Ceramizing the Future foir a Sustainable Society
June 17-21, 2018 - Foz do Iguaçu - PR - Brazil

ICC7

7th International Congress on Ceramics
& 62 Congresso Brasileiro de Cerâmica

Final Program

The content of this ebook reflects information received and processed by June 21, 2018. All participants are encouraged to use the congress app which is updated in "real time".

Support

CNPq
Conselho Nacional de Desenvolvimento Científico e Tecnológico

FAPESP

Organizing
Brazilian Ceramic Society

On behalf
International Ceramic Federation

ICF

Secretariat

Metallum
Congressos Técnicos e Científicos

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COMMITTEES

Organizing Committee

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University of São Paulo (Polytechnic School)

Daniel Zanetti de Florio (Co-chair)
Federal University of ABC

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Federal University of São Carlos (Materials Engineering Department)

Humberto Naoyuki Yoshimura (Co-chair)
Federal University of ABC

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Institute for Nuclear and Energy Research - IPEN

Ulisses Soares do Prado
Lining Representação, Consultoria e Projetos

Victor Carlos Pandolfelli*
Federal University of São Carlos (Materials Engineering Department)

Wilson Acchar
Federal University of Rio Grande do Norte

* WAC members

GENERAL INFORMATION

VENUE
ICC7 will be held in Recanto Cataratas Thermas Resort & Convention in Foz do Iguaçu – Brazil. Address: Av. Costa e Silva, 3500 - Parque Pres. I, Foz do Iguaçu – PR Phone: +55 (45) 2102-3000

LANGUAGE
English is the official language of the Congress.

REGISTRATION DESK
Bring ID to collect registration materials on your first day at the congress. We strongly encourage you to collect your registration materials on June 17 so that you are all set to attend the Opening Ceremonies on June 7:00 p.m. The Registration Desk will open from 3:00 p.m. to 7:00 p.m. on June 17, and from 8:00a.m. to 7:00p.m. on the other days.

PUBLIC NOTICE - SMOKING
In Brazil, smoking is not allowed in any public buildings including restaurants and terraces. Smoking is allowed outside of the building doors.

IDENTIFICATION BADGE
Participants are kindly requested to wear their personal name badge during all ICC7 events.

WIRELESS INTERNET
Wireless Internet is available and can be accessed anywhere in the convention center.

COFFEE BREAKS
Coffee-breaks will be available from 4:00 p.m. to 4:30 p.m. (June 18 , 19 and 20) in front of Sonata Room. Light coffee-breaks will also be available from 10:30 a.m. to 10:50 a.m. (June 18, 19, 20 and 21) at the same location.

CERTIFICATE OF ATTENDANCE AND PRESENTATION
A personalized Certificate of Attendance will be on the ICC7 webpage after the conference.
A printed Certificate of Presentation will be given at the end of the presentation

POSTER SESSIONS
There is a poster session in front of Sonata room. The poster session provides an alternative to the usual way of presentations, encouraging one-on-one communication between the presenter and the audience. The Organisers encourage you to spend some time near your Poster during this Session. Maximum poster size allowed at ICC7 is: height of 120 cm and maximum width of 90cm.
Important: Each board to affix the poster will have an identification number. Abstract identification number will correspond to that on the poster board. The author should display his/her poster on the correct poster board.
The poster should be, preferable, fixed from 08:00 a. m. to 08:30 a. m. at the same presentation day. Please, remove your poster after the ending of session (7:00 p. m.). During ICC7 it is not possible to change poster presentations.

ORAL SESSIONS
All presentations will be in English. Please, bring your .pdf or Power Point™ compatible file(s) of your presentation in a USB memory stick (pen drive). Alternatively, you can also use your own PC. In the day before your presentation, please, go to your presentation room between 5:30 p. m. to 7:00 p. m. to upload your file(s).
Oral presentation rooms will be equipped with the following items: 1 PC (Windows 10), 1 video projector and 1 LASER pointer.

OFFICIAL PICTURE
The official picture will be on June 18 at 12:30 p.m.

LUNCHES
Lunches will be served from June 18 to 20, at Bromélia Restaurant. These lunches are included in the full registration fees and delegates will be provided DAILY LUNCH TICKETS when picking up their badges.

SOCIAL PROGRAM

WELCOME RECEPTION

The welcome reception will be in June 17, at 8:00 p.m., in front of Sonata room, after opening ceremony. This reception is included in the full registration fees.

CONFRATERNIZATION DINNER

On June the 20th (at 8 p.m.) there will be a confraternization dinner (optional) at *Rafain Churrascaria Show.* It will cost 147.00 BRL per person. It is included: dinner, show, transportation and bar (water, soda, juice, beer and caipirinha). It will last from 2½ to 3 hours..

Reservation must be done at the event website till *June 11th.* This is the due date for reservation and payment (invoice ticket or credit card). After this date, please check with the organization for available places through the e-mail: cbc@metallum.com.br. **Tickets must be taken at the event's reception, in Foz do Iguaçu, from June 17th.**

dress code: business casual

SCIENTIFIC PROGRAM

OFFICIAL OPENING SESSION

The ceremony will be held on June the 17th, 2018, at 7 P.M., in Sonata room at the event venue: Recanto Cataratas Thermas Resort & Convention in Foz do Iguaçu – Brazil. Address: Av. Costa e Silva, 3500 - Parque Pres. 1, Foz do Iguaçu – PR

TECHNICAL ACTIVITIES WILL BE HAPPENING AS FOLLOWING:

- on the 18, 19 and 20 from 8:30 a.m. to 7 p.m.
- on the 21 from 8:30 a.m. to 1 p.m.

CLOSING REMARKS

June 21 – 12:30 p.m.

PLENARY SPEAKER

ANDRÉ R. STUDART

ETH Zurich Switzerland

Associate Professor for Complex Materials at ETH Zurich, Switzerland. He obtained his BSc and PhD degrees in Materials Science and Engineering from the Federal University of São Carlos, Brazil. Before his faculty appointment, André worked as post-doctoral fellow at ETH Zurich and Harvard University. He is currently Director of the ETH Zurich Competence Centre for Materials and Processes. Research in his group covers a wide range of interdisciplinary topics, including soft matter, bioinspired materials, microfluidics, additive manufacturing and functional materials.

Plenary talk

Ceramics inspired by nature

Bioinspired ceramics featuring remarkable properties and functionalities have been successfully created by combining biological design principles with advanced manufacturing technologies. Using for example design principles encoded in the structure of mollusk shells, colloidal assembly approaches have led to bioinspired ceramics whose stiffness and toughness exceed the limits expected from the constituent brittle building blocks. In this talk, I will present some of the manufacturing technologies that have been historically developed to fabricate biologically-inspired tough structural materials and how such bioinspired architectures have now been used as model systems to better understand the toughening mechanisms responsible for the unique fracture resistance of shells. Experiments and theory have shown that highly aligned inorganic platelets connected by an optimal density of mineral bridges are crucial to enhance the toughness of shell- inspired architectures without compromising their high elastic modulus and strength. Beyond mechanical properties, I will also show how advanced colloidal processing can also be used to create ceramics that self-shape into intricate geometries during sintering, following the design principles of plant seedpods. Exploiting the similarities and differences between bioinspired artificial architectures and biological materials opens exciting opportunities to design and fabricate synthetic ceramics with unprecedented properties and to shed new light into the design strategies that emerged from the evolution of structural materials in Nature.

MASAHIRO YOSHIMURA

Distinguished Chair Professor, Dept of Mater., Sci. and Eng., National Cheng Kung University, Tainan, Taiwan

was graduated for B.S. at 1965, M.S. at 1967 and D. Sc. in Engineering at 1970 from Tokyo Institute of Technology, Japan. Then 1970, Research Assoc., 1978 Assoc. Prof., 1985 Full Prof. in Materials and Structures Laboratory, Tokyo Institute of Technology. During those periods, 1973-1975 Post Doc. in 3 CNRS Labs. (Odeillo, Orleans and Paris) in France, and 1975-1977 in Mass. Inst. Tech., USA. He was the Director of Center for Materials Design for 1996-2002. He retired at 2008, Professor Emeritus, from Tokyo Institute of Technology. After experienced several Visiting/Guest Profs. in Tohoku Univ., Japan, Univ. Limerick, Ireland, ETH Zurich, Switzerland, Inst. Metal. Res., CAS, Shenyang, China, etc. he has been in National Cheng Kung Univ., Taiwan since Feb. 2010 as a Visiting Chair Prof. then now Distinguished Chair Prof. and Director of Promotion Center for Global Materials Research, NCKU, since July 2011. He received, Academic Award (1993) from The Ceramic Soc. Japan, 10th Fulrath Pacific Award (1987) and Fellow (1995) from The Amer. Ceram. Soc., International Award (2001) from European Ceramic Soc., IUMRS Somiya Award for International Collaborative Work, IUMRS (2002), Honorary Members in MRS –India (2003), Research Award, Ministry of Education, Culture & Science, Japan (2007), Lee Hsun Award, Institute of Metal Research, CAS, Shenyang, China (2008) and Honorable Permanent Resident Visa, Taiwan (2012), Honorary Fellow of European Ceramic Society (2017), Distinguished Life Member from Amer. Ceram. Soc. (2017). etc. He is nominated form Thomson-Reuter as ISI Highly-Cited Researcher (2001). Now he has >730 peer-reviewed Papers, 84 Reviews, 4 Books (47 Book Chapters) & >30 Patents, and >18,000 International. Citations with h-index >68, in Google Scholars: >28,700 Citations with h-index= 78. He has served as 19 Organizing Chairs, i.e IUMRS-ICA, Chiba, 1997, IUMRS-ICAM, Yokohama, 2003, and International Conference in Hydrothermal Reactions, Sendai, 2006, 6th ISHA, 2016, Tainan, Taiwan. Mater Sci 2017, Valencia, Spain, etc. joined as 64 International Advisory/Organizing Committees, 26 Plenary Lectures, i.e. MS&T, San Francisco (2000), ICMAT, Singapore (2003), Hydrothermal/Solvothermal Symposia, Kochi, Japan (2000) Mysore, India (2004), Sendai, Japan (2006), Nottingham, UK (2008), Beijing, China (2010), 3rd SCESCM, Bali (2016), Materials Science 2016, Dubai and 2017, Valencia, etc. and he gave >220 Invited/Keynote Lectures in International Meetings. He is the Editor in Chief of Mater Sci Letters (Sci Fed), one of Editors in Solid State Science (since 1988), J. Nanomaterials (since 2004), Nano Letters (2002-2005), etc. and Guest Editors in MRS Bull, Oct. 1994 & Sept. 2000, Euro. J. Solid State and Inorg. Chem. 1995, Solid State Ionics, 152/154, 2002, J. Mater. Sci. 2006&2007, etc. He is Founding President (2006-2008), International Solvothermal and Hydrothermal Association (ISHA), President of the Advisory Board (2010-2014), Chairman of the Nomination Committee, 2002, 2004 & 2006 in The World Academy of Ceramics (WAC), An Advisory Officer, IUMRS (Audit Elect 2007-2008, Former President of MRS-Japan). He has cooperated with 24 visiting Professors (12 from abroad), 38 Postdoctoral Researchers, (27 from abroad), 12 visiting Researchers from abroad, Supervised 56 Ph.D (16 foreigners) Students and candidates, >70 Master Students, 30 Research Students during his professorship in Tokyo Institute of Technology. In NCKU many cooperations have been going mostly based upon MOU with global academicians. i.e. Profs. Yury Gogotsi (Drexel Univ., USA), Takayoshi Sasaki (NIMS, Japan), Jin-Ho Choy (Ewha Womans Univ., Korea), K. Byrappa (Mysore Univ., India), Shu-Hong Yu (Univ. Sci. Tech. China, China), C.N.R. Rao (India) with 12 Pos-docs, and 8 professors in NCKU. With their graduate students, then published 20 papers in high IP Journals.

Plenary talk

Why Soft Processing(=Low-Energy Production) of Advanced Materials is Difficult but Necessary for Sustainable Society?

Modern our society has been developed with various advanced materials. Most of advanced materials, Metallurgical materials, Semiconductors, Ceramic materials and Plastics have been used in wide area of applications like structural, mechanical, chemical, electrical, electronic, optical, photonic, biological, medical, etc. Most of them except for bio-polymers & bio-minerals have never been produced via biological systems. Thus they have generally been fabricated artificially and/or industrially by so-called high-technology, where high temperature, high pressure, vacuum, molecule, atom, ion, plasma, etc. have been used for their fabrications, then consumed huge amount of resources and energies thus exhausted huge amounts of wastes: materials, heats and entropy. To save this tragedy, we must consider water-based industries. Considering the lowering of total energy consumption, we have challenged to fabricate those advanced inorganic materials with desired shape/size/location,etc. directly in low energetic routes using aqueous solutions since 1989 when we found a method to fabricate BaTiO3 film on Ti substrate in a Ba(OH)2 solution by

Hydrothermal Electrochemical[HEC] method at low temperatures of 60-200 C. We proposed in 1995 an innovative concept and technology, "Soft Processing" or "Soft Solution Processing," which aims low energetic (=environmentally friendly) fabrication of shaped, sized, located, and oriented inorganic materials in/from solutions. It can be regarded as one of bio-inspired processing, green processing, or eco-processing. When we have activated/stimulated interfacial reactions locally and/or moved the reaction point dynamically, we can get patterned ceramic films directly in solution without any firing, masking nor etching. Direct Patterning of CdS, PbS and CaWO4 on papers by Ink-Jet Reaction method. Furthermore, we have succeeded to fabricate BaTiO3 patterns on Ti by a laser beam scanning and carbon patterns on Si by plasma using a needle electrode scanning directly in solutions. Successes in TiO2 and CeO2 patterns by Ink-Jet Deposition, where nano-particles are nucleated and grown successively on the surface of substrate thus become dense even below 300° C will be presented. Nano-structured films will be also talked. A recent novel subject, Soft Processing for various nano-carbons including Graphene and functionalized Graphene, will be introduced. Where we have succeeded to prepare functionalized Graphene Ink via successive processes under ambient temperature and pressure conditions.

MIKE MURRAY

Chief Technology Officer Morgan Advanced Materials United Kingdon

Is the chief technology officer for Morgan Advanced Materials plc, where he has worked in a variety of roles for the last 22 years. Morgan is a c£1bn business delivering differentiated advanced materials technologies (including ceramics, carbon, and polymeric composites) to a range of attractive growth markets. Key market sectors include petrochemical/industrial, transportation, security and defence, energy, healthcare and electronics. Murray is a materials science engineer by training, with his Ph.D. in ceramic engineering, with both degrees obtained at the University of Birmingham in the UK. He is currently the chairman of the government funded KTN (Knowledge Transfer Network) Powders Advisory Board and also sits on the Materials Sector Board to advise the UK Technology Strategy Board. In the past he has been chairman of both BSI and CEN international standards committees for advanced ceramics and has worked as a member of BSI and ASTM in development of medical device standards and was the UK delegate at ISO TC150. As a member of the EPSRC (Engineering and Physical Sciences Research Council) peer review panel, he is critically assessing the funding priorities of science in the UK and recommending research priorities to government. Having published over 25 papers in peer-reviewed journals and conference proceedings; he is regularly an invited keynote or plenary speaker for international meetings and a delegate on UK trade missions.

Plenary talk

Materiomics and emerging manufacturing technologies for sustainable development

Materiomics is defined as the holistic study of material systems. Materials science in itself is one of the most interdisciplinary subjects within science today and the links between physiochemical material properties and material characteristics and function are of continual focus today, and still drive many research efforts. The focus of materiomics is the interconnectivity of material functionality and behaviour, rather than an independent collection of properties. As we strive for the ultimate performance, it is the fundamental understanding of the mechanisms that exist and ultimately the link between processes, structures, and properties at multiple scales, from nano to macro. Only through this systematic approach to understanding the building blocks of materials science can we continue to enhance and drive innovation. Innovation and growth opportunities continue at a pace within the advanced ceramics market place and the performance challenges being pushed to the material limits. We will review that while product innovation and differentiation is always important, interconnected operational and supply chain innovations lead to a more productive and profitable manufacturing company. Creating a company culture that focuses on innovating in all aspects of the business process can have a dramatic impact on the chances of success, but also productivity of the entire supply chain.

EDGAR D. ZANOTTO

Department of Materials Engineering, Center for Research, Technology and Education in Vitreous Materials, Federal University of São Carlos, SP, Brazil

Is a professor of materials science at the Federal University of São Carlos, Brazil, director of the CeRTEV (www.certev.ufscar.br [1]), editor of the Journal of Non-Crystalline Solids, member of the Editorial Board of 6 scientific journals, and president of the scientific council of the Serrapilheira Institute. His work focuses on fundamental and applied research on the crystallization kinetics and properties of glasses and glass-ceramics. Zanotto has published approximately 250 original and review papers, 21 book chapters, 3 books, 5 book prefaces, 20 patents, and advised about 75 theses. He chaired 6 of the most important glass congresses, was a member of the Scientific Advisory Board of more than 50 materials and glass congresses, and delivered more than 300 conference presentations, including approximately 140 invited and 20 plenary talks. He is a member of both Brazilian and São Paulo State Academy of Sciences, National Academy of Engineering, The World Academy of Sciences (TWAS), World Academy of Ceramics, and Fellow of the Soc. Glass Technology, UK, and American Ceramic Society. His 32 awards include some of the most important Brazilian awards: Admiral Alvaro Alberto, Knight (Comendador), and Scientist of the Year - Nanomaterials 2017 - as well as the TWAS Engineering Sciences Award, and 5 of the most important international glass research awards: Zachariasen Award, Gottardi Prize, Morey Award, Turner Lecture and Cooper Lecture.

Plenary talk

Glasses and glass transition for ceramists

Natural glasses have "always" existed, whereas synthetic glasses were created approximately 6,000 years ago and are now omnipresent - and unreplaceable in many cases - in our daily routine. In this talk, we will consider some fundamental questions related to the intrinsic nature of glasses, which are not always clear to ceramicists, such as: what is glass? What is the glass transition? Are glasses solids or liquids? Do glasses flow at room temperature? Can all glasses be crystallized? We will show that glasses are unstable and spontaneously start to relax toward the supercooled liquid state at any temperature above absolute zero. Finally, to end the science part of the talk, we present and explain a modern definition for glasses. To illustrate their realm of applications, we show some novel uses of modern inorganic glasses, such as bioactive glasses, optical fibers, spectacles for colorblind correction, UV and IR-filters and ultra-strong glasses for electronic device displays. We finally show that, after controlled crystallization, specific glasses turn into glass-ceramics -- polycrystalline materials that are related to, but not the same as sintered ceramics. Glass-ceramics exhibit some unusual combinations of properties that make them unique, such as dental applications or transparent, low CTE materials for telescope mirrors and cooktops. The talk is illustrated using videos about the glass transition phenomenon and some unusual mechanical properties. We finish the speech by asking three questions to the participants: How many vitreous materials have already been made? How many can still be produced? How can new glasses be designed? Optimistically the speech and its contents will be educative and fun for ceramists, and even perhaps for glass scientists?

CONFERENCE SYMPOSIA

A- Additive manufacturing of ceramics

Powder-, paste- and suspension-based additive manufacturing methods allow a tool-free production of porous and dense ceramic components with a so-far unknown freedom in design. In particular, ceramic single parts and small series of individualized or personalized components, such as patient specific implants and dental restoration but also jewelry and design components and voluminous components such as optical components for lithography and space applications, are currently the focus of additive manufacturing efforts and research. Nevertheless, additive manufacturing methods are also of interest for the production of medium-size series, especially taking into account economic aspects such as resource efficiency and tooling costs.
However, in comparison to polymeric and metallic materials additive manufacturing of ceramic components is still at the beginning of the development. The reason is that additive manufacturing of ceramics is limited by the inherent material properties of the ceramic powders and the sintering behavior of ceramics, respectively. The successful development of additive manufacturing methods for ceramic components will have to meet several challenges in the next years.

This symposium will review the current state of the AM technologies for ceramic processing, with focus on feedstocks, equipment development, design, properties and microstructure of printed parts. The following topics are suggested, but not limited to:

- Design of ceramic components for AM
- Feedstocks for AM
- AM of inorganic polymers (preceramic polymers and geopolymers)
- Advances in AM technologies and Hybrid AM technologies
- Additive Manufacturing of oxide and non-oxide advanced ceramics
- Multi-material AM

Symposium Organizers:

- Chairman: Jens Günster
- Co-chair: Dachamir Hotza

B- Advances in bioceramics

A rapidly evolving area of research in ceramic science and technology concerns the interactions between bioceramic materials and human body. Upon the past half century, the use of bioceramics has revolutionized the treatment of many diseases that primarily affect bone and teeth and has introduced new therapeutic approaches to improve the quality of life of rehabilitated patients. Hydroxyapatite and resorbable calcium phosphates are traditionally employed for repairing osseous defects due to their compositional and crystallographic similarity to biological apatites in bone. Alumina-matrix composites and other "hard" ceramics are excellent biomaterials to fabricate load-bearing prosthetic joint surfaces due to their wear resistance and favourable mechanical properties. Bioactive glasses and glass-ceramics are able to bond both to bone and to soft tissues, thereby opening fascinating scenarios in the field of regenerative medicine. In the last few years, the advent of multifunctional ceramics with smart added values (e.g. drug release, antibacterial properties) has generated considerable interest in the scientific community to cope biomedical challenges and needs of patients.

This symposium will provide an excellent platform for presentation, dissemination and discussion of the most recent and significant results related to design, processing, characterization, commercialization and clinical use of bioceramics. Abstracts on the following

- Hydroxyapatite and resorbable calcium phosphates
- Bioactive glasses and glass-ceramics
- Composites and coatings

- Tissue engineering
- Biosensors
- Scaffolds and biomimetic ceramics
- Processing routes and characterization ofbioceramics
- Modelling of bioceramics
- Hierarchical and nanostructured bioceramics
- Bioceramics for drug delivery
- Cell-material interactions, biological and clinical aspects
- Environmental and toxicological issues
- Commercial and regulatory aspects

Symposium Organizers:

- Chair: Dr. Juliana Marchi
  - UFABC, Brazil
- Co-chair: Dr. Francesco Baino
  - Politecnico di Torino, Italy
- Co-chair: Roger Jagdish Narayan
  - NC State University and UNC Chapel Hill, USA

C- Bioinspired ceramics and composites

Living organisms are able to grow mineralized tissues with remarkable multiscale architectures and properties using sustainable processes and building blocks. Design principles underlying the architecture of these biological materials reveal new pathways to produce ceramics and ceramic-based composites with unprecedented properties or that fulfill application needs using environmental-friendly processes and chemistries. This has led to exciting research aimed at better understanding structure-property relationships in natural materials and at devising processing routes that could enable the replication of key biological design principles in synthetic materials. The goal of this symposium is to foster the dialogue between the ceramic community and researchers active in the area of bioinspired materials to discuss further possible avenues that can be pursued in this exciting interdisciplinary field. Abstracts on the following:

- Bioinspired materials and composites
- Multiscale modeling of biological materials
- Processes and products inspired by nature
- 3D Printing and additive manufacturing
- Correlated microscopy and spectroscopic techniques
- Scattering techniques applied to multiscale materials
- Applications of bioinspired materials
- Mechanical properties of bioinspired materials
- Characterisation of natural materials
- Biomineralization

Symposium Organizers:

- Chairman: Prof. Dr. André R. Studart
  - ETH Zurich, Switzerland
- Chairman: Prof. Dr. Eduardo Saiz
  - Imperial College London, UK
- Chairman: Dr. Rafael Libanori
  - ETH Zurich, Switzerland

D- Cements and geopolymers

Materials science has been impacting the technological advance of agriculture and livestock production in different ways. Although the recognized importance (such as metals as agriculture tools), ceramic materials play a fundamental role often neglected, where there are many possible technological gaps to be still solved. Examples include the

preparation of catalytic materials and its supports for the production of fertilizers and agrichemicals; the development of sensing materials to detect gaseous emissions in field; the production of scaffolds and porous matrices for controlled drug delivery (in animal health); among others with high potential to produces technology breakthroughs – and consequently, impacting on the food quality and productivity. These topics demand research in synthesis, including nanoparticles, and device design connected to these final applications. Therefore, this symposium focuses on the recent developments of ceramic science and technology with prospective application or impact in agriculture and livestock. Researchers are invited to show their findings, especially those with cross-main nature (i.e., involving fine chemistry, physico-chemical characterization, biological interaction and agronomical impact) and contextualize to agriculture needs. The discussion will cover not only defined application but also prospective applications for ceramic products or processes are welcome. Abstracts on the following

- Nanoparticulate catalysts (synthesis, characterization) applied to:
  - Chemical fixation of N2 to N-based fertilizers
  - Chemical fixation of CO2 and greenhouse gases
  - Abatement of water contaminants, including (but not limited to) pesticides
  - Chemical conversion of biobased molecules

- Ceramic sensing materials and devices (synthesis and processing):
  - Sensors for NH3, NH4+, moisture and other agriculture productivity indicators;
  - Sensors for water contamination and food quality (juice, wine, etc)
  - Sensors applied to animal health and production (diseases early detection, analysis of feed, beef quality, etc)
  - Low-temperature gas sensors for in-field application

- Slow and controlled release ceramic materials:
  - Synthesis and processing of porous and mesoporous materials (including hierarchical structures) for nutrient and drug release,
  - pH and temperature responsible adsorbent materials
  - Nanoparticles as fertilizers: solubility of oxides (Zn, Mn, Mo and others) and phosphates as potential nutrient sources for plants
  - Nanocomposite materials for controlled release of agrichemicals and drugs for animal health

- Food conservation and quality:
  - Packaging materials for food conservation (bactericidal particles, ethylene absorbers, etc)
  - Food quality assessment (smart packaging and smart labeling)

Symposium Organizers:

- Chairman: Caue Ribeiro
  - Embrapa, Brazil

- Co-chair: Markus Niederberger
  - ETH, Swiss
  - Fábio Alonso Cardoso
  - Roberto César de Oliveira Romano

E- Ceramics for agriculture and livestock

Materials science has been impacting the technological advance of agriculture and livestock production in different ways. Although the recognized importance (such as metals as agriculture tools), ceramic materials play a fundamental role often neglected, where there are many possible technological gaps to be still solved. Examples include the preparation of catalytic materials and its supports for the production of fertilizers and agrichemicals; the development of sensing materials to detect gaseous emissions in field; the production of scaffolds and porous matrices for controlled drug delivery (in animal health); among others with high potential to produces technology breakthroughs – and consequently, impacting on the food quality and productivity. These topics demand research in synthesis, including nanoparticles, and device design connected to these final applications. Therefore this symposium focuses on the recent developments of ceramic science and technology with prospective application or impact in agriculture and livestock.

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  - Packaging materials for food conservation (bactericidal particles, ethylene absorbers, etc)
  - Food quality assessment (smart packaging and smart labeling)

Symposium Organizers:

- Chairman: Rafael G. Pileggi
  - Embrapa, Brazil
- Co-chair: Vanderley M. John
  - Fábio Alonso Cardoso
  - Roberto César de Oliveira Romano

F- Ceramics for energy and environment

Ceramic materials enable reduced emissions and ensure efficient use of resources in many areas of energy supply and environmental technology. Distinguished properties such as ionic and mixed conductivity, electromechanical/piezoelectrics, corrosion resistance, catalytic, and photocatalytic make advanced ceramics an interesting choice for application with high requirements. The focus of our symposium is on advanced ceramics that can promote increased performance and environmentally friendly and efficient use of resources. The symposium will cover papers on technical ceramics that are key components for advanced energy and environmental technologies. Abstracts on the following:

- Advanced Ceramics and Systems for Electrochemical Conversion and Storage: fuel cells, electrolyzers, solid state batteries, etc.
- Ceramics for Solar and Thermal Conversion Technologies: thermoelectrics, photocatalysts, photovoltaics, solar-to-fuels, water splitting, etc.
- Catalytic Ceramics for Energy Conversion and Environmental Applications
- Ceramics Enabling Environmental Protection: Clean Air and Water
- Advanced Sensors for Energy and Environment Applications
- Ceramics for Electromechanical Conversion
- Advances in Mixed Ionic-Electronic Ceramics

Symposium Organizers:

- Chairman: Vincenzo Esposito
  - DTU, Denmark
- Co-chair: Fabio Coral Fonseca
  - IPEN, Brazil

G- Education in ceramics

The Education in Ceramics Symposium will be an international forum for presentation and discussion of multidisciplinary themes concerned to theory and practice of teaching ceramics and related areas, from technical schools, undergraduate and graduate courses. It will be a great opportunity to discuss problems, challenges or initiatives and identifying solutions pertinent to ceramics education, that could benefit students, educators, and the public knowledge of ceramics, promoting development and innovation in the ceramics courses. This Symposium could improve the discussion about learning strategies, critical thinking, values and citizenship, objectives implicit in education towards sustainable development, as the slogan of ICC7 is "Ceramizing the Future for a Sustainable Society". Abstracts on the following:

- Promoting multi-disciplinary initiatives in education in ceramics - impact on curriculum, curriculum development
- Distance learning: methods, technologies and assessment
- Innovative uses of technology in the classroom, open and online education
- Student recruitment and retention methods, attractiveness of ceramics education
- Team projects, case studies and researches challenges (undergraduate or graduate experiences)
- Preparing graduates for industry
- Partnerships with industry and government, university-business cooperation
- STEM (Science, Technology, Engineering & Mathematics) initiatives
- Evaluation strategies (professors and students)
- Transition to graduate studies, recruiting methods to attract graduate students
- Sustainability, environmental and ceramics education
- Skills and ceramics education
- Continuing ceramics education and lifelong learning
- Skills for integrating issues of sustainability into ceramics subjects and classroom topics

Symposium Organizers:

- Chairman: Dr. Renata Ayres Rocha
  UFABC, Brazil
- Chairman: Asst. Prof. Andraž Kocjan / Jožef Stefan Institute, Slovenia

H- Electric and magnetic ceramics

The aim of the symposium is to bring together physicists, chemists and materials scientists from universities and industries, to discuss in a multidisciplinary way progress in electric and magnetic ceramics (ferroelectrics, piezoelectrics, (anti) ferromagmetics, magnetoelectrics, etc), including a broad spectrum of basic principles, advanced materials processing, characterizations techniques and potential applications and devices. All participants will be encouraged to present novelty and original contributions addressed to the state-of-art in their respective fields. Abstracts on the following

- Ferroelectrics, Piezoelectrics and Pyroelectrics
- Thermoelectrics
- Magnetoelectrics
- (Anti-) Ferromagnetics
- Dielectrics
- Electrooptics

Symposium Organizers:
- Chairman: José Antonio Eiras
- Co-Chairman: Liliana Mitoseriu

I- Engineering ceramics, mechanical behavior and fractography

In the last 50 years, significant advances were achieved to increase the strength, toughness and reliability of the engineering ceramics, and they have been applied gradually to a practical use in a variety of fields. Demands for ceramics from industries are increasing, therefore we must improve mechanical properties of ceramics and create new materials. For the purpose, new testing method, processing and material design concept are needed. This symposium will be receiving submissions related to advances in the processing, microstructure design, mechanical properties and testing of engineering ceramics. Abstracts on the following

- Engineering ceramics
  - Advances in oxides and non-oxides ceramics
  - Composites: particulate, whisker and fiber-reinforced; laminates
  - Nanostructured ceramics and composites
  - Engineering ceramics processed by new routes: SPS, fast sintering, cold sintering
  - Advances in coating for thermal and environmental barrier

- Mechanical behavior
  - Processing-microstructure-mechanical properties relationship
  - Advances in toughening mechanisms and flaw-tolerant ceramics
  - Advances in crack healing of ceramics
  - Advances to reduce time-dependent damages (fatigue, slow crack growth, creep, ageing)
  - Advances in mechanical testing: new methods, small scale testing
  - Advances in flaw detecting methods: NDE (-CT)

- Fractography
  - Advances in understanding and quantification of fracture
  - Advances in surface characterization techniques: imaging methods (confocal, AFM), correlative fractography
  - Fractography of nanostructured ceramics and composites
  - Case reports: fractography applied to ceramic components

Symposium Organizers:

- Chairman: Humberto N. Yoshimura
  - UFABC, Brazil
- Co-chair: Toshiyuki Nishimura
  - National Institute for Materials Science, Japan

J- Frontiers of glass science

All submissions should address essential problems in the frontiers of glass science. Speakers are instructed to review and analyze the state-of-art critically and to point out open, relevant issues in their topics.
Other types of research reports can be presented as posters.
We are planning to publish a special issue of the *Journal of Non-crystalline Solids* with articles that follow the above-listed instructions. Abstracts on the following

- Glass structure
  - Short, intermediate and medium range order in glasses and their relationships to dynamic processes or properties
- Dynamic processes
  - Viscous flow, relaxation, liquid-liquid phase separation, crystal nucleation and growth, overall crystallization, glass-forming ability
- Properties
  - Mechanical, thermal, electrical, optical, chemical, etc.

Symposium Organizers:

- Chairman: Edgar Dutra Zanotto
  - Federal University of São Carlos, Brazil
- Co-chair: Morten M. Smedskjaer
  - Aalborg University, Denmark

K- Frontiers of glass technology

All submissions and accepted talks should address innovative and relevant products and processes in the frontiers of glass technology. The invited speakers will be instructed to critically review and analyze the state-of-art of glass industries and products. Abstracts on the following

- Flat glass
- Hollow/container glass
- Fiber glass
- Specialty glasses
- Glass and communication
- Glass and Sustainability
- New melting concepts
- Energy and emissions in the glass industry
- Furnace equipment and refractories

Symposium Organizers:

- Chairman: Mathieu Hubert
  - Corning Inc.
- Co-chair: Mauro Akerman
  - ABCeram, Brazil
- Co-chair: Eduardo Bellini Ferreira
  - USP, Brazil

L- Fundamentals of sintering and advanced sintering processes

This symposium covers fundamental aspects of sintering and related phenomena, such as grain growth, as well as recent advances in sintering processes. Both simulations (modelling) and experimental contributions are welcome, ranging from the atomistic perspective to a mesoscale description of sintering. Abstracts on the following

- Science and technology of conventional pressureless sintering
- Field- and pressure-assisted processes
- Science and technology of cold sintering
- Grain growth processes and modeling
- Sintering of porous materials
- Sintering and additive manufacturing
- Thermodynamics of sintering
- Control of ceramic properties via sintering and grain growth

Symposium Organizers:

- Chairman: Ricardo Castro
  - University of California - Davis, USA
- Co-chair: Douglas Gouvea
  - University of São Paulo, Brazil
- Co-chair: Gary Messing
  - Penn State University, USA

M- Green and energy efficient processing

The development of industrial activities has reached a high technical development but the immediate future needs the establishment of processes and manufacture strategies capable to overcome the current impact to environment and to improve social skills and needings. In such a context, new solutions for sustainable growth of ceramics performance environmentally friendly without any health risk and capable to benefit from natural resources are urgently claimed by a society more and more concerned of the importance of reducing contamination and improving life conditions. Therefore, it is essential to develop new processing strategies for the green manufacture of ceramics to preserve natural sustainability and to generate clean and sustainable energy sources. This symposium focuses on new science and technology of ceramic processing especially concerned with these aspects of sustainability, friendly for environment and health and with reduced costs. On this basis, this symposium welcomes and encourages all ceramics community to submit their recent works dealing with novel aspects of the different steps of ceramic processing, including the development of new, eco-friendly synthesis routes, the optimization of powders preparation, colloidal dispersions and rheology, the study of natural biomolecules and natural additives, the theoretical and practical analysis of innovative shaping techniques involving non-contaminant steps or additives, the use of clean and energetically efficient processes and the recuperation of wastes and recycled products, as well as new aspects concerning the development of fast sintering procedures capable to reduce environmental impact and energy consumption at reduced costs. In addition, the design and manufacture of ceramics and ceramic based composites with complex shapes and tailored microstructures with especial functionalities including aligned porosity, texturation, lamination, etc, are also welcome. Abstracts on the following

- Novel synthesis routes
  - Chemical routes avoiding toxic precursors, such as colloidal sol-gel, freeze drying, chemical routes, etc
  - Routes for the fast, clean synthesis of nanopowders, such as spray flame pyrolysis, microwaves assisted synthesis, etc
  - Synthesis of mixtures, core-shell structures, powders with special shapes and geometries, nano and microspheres, etc
- Modification and beneficiation of raw materials avoiding environmentally aggressive conditions
  - Modelling and engineering of milling and mixing procedures
  - Controlled granulation by spraying, freezing, etc

- Dry powder processing
  - Dry pressing
  - Electrostatic deposition

- Preparation and optimization of suspensions for green manufacture
  - Colloidal stabilization and rheology of suspensions
  - Use of natural additives for ceramic processing
  - Development of aqueous and low toxicity systems
  - Particles assembly

- Innovative shaping processes
  - Colloidal based processes for three dimensional parts including slip casting and derivatives, gelcasting, micropatterning, etc
  - Plastic forming processes, low and high pressure injection moulding, extrusion, etc
  - Manufacture of thin and thick films and coatings by vapor assisted techniques such as CVD, PVD, etc, or using suspensions or particulate sols, such as dipping, spin coating, electrophoretic deposition, etc.
  - Production of laminates and functionally graded materials with functional or structural applications, focusing biomimetic materials, multilayer devices, textured laminates, etc
  - Shaping of porous ceramics using friendly additives, ice-templating, polysaccharides, starches, etc

Symposium Organizers:

- Chair: Dr. Rodrigo Moreno
  - Institute of Ceramics & Glass, Spain
- Chair: Dra. Sonia R. H. Mello Castanho
  - IPEN, Brazil

N- High and ultra high temperature ceramics

A high-level global platform for scientists, engineers, business leaders and ceramists to discuss the latest innovations and scientific achievements in the High and Ultra High Temperature Ceramic field. Ideas and visions of the future for both conventional and new processing technologies, characterization, performance, modelling as well as applications will be shared. Abstracts on the following

- Materials Design, New Compositions and Composites
- Improving Damage Tolerance, Oxidation and Thermal Shock Resistance
- Structure Stability at High and Ultra High Temperatures
- Processing-Microstructure-Property Relationships
- Ceramic Matrix Composites (CMCs) and UHTCMCs
- Modelling and Simulations
- Advanced and Novel Processing Methods

Symposium Organizers:

- Chairman: William (Bill) E. Lee
  - Imperial College London – U.K.
- Chairman: Victor C. Pandolfelli
  - Federal University of São Carlos - Brazil
- Chairman: Jon Binner
  - University of Birmingham – U.K.
- Chairman: Christos Aneziris
  - Technische Universität Bergakademie Freiberg - Germany

O- José Arana Varela memorial symposium

Prof. José Arana Varela was responsible for introducing many of the modern concepts of advanced ceramics in Brazil, especially in electronic ceramics and thin films. He contributed to the formation of human resources, leaving as his great legacy professionals of high capacity, who contribute formally to the development of advanced ceramics in Brazil. This symposium will be a tribute to Professor Varela, showing through invited researchers, its importance for the scientific development of this strategic area. This will be a one-day symposium. Only for invited speakers (30 min. of presentation)

Symposium Organizers:

- Chairman: Edson Roberto Leite
  - Federal University of São Carlos

P- New trends in silicate and clay-based ceramics

This session will focus on the current and emerging strategies being adopted in the production of silicate and clay-based ceramics, including raw materials, processing, properties and higher added-value products. Abstracts on the following

- Raw materials constraints and alternatives, including industrial wastes
- Innovative products and applications, including pigments and inks
- Thermal and structural transformations during firing
- New processing techniques including microwave heating, new decoration techniques.
- Special clays for health related applications
- Effluents (liquids, solids, gases) and environmental
- Testing and characterization of materials and processes
- Computational modeling and simulation

Symposium Organizers:

- Chairman: Wilson Acchar
  - UFRN, Brazil
- Co-chair: Ana M. Segadães
  - University of Aveiro, Portugal

Q- Porous and cellular ceramics

Porous and cellular ceramic materials and components are essential in many applications, including filters, absorbers, catalyst carriers, membranes, heat exchangers, heat storage, sensors and lightweight structural components. Highly porous components possessing various pore and cell architecture in the millimeter to the nanometer range can be obtained based on several processing technologies, including precursor pyrolysis, sacrificial templating, partial sintering, direct foaming, replica of porous structures, extrusion, fiber assemblage and Additive Manufacturing. In this symposium, we will discuss recent advances in modeling, manufacturing, characterization and applications of cellular and porous ceramics. Abstracts on the following:

- Advancements in Processing of Porous Ceramics
- Structure and Properties of Porous Ceramics
- Modeling of Porous Structures and Properties
- Characterization of Porous Structures
- Micro-porous and Meso-porous Ceramics
- Ceramic Membranes
- Applications of Porous Ceramics

Symposium Organizers:

- Chairman: Prof. Fernando dos Santos Ortega
  - FEI, Brazil
- Co-chair: Prof. ing. Paolo Colombo
  - University of Padova, Italy

R- Polymer-derived ceramics development and applications

Precursor-based ceramics play an increasing role because of their flexibility in incorporating elements at a molecular level resulting in different classes of ceramics as amorphous networks containing the constituents homogeneously dispersed on the atomic level, crystalline phases and (nano)composites of binary or multinary phases which cannot be formed by traditional routes . Additionally, technical fibers, coatings, matrices of composites and functional porous ceramics are examples for the wide field of applications of these pre-ceramic polymers. In comparison to other ceramic manufacturing technologies, the use of polymer-shaping techniques and the considerable low processing temperatures are technological advantages which allow unique properties and functionalities. The aim of the symposium is to discuss the latest developments on PDC ceramics, including modelling, structural characterization, microstructure/property correlations, and the manufacture of functional and structural components based on these organic-inorganic polymers. This symposium will review the current state of the AM technologies for ceramic processing, with focus on feedstocks, equipment development, design, properties and microstructure of printed parts. The following topics are suggested, but not limited to:

- PDC based ceramic fibers
  - Processing of oxide and non-oxide ceramic fibers
  - Characterization and properties of ceramic fibers
  - Applications for CMCs, MMCs and fiber fabrics

- Precursor based polymer and ceramic coatings
  - Development of functional coatings hydrophilic/hydrophobic/catalytic
  - protective coatings from corrosion/oxidation
  - coating technologies and characterization

- Functional ceramics
  - Metal modified PDCs
  - Catalytic active ceramics
  - Electrical and magnetic properties
  - Optical properties
  - Ceramics for hydrogen generation

- Nanocomposites
  - Techniques for tailoring the nanostructure
  - Processing of nanocomposites
  - Properties of nanocomposites

- Porous ceramics
  - Robust catalysts for bio-mass conversion
  - Hydrogen storage and separation
  - Membranes for gas purification and separation

- Modeling and simulation
  - Simulation of phase formation, separation and crystallization
  - Prediction of ceramic properties in dependency on the precursor

- Industrial applications
  - Electronic applications e.g. LED, dielectric medium, shielding
  - As alternative coating systems
  - CMCs (fibers and matrices)

Symposium Organizers:

- Chairman: Dr. Günter Motz
- Chairman: Dr. Samuel Bernard
- Co-chair: Prof. Yuji Iwamoto
- Co-chair: Prof. Raj K. Bordia
- Co-chair: Prof. Ricardo Machado
- Co-chair: Prof. Jie Kong

CONFERENCE VENUE

EXHIBITION AREA

Exhibitors

01 - REOTERM

02- AVACO

03 - ELFUSA

04 - EIRICH

05 - NETZSCH

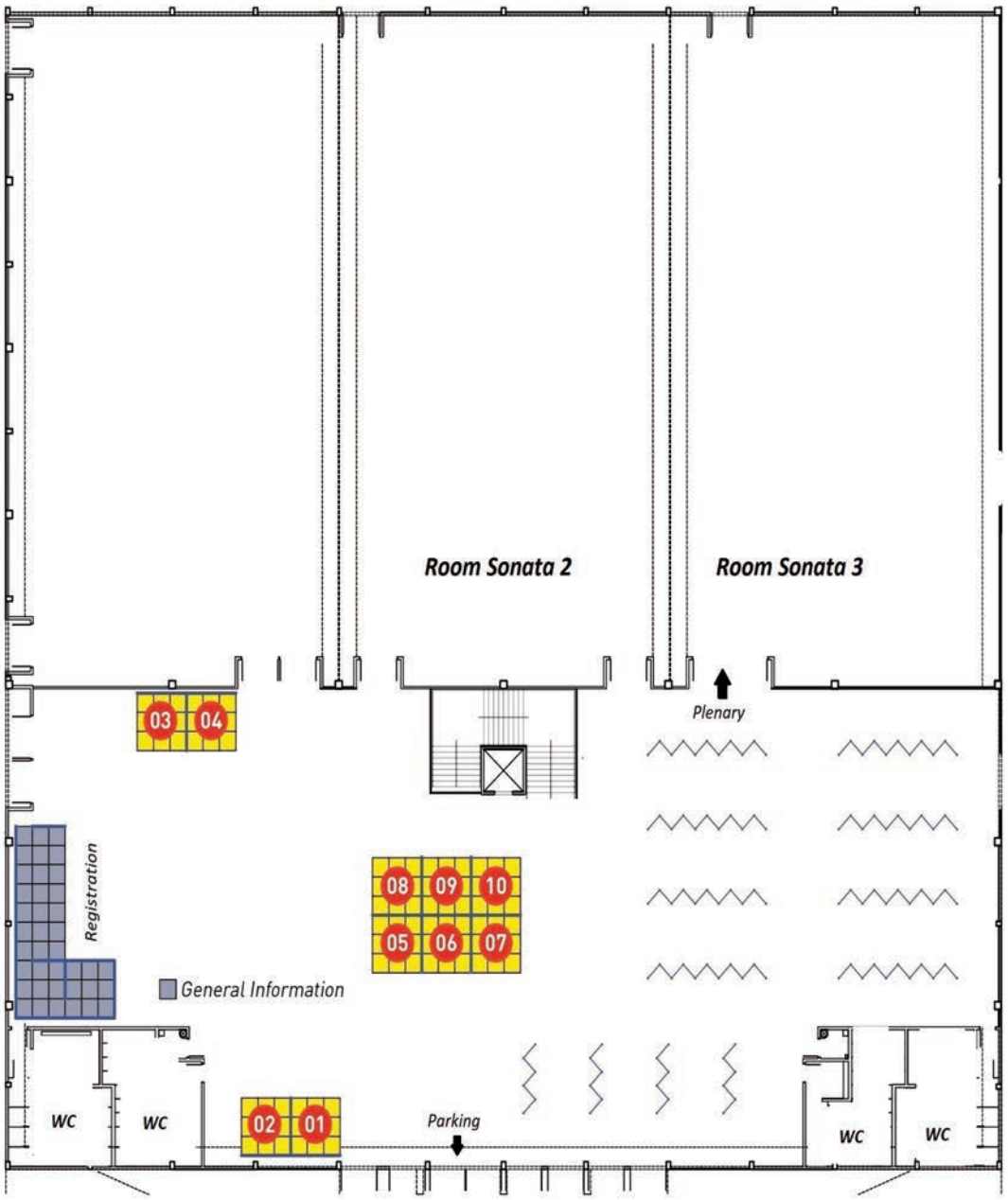
06 - MBRAUM

07 - ATCP

08 - QUANTUM

09 - TECPROPRO

10 - ALTMANN



PROGRAM OVERVIEW

June, 18									
Room Sonata 2	Room Minueto	Room Cantata 1	Room Cantata 2	Room Prelúdio	Room Canon	Room Allegro 1	Room Allegro 2	Room Vivace 1	Room Vivace 2
08:30- 09:00 a.m. **14-020** I	08:30- 09:00 a.m. **09-027** /	08:30- 08:50 a.m. **Opening session** 08:50- 09:10 a.m. **Karen Scrivener** /	08:30- 09:00a.m. **13-041** /	08:30- 09:00a.m. **10-030** /	08:30- 09:00 a.m. **Overview Brazilian glass**	08:30- 09:00 a.m. **08-004** /	08:30- 09:00 a.m. **06-227** /	08:30- 09:00 a.m. **18-063** /	08:30- 08:50 a.m. **Openig Section**
09:00- 09:30 a.m. **14-004** /	09:00- 09:20 a.m. **09-064** *O*	09:10- 09:50 a.m. **Vanderley M John** /	09:00- 09:30 a.m. **13-058** /	09:00- 09:30 a.m. **10-079** /	09:00- 09:30 a.m. **11-018** /	09:00- 09:30 a.m. **08-018** /	09:00-0 9:20 a.m. **06-180** *O*	09:00- 09:30 a.m. **18-029** /	08:50- 09:20 a.m. **02-070** /
09:30- 10:00 a.m. **14-035** /	09:20-09:40a.m. **09-124** ***O*** 09:40- 10:00 a.m. **09-101** ***O***		09:30- 09:50 a.m. **13-046** *O*	09:30- 10:00 a.m. **10-028** /	09:30- 09:50 a.m. **11-034** *O*	09:30- 09:50 a.m. **08-109** *O*	09:20-09:40a.m. **06-049** *O*	09:30- 09:50 a.m. **18-018** O	09:20- 09:40 a.m. **02-092** *O*
10:00- 10:30 a.m. **14-072** /	10:00- 10:30 a.m. **09-028** /	09:50- 10:30 a.m. **Edgardo F Irassar** /	09:50- 10:10 a.m. **13-048** *O* 10:10- 10:30 a.m. **13-033** *O*	10:00- 10:30 a.m. **10-058** /	09:50- 10:10 a.m. **11-030** *O* 10:10- 10:30 a.m. **11-019** *O*	09:50- 10:10 a.m. **08-027** *O* 10:10- 10:30 a.m. **08-048** *O*	09:40- 10:00 a.m. **06-160** *O* 10:00- 10:30 a.m. **06-181** /	09:50- 10:10 a.m. **18-042** *O* 10:10- 10:30 a.m. **18-007** *O*	09:40- 10:10 a.m. **02-096** / 10:10- 10:30 a.m. **02-028** *O*
10:30 -10:50 a.m. Coffee									
10:50- 11:10 a.m. **14-040** /	11:00- 11:20 a.m. **09-106** *O*	10:50- 11:15 a.m. **Maria A.**	10:50- 11:20 a.m. **13-012** /	10:50- 11:10 a.m. **10-011** *O*	10:50- 11:10 a.m. **11-009** *O*	10:50- 11:10 a.m. **08-047** *O*	10:50- 11:10 a.m. **06-220** *O*	10:50- 11:20 a.m. **18-027** /	10:50- 11:10 a.m. **02-006** *O*
11:10- 11:30 a.m. **14-061** /	11:20- 11:40 a.m. **09-016** ***O***	11:15- 11:50 a.m. **Luciano Gobbo** /	11:20- 11:50 a.m. **13-060** /	11:10- 11:30 a.m. **10-034** *O*	11:10- 11:30 a.m. **11-025** *O*	11:10- 11:30 a.m. **08-022** *O*	11:10- 11:30 a.m. **06-110** *O*	11:20- 11:50 a.m. **18-015** /	11:10- 11:30 a.m. **02-052** *O*
11:30- 11:50 a.m. **14-046** *O*				11:30- 11:50 a.m. **10-077** *O*	11:30- 11:50 a.m. **11-017** *O*	11:30- 11:50 a.m. **08-099** *O*			11:30- 11:50 a.m. **02-017** *O*
11:50 a.m. -12:30 p.m. Plenary talk - André R. Studart ***Room 1 Sonata 3***									
12:30 - 02:00 p.m. Lunch									
02:00- 02:25 p.m. **14-064** /	02:00- 02:30 p.m. **09-121** /	02:00- 02:20 p.m. **04-039** *O*	02:00- 02:30 p.m. **13-001** /	02:00- 02:30 p.m. **10-029** /	02:00- 02:30 p.m. **11-007** /	02:00- 02:30 p.m. **08-081** /	02:00- 02:30 p.m. **06-081** /	02:00- 02:30 p.m. **18-054** /	
02:25- 02:50 p.m. **14-039** /	02:30- 02:50 p.m. **09-109** *O*	02:20- 02:40 p.m. **04-075** *O*	02:30- 03:00 p.m. **13-039** /	02:30- 03:00 p.m. **10-023** /	02:30- 03:00 p.m. **11-014** /	02:30- 03:00 p.m. **08-142** /	02:30- 02:50 p.m. **06-229** *O*	02:30- 03:00 p.m. **18-064** /	02:30- 02:50 p.m. **02-023** *O*
02:50- 03:15 p.m. **14-028** /	02:50- 03:10 p.m. **09-084** *O*	02:40- 03:20 p.m. **Robert Flatt** /	03:00- 03:20 p.m. **13-059** /	03:00- 03:30 p.m. **10-068** /	03:00- 03:20 p.m. **11-021** *O*	03:00- 03:20 p.m. **08-123** *O*	02:50- 03:10 p.m. **06-018** *O*	03:00- 03:20 p.m. **18-021** *O*	02:50- 03:10 p.m. **02-024** *O*
03:15- 03:40 p.m. **14-034** /	03:10- 03:30 p.m. **09-085** *O*	03:20- 04:00 p.m. **Rafael G Pileggi** /			03:20- 03:40 p.m. **11-015** *O*	03:20- 03:40 p.m. **08-041** *O*	03:30-04:00 p.m. **06-182** /	03:20- 03:40 p.m. **18-011** *O*	03:10-03:30 p.m. **02-091** *O*
03:40- 04:00 p.m. **14-015** *O*	03:30- 04:00 p.m. **09-054** *O*				03:40- 04:00 p.m. **11-026** *O*	03:40- 04:00 p.m. **08-051** *O*		03:40- 04:00 p.m. **18-022** *O*	03:30-04:00 p.m. **02-036** /
04:00- 04:30 p.m. Coffee - Break									
04:30- 04:50 p.m. **14-024** /	04:30- 04:50 p.m. **09-022** *O*	04:30- 04:50 p.m. **04-022** *O*		04:30- 05:30 p.m. **Poster Firetalks**	04:30- 05:00 p.m. **11-003** /	04:30- 05:00 p.m. **08-151** /		04:30- 04:50 p.m. **18-040** *O*	04:30- 05:00 p.m. **02-060** /
04:50- 05:100 p.m	04:50- 05:10 p.m. **09-033** *O*	04:50- 05:10 p.m. **04-054** *O*				05:00- 05:20 p.m. **08-012** *O*		04:50- 05:10 p.m. **18-055** *O*	05:00- 05:30 p.m. **02-058** /
05:10- 05:30 p.m. **14-056** *O*	05:10- 05:30 p.m. **09-045** *O*	05:10- 05:30 p.m. **Poster short presentations**				05:20- 05:40 p.m. **08-083** *O*		05:10- 05:30 p.m. **18-053** *O*	
POSTER SESSION									

Simposium	A/1	B/2	C/3	D/4	E/5	F/6	G/7	H/8	I/9
	J/10	K/11	L/12	M/13	N/14	O/15	P/16	Q/17	R/18

Symposium	Title
A/1	Additive Manufacturing of Ceramics
B/2	Advances in Bioceramics
C/3	Bioinspired Ceramics and Composites
D/4	Cements and geopolymers
E/5	Ceramics for agriculture and livestock
F/6	Ceramics for energy and environment
G/7	Education in Ceramics
H/8	Electric and Magnetic Ceramics
I/9	Engineering Ceramics, Mechanical Behavior and Fractography
J/10	Frontiers of Glass Science
K/11	Frontiers of Glass Technology
L/12	Fundamentals of Sintering and Advanced Sintering Processes
M/13	Green and Energy Efficient Processing
N/14	High and Ultra High Temperature Ceramics
O/15	José Arana Varela Memorial Symposium
P/16	New trends in silicate and clay-based ceramics
Q/17	Porous and Cellular Ceramics

ment and applications

June, 19									
Room Sonata 2	Room Minueto	Room Cantata 1	Room Cantata 2	Room Prelúdio	Room Canon	Room Allegro 1	Room Allegro 2	Room Vivace 1	Room Vivace 2
08:30-08:55 a.m. **14-002** /	08:30- 09:00a.m. **09-096** /		08:30- 09:00a.m. **13-018** /	08:30- 09:00a.m. **10-056** /	08:30-08:50 a.m. **17-087** *O*	08:30- 09:00a.m. **08-075** /	08:30- 09:00a.m. **06-007** /	08:30- 09:00a.m. **18-004** /	
08:55-09:20 a.m. **14-049** /	09:00- 09:20 a.m. **09-095** *O*	08:50- 09:10 a.m. **04-036** *O*	09:00- 09:30 a.m. **13-045** /	09:00- 09:30 a.m. **10-015** /	08:50- 09:10 a.m. **17-080** *O*	09:00- 09:30 a.m. **08-077** /	09:00- 09:20 a.m. **06-211** *O*	09:00- 09:30 a.m. **18-048** /	
09:20-09:45 a.m. **14-018** /	09:20- 09:40 a.m. **09-012** *O*	09:10- 09:30 a.m. **04-031** *O*	09:30- 09:50 a.m. **13-016** *O*	09:30- 10:00 a.m. **10-002** /	09:10- 09:30 a.m. **17-052** *O*	09:30- 09:50 a.m. **08-085** *O*	09:20- 09:40 a.m. **06-030** *O*	09:30- 09:50 a.m. **18-030** *O*	09:20- 09:40 a.m. **02-034** *O*
09:45-10:10 a.m. **14-008** /	9:40- 10:00 a.m. **09-119** *O*	09:30- 09:50 a.m. **V.M. John** *O*	09:50- 10:10 a.m. **13-003** *O*		09:30- 09:50 a.m. **17-028** *O*	09:50- 10:10 a.m. **08-138** *O*	09:40- 10:00 a.m. **06-115** *O*	09:50- 10:10 a.m. **18-045** *O*	09:40- 10:00 a.m. **02-094** *O*
10:10-10:30 a.m. **14-075** *O*	10:00- 10:30 a.m. **09-093** /	09:50- 10:30 a.m. **Bernhard Middendorf** /	10:10- 10:30 a.m. **13-024** *O*	10:00- 10:30 a.m. **10-009** /	09:50- 10:30 a.m. **17-019** /	10:10- 10:30 a.m. **08-046** *O*	10:00- 10:30 a.m. **06-196** /	10:10- 10:30 a.m. **18-062** *O*	10:00- 10:30 a.m. **02-016** /
10:30 -10:50 a.m. Coffee									
10:50- 11:10 a.m. **14-001** /	10:50- 11:10 a.m. **09-067** *O*	10:50- 11:15 a.m. **Carlos J.**	10:50- 11:20 a.m. **13-019** /	10:50- 11:10 a.m. **10-001** *O*	10:50- 11:10 a.m. **17-077** *O*	10:50- 11:20 a.m. **08-150** /	10:50- 11:10 a.m. **06-016** *O*		10:50- 11:10 a.m. **02-075** *O*
11:10- 11:30 a.m. **14-054** /		11:15- 11:40 a.m. **Silvia R. Vieira**		11:10- 11:30 a.m. **10-020** *O*			11:10- 11:30 a.m. **06-208** *O*		11:10- 11:40 a.m. **02-056** /
11:30- 11:50 a.m. **14-016** *O*	11:10- 11:50 a.m. **09-029** /	11:40- 11:50 a.m. **Debate**	11:20- 11:50 a.m. **13-040** /	11:30- 11:50 a.m. **10-045** *O*	11:10- 11:50 a.m. **17-029** /	11:20- 11:50 a.m. **08-149** /	11:30- 11:50 a.m. **06-177** *O*		11:40- 11:50 a.m. **Closing Section**
11:50 a.m. -12:30 p.m. Plenary talk - Edgar Dutra Zanotto ***Room 1 Sonata 3***									
12:30 - 02:00 p.m. Lunch									
02:00- 02:25 p.m. **14-029** /	02:00- 02:30 p.m. **09-083** /	02:00- 02:20 p.m. **04-021** *O*	02:00- 02:30 p.m. **13-038** /	02:00- 02:30 p.m. **10-027** /	02:00- 02:20 p.m. **17-005** *O*	02:00- 02:30 p.m. **08-127** /	02:00- 02:30 p.m. **06-240** /		02:00- 02:30 p.m. **03-031** /
02:025- 02:50 p.m. **14-022** /	02:30- 02:50 p.m. **09-034** *O*	02:20- 02:40 p.m. **04-104** *O*	02:30- 03:00 p.m. **13-042** /	02:30- 03:00 p.m. **10-037** /	02:20- 02:40 p.m. **17-065** *O*	02:30- 03:00 p.m. **08-141** /	02:30- 02:50 p.m. **06-232** *O*		02:30- 03:00 p.m. **03-047** /
02:50- 03:15 p.m. **14-043** /	02:50- 03:10 p.m. **09-094** *O*	02:40- 03:20 p.m. **Mohend Chaouche** /	03:00- 03:20 p.m. **13-015** *O*	03:00-03:30 p.m. **10-032** /	02:40- 03:00 p.m. **17-032** *O*	03:00- 03:20 p.m. **08-042** *O*	02:50- 03:10 p.m. **06-148** *O*		03:00- 03:30 p.m. **03-032** *O*
03:15- 03:40 p.m. **14-071** /	03:10-03:30 p.m. **09-118** *O*	03:20- 04:00 p.m. **Guilherme Lenz e Silva** /			03:00- 03:20 p.m. **17-022** *O*	03:20- 03:40 p.m. **08-019** *O*	03:10-03:30 p.m. **06-239** *O*		
03:40- 04:00 p.m. **14-041** I	03:30-04:00 p.m. **09-114** *O*				03:20- 04:00 p.m. **17-012** /	03:40- 04:00 p.m. **08-044** *O*	03:30-04:00 p.m. **06-052** /		03:30-04:00 p.m. **03-049** /
04:00- 04:30 p.m. Coffee - Break									
04:30- 04:50 p.m. **14-006** /	04:30- 04:50 p.m. **09-032** *O*	04:30- 04:50 p.m. **04-049** *O*		Free	04:30- 04:50 p.m. **17-048** *O*	04:30- 04:50 p.m. **08-089** *O*			04:30- 05:00 p.m. **03-050** /
04:50- 05:10 p.m. **14-066** /	04:50- 05:10 p.m. **09-030** *O*	04:50- 05:10 p.m. **04-088** *O*				04:50- 05:10 p.m. **08-118** *O*			
05:10- 05:30 p.m. **14-057** /	05:10- 05:30 p.m. **09-035** *O*	05:10- 05:30 p.m. **Poster short presentations**			04:50- 05:30 p.m. **17-040** /	05:10- 05:30 p.m. **08-125** *O*			05:00- 05:30 p.m. **Flash poster presentation**
POSTER SESSION									

Simposium	A/1	B/2	C/3	D/4	E/5	F/6	G/7	H/8	I/9
	J/10	K/11	L/12	M/13	N/14	O/15	P/16	Q/17	R/18

Symposium	Title
A/1	Additive Manufacturing of Ceramics
B/2	Advances in Bioceramics
C/3	Bioinspired Ceramics and Composites
D/4	Cements and geopolymers
E/5	Ceramics for agriculture and livestock
F/6	Ceramics for energy and environment
G/7	Education in Ceramics
H/8	Electric and Magnetic Ceramics
I/9	Engineering Ceramics, Mechanical Behavior and Fractography
J/10	Frontiers of Glass Science
K/11	Frontiers of Glass Technology
L/12	Fundamentals of Sintering and Advanced Sintering Processes
M/13	Green and Energy Efficient Processing
N/14	High and Ultra High Temperature Ceramics
O/15	José Arana Varela Memorial Symposium
P/16	New trends in silicate and clay-based ceramics
Q/17	Porous and Cellular Ceramics
R/18	Polymer-derived ceramics development and applications

June, 20

Room Sonata 2	Room Minueto	Room Cantata 1	Room Cantata 2	Room Prelúdio	Room Canon	Room Allegro 1	Room Allegro 2	Room Vivace 1	Room Vivace 2
08:30- 08:55 a.m. **14-063 I**	08:30- 9:10 a.m. **ELFUSA I**		08:30- 09:00 a.m. **12-039 I**	08:30- 09:00 a.m. **10-031 I**	08:30- 08:50 a.m. **17-060 O**		08:30- 09:00 a.m. **06-230 I**	08:30- 09:00 a.m. **03-033 I**	**Symposium - O José Arana Varela Memorial Symposium**
08:55- 09:20 a.m. **14-093 I**					08:50- 09:10 a.m. **17-071 O**		09:00- 09:20 a.m. **06-184 O**		
09:20- 09:45 a.m. **14-007 I**	09:10- 9:50 a.m. **REOTERM I**		09:00- 09:30 a.m. **12-031 I**	09:00- 09:30 a.m. **10-076 I**	09:10- 09:30 a.m. **17-066 O**		09:20- 09:40 a.m. **06-214 O**	09:00- 09:30 a.m. **03-036 I**	
09:45- 10:10 a.m. **14-062 I**			09:30- 10:00 a.m. **12-035 I**	09:30- 10:00 a.m. **10-003 I**	09:30- 09:50 a.m. **17-070 O**		09:40- 10:00 a.m. **06-150 O**	09:30- 10:00 a.m. **03-039 I**	
10:10- 10:30 a.m. **14-055 I**	09:50- 10:30 a.m. **TECPROPRO I**		10:00- 10:30 a.m. **12-032 I**	10:00- 10:30 a.m. **10-047 I**	09:50- 10:30 a.m. **17-037 I**		10:00- 10:30 a.m. **06-034 O**	10:00- 10:30 a.m. **03-026 I**	
10:30 -10:50 a.m. Coffee									
10:50- 11:10 a.m. **14-067 I**	10:50- 11:20 a.m. **07-037 I**		10:50- 11:10 a.m. **12-029 O**	10:50- 11:10 a.m. **10-019 O**	10:50- 11:10 a.m. **17-058 O**		10:50- 11:10 a.m. **06-179 O**	10:50- 11:20 a.m. **03-046 I**	**Symposium - O José Arana Varela Memorial Symposium**
11:10- 11:30 a.m. **14-003 I**			11:10- 11:30 a.m. **12-047 O**	11:10- 11:30 a.m. **10-081 O**			11:10- 11:30 a.m. **06-163 O**		
11:30- 11:50 a.m. **14-021 I**	11:20- 11:50 a.m. **07-022 I**		11:30- 11:50 a.m. **12-040 O**	11:30- 11:50 a.m. **10-035 O**	11:10- 11:50 a.m. **17-015 I**		11:30- 11:50 a.m. **06-177 O**	11:20- 11:50 a.m. **Flash poster presentation**	
11:50 a.m. -12:30 p.m. Plenary talk - Mike Murray *Room 1 Sonata 3*									
12:30 - 02:00 p.m. Lunch									
02:00- 02:25 p.m. **14-005 I**	2:00- 2:30 p.m. **07-039 I**		02:00- 02:30 p.m. **12-027 I**	02:00- 02:30 p.m. **10-007 I**	02:00- 02:20 p.m. **17-039 O**	02:00- 02:40 p.m. **01-024 I**	02:00- 02:20 p.m. **06-004 O**	02:00- 02:30 p.m. **16-007 I**	**Symposium - O José Arana Varela Memorial Symposium**
02:25- 02:50 p.m. **14-068 I**	02:30- 02:50 p.m. **07-005 O**		02:30- 03:00 p.m. **12-038 I**	02:30- 02:50 p.m. **10-062 O**	02:20- 02:40 p.m. **17-067 O**		02:20- 02:40 p.m. **06-108 O**	02:30- 03:00 p.m. **16-051 I**	
02:50- 03:15 p.m. **14-037 I**	02:50- 03:10 p.m. **07-034 O**			02:50- 03:20 p.m. **10-051 I**	02:40- 03:00 p.m. **17-049 O**	02:40- 03:00 p.m. **01-072 O**	02:40- 03:00 p.m. **06-054 O**		
03:15- 03:40 p.m. **14-010 I**	03:10- 03:40 p.m. **07-009 I**		03:00- 03:20 p.m. **12-050 O**		03:00- 03:20 p.m. **17-084 O**	03:00- 03:20 p.m. **01-060 O**	03:00- 03:20 p.m. **06-061 O**	03:00- 03:20 p.m. **16-022 O**	
03:40- 04:00 p.m. **14-051 O**			03:20- 03:40 p.m. **12-014 O**	03:20- 03:40 p.m. **10-063 O**	03:20- 04:00 p.m. **17-035 I**	03:20- 04:00 p.m. **01-071 I**	03:20- 03:40 p.m. **06-029 O**	03:20- 03:40 p.m. **16-003 O**	
			03:40- 04:00 p.m. **12-018 O**				03:40- 04:00 p.m. **06-155 O**	03:40- 04:00 p.m. **16-070 O**	
04:00- 04:30 p.m. Coffee - Break									
04:30- 04:50 p.m. **14-011 I**	04:30- 05:00 p.m. **07-019 I**		04:30- 05:00 p.m. **12-052 I**		04:30- 04:50 p.m. **17-020 O**	04:30- 05:10 p.m. **01-016 I**		04:30- 04:50 p.m. **16-004 O**	**Symposium - O José Arana Varela Memorial Symposium**
04:50- 05:10 p.m. **14-017 O**			05:00- 05:20 p.m. **12-019 O**		04:50- 05:30 p.m. **17-085 I**			04:50- 05:10 p.m. **16-040 O**	
05:10- 05:30 p.m. **14-078 I**	05:00- 05:30 p.m. **07-003 I**		05:20- 05:40 p.m. **12-028 O**			05:10- 05:30 p.m. **01-061 O**		05:10- 05:30 p.m. **16-026 O**	
05:30- 05:50 p.m. **M. Jalaly invited**									
POSTER SESSION									

Simposium	A/1	B/2	C/3	D/4	E/5	F/6	G/7	H/8	I/9
	J/10	K/11	L/12	M/13	N/14	O/15	P/16	Q/17	R/18

Symposium	Title
A/1	Additive Manufacturing of Ceramics
B/2	Advances in Bioceramics
C/3	Bioinspired Ceramics and Composites
D/4	Cements and geopolymers
E/5	Ceramics for agriculture and livestock
F/6	Ceramics for energy and environment
G/7	Education in Ceramics
H/8	Electric and Magnetic Ceramics
I/9	Engineering Ceramics, Mechanical Behavior and Fractography
J/10	Frontiers of Glass Science
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L/12	Fundamentals of Sintering and Advanced Sintering Processes
M/13	Green and Energy Efficient Processing
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June, 21									
Room Sonata 2	Room Minueto	Room Cantata 1	Room Cantata 2	Room Prelúdio	Room Canon	Room Allegro 1	Room Allegro 2	Room Vivace 1	Room Vivace 2
		08:30- 08:50 a.m. **05-004** /		08:30- 10:30 a.m. **Discussion: International research collaboration / JNCS "Frontiers" issue**				08:30- 09:00 a.m. **freee slot**	**Symposium - O José Arana Varela Memorial Symposium**
		08:50- 09:15 a.m. **05-001** *O*						09:00- 09:30 a.m. **03-037** /	
		09:15- 09:30 A.M. **05-005** *O*						09:30- 10:00 a.m. **03-041** /	
		09:30- 10:00 a.m. **05-016** /						10:00- 10:30 a.m. **03-052** /	
		10:00- 10:30 a.m. **Swateshmukul Santra**							
10:30 -10:50 a.m. Coffee									
		10:50- 11:20 a.m. **Markus Niedrberger**		10:50- 11:50 a.m. **Discussion: International research collaboration / JNCS "Frontiers" issue**				10:50- 11:20 a.m. **03-051** /	**Symposium - O José Arana Varela Memorial Symposium**
		11:20- 11:35 A.M. **Andre F. de**						11:20- 11:50 a.m. **03-040** /	
		11:35- 11:50 a.m. **05-002** *O*							
11:50 a.m. -12:30 p.m. Plenary talk - Masahiro Yoshimura ***Room 1 Sonata 3***									
Closing Cerimony									

Simposium								
A/1	B/2	C/3	D/4	E/5	F/6	G/7	H/8	I/9
J/10	K/11	L/12	M/13	N/14	O/15	P/16	Q/17	R/18

Symposium	Title
A/1	Additive Manufacturing of Ceramics
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Q/17	Porous and Cellular Ceramics
R/18	Polymer-derived ceramics development and applications

ORAL SESSION DETAILED SYMPOSIM PROGRAM

Monday, June 17 - 21, 2018

18, June - Room Sonata 2 Symposia: N - High and Ultra High Temperature Ceramics		
Time	Chair	
08:30 AM	William (Bill) E. Lee / Victor C. Pandolfelli Jon Binner / Christos Aneziris	14-020 - Invited **Future Research Needs for Ultra-High Temperature Ceramics** William Fahrenholtz (Estados Unidos) (1) MST; Fahrenholtz, W.(1);
09:00 AM		14-004 - Invited **Exposure of High Temperature Ceramics to Molten Sand and Combustion Flows for Gas Turbine Engine Applications** Andy Nieto (Estados Unidos) (1) AN; (2) MW; (3) MM; (4) AG; Nieto, A.(1); Walock, M.(2); Murugan, M.(3); Ghoshal, A.(4);
09:30 AM		14-035 - Invited **Advances in the processing and characterization of UHTC-Composites for Aerospace** **Diletta Sciti (Italy)** (1) CNR; Sciti, D.(1);Vinci, A.(1);
10:00 AM		14-072 - Invited **Study of UHTC microstructures for hypersonic applications via finite element method** **Ricardo Afonso Angélico (Brazil)** (1) USP; (2) UFSCar; Angélico, R.A.(1); Dos Santos, M.F.(2); Sciuti,V.F.(2); Canto, R.B.(2); Pandolfelli,V.C.(2);
10:30am	Coffee	
10:50 AM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-040 - Invited **Arc Melted High Temperature Oxides: Recent Developments, Opportunities and Challenges** Paschoal Bonadia (Brazil) (1) RHIM; Bonadia, P.(1); Gelbmann, G.(1);
11:10 AM		14-061 - Invited **The wettability at high temperatures in the technological development of materials** **Sebastiao Ribeiro (Brasil)** (1) EEL/USP; Ribeiro, S.(1);
11:30 AM		14-046 - oral **Energy savings in iron and steel vessels by refractory lining design** Matheus Felipe Dos Santos (Brazil) (1) UFSCar; (2) USP; (3) FATEC Sertãozinho; Dos Santos, M.F.(1); Campos, M.G.G.(1); Pelissari, P.B.G.B.(1); Sako, E.Y.(1); Angélico, R.A.(2); Salvini, V.R.(3); Pandolfelli, V.C.(1);
11:50 AM	Plenary talk - André R. Studart	

Oral

12:30 PM	Lunch	
02:00 PM	William (Bill) E. Lee / Victor C. Pandolfelli Jon Binner / Christos Aneziris	14-064 - Invited **Why should a steel producer bother about refractories** Sido Sinnema (Netherlands) (1) S.; Sinnema, S.(1);
02:25 PM		14-039 - Invited **Extreme temperature in refractory applications: some examples from the field** **Frédéric Roulet (France)** (1) SG CREE; Roulet, F.(1); San -miguel, L.(1); Francy, O.(1); Boumahdi, N.(1); Cabodi, I.(1);
02:50 PM		14-028 - Invited **Carbon bonded Refractories binding systems: Technical, Economical and Environmental challenges** Erwan Gueguen (France) (1) ; Gueguen, E.(1); Hill, K.(1); Cabral Da Silva, S.L.(1);
03:15 PM		14-034 - Invited **The Relevance of Carbon in Ceramics** Markus Braun (Germany) (1) ; Braun, M.(1); Boenigk, W.(1);
03:40 PM		14-015 - oral **On the non-linear mechanical behavior of carbon-bonded alumina at high temperatures** **Bruno Luchini (Alemanha)** (1) IKGB; (2) UFSCar; Luchini, B.(1); Grabenhorst, J.(1); Fruhstorfer, J.(1); Pandolfelli, V.C.(2); Aneziris, C.(1);
04:00pm	Coffee-Break	
04:30 PM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-024 - Invited **High performance thermal insulator ceramic foams with tailored microstructure** **Pedro Ivo Batistel Galiote Brossi Pelissari (Brazil)** (1) UFSCar; (2) USP; Pelissari, P.B.G.B.(1); Angélico, R.A.(2); Salvini, V.R.(1); Pandolfelli, V.C.(1);
04:50 PM		14-030 - oral **Macroporous ceramics for thermal insulation at high temperatures derived from greener and ultrastable liquid foams** Tiago dos Santos Junior (Brazil) (1) UFSCar; (2) FATEC Sertãozinho; Santos Junior, T.(1); Pereira, C.I.(1); Salvini, V.R.(2); Pandolfelli, V.C.(1);
05:10 PM		14-056 - oral **Development and testing of exchangeable carbon-bonded alumina foam filter systems for the continuous casting of steel** Tony Wetzig (Germany) (1) TU BA Freiberg; (2) TU B Freiberg; Wetzig, T.(1); Dudczig, S.(1) ; Hubálková, J.(1); Aneziris, C.(2);

18, June - Minueto
Symposia: I - Engineering Ceramics, Mechanical Behavior and Fractography

Time	Chair	
08:30 AM	Humberto N. Yoshimura	09-027 - Invited **Novel hybrid materials with added-value functionalities for applications in extreme environments** Frederic Monteverde (Italy) (1) CNR; Monteverde, F.(1); Sciti, D.(1); Zoli, L.(1); Saraga, F.(1);
09:00 AM		09-064 - oral **The role of interfaces in advanced ceramic composites** Piotr Wiecinski (Poland) (1) WUT; (2) ITE -PIB; Wiecinski, P.(1); Wieclaw -midor, A.(1); Smolik, J.(2); Garbacz, H.(1);
09:20 AM		09-124 - oral **R-Curve Behavior and Flexural Strength of Zirconia-toughened Alumina and Partially Stabilized Zirconia Composite Laminates** Marcelo Daniel Barros (Brasil) (1) TUHH; (2) UFSC; (3) FAU; Blaese, D.(1); Benitez, T.(2); Barros, M.D.(2); Jelitto, H.(1); Travitzk y, N.(3); Hotza, D.(2); Janssen, R.(1);
09:40 AM		09-101 - oral **Production and characterization of Alumina-Titania-ítria ceramics composites for thermal barrier aerospace exhaust system.** YOGENDRA PRASAD YADAVA (Brasil) (1) UFPE; De Albuquerque, L.T.(1); Gomes, N.L.(1); Ferreira, R.A.S.(1); Yadava, Y.P.(1);
10:00 AM		09-028 - Invited **Thermal shock resistance, wear behavior and oxidation resistance of silicon nitride based nano-composites** Pavol Sajgalik (Slovakia) (1) IIC SAS; (2) IMR SAS; (3) ; Sajgalik, P.(1); Hnatko, M.(1); Lences, Z.(1); Dusza, J.(2); Tatarko, P.(3); Koval?íková, A.(2); Kašiarová, M.(2);
10:30am	Coffee	
11:00 AM	Humberto N. Yoshimura	09-106 - oral **Texture formation in alpha-alumina coating by aerosol deposition method** Makoto Tanaka (Japan) (1) JFCC; (2) YNU; Tanaka, M.(1); Kawashima, N.(1); Kitaoka, S.(1); Yokoe, D.(1); Kato, T.(1); Hasegawa, M.(2);
11:20 AM		09-016 - oral **Tribological behavior of hydrogenated W-C/a-C:H coatings deposited by different sputtering techniques** Frantisek Lofaj (Slovakia) (1) IMR SAS; (2) IMSE LUT; (3) MTF STU; Lofaj, F.(1); Klich, M.(2); Medved, D.(1); Kabatova, M.(1); Vana, D.(3); Dobrovodsky, J.(3);
11:50 AM	Plenary talk - André R. Studart	

12:30:00	Lunch	
02:00 PM	Humberto N. Yoshimura	09-121 - Invited **Super-strong ZrB2-based UHTCs at High Temperatures** Guo Jun Zhang (China) (1) DHU; (2) Birmingham; Zhang, G.(1); Zou, J.(2); Ma, H.(1);
02:30 PM		09-109 - oral **Understanding fracture of brittle solids: from single crystals to ceramic systems** Raul Bermejo (Austria) (1) RB; Bermejo, R.(1);
02:50 PM		09-084 - oral **Effects of sintering additive on the mechanical properties of AlN ceramics** Humberto Naoyuki Yoshimura (Brasil) (1) UFABC; (2) FSA; (3) USP; Yoshimura, H.N.(1); Molisani, A.L.(2); Goldenstein, H.(3);
03:10 PM		09-085 - oral **Ferroelastic characterization of LaCoO3 by impression testing** Ali Akbari-Fakhrabadi (Chile) (1) Advanced Materials Laboratory; Akbari-fakhrabadi, A.(1); Rodríguez Carreño, O.B.(1); Meruane, V.(1);
03:30 PM		09-054 - oral **Cavitation wear of ceramics uder stream-impact conditions** Zbigniew Pedzich (Poland) (1) AGH; (2) Ziabka, M.; (3) Jasionowski, R.; Pedzich, Z.(1); Ziabka, M.(2); Jasionowski, R.(3);
04:00pm	Coffee-Break	
04:30 PM	Humberto N. Yoshimura	09-022 - oral **Combined Effect of Conductive Phase and Current Pattern on Spark Plasma Sintering of Si3N4-Based Ceramic Composite** FEI ZUO (China) (1) GDUT; Zuo, F.(1); Lin, H.(1);
04:50 PM		09-033 - oral **Mechanical Properties of Spark Plasma Sintered Aluminum Nitride Ceramics** Toshiyuki Nishimura (Japan) (1) T.N.; Nishimura, T.(1);
05:10 PM		09-045 - oral **Comminution influence on mechanical properties of nbc consolidated by spark plasma sintering** Ana Julia Oliveira Tertuliano (Brasil) (1) USP; (2) UFABC; Tertuliano, A.J.O.(1); Boidi, G.(1); Machado, I.F.(1); Trombini, V.(2);

18, June - Cantata 1 Symposia: D - Cements and geopolymers		
Time	Chair	
08:30 AM	Rafael G. Pileggi	Opening session
08:50 AM		Invited Karen Scrivener (EPFL Lausanne)
09:50 AM		Invited Edgardo F Irassar (National University of the Center of Buenos Aires Province)
10:30am	Coffee	
10:50 AM	Rafael G. Pileggi	Invited Special session: Prof. Maria A. Cincotto
11:15 AM		Invited Luciano Gobbo - Malvern PANalytical
11:50 AM	Plenary talk - André R. Studart	
12:30:00	Lunch	

02:00 PM	Rafael G. Pileggi	04-039 - oral **Monitoring the gain on consistency over time of cementitious suspensions mixed with vermiculite residue** Marcel Hark Maciel (Brasil) (1) USP; Rojas-ramírez, R.A.(1); Maciel, M.H.(1); Romano, R.C.O.(1); Pileggi, R.G.(1); Vieira - coelho, A.C.(1);
02:20 PM		04-075 - oral **Experimental developments of the squeeze-flow test for building materials** Fábio Alonso Cardoso (Brasil) (1) Poli-USP; Cardoso, F.A.(1); John, V.M.(1); Pileggi, R.G.(1);
02:40 PM		Invited Robert Flatt (ETH Zürich)
03:20 PM		Invited Rafael G Pileggi (Poli-USP)
04:00pm	Coffee-Break	
04:30 PM	Rafael G. Pileggi	04-022 - oral **MgAl-layered double hydroxide as smart nanofiller for cement-based materials** Marinalva Aparecida Alves-Rosa (Brasil) (1) UNESP/IQ; Alves-rosa, M.A.(1); Almeida, A.A.(1); Santos, R.(1); Pulcinelli, S.H.(1); Santilli, C.V.(1);
04:50 PM		04-054 - oral **Evaluation of blended portland - pozzolan cements contaning diatomaceous earth** PEDRO CESAR RODRIGUES ALVES ABRAO (Brazil) (1) Poli-USP; Abrao, P.R.A.(1); Cardoso, F.A.(1); John, V.M.(1);

18, June - Cantata 2 Symposia: M - Green and Energy Efficient Processing		
Time	Chair	
08:30 AM	Rodrigo Moreno / Sonia R. H. Mello Castanho	13-041 - Invited **Recent developments in mineral-based eco-materials** Agnes Smith (France) (1) IRCER; Smith, A.(1);
09:00 AM		13-058 - Invited **Processing, Valorization and Application of Waste Derived from Silica and Alumina** Denise Alves Fungaro (Brasil) (1) IPEN; Fungaro, D.A.(1);
09:30 AM		13-046 - oral **Simple method for making formulations with several raw materials in masses for structural ceramic** Francisco Rolando Valenzuela -Diaz (Brasil) (1) IFES; (2) Ifes; (3) EPUSP; Savazzini-reis, A.(1); Sagrillo, V.P.D.(2); Valenzuela -diaz, F.R.(3);
09:50 AM		13-048 - oral **How the design of nanomaterials makes it possible to control the properties** **Sophie Cassaignon (France)** (1) SU; Cassaignon, S.(1); Durupthy, O.(1); Portehault, D.(1);
10:10 AM		13-033 - oral **Effect of collagen tipe I and vitamin D3 functionalization of biomimetic bioglass scaffolds on hydroxyapatite condensation.** María Eugenia Contreras-García (Mexico) (1) UMSNH; Contreras-garcía, M.E.(1); Abad -javier, M.E.(1); Cajero -juarez, M.(1); Nuñez-anita, R.E.(1);
10:30am	Coffee	
10:50 AM	Rodrigo Moreno / Sonia R. H. Mello Castanho	13-012 - Invited **Green ceramic membranes. From countryside to efficient industrial performance** Enrique Sánchez (Spain) (1) University Jaume I; (2) FACSA; Sánchez, E.(1); Lorente, M.(1); Bordes, M.(1); Zuriaga, E.(2);
11:20 AM		13-060 - Invited **Advanced processing strategies for the development of energy efficient devices with eco-friendly, natural materials** Sonia Regina H Mello Castanho (Brasil) (1) IPEN; Mello Castanho, S.R.(1); Parra Silva, J.(1); Cardoso, S.(1);
11:50 AM	Plenary talk - André R. Studart	

Oral

12:30:00	Lunch	
02:00 PM	Rodrigo Moreno / Sonia R. H. Mello Castanho	13-001 - Invited **Electrochemical supercapacitors for energy storage prepared by colloidal nanotechnologies** Igor Zhitomirsky (Canadá) (1) IZ; (2) JM; (3) AS; Zhitomirsky, I.(1); Milne, J.(2); Syed, A.(3);
02:30 PM		13-039 - Invited **Solid oxide fuel cells with laser-patterned electrode-electrolyte interfaces** Angel Larrea (Spain) (1) ICMA; Larrea, A.(1); Cebollero, J.(1); Lahoz, R.(1); Laguna -bercero, M.(1); Silva, J.(1);
03:00 PM		13-059 - Invited **Micrograded ceramic-metal composites** Thomaz Augusto Guisard Restivo (Brazil) (1) UNISO; (2) IPEN; (3) Uniso; (4) EPUSP; (5) Ipen; Guisard Restivo, T.A.(1); Beccari, R.(1); Durazzo, M.(2); Telles, V.(3); Yamagata, C.(2); Silva, A.C.(2); Tenório, J.A.S.(4); Mello -castanho, S.R.H.(5);
04:00pm	Coffee-Break	

18, June - Prelúdio
Symposia: J - Frontiers of Glass Science

Time	Chair	
08:30 AM	Edgar Dutra Zanotto	10-030 - Invited **Fragile-to-strong transitions in network glasses** Pierre Lucas (United States) (1) PL; Lucas, P.(1);
09:00 AM		10-079 - Invited **Open Questions in Glass Relaxation** Mathieu Bauchy (Estados Unidos) (1) Y. H.; (2) T. B.; (3) M. M. S.; (4) M. B.; Hu, Y.(1); Bechgaard, T.(2); Smedskjaer, M.M.(3); Bauchy, M.(4);
09:30 AM		10-028 - Invited **Structure-transport Correlation of Mixed Network Former Glasses** Aswini Ghosh (India) (1) IACS; Ghosh, A.(1); Palui, A.(1);
10:00 AM		10-058 - Invited **The model of ionic glass as weak electrolyte revisited** Ana Candida Martins Rodrigues (Brasil) (1) UFSCar; Rodrigues, A.C.M.(1);

10:30am	Coffee	
10:50 AM	Edgar Dutra Zanotto	10-011 - oral **Electrical properties of borosilicate glasses melted by cold crucible induction melter (CCIM) technology** Dylan Jouglard (France) (1) CEA; (2) CEMHTI; Jouglard, D.(1); Neyret, M.(1); Malki, M.(2); Del Campo, L.(2);
11:10 AM		10-034 - oral **Unravelling diffraction pattern of glass, liquids, and amorphous materials** Shinnji Kohara (Japan) (1) SK; (2) YO; (3) ST; (4) AM; Kohara, S.(1); Onodera, Y.(2); Ta hara, S.(3); Masuno, A.(4);
11:30 AM		10-077 - oral **Structure-property relations in rare-earth doped GeO2-B2O3-Al2O3-PbO-PbF2 glasses by modern magnetic resonance techniques** Eduar Enrique Carvajal (Columbia) (1) UFSCar; (2) USP; (3) University of Sao Paulo; Carvajal, E.E.(1); Doerenkamp, C.(2); Donoso, J.P.(2); De Camargo, A.(2); Eckert, H.(3);
11:50 AM	Plenary talk - André R. Studart	
12:30:00	Lunch	

02:00 PM	Edgar Dutra Zanotto	10-029 - Invited **Exploring the structure of glass-forming liquids using high energy X-ray diffraction, containerless methodology and state-of-the-art molecular dynamics simulation.** Martin Charles Wilding (England) (1) UCL; (2) ANL; (3) MDI; (4) UO; (5) SUNY; Wilding, M.C.(1); Benmore, C.(2); Weber, R.(3); Alderman, O.(3); Tamalonis, A.(3); Wilson, M.(4); Parise, J.(5);
02:30 PM		10-023 - Invited **Polyamorphic and rigidity transitions in glasses** Matthieu Micoulaut (1) M; (2) JYR; (3) CY; Micoulaut, M.(1); Raty, J.(2); Yildirim, C.(3);
03:00 PM		10-068 - Invited **Percolation channels: a universal idea to describe the atomic structure and dynamics of glasses and melts** Daniel R. Neuville (France) (1) IPGP; (2) ; (3) A; Neuville, D.(1); Le Lo sq, C.(2); Chen, W.(2); Florian, P.(2); Massiot, D.(2); Zhou, Z.(2); Greaves, N.(3);
04:00pm	Coffee-Break	
04:30 PM	Edgar Dutra Zanotto	Poster Firetalks

Oral

18, June - Canon Symposia: K - Frontiers of Glass Technology		
Time	Chair	
08:30 AM	Mathieu Hubert	Invited Overview Brazilian glass industry
09:00 AM		11-018 - Invited **Sustainability in Ocean Mining for the Production of Glass Sand** Luciano Rocha (Brazil) (1) LR; (2) HD; Rocha, L.(1); Delboni Jr., H.(2);
09:30 AM		11-034 - oral **Outlook and trends of glass recycling in Brazil** Pedro Garcia Lins (Brazil) (1) USP; (2) CFB; Lins, P.G.(1); Toffoli, S.M.(1); Bernardo, F.S.(2);
09:50 AM		11-030 - oral **Brazilian glass industry state of the art in bulk solids handling** Rogerio Ruiz (Brazil) (1) J&J; (2) EDV; Ruiz, R.(1); Akerman, M.(2); Barnum, R.(1);
10:10 AM		11-019 - oral **Creation of a Glass Technician Training Course in Brazil** Mauro Akerman (Brasil) (1) EDV; (2) UFSCar; Akerman, M.(1); Rodrigues, A.C.M.(2);
10:30am	Coffee	

10:50 AM	Mathieu Hubert	11-009 - oral **Practical approach to secure furnace lifetime** Oscar Verheijen (Netherlands) (1) OS; (2) J.; (3) AFJA; (4) SJAM; Verheijen, O.(1); Laven, J.(2); Habraken, A.(3); Lessmann, S.(4);
11:10 AM		11-025 - oral **Evolution and Advancement of Oxy-Fuel Burner Technology for Glass Melting Furnaces** Renato Pereira da Silva Junior (Brazil) (1) APB; (2) APCI; Silva Junior, R.P.(1); D'agostini, M.D.(2); Basilio, E.E.(1);
11:30 AM		11-017 - oral **Design and implementation of optimelt™ thermochemical heat recovery system for oxy-fuel furnaces** Abilio tasca (Brazil) (1) Mr.; (2) Mr; Tasca, A.(1); Kobayashi, H.(2); Laux, S.(2); Bell, R.(2); Francis, A.(2);
12:30:00	Lunch	
02:00 PM	Mathieu Hubert	11-007 - Invited **The smart factory concept used in glass furnaces.** Gabriel Noboa (United States) (1) GS; Noboa, G.(1);
02:30 PM		11-014 - Invited **High epsilon solution – high emissivity silica enables energy savings and emission reductions** Peter Klaus Frolow (Germany) (1) DPF; Frolow, P.K.(1);
03:00 PM		11-021 - oral **Fluoride loss in fluoride-phosphate glasses: dependence of composition and glass structure on preparation conditions** Doris Möncke (Greece) (1) NHRF; (2) FSU; Möncke, D.(1); Ehrt, D.(2);
03:20 PM		11-015 - oral **Current Status and Trends of Dental Glass-ceramics** Maziar Montazerian (Brazil) (1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV); Montazerian, M.(1); Villas Boas, M.(1); Eilaghi, M.(1); Sampaio, A.(1); Zanotto , E.D.(1);
03:40 PM		11-026 - oral **Thermal performance labeling of fenestration and glazing for residential buildings in Brazil** Fernando Simon Westphal (Brazil) (1) UFSC; Westphal, F.S.(1);
04:00pm	Coffee-Break	

04:30 PM	Mathieu Hubert	11-003 - Invited **Recent developments on solar reflective glazed ceramic tiles** Chiara Ferrari (Itália) (1) DIEF; Ferrari, C.(1); Muscio, A.(1); Siligardi, C.(1);
18, June - Allegro 1 Symposia: H - Electric and Magnetic Ceramics		
Time	Chair	
08:30 AM	José Antonio Eiras	08-004 - Invited **Room-Temperature Multiferroic New Candidates in Hexagonal RFeO3** Xiang Ming Chen (China) (1) XM; (2) J; (3) TL; (4) XQ; (5) H; (6) TT; Chen, X.(1); Liu, J.(2); Sun, T.(3); Liu, X.(4); Tian, H.(5); Gao, T.(6);
09:00 AM		08-018 - Invited **Advances and challenges in the synthesis, characterization and application of BFO-based nanostructured ceramics** IVAIR Aparecido SANTOS (Brazil) (1) UEM; Santos, I.A.(1);
09:30 AM		08-109 - oral **Multiferroic properties of Eu-substituted BiFeO3 fine-grained ceramics** Vasile Adrian Surdu (Romania) (1) UPB; (2) INFIM; Surdu, V.A.(1); Ganea, P.(2); Kuncser, V.(2); Ianculescu, A.(1);
09:50 AM		08-027 - oral **Nonlinear magnetic response of nanostructured BiFeO3** Gustavo Sanguino Dias (Brazil) (1) UEM; (2) UFSCar; Volnistem, E.A.(1); Dias, G.S.(1); Leonardo, J.M.P.(1); Silva, D.M.(1); Garcia, D.(2); Eiras, I.A.(2); Santos, I.A.(1);
10:10 AM		08-048 - oral **Grain size effect on the high field properties of (Ba,Ca)(Ti,Zr)O3 ceramics** Lavinia Curecheriu (Romania) (1) UAIC; (2) ICMATE; Curecheriu, L.(1); Buscaglia, M.T.(2); Canu, G.(2); Buscaglia, V.(2); Mitoseriu, L.(1);
10:30am	Coffee	

10:50 AM	José Antonio Eiras	08-047 - oral **Cerium doped barium titanate ceramics prepared by the sol-gel method** Catalina A STANCIU (Romania) (1) UPB; (2) NIMP; Stanciu, C.(1); Ianculescu, A.(1); Trusca, R.(1); Vasile, B.(1); Cernea, M.(2); Pintilie, I.(2);
11:10 AM		08-022 - oral **Oxide transversal multilayer thermoelectric generators** Jörg Töpfer (Germany) (1) JT; (2) TR; (3) TS; (4) AB; (5) BC; (6) ST; Töpfer, J.(1); Reimann, T.(2); Schulz, T.(3); Bochmann, A.(4); Capraro, B.(5); Teichert, S.(6);
11:30 AM		08-099 - oral **Microstructural, structural and electrical properties of bilayered BaZr0.05Ti0.95O3/Ba0.75Sr0.25TiO3 ceramics** Eduardo Antonelli (Brasil) (1) UNIFESP; Antonelli, E.(1); Serrano, A.G.(1); Boschilia Junior, R.(1); Boaventura, A.L.(1);
11:50 AM	Plenary talk - André R. Studart	
12:30:00	Lunch	
02:00 PM	José Antonio Eiras	08-081 - Invited **Single phase multiferroic compounds by doping Bi4Ti3O12 with Fe+3 ions** Marcelo Stachiotti (Argentina) (1) IFIR; Stachiotti, M.(1); Lavado, C.(1); Rebola, A.(1);
02:30 PM		08-142 - Invited **Ceramics materials structures, energy and fractal** Vojislav V Mitic (Serbia) (1) 1; (2) 2; (3) 3; (4) 4; Mitic, V.(1); Paunovic, V.(2); Lazovic, G.(3); Kocic, L.(2); Vlahovic, B.(4);
03:00 PM		08-123 - oral **Influence of the magnitude of the ferroelectric ordering on the optical properties of Pb(Ti Ni)O3 and (K Ba)(Nb Ni)O3** Manuel Henrique Lente (Brasil) (1) UNIFESP; (2) UFSCar; Lente, M.H.(1); Eiras, J.A.(2); De Abreu, P.T.P.(1); Vargas, N.F.C.(1); Gennari, R.C.(1); Lang, R.(1);
03:20 PM		08-041 - oral **Structural and electromagnetic effects caused by the addition of niobium pentoxide in the cobalt ferrite** Francisco Eduardo Carvalho (Brasil) (1) IEAv; (2) UNIFEI; (3) UA; Carvalho, F.E.(1); Lemos, L.V.(1); Mi gliano, A.C.C.(1); Da Silva, M.R.(2); Pullar, R.C.(3);
03:40 PM		08-051 - oral **Modeling of The Tunability Properties and Switching Properties in Ferroelectric Ceramics with Different Grain Sizes** Leontin Padurariu (Romania) (1) UAIC; Padurariu, L.(1); Curecheriu, L.(1); Ciomaga, C.(1); Mitoseriu, L.(1);

04:00pm	Coffee-Break	
04:30 PM	José Antonio Eiras	08-151 - Invited **Ultra-Low Temperature Co-fired Ceramics with Zero-Shrinkage Approach (Invited Lecture)** Heli Maarit Jantunen (Finland) (1) Oulu; Jantunen, H.M.(1);
05:00 PM		08-012 - oral **A mesoscopic description of PLZT relaxor ceramics using Rietveld refinement parameters** Eriton R Botero (Brasil) (1) UFGD; (2) UFSCar; Botero, E.(1); Garcia, D.(2);
05:20 PM		08-083 - oral **First-order hybrid improper ferroelectric phase transition in (Sr,Ca)3Sn2O7 ceramics** Xiao Qiang Liu (China) (1) XQ; (2) JJ; (3) XM; Liu, X.(1); Lu, J.(2); Chen, X.(3);

18, June - Allegro 2 Symposia: F - Ceramics for energy and environment		
Time	Chair	
08:30 AM	Vincenzo Esposito	06-227 - Invited **Optimization of SOC electrodes performance for fuel cell and co-electrolysis operation** **Mihails Kusnezoff (Germany)** (1) MK; (2) NT; (3) SM; (4) AM; Kusnezoff, M.(1); Trofimenko, N.(2); Megel, S.(3); Michaelis, A.(4);
09:00 AM		06-180 - oral **Advanced Ceramics for Energy Systems and Environmental Technology** Alexander Michaelis (Germany) (1) AM; Michaelis, A.(1);
09:20 AM		06-049 - oral **Innovative microstructure and architecture in efficient La2-xPrxNiO4+d based SOFC Cathodes** Elisabeth Djurado (França) (1) CNRS, Grenoble INP; Djurado, E.(1); Khamidy, N.I.(1); Sharma, R.(1);
09:40 AM		06-160 - oral **The influence of porosity on mechanical strength and electrical conductivity of NiO-3,5YSZ composite and its Ni-3,5YSZ cermet for SOFC anode application** Ihor Polishko (Ukraine) (1) IPMS; (2) PMI; Polishko, I.(1); Brodnikovskyi, Y.(1); Brodnikovskyi, D.(1); Vasyliv, B.(2); Podhurska, V.(2); Vasylyev, O.(1);
10:00 AM		06-181 - Invited **Oxygen Ion-Conducting Ceramic Membranes for High-Temperature Applications** **Olivier Guillon (Germany)** (1) RWTH; (2) JARA-Energy; (3) JARA-Energy and RWTH; Guillon, O.(1); Baumann, S.(2); Liu, Y.(2); Schulze -küppers, F.(2); Deibert, W.(2); Ivanova, M.(2); Unije, U.(2); Mücke, R.(2); Meulenberg, W.(3);
10:30am	Coffee	

10:50 AM	Vincenzo Esposito	06-220 - oral **A geometric characterization and modelling of microstructure development for ceramics composites BaZr0,9Y0,1O3-? + BaCe0,9Y0,1O3-? (BCY-BZY)** Huyra Estevao Araujo (Brazil) (1) IFSP; Araujo, H.E.(1);
11:50 AM	Plenary talk - André R. Studart	
12:30:00	Lunch	
02:00 PM	Vincenzo Esposito	06-081 - Invited **Glass-based seals and ceramic protective coatings for solid oxide cells: current status, issues and perspectives** Federico Smeacetto (Italy) (1) ; Smeacetto, F.(1);
02:30 PM		06-229 - Invited **3D Printing of functional multi-ceramics for Solid Oxide Fuel Cells applications Marc Torrell (Spain)** (1) IREC; (2) DTU; (3) 3dCeram; (4) ULL; (5) PromPart; (6) FAE; (7) HyGear; (8) Saan; Torrell, M.(1); Morata, A.(1); Esposito, V.(2); Chaput, C.(3); Hern andez, L.(4); Crawshaw, C.(5); Ramos, F.(6); Liefthink, D.(7); Ansar, S.(8); Tarancón, A.(1);
03:00 PM		06-018 - Invited **Ceramic batteries for electrochemical energy storage** Sven Uhlenbruck (Germany) (1) SU; (2) CD; (3) CT; (4) AW; (5) SL; (6) ; (7) DF; (8) OG; Uhlenbruck, S.(1); Dellen, C.(2); Tsai, C.(3); Windmüller, A.(4); Lobe, S.(5); Finsterbusch, M.(6); Fattakhova-rohlfing, D.(7); Guillon, O.(8);
03:30 PM		06-182 - oral **Electrochemical properties of NASICON-structured glass-ceramics of the Li1+xCrx(GeyTi1-y)2-x(PO4)3 system** Rafael Bianchini Nuernberg (Brasil) (1) UFSCar; (2) UM; Nuernberg, R.B.(1); Rodrigues, A.C.M.(1); Pradel, A.(2); Ribes, M.(2);
04:00pm	Coffee-Break	

18, June - Vivace 1 Symposia: R - Polymer - derived ceramics development and applications		
Time	Chair	
08:30 AM	Günter Motz / Samuel Bernard	18-063 - Invited **Silicon Oxycarbide Glasses and Glass-Ceramics: "All-Rounder"- Materials for Advanced Structural and Functional Applications** Ralf Riedel (Alemanha) (1) TUD; Riedel, R.(1); Ionescu, E.(1);
09:00 AM		18-029 - Invited **Formation of Graphene Networks in Silicon Oxycarbide Ceramics** Peter Kroll (1) pk; Kroll, P.(1);
09:30 AM		18-018 - oral **Silicon Oxycarbide Micro and Nanostructured Electrodes for Electrochemical Energy Storage** Gurpreet Singh (United States) (1) UNIPD; (2) KSU; Singh, G.(1); Colombo, P.(2); Francin, G.(2); Cuccato, R.(2); Mukherjee, S.(1); Abass, M.(1);
09:50AM		18-042 - oral **From design to application of TiC(N)/SiC(N) Nanocomposites derived from preceramic polymers** Maxime Balestrat (France) (1) IRCER; (2) IEM; Balestrat, M.(1); Cretin, M.(2); Bernard, S.(1);
10:10 AM		18-007 - oral **Development of novel carbon-based fibers with remarkable oxidation resistance** Luiz Fernando Belchior Ribeiro (Brasil) (1) UFSC; (2) UBT; (3) UNILIM; Ribeiro, L.F.B.(1); Motz, G.(2); Bernard, S.(3); Hotza, D.(1); Machado, R.A.(1);
10:30am	Coffee	
10:50 AM	Günter Motz / Samuel Bernard	18-027 - Invited **Polysiloxane-based ceramic tapes applied for membrane emulsification process** Michaela Wilhelm (Germany) (1) UFSC; (2) Uni Bremen; Nishihora, R.K.(1); Hotza, D.(1); Rezwan, K .(2); Wilhelm, M.(2);
11:20 AM		18-015 - Invited **Micro- and macropore-tailoring strategies in polysilazane-derived ceramic materials** Thomas Konegger (Austria) (1) TUW; Konegger, T.(1); Drechsel, C.(1); Prochaska, T.(1); Rauchenecker, J.(1);

11:50 AM	Plenary talk - André R. Studart	
12:30:00	Lunch	
02:00 PM	Günter Motz / Samuel Bernard	18-054 - Invited **High temperature oxidation behaviour of thick polymer derived glass-ceramic coatings on stainless steel** Dusan Galusek (Slovakia) (1) SAS; (2) TnUAD; (3) CME; Galusek, D.(1); Parchoviansky, M.(2); Svancarek, P.(1); Galuskova, D.(2); Motz, G.(3); Barosso, G.(3); Petrikova, I.(2);
02:30 PM		18-064 - Invited **Industrial Synthesis and Applications of Silazane Resins and Formulations** Ralf Grottenmüller (Alemanha) (1) KGaA; Grottenmüller, R.(1);
03:00 PM		18-021 - oral **Polysilazane derived ceramic oxidation barrier coatings on MoSiB alloys** Iryna Smokovych (Germany) (1) OvGU Magdeburg; Smokovych, I.(1); Scheffler, M.(1);
03:20 PM		18-011 - oral **Influence of BIAS voltage and pulse time on the active-filler conversion of Polymer derived Ceramic coatings processed by Plasma Assisted Pyrolysis.** Daniel Auri Schaefer (Brasil) (1) UFSC; (2) UBT; Schaefer, D.A.(1); Leite, M.L.(2); Seifert, M.(2); Marti ns, N.(1); Klein, A.N.(1); Motz, G.(2);
03:40 PM		18-022 - oral **Synthesis and Application on metal substrates of ML33 functionalized with Silver Nanoparticles to evaluate antibacterial activity** Suellen Battiston (Brazil) (1) UFSC; (2) UNILIM; Battiston, S.(1); Bezerra, A.V.A.(1); Ribeiro, L.F.B.(1); Reis, E.M.(1); Bernard, S.(2); Machado, R.A.(1);

04:00pm	Coffee-Break	
04:30 PM	Günter Motz / Samuel Bernard	18-040 - oral **Recent Advances in synthesis of pure h-BN nanosheets by coupling** Berangere TOURY (France) (1) INSA; (2) UDL; Toury, B.(1); Li, Y.(2); Garnier, V.(2); Steyer, P.(2); Journet, C.(1);
04:50 PM		18-055 - oral **New atomic layer deposition approach of boron nitride based on polymer derived ceramics route: Potentiality for functional complex nanostructure fabrication** Catherine Marichy (France) (1) LMI UMR5615; Marichy, C.(1); Hao, W.(1); Journet, C.(1); Brioude, A .(1);
05:10 PM		18-053 - oral **Low temperature design of polymer-derived hexagonal boron nitride** Samuel Bernard (France) (1) IRCER; Bernard, S.(1); Lale, A.(1);
18, June - Vivace 2 Symposia: B - Advances in Bioceramics		
Time	Chair	
08:30 AM	Juliana Marchi	Openig Section
08:50 AM		02-070 - Invited **Novel bioactive ceramic and glass-ceramic compositions for bone regeneration** Ilaria Cacciotti (Italy) (1) ; Cacciotti, I.(1);
09:20 AM		02-092 - oral **Influence of Na2O/CaO ratio on the dissolution kinetics of biocompatible glasses** Juliana Marchi (Brasil) (1) UFABC; (2) IPEN; Marchi, J.(1); Borges, R.(1); Zezell, D.M.(2); Lima, C.A.(2);
09:40 AM		02-096 - Invited **Biosilicate, a highly bioactive glass-ceramic; F18, a new bioactive crystallization resistant glass** Edgar Dutra Zanotto (Brasil) (1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV); (2) UFSCar; Zanotto, E.D.(1); Peitl, O.(2); Souza, M.T.(2); Crovace, M.(2);
10:10 AM		02-028 - oral **3D printing of bioactive glass scaffolds with porosity gradient for bone tissue engineering** **Francesco Baino (Italy)** (1) POLITO; (2) TUT; Baino, F.(1); Barberi, J.(1); Massera, J.(2); Verné, E.(1);

10:30am	Coffee	
10:50 AM	Juliana Marchi	02-006 - oral **Probing local environments in calcium pyrophosphate-based glasses for bone regeneration combining advanced characterization methods and computational modelling** Christel Gervais (França) (1) UPMC; (2) ICGM; (3) ENSIACET; (4) UNT; Gervais, C.(1); Bonhomme, C.(1); Petit, I.(1); Sassoye, C.(1); Laurencin, D.(2); Combes, C.(3); Mayen, L.(3); Soulie, J.(3); Rimsza, J.(4); Du, J.(4);
11:10 AM		02-052 - oral **Characterization of thin films of Ag-doped TiO2 with antimicrobial properties for use in orthodontic products** Ellen Lopes Alves (Brazil) (1) UFOP; Alves, E.L.(1);
11:30 AM		02-017 - oral **Fabrication and characterization of porous glass-ceramics as novel orbital implant materials** Francesco Baino (Italy) (1) POLITO; (2) CNR; Baino, F.(1); Gautier Di Confiengo, G.(2); Faga, M.G.(2);
11:50 AM	Plenary talk - André R. Studart	
12:30:00	Lunch	

02:30 PM	Juliana Marchi	02-023 - oral **Novel process of non-sintered HAp/SF biocomposite for bone regeneration** **Sergio Akinobu Yoshioka (Brasil)** (1) PPGIB - USP; (2) USP; (3) JHS; Vieira, D.(1); Gutiérrez, S.(2); Castro Máximo Bicalho, S.M.(3);Yoshioka, S.A.(2);
02:50 PM		02-024 - oral **Hydrogel Grafted on Boron Nitride Nanotubes: Preparation, Characterization and Potential Use as Drug Delivery System Tests** Gabriel Augusto Alemão Monteiro (Brazil) (1) CDTN; (2) UFMG; Monteiro, G.A.A.(1); Silva, W.M.(1); Sousa, R.G.(2); Macedo, W.A.A.(1); Gaste lois, P.L.(1); Sousa, E.M.B.(1);
03:10 PM		02-091 - oral **Synthesis and characterization of a nanocomposite based on bioactive glasses containing superparamagnetic iron oxide nanoparticles aiming bone tumor treatment** Roger Borges (Brasil) (1) UFABC; Borges, R.(1); Lourenço, I.M.(1); Seabra, A.B.(1); Ferreira, L.M.(1); Rettori, C.(1); Marchi, J.(1);
03:30 PM		02-036 - Invited **Bioactive ceramics based on CaMg(SiO3)2** Carmen Baudin (Espanha) (1) ICV-CSIC; (2) BioMediTech; Baudin, C.(1); Vanhatupa, S.(2) ; Miettinen, S.(2); Pena, P.(1);
04:00pm	Coffee-Break	
04:30 PM	Juliana Marchi	02-060 - Invited **Two Decades of Commercializing Bioceramic Nanotechnology for Improved Medical Devices** Thomas J Webster (United States) (1) TJW; Webster,T.(1);
05:00 PM		02-058 - Invited **Microstructured and Nanostructured Diamond for Medical Applications** Roger J Narayan (United States) (1) NCSU; Narayan, R.(1);

19, June - Sonata 2 Symposia: N - High and Ultra High Temperature Ceramics		
Time	Chair	
08:30 AM	William (Bill) E. Lee / Victor C. Pandolfelli Jon Binner / Christos Aneziris	14-002 - Invited **High and Ultra-High Temperature Ceramic Matrix Composites** **Jon Binner (Inglaterra)** (1) UoB; (2) NCC; Binner, J.(1); Rubio, V.(1); Porter, M.(1); D'angio, A.(2); Hillman, W.(1);
08:55 AM		14-049 - Invited **Material design of and processing of sustainable compositions in the Alumina-Calcium field for Ultra High temperature applications** christopher parr (France) (1) ; Parr, c.(1);
09:20 AM		14-018 - Invited **Structural Stability of UHTCs at Extreme Environments** Doni Daniel Jayaseelan (Inglaterra) (1) KU; (2) ICL; (3) QMUL; (4) UTEP; Jayaseelan, D.D.(1); Zapata -solvas, E.(2); Grasso, S.(3); Iasi, C.(1); Valenzuela, E.(1); Cedillos-barraza, O.(4); Lee, W.E.(2);
09:45 AM		14-008 - Invited **Tungsten-based ceramic composites in extreme fusion reactor environments** **Samuel Humphry-Baker** (1) ICL; (2) TE; Humphry-baker, S.(1); Smith, G.(2); Lee, B.(1); Vandeperre, L.(1);
10:10 AM		14-075 - oral **Mechanical properties and oxidation resistance of ZrB2-SiC composites prepared with nano-sized particles by spark plasma sintering** Xiaochao Jin (China) (1) JX; (2) LP; (3) WX; (4) FX; (5) WT; Jin, X.(1); Li, P.(2); Wang, X.(3); Fan, X.(4); Wang, T.(5);
10:30am	Coffee	
10:50 AM	William (Bill) E. Lee / Victor C. Pandolfelli Jon Binner / Christos Aneziris	14-001 - Invited **Creep of HfB2-based UHTCs up to 2000 °C or how important structural/dimensional stability could be on hypersonic applications** Eugenio Zapata-Solvas (Inglaterra) (1) ICL; (2) US; Zapata-solvas, E.(1); Gomez-garcia, D.(2); Dominguez -rodriguez, A.(2); Lee, B.(1);
11:10 AM		14-054 - Invited **Spark plasma sintering of textured GNPs reinforced advanced ceramic matrices** **Jacques RENNOTTE (Belgium)** (1) BCRC; Rennotte, J.(1); Bister, G.(1); Erauw, J.(1); Dupon t, V.(1); Lardot, V.(1); Cambier, F.(1);
11:30 AM		14-016 - oral **Cost-effective production and oxidation protection of CFCC's for moderate and high temperature applications** Stefano Martelli (Itália) (1) SM; (2) DLB; Martelli, S.(1); De Bastiani, D.(2);

11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	William (Bill) E. Lee / Victor C. Pandolfelli Jon Binner / Christos Aneziris	14-029 - Invited **Design Silicon Nitride Ceramics for Energy Technology Applications** **Hua-Tay Lin (China)** (1) ; Lin, H.(1);
02:25 PM		14-022 - Invited **Progress of Silicon Nitride Ceramics, Microstructure Evolution and Mechanical/Thermal Properties** Tatsuki Ohji (Japan) (1) AIST; Ohji, T.(1);
02:50 PM		14-043 - Invited **New nitrides and carbides for high temperature application** Pavol Sajgalik (Slovakia) (1) IIC SAS; Sajgalik, P.(1);
03:15 PM		14-071 - Invited **Thermal Transport in SiBN ceramics: Density Functional Theory Calculations and Molecular Dynamics Simulations** Peter Kroll (1) pk; Kroll, P.(1);
03:40 PM		14-041 - Invited **Hermetic ceramic feedthroughs for sensors used in extreme environments** Donald J BRAY (United States) (1) ; Patnaik, A.(1); Sarker, V.(1); Antalek, J.(1); Bakshi, A.(1); Bray , D.(1);
04:00 PM	Coffee-Break	

04:30 PM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-006 - Invited **A new non-classified, pollution resistant high temperature insulation fibre** **Farid Modarresifar** (1) ; (2) CoE; Wynn, A.(1); Jubb, G.(2); Modarresifar, F.(2);
04:50 PM		14-066 - Invited **Eco design of insulating ceramic foams for high temperature application** **Vania Regina Salvini (Brazil)** (1) FATEC; (2) UFSCar; Salvini, V.R.(1); Pandolfelli, V.C.(2); Rodrigues, J.A.(2); Pelissari, P.B.G.B.(2); Santos Junior, T.(2);
05:10 PM		14-057 - Invited **High temperature ceramic coatings for energy saving applications** Eric Yoshimitsu Sako (Brazil) (1) UFSCar; Sako, E.Y.(1); Pandolfelli, V.C.(1); Pelissari, P.B.G.B.(1); De Meo, C.E.(1);
19, June - Minueto **Symposia: Engineering Ceramics, Mechanical Behavior and Fractography**		
Time	Chair	
08:30 AM	Humberto N. Yoshimura	09-096 - Invited **Optical and luminescent properties of translucent YSZ ceramics manufactured using dry powder compaction under powerful ultrasound assistance** Oleg L. Khasanov (Russia) (1) TPU; Khasanov, O.(1); Dvilis, E.(1); Paygin, V.(1); Polisadova, E.(1); Stepanov, S.(1); Valiev, D.(1); Tolkachev, O.(1);
09:00 AM		09-095 - oral **Optimization of modes of spark plasma sintering of transparent MgAl2O4 ceramics** **Oleg L. Khasanov (Russia)** (1) TPU; Khasanov, O.(1); Dvilis, E.(1); Polisadova, E.(1); Stepanov, S.(1); Valiev, D.(1); Paygin, V.(1);
09:20 AM		09-012 - oral **Lithium as a sintering aid for producing dense transparent Magnesium Aluminate Spinel** Lorena Batista Caliman (Brasil) (1) USP; Caliman, L.B.(1); Gouvêa, D.(1);
09:40 AM		09-119 - oral **Zirconia ceramics for dental restorations: trade-off between strength, stability and translucency** Fei Zhang (1) FZ; (2) JC; (3) JV; (4) BVM; Zhang, F.(1); Chevalier, J.(2); Vleugels, J.(3); Van Meerbeek, B.(4);
10:00 AM		09-093 - Invited **Fabrication of transparent polycrystalline cubic silicon nitride and its physical properties** Norimasa Nishiyama (Japan) (1) NN; (2) FW; Nishiyama, N.(1); Wakai, F.(2);

10:30 AM	Coffee	
10:50 AM	Humberto N. Yoshimura	09-067 - oral **Surface segregation of BaO-doped TiO2 and its relationship with nanostability** Andre Luiz da Silva (Brasil) (1) USP; Da Silva, A.L.(1); Gouvêa, D.(1);
11:10 AM		09-029 - Invited **Improved toughness in nanocrystalline ceramics by grain boundary energy engineering** Ricardo Hauch Ribeiro Castro (Estados Unidos) (1) UC Davis; (2) Illinois; Castro, R.H.R.(1); Bokov, A.(1); Zhang, S.(1); Faller, R.(1); Dillon, S.(2); Feng, L.(2);
11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	Humberto N. Yoshimura	09-083 - Invited **Grain boundary strength in porous SiC ceramics measured using microcantilever beam specimens** Junichi Tatami (Japan) (1) YNU; (2) KISTEC; Tatami, J.(1); Iijima, M.(1); Takahashi, T.(2); Imoto, Y.(1); Yahagi, T.(2);
02:30 PM		09-034 - oral **Influence of the carbon content and the coking temperature on the temperature dependent strength of carbon-bonded alumina (Al2O3-C)** Henry Zielke (Germany) (1) TU BA Freiberg; (2) TU B Freiberg; Zielke, H.(1); Schmidt, A.(1); Wetzig, T.(1); Abendroth, M.(1); Kuna, M.(1); Aneziris, C.(2);
02:50 PM		09-094 - oral **The influence of the coarse grain fraction on the microstructure and effective thermal conductivity of alumina castables** Jens Fruhstorfer (1) TUBAF; Fruhstorfer, J.(1); Goetze, P.(1); Gross, U.(1); Fieback, T.(1); Aneziris, C.(1);
03:10 PM		09-118 - oral **Finite-element analyses of the pressing of ceramic components** Caiuã Caldeira Melo (Brazil) (1) UFSCar; Melo, C.C.(1); Canto, R.B.(1); Maginador, R.V.(1); Sciuti, V.F.(1);
03:30 PM		09-114 - oral **The Influence of the Silica Fume Content on the Mechanical Behavior and Fracture Toughness of the Portland Cement Concrete Applied on the Rigid Road Pavement.** Joamir Henrique da Silva (Brasil) (1) UFSC; (2) UFRN; Silva, W.S.(1); Silva, J.H.(2);

04:00 PM	Coffee-Break	
04:30 PM	Humberto N. Yoshimura	09-032 - oral **Effects of the addition of egg shell in the mechanical properties of sintered ceramics** Victor Antunes Silva Barbosa (Brazil) (1) IFBA; Vargens Neto, o.c.(1); Leão, M.A.(1); Da Conceição, A.R.(1); Barbosa, V.A.S.(1); Costa, C.(1);
04:50 PM		09-030 - oral **Study of emerald waste added to ceramic mass for ceramic coating manufacturing** **olimpio baldoino da costa vargens neto (Brazil)** (1) IFBA; Vargens Neto, o.c.(1); Barbosa, V.A.S.(1); Leão, M.A.(1); Santos, O.C.(1); Da Conceição, A.R.(1);
05:10 PM		09-035 - oral **Analysis of the resistance of adherence of ceramic plates, produced with different cycles of burn, through the simple and double collage** Guilherme Timboni Teixeira (Brazil) (1) UNESC; (2) UFSC; Antunes, E.G.P.(1); Teixeira, G.T.(1); Wanderlind, A.(1); Piva, J.H.(1); Bernardin , A.M.(1); Roman, H.R.(2);
19, June - Cantata I **Symposia: D - Cements and geopolymers**		
Time	Chair	
08:50 AM	Rafael G. Pileggi	04-036 - oral **Evaluation of the pozzolanicity of fine fraction of civil construction waste (FCCW)** Nilson Santana de Amorim Júnior (Brasil) (1) UFBA; Amorim Júnior, N.S.(1); Andrade Neto, J.S.(1); Santos, T.A.(1); Ribeiro, D.V.(1);
09:10 AM		04-031 - oral **Analyze of hydration process of cement of clinker co-processed with tio2 waste** José da Silva Andrade Neto (Brasil) (1) UFBA; Andrade Neto, J.S.(1); Mariani, B.B.(1); Amorim Júnior, N.S.(1); Ribeiro, D.V.(1);
09:30 AM		Invited Vanderley M John (Poli-USP) **Microstructure of cementitious materials with different filler content**
09:50 AM		Invited Bernhard Middendorf (Universität Kassel)

Oral

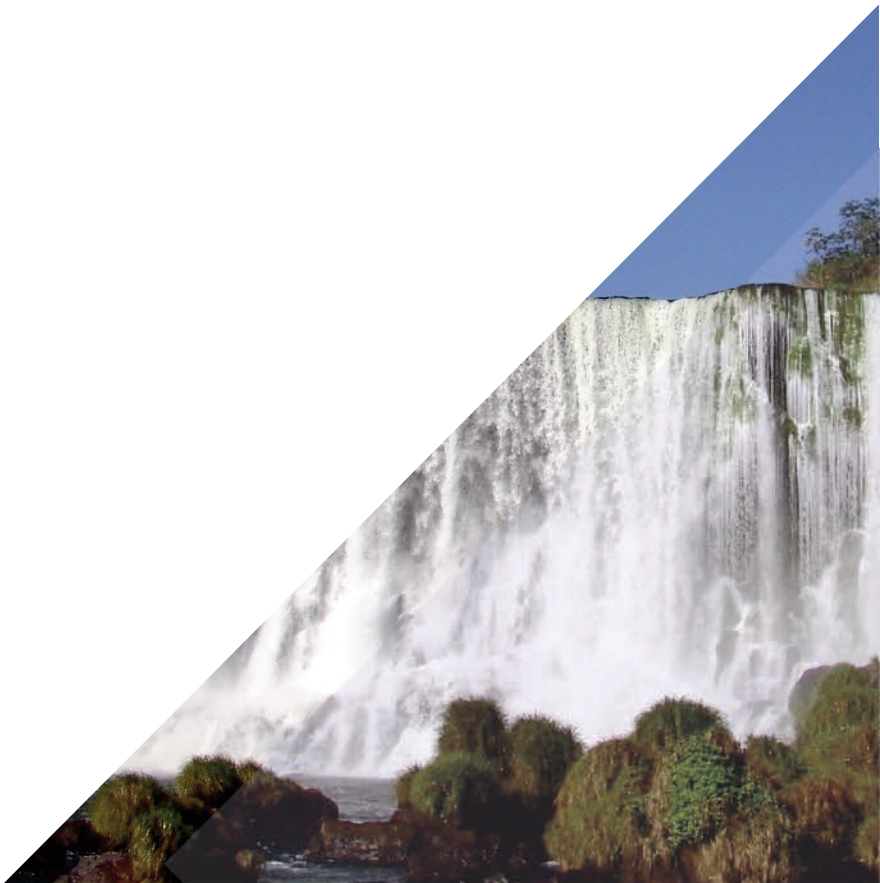
10:30 AM	Coffee	
10:50 AM	Rafael G. Pileggi	Invited Carlos J Massucato - Intercement
11:15 AM		Invited Silvia R Vieira - Votorantim
11:40 AM		Debate
11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	Rafael G. Pileggi	04-021 - oral **Mechanical response of distinct geopolymer mixtures reinforced with pva fibers** Ana Carolina Constâncio Trindade (Brasil) (1) PUC-Rio; (2) CEFET-MG; Trindade, A.C.(1); Batista, R.P.(2); Borges, P.R.(2); Silva, F.A.(1);
02:20 PM		04-104 - oral **Paper and cellulose wastes as raw materials for geopolymers** Rafael Vidal Eleutério (Brazil) (1) UFSC; (2) Klabin; Eleutério, R.V.(1); Lemes Rachadel, P.(1); Hotza, D.(1); Zanlorenzi, H.(2);
02:40 PM		Invited Mohend Chaouche (CNRS - ENS Cachan)
03:20 PM		04-093 - Invited **Development of Synthetic Ceramic Proppants from Geopolymer and Nanocarbon Materials** Guilherme Frederico Bernardo Lenz e Silva (Brasil) (1) PMT-USP; De Campos, V.P.P.(1); Lenz E Silva, G.F.B.(1);

04:00 PM	Coffee-Break	
04:30 PM	Rafael G. Pileggi	04-049 - oral **Treatment of red mud with blast furnace slag followed by calcination: impact on the chemical reaction and leaching after association with Portland cement** Roberto Cesar de Oliveira Romano (Brasil) (1) USP; Romano, R.C.O.(1); Bernardo, H.M. (1); Maciel, M.H.(1); Mesquita, J.A.F.S.(1); Roschel, B.P.(1); Vieira -coelho, A.C.(1); Pileggi, R.G.(1); Cincotto, M.A.(1);
04:50 PM		04-088 - oral **The potential use of the alkaline waste from the aluminum industry as aluminum and silicon source in the geopolymerization process** Mirian Chieko Shinzato (Brazil) (1) UNIFESP; (2) IPEN; Shinzato, M.C.(1); Almeida, T.M.(1); Guedes -silva, C.C.(2); Silva, E.F.S.(1);
05:10 PM		Invited Poster short presentations
19, June - Cantata 2 Symposia: M - Green and Energy Efficient Processing		
Time	Chair	
08:30 AM	Rodrigo Moreno / Sonia R. H. Mello Castanho	13-018 - Invited **Sugar-based compounds as the additives of the future in colloidal processing of ceramics** Paulina Wiecinska (Poland) (1) WUT; Wiecinska, P.(1); Pietr zak, E.(1); Poterala, M.(1); Wieclaw -midor, A.(1);
09:00 AM		13-045 - Invited **Optimization of water based Y-TZP/Al2O3/SiC feedstocks for suspension plasma spraying** Rodrigo Moreno (Espanha) (1) ITC; (2) ICV; Carnicer,V.(1); Sánchez, E.(1); Orts, M.(1); M oreno, R.(2);
09:30 AM		13-016 - oral **Innovative aqueous alumina mixtures using eco-friendly additives for micro-extrusion and tape casting** Julie Bourret (France) (1) IRCER; Bourret, J.(1); Marie, J.(1); Geffroy, P.(1); El Younsi, I.(1); Chartier,T.(1); Pateloup, V.(1); Smith, A.(1); Chaleix,V.(1); Bienia, M.(1);
09:50 AM		13-003 - oral **"Plasma Melting Technology – a novel route to Ceramic tubes"** Lars Ortmann (Alemanha) (1) 98704; Ortmann, L.(1);
10:10 AM		13-024 - oral **Pulsed laser ablation in supercritical CO2 to synthesize photocatalytically active TixOy nanoparticles** Amandeep Singh (Finland) (1) TUT; (2) ; Singh, A.(1); Levänen, E.(1); Honkanen, M.(1); Vihinen, J.(2); Salminen, T.(1); Nikkanen, J.(1); Hyvärinen, L.(1);

10:30 AM	Coffee	
10:50 AM	Rodrigo Moreno / Sonia R. H. Mello Castanho	13-019 - Invited **Porous Ceramic Architectures for Sustainability** Katherine T. Faber (United States) (1) Caltech; (2) NU; (3) FAU; Faber, K.(1); Naviroj, M.(2); Fey, T.(3);
11:20 AM		13-040 - Invited **Processing of hierarchically porous ceramics by rapid thermal processing** Farid Akhtar (Sweden) (1) LTU; Akhtar, F.(1);
11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	Rodrigo Moreno / Sonia R. H. Mello Castanho	13-038 - Invited **Microwave and Flash Processing of 3D Printed Ceramics** Bala Vaidhyanathan (United Kingdom) (1) B; Vaidhyanathan, B.(1);
02:30 PM		13-042 - Invited **Advanced processing of ceramic-metal composites with enhanced functionalities** José Florindo Bartolomé (Espanha) (1) ICMM-CSIC; Bartolomé, J.F.(1);
03:00 PM		13-015 - oral **Modern material preparation in ceramics: Dispersing mixer – a tried and tested solution that is suitable for processing slurries and suspensions for the ceramic universe** Alban Bunjaku (Germany) (1) JC; (2) BUA; Cardoso, J.(1); Bunjaku, A.(2);
04:00 PM	Coffee-Break	

19, June - Prelúdio Symposia: J - Frontiers of Glass Science		
Time	Chair	
08:30 AM	Edgar Dutra Zanotto	10-056 - Invited **Fracture of Sodium-Silicate Glasses: Insights from computer simulations** Walter Kob (France) (1) UM; Kob, W.(1); Zhang, Z.(1); Ispas, S.(1);
09:00 AM		10-015 - Invited **In-situ evaluation of structural changes of glass under a sharp indenter** Satoshi Yoshida (Japan) (1) USP; Yoshida, S.(1); Nguyen, T.(1); Yamada, A.(1); Matsu oka, J.(1);
09:30 AM		10-002 - Invited **Indentation Deformation and Crack Resistance of Oxide Glasses** Morten Mattrup Smedskjaer (Dinamarca) (1) M. M. S.; (2) K. J.; Smedskjaer, M.M.(1); Januchta, K.(2);
10:00 AM		10-009 - Invited **Mechanical Properties of Glass-Ceramics** Francisco C. Serbena (Brazil) (1) UEPG; (2) UFSCar; Serbena, F.(1); Zanotto, E.D.(2);
10:30 AM	Coffee	
10:50 AM	Edgar Dutra Zanotto	10-001 - oral **Tuning Mechanical Properties of Aluminoborate Glasses by Modifier Substitution** Kacper Januchta (Dinamarca) (1) K. J.; (2) K. F. F.; (3) M. B.; (4) R. E.Y.; (5) M. M. S.; Januchta, K.(1); Frederiksen, K.F.(2); Bauchy, M.(3); Youngman, R.(4); Smedskjaer, M.M.(5);
11:10 AM		10-020 - oral **Thermally and Optical Stimulated Luminescence studies in oxyfluoride glasses and glass-ceramics** Mauricio Rodriguez (Uruguay) (1) UdelaR; Rodriguez, M.(1);
11:30 AM		10-045 - oral **Phosphotellurite glass and glass-ceramics with high TeO2 content: thermal, structural and optical investigations** Danilo Manzani (Brazil) (1) IQSC-USP; (2) IQ-UNESP; (3) DF-UFPE; Manzani, D.(1); Fares, H.(2); Reyna, A.(3); Neto, M.(3); Bautista, J.E.Q.(3); Nalin, M.(2); Ribeiro, S.J.L.(2); De Araújo, C.B.(3);

11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	Edgar Dutra Zanotto	10-027 - Invited **Strategies towards highly luminescent quantum dots in glasses** Chao Liu (China) (1) WUT; Liu, C.(1); Zhao, X.(1); Han, J.(1);
02:30 PM		10-037 - Invited **Challenges with processing and performance of high level nuclear waste glasses: Past, present and future** Ashutosh Goel (United States) (1) Rutgers; (2) WSU; (3) U.S. DOE; Goel, A.(1); Mccloy, J.(2); Kruger, A.(3);
03:00 PM		10-032 - Invited **Glass sintering with concurrent crystallization and foaming** Ralf Mueller (Germany) (1) BAM; Mueller, R.(1);
04:00 PM	Coffee-Break	



19, June - Canon Symposia: Q - Porous and Cellular Ceramics		
Time	Chair	
08:30 AM	Fernando dos Santos Ortega	17-087 - oral **Novel tubular alumina substrates produced by the freeze-casting method** Daniel Dornellas Athayde (Brasil) (1) UFMG; Athayde, D.D.(1); Sousa, B.M.(1); Vasconcelos, W.L.(1);
08:50 AM		17-080 - oral **Alumina porous microspheres produced by snowballing technique, a new approach towards developing a suitable ceramic column for Tc-99m generators and other applications.** Kalan Bastos Violin (Brazil) (1) IPEN; (2) UFABC; Violin, K.B.(1); Goia, T.S.(2); Bressiani, A.H.A.(1); Bressiani, J.(1);
09:10 AM		17-052 - oral **Impact of annealing on physicochemical features of silver silica ceramic nanocomposite** Mateusz Dulski (Poland) (1) M.D.; (2) J.P.; (3) A.N.; (4) M.Z.; (5) M.W.; (6) J.W.; (7) K.D.; Dulski, M.(1); Peszke, J.(2); Nowak, A.(3); Zubko, M.(4); Wojtyniak, M.(5); Wlodarczyk, J.(6); Dudek, K.(7); Podwórny, J.(2);
09:30 AM		17-028 - oral **Influence of sulfate content in structural and porous characteristics of sulfated tin oxide ceramics** Sandra Helena Pulcinelli (Brasil) (1) UNESP/IQ; Alves-rosa, M.A.(1); Manaia, E.(1); Pavan, M.(1); Santilli, C.V.(1); Pulcinelli, S.H.(1);
09:50 AM		17-019 - Invited **Effect of Microstructure on the Properties of Porous Ceramics** Sawao HONDA (Japan) (1) NITech; Honda, S.(1); Daiko, Y.(1); Hashimoto, S.(1); Iwamoto, Y.(1);
10:30 AM	Coffee	
10:50 AM	Fernando dos Santos Ortega	17-077 - oral **From the synthesis of boron-modified silicon carbide and silicon carbonitride precursors to the design of porous structures** Samuel Bernard (France) (1) IRCER; Bernard, S.(1);
11:10 AM		17-029 - Invited **Water Treatment with Recrystallized Silicon Carbide (R-SiC) Filters** Adrien Vincent (1) Saint-Gobain CREE, Cavaillon, France; (2) Saint -Gobain IndustrieKeramik, Rödental, Germany; (3) Saint-Gobain SEPR, Avignon, France; Schmalbuch, K.(1); Rubio, A.(1); Vincent, A.(1); Neufert, R.(2); Möller, M.(2); Rodrigues, F.(3); Laurent, P.(1);

11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	Fernando dos Santos Ortega	17-005 - oral **Controlling of pore structure of porous ceramics fabricated by gel-casting method** Yunzi Xin (1) NIT; Xin,Y.(1); Hong, J.(1); Shirai,T.(1);
02:20 PM		17-065 - oral **Zeolite synthesis fau-type from a gibbsitic-kaolinitic waste applying fractional factorial doe** Caio César Amorim Melo (Brazil) (1) UFPA; Melo, C.A.(1); Melo, B.S.(1); Angélica, R.S.(1); Paz, S.A.(1);
02:40 PM		17-032 - oral **Macro-mesoporous sulfated titanium dioxide from sol-gel associated to emulsion templates for photocatalysis application** Paula Glazielli Paulino Moraes (Brazil) (1) UNESP/IQ; Moraes, P.G.P.(1); Alves -rosa, M.A.(1); Pulcinelli, S.H.(1); Santilli, C.V.(1);
03:00 PM		17-022 - oral **Hydroxyapatite-Niobium Oxide 3D Scaffolds: Synthesis and Characterization** Taiana Gabriela Moretti Bonadio (Brazil) (1) TGMB; (2) Unicentro; (3) MLB; (4) UEM; (5) LH; (6) WRW; Bonadio,T.G.M.(1); Freitas, V.F.(2); Santos, I.A.(3); Mi yahara, R.Y.(2); Baesso, M.L.(4); Weinand, W.R.(5); Hernandes, L.(6);
03:20 PM		17-012 - Invited Development of self-cleaning permeable geopolymer pavement Marcelo Strozi Cilla (Brazil) (1) UFBA; Cilla, M.S.(1);
04:00 PM	Coffee-Break	
04:30 PM	Fernando dos Santos Ortega	17-048 - oral **Porous mullite ceramics, obtained through reactive sintering of alumina and electrofused mullite, to use in high temperatures** Vera Lúcia Arantes (Brasil) (1) USP; (2) UNIFAL-MG; Arantes,V.L.(1); Sousa, L.L.(2); Salomão, R. (1);
04:50 PM		17-040 - Invited **Building 3D Architectures with 2D Materials** Suelen Barg (England) (1) UoM; Barg, S.(1);

19, June - Allegro 1 Symposia: H - Electric and Magnetic Ceramics		
Time	Chair	
08:30 AM	José Antonio Eiras	08-075 - Invited **Effects of Structural Characteristics on Dielectric Properties of Mg4Nb2O9–based Ceramics at Microwave Frequencies.** Eung Soo Kim (South Korea) (1) ; Kim, E.(1);
09:00 AM		08-077 - Invited **The symmetry-mode decomposition for better understanding of the structural evolution presented in polar functional materials** Yun Liu (Australia) (1) ANU; Liu, Y.(1);
09:30 AM		08-085 - oral **Texture Engineering of Lead-Free Piezoelectric Ceramics** Jae-Ho Jeon (South Korea) (1) KIMS; Jeon, J.(1); Cha, H.(1);
09:50 AM		08-138 - oral **Phase concentration and microstructure effects on the properties of hot-pressed PZN-PT/CFO magnetoelectric composites** Ducinei Garcia (Brasil) (1) UFSCar; Garcia, D.(1); Rosa, W.S.(1); Milton, F.P.(1); Perdomo, C.F.(1); Gualdi, A.J.(1); Kiminami, R.H.G.A.(1); Eiras, J.A.(1); Oliveira, A.J.A.(1); Zabotto, F.L.(1);
10:10 AM		08-046 - oral **Ce doped BaTiO3 1D-nanostructures prepared by colloidal chemistry** Adelina C IANCULESCU (Romania) (1) UPB; (2) NIMP; Ianculescu, A.(1); Stanciu, C.(1); Vasile, B.(1); Nicoara, A.(1); Trusca, R.(1); Cernea, M.(2); Trupina, L.(2);
10:30 AM	Coffee	
10:50 AM	José Antonio Eiras	08-150 - Invited **PLD epitaxial growth of ultra-thin SrTiO3/Sr/Si (001) pseudo-substrates** Matjaz Spreitzer (Slovenia) (1) JSI; Spreitzer, M.(1);
11:20 AM		08-149 - Invited **Dielectric relaxation and electrical conductivity of random oriented BiFeO3 thin films** Eudes Borges Araújo (Brazil) (1) UNESP; Araújo, E.B.(1); Masteghin, J.F.V.(1); Reis, S.P.(1);
11:50 AM	Plenary talk - Edgar Dutra Zanotto	

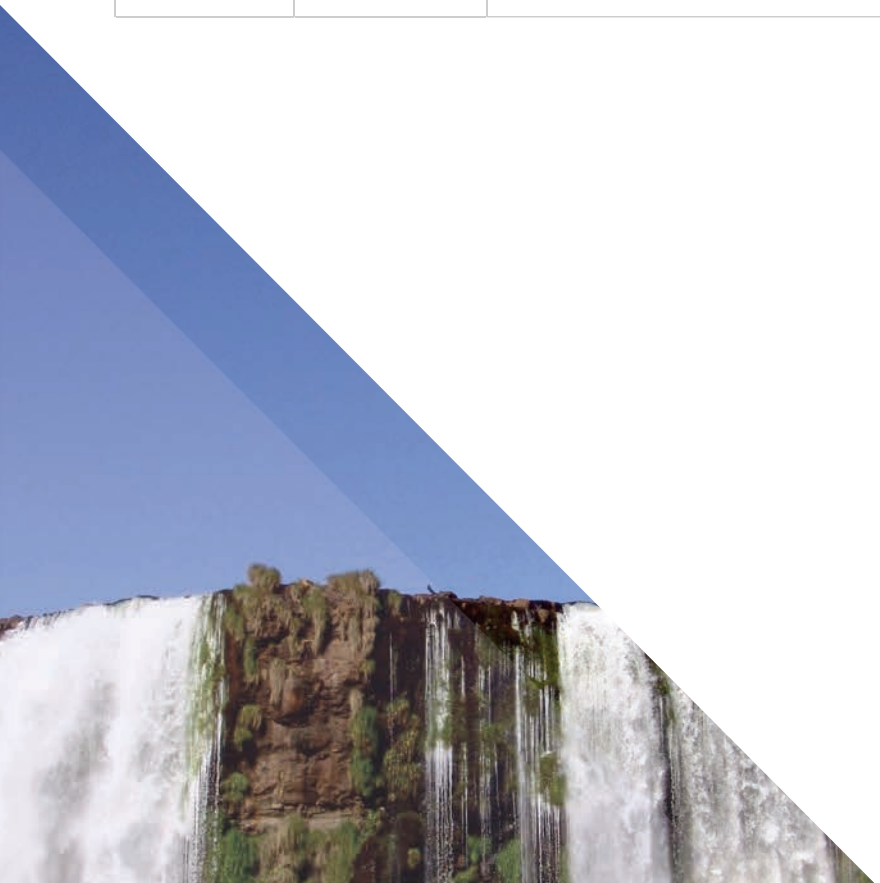
Oral

12:30 PM	Lunch	
02:00 PM	José Antonio Eiras	08-127 - Invited **Microstructure control in multiferroic composites** Carmen Galassi (Itália) (1) CNR-ISTEC; Galassi, C.(1);
02:30 PM		08-141 - Invited **Defects monitoring in (multi) ferroics composites** Mario MAGLIONE (1) ICMCB; (2) KU Leuven; (3) UCL; Elissalde, C.(1); Albino, M.(1); Basov, S.(1); Mauvy, F.(1); Chung, U.(1); Simon, Q.(1); Chavarria, C.(1); Temst, K.(2); Piraux, L.(3); Maglione, M.(1);
03:00 PM		08-042 - oral **Maintenance of the phases integrity during the processing of magnetoelectric particulate composites** Fabio Luis Zabotto (Brasil) (1) UFSCar; Zabotto, F.L.(1); Eiras, J.A.(1); Garcia, D.(1);
03:20 PM		08-019 - oral **Bioactive Multifunctiona Magnetoelectric Composites** Valdirlei Fernandes Freitas (Brazil) (1) Unicentro; (2) UEM; Freitas, V.F.(1); Bonadio, T.G.M.(1); Dias, G.S.(2); Santos, I.A.(2); Miyahara, R.Y.(1);
03:40 PM		08-044 - oral **Synthesis, characterization and methylene blue degradation of cobalt ferrite/niobium oxide composite calcined at various temperatures** Sunday Joseph Olusegun (Brazil) (1) UFMG; Olusegun, S.J.(1); Lara, L.R.S.(1); Mohallem, N.D.S.(1);
04:00 PM	Coffee-Break	
04:30 PM	José Antonio Eiras	08-089 - oral **Influence of substrate temperature on the electrical performance of SnO2:Sb / SnO2:Er homostructure** Luis Vicente de Andrade Scalvi (Brasil) (1) UNESP; Santos, S.B.O.(1); Boratto, M.H.(1); Scalvi, L.V.A.(1);
04:50 PM		08-118 - oral **Study of the reduced graphene oxide (rGO) thin films properties obtained from different processes** Marina Sparvoli (Brasil) (1) UFABC; (2) UNB; Sparvoli, M.(1); Monteiro, J.F.(1); Silva, M.F.P.(2); Ideyama, R.H.(1); Munaro, G.(1); Comarin, P.(1);
05:10 PM		08-125 - oral **Influence of the growth conditions on the nanostructural features of BaTiO3/La0.77Sr0.33MnO3 bilayers** Flavia Regina Estrada (Brasil) (1) CNPEM; Estrada, F.R.(1); Muniz, P.S.N.(1); Neme, M.D.(1); Mori, T.J.A.(1); Cezar, J.C.(1);

19, June - Allegro 2 Symposia: F - Ceramics for energy and environment		
Time	Chair	
08:30 AM	Vincenzo Esposito	06-007 - Invited **Bio-inspired inorganic nanomaterials for sustainable applications** Ziqi Sun (Austrália) (1) QUT; Sun, Z.(1);
09:00 AM		06-211 - oral **Hydrothermal Synthesis and Characterization of NaxK1-xNbO3 Ceramics** Swarup Kundu (Brasil) (1) IQ-UNESP; (2) UFSCar; Kundu, S.(1); Teixeira, G.F.(1); Zaghete, M.A.(1); Longo, E.(2);
09:20 AM		06-030 - oral **Revisiting the ZnO Q?dot Formation Toward an Integrated Growth Model** Celso Valentim Santilli (Brasil) (1) IQ/UNESP; (2) Soleil; (3) LNLS; (4) UNESP; Caetano, B.L.(1); Briois, V.(2); Meneau, F.(3); Pulcinelli, S.H.(4); Santilli, C.V.(4);
10:00 AM		06-196 - Invited **Nanostructured semiconductor oxides thin film applied for artificial photosynthesis: The role of the nanostructure in the electronic and photoelectrochemical properties.** Edson Roberto Leite (Brazil) (1) CNPEM-LNNano; Leite, E.R.(1);
10:30 AM	Coffee	
10:50 AM	Vincenzo Esposito	06-016 - oral **Synthesis of nonstoichiometric Titanium oxides by Heat Switching in Microwave Reaction Field and Application for Visible Light-Photocatalyst** Kunihiko Kato (1) NIT; (2) EMPA; Kato, K.(1); Vaucher, S.(2); Hong, J.(1); Xin, Y.(1); Shirai, T.(1);
11:10 AM		06-208 - oral **Control of the electrochemical properties by the design of metal oxide nanoparticles** sophie cassaignon (France) (1) SU; Cassaignon, s.(1); Durupthy, o.(1); Portehault, d.(1);
11:30 AM		06-177 - oral **Advanced nanoparticles synthesis by laser pyrolysis for energy production and storage** Yann Leconte (France) (1) CEA; Leconte, Y.(1);

11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	
02:00 PM	Vincenzo Esposito	06-240 - Invited **Processing and Characterisation of Copper Impregnated Ceramic Granulates for Chemical Looping Applications** Frank Jörg Clemens (Switzerland) (1) Empa; Clemens, F.J.(1);
02:30 PM		06-232 - oral **Effect of iron doping nano-GDC synthesized via low temperature heterogeneous precipitation** Marina Machado (Brasil) (1) IPEN; Moraes, L.P.R.(1); Machado, M.(1); Nunes, L.(1); Fonseca, F.C.(1);
02:50 PM		06-148 - oral **Low temperature, highly sensitive no2 sensors based on zinc stannate microcubes** Niravkumar J Joshi (United States) (1) UCB; (2) USP; Joshi, N.(1); Hayasaka, T.(1); Liu, Y.(1); Liu, H.(1); Oliveira Jr, O.N.(2); Lin, L.(1);
03:10 PM		Invited Marilaine Moreira de Lima **Production of Ba2AlNbO6 Ceramics and Study of Their Stability in Crude Petroleum for the Conservation of Metallic Sensing Elements used in Petroleum Extraction**
03:10 PM		06-239 - oral **Bottom-up and top-down approaches to the synthesis of 2D gadolinium-doped cerium oxide (CGO) at low temperature** Leticia Poras Reis de Moraes (Brasil) (1) IPEN; (2) UFABC; (3) DTU; (4) QUT; (5) IPEN -CNEN/SP; Moraes, L.P.R.(1); Marani, D.(2); Machado, M.F.S.(1); Rodrigues, L.N.(1); Fonseca, F.C.(3); Esposito, V.(4); Sun, Z.(5);
03:30 PM		06-052 - oral **Scope for Using Ceramic Coatings in the Nuclear Field** Lalgudi Venkataraman Ramanathan (Brasil) (1) IPEN; Ramanathan, L.V.(1);
04:00 PM	Coffee-Break	

19, June - Vivace 1 Symposia: R - Polymer - derived ceramics development and applications		
Time	Chair	
08:30 AM	Günter Motz / Samuel Bernard	18-004 - Invited **Probing local environments in PDCs with solid-state NMR combined with ab-initio calculations** Christel Gervais (França) (1) UPMC; (2) IEM; (3) CME; (4) UNILIM; Gervais, C.(1); Salameh, C.(2);Viard, A.(3); Schmidt, M.(2); Babonneau, F.(1); Miele, P.(2); Bernard, S.(4);
09:00 AM		18-048 - Invited **Rheology of preceramic polymers** Romain Lucas (France) (1) IRCER; Lucas, R.(1); Foucaud, S.(1); Bernard, S .(1); Schmidt, M.(1);
09:30 AM		18-030 - oral **New ReaxFF Potential for Modeling SiCO Ceramics** Peter Kroll (1) pk; Kroll, P.(1);
09:50 AM		18-045 - oral **From custom-engineered polymer precursors to silicon carbonitride-based fibers** David Lopez Ferber (France) (1) IRCER; (2) CME; Lopez Ferber, D.(1);Viard, A.(2); Lucas, R.(1); Motz, G.(2); Bernard, S.(1);
10:30 AM	Coffee	



11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	

19, June - Vivace 2
Symposia: B - Advances in Bioceramic

Time	Chair	
09:20 AM	Juliana Marchi	02-034 - oral **Novel zwitterionic mesoporous bioactive glasses as powerful devices for bone regeneration** Sonia Fiorilli (Italy) (1) PT; Fiorilli, S.(1); Bari, A.(1); Peretti, E.(1);Vitale Brovarone, C.(1);
09:40 AM		02-094 - oral **Characterization and evaluation of the bioactive potential in CEL2 bioactive glass-ceramic porous scaffolds loaded with chitosan microspheres** Esmeralda Villicaña (Mexico) (1) IIMM,UMSNH; Villicaña, E.(1); Aguilar, E.A.(1);
10:00 AM		02-016 - Invited **Bioactive glasses for tissue engineering: where are we and where are we going?** Francesco Baino (Italy) (1) POLITO; (2) MUMS; Baino, F.(1); Fiume, E.(1);Verné, E.(1); Kargozar, S.(2);
10:30 AM	Coffee	
10:50 AM	Juliana Marchi	02-075 - oral **Evaluation of Cerium-doped TiO2 nanoparticles as anticancer release systems** **María Eugenia Contreras-García (Mexico)** (1) UMSNH; Contreras-garcía, M.E.(1);
11:10 AM		02-056 - Invited **Solid state NMR characterization of disordered mineral domains in biological mineralized tissues** Thierry Azaïs (France) (1) TA; (2) WA; (3) NN; (4) SAB; Azaïs, T.(1); Ajili, W.(2); Nassif, N.(3); Auzoux -bordenave, S.(4);
11:40 AM		Closing section

11:50 AM	Plenary talk - Edgar Dutra Zanotto	
12:30 PM	Lunch	

19, June - Vivace 2
Symposia: C - Bioinspired Ceramics and Composites

Time	Chair	
02:00 PM	André R. Studart / Eduardo Saiz / Rafael Libanori	03-031 - Invited **Coherently Aligned Nanoparticles Within a Biogenic Single Crystal: a Biological Prestressing Strategy as inspiration for functional ceramics** Boaz Pokroy (Israel) (1) B.P.; Pokroy, B.(1);
02:30 PM		03-047 - Invited **Bioceramics as Impact-Resistant Biotools and Elastic Energy Storage Devices: Lessons from the Mantis Shrimp Dactyl Club** Ali Miserez (Singapura) (1) NTU; Miserez, A.(1);
03:00 PM		03-032 - oral **Novel bio-inspired semiconductor/amino acid ceramic single crystals: from crystal growth to band gap engineering** Iryna Polishchuk (Israel) (1) Israel Institute of Technology; Polishchuk, I.(1);
03:30 PM		03-049 - Invited **The power of colloidal processing for bio-inspired ceramics: from particle-particle interaction to manufacturing** Carolina Tallon (United States) (1) VT; Tallon, C.(1);
04:00 PM	Coffee-Break	
04:30 PM	André R. Studart / Eduardo Saiz / Rafael Libanori	03-050 - Invited **Using colloidal nanoparticles to process nanocomposites based on commercial polymers** Edson Roberto Leite (Brasil) (1) LNNano-CNPEM-UFSCar; Leite, E.R.(1);

Oral

20, June - Sonata 2
Symposia: N - High and Ultra High Temperature Ceramics

Time	Chair	
08:30 AM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-063 - Invited **Multi-Scale Porous UHTCs: Dual Approach to Passive Cooling Components Design and Manufacturing** Carolina Tallon (United States) (1) VT; Tallon, C.(1);
08:55 AM		14-093 - Invited **Sol-Gel Processing for Porous Ultra-High Temperature Ceramics** Guo Jun Zhang (China) (1) DHU; (2) SIC; Zhang, G.(1); Li, F.(1); Huang, X.(2);
09:20 AM		14-007 - Invited **Manufacturing of Damage Tolerant Fiber Reinforced Ceramic Composites with SiC and UHTC based Matrices via Reactive Melt Infiltration** Dietmar Koch (Alemanha) (1) DLR; Koch, D.(1); Kütemeyer, M.(1); Mainzer, B.(1);
09:45 AM		14-062 - Invited **Characteristics of UHTC composites and coatings fabricated by reactive melt infiltration method** Shaoming Dong (China) (1) SICCAS; Dong, S.(1); Chen, X.(1); Xue, C.(1); Kan, Y.(1); Zhou, H.(1); Ni, D.(1);
10:10 AM		14-055 - Invited **ZrB2-SiC Laminates Produced by Aqueous Tape Casting with Low Binder Concentration** Rosa Maria da Rocha (Brasil) (1) IAE; (2) ITA; Rocha, R.M.(1); Petraconi F., G.(2); Rita, C.C.P.(2); Sene, F.F.(1);
10:30 AM	Coffee	
10:50 AM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-067 - Invited **Slag corrosion of steelmaking refractories – the use of thermodynamic simulation models** Analía Gladys Tomba Martinez (Argentina) (1) INTEMA; Tomba Martinez, A.G.(1);
11:10 AM		14-003 - Invited **CA6 reinforcing role in high-alumina refractory castables containing CAC or CaCO3 as binders** Ana Paula da Luz (Brasil) (1) UFSCar; (2) TU B Freiberg; Da Luz, A.(1); Consoni, L.(1); Guimarães Gabriel, A.H.(1); Aneziris, C.(2); Pandolfelli, V.C.(1);
11:30 AM		14-021 - Invited **Aluminum industry challenge: "lower" temperature applications with high technological demands** Mariana Braulio (1) 4Cast; (2) UFSCar; Braulio, M.(1); Pandolfelli, V.C.(2);

Oral

11:50 AM	Plenary talk - Mike Murray	
12:30 PM	Lunch	
02:00 PM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-005 - Invited **Constitutive modelling of refractories at liquid steel temperature** Davide Bigoni (Itália) (1) UniTn; Bigoni, D.(1);
02:25 PM		14-068 - Invited **Thermomechanical behaviour of refractories, from model materials to industrial ones** Marc Huger (France) (1) UL; Huger, M.(1);
02:50 PM		14-037 - Invited **Fracture energy, R-curve behaviour and resistance to crack propagation in refractory ceramics** José de Anchieta Rodrigues (Brasil) (1) UFSCar; Rodrigues, J.A.(1); Maginador, R.V.(1); Canto, R.B.(1);
03:15 PM		14-010 - Invited **Materials formulated in the ZrO2-MgO-CaO system for advanced structural applications** Carmen Baudin (Espanha) (1) ICV-CSIC; (2) UBI; Baudin, C.(1); Silva, A.(2); Pena, P.(1);
03:40 PM		14-051 - oral **Application of refined Digital Image Correlation for the investigation of the fracture behaviour of Magnesia-based refractories** Imad KHLIFI (France) (1) UL; (2) UP; Khlifi, I.(1); Pop, O.(1); Dupre, J.(2); Doumalin, P.(2); Huger, M.(1);
04:00pm	Coffee-Break	

04:30 PM	William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris	14-011 - Invited **New Types of Chrome-free Refractories for the Copper Production** Helge Jansen (Germany) (1) RTS; Jansen, H.(1);
04:50 PM		14-017 - oral **Magnesium borate fibers by electrospinning** Enrico Storti (Alemanha) (1) TU B Freiberg; (2) UNIPD; Storti, E.(1); Colombo, P.(2); Aneziris, C.(1);
05:10 PM		14-078 - Invited **Effect of reinforcement additions on mechanical, thermal, oxidation and ablation properties of ZrB2 based ultra-high temperature ceramic composites** Rahul Mitra (India) (1) R. Mitra; (2) M. Mallik; Kashyap, S.(1); Mallik, M.(2); Mitra, R.(1);
05:30 PM		Invited M. Jalaly **Production of Ultra-High Temperature Diboride Nanoceramics by Magnesiothermic Combustion Synthesis**
20, June - Minueto Special Technical Session		
Time	Chair	
08:30 AM		Invited Peter Miura Nakachima **New Industrial Minerals for the Refractory Market**
09:10 AM		Invited John Foley **Combinando Análise de Tamanho e Formato de Partículas**
09:50 AM		Invited Thomas Detlef Kreuzaler **Hybrid Sintering - A New Trend for Innovative Material Solutions**
10:30 AM	Coffee	

11:20 AM	Renata Ayres Rocha / Andraž Kocjan	07-022 - Invited **New way to identify ceramics and glasses with tailor-made properties** Stanislav Kuzyakin (Russia) (1) S.V.; (2) G.I.; Kuzyakin, S.(1); Gladkova, G.(2);
10:50 AM		07-037 - oral **Combining Technology Roadmapping and agile techniques for planning technology-based new ventures – a case of flash sintering of glasses** Eduardo Bellini Ferreira (Brasil) (1) EESC/USP; (2) UFSCar; Piccirillo, I.N.(1); Bacha, M.G.(1); Ferreira, E.B.(1); Silva, S.L.(2); Amaral, D.C.(1);
11:50 AM		Plenary talk - Mike Murray
12:30 PM	Lunch	
02:00 PM	Renata Ayres Rocha / Andraž Kocjan	07-039 - Invited **Inclusive Excellence -- The Critical First Year** Janet Callahan (Estados Unidos) (1) -; Callahan, J.(1);

12:30 PM	Lunch	
02:30 PM	Renata Ayres Rocha / Andraž Kocjan	07-005 - oral **Methodology to create ceramic products based on the development of patterns by manual and digital processes and experiments with colours and textures used in a design and materials workshop** Cristiane Aun Bertoldi (Brasil) (1) FAUUSP; (2) Poli.Milano; Bertoldi, C.(1); Del Curto, B.(2); Dantas, D.(1);
02:50 PM		07-034 - oral **Technical Training in Glass in Brazil** Mauro Akerman (Brasil) (1) EDV; (2) UFSCar; Akerman, M.(1); Rodrigues, A.C.M.(2);
03:10 PM		07-009 - Invited **Challenges in identifying and delivering essential ceramic educational initiatives** Richard Bowman (Australia) (1) -; Bowman, R.(1);
04:00 PM	Coffee-Break	
04:30 PM	Renata Ayres Rocha / Andraž Kocjan	07-019 - Invited **Young Ceramists Network – connecting young ceramists within Europe and beyond** Andraž Kocjan (Slovenia) (1) JSI; (2) TUT; (3) BCRC; (4) ISTEC; Kocjan, A.(1); Frankberg, E.(2); Hautcoeur, D.(3); Lasgorceix, M.(3); Silvestroni, L.(4);
05:00 PM		07-003 - Invited **Engaging Materials Science Students with the Universe of Superheroes: A Successful Classroom Experiment** Ricardo Hauch Ribeiro Castro (Estados Unidos) (1) UC Davis; Castro, R.H.R.(1);

20, June - Cantata 2 Symposia: L - Fundamentals of Sintering and Advanced Sintering Processes		
Time	Chair	
08:30 AM	Ricardo Castro	12-039 - Invited **State of Play in the Developing Story of Cold Sintering** Clive Randall (United States) (1) CAR; Randall, C.(1);
09:00 AM		12-031 - Invited **Fundamental Investigation of Sintering Anisotropy** Rajendra Kumar Bordia (Brazil) (1) CU; (2) ; Bordia, R.K.(1); Martin, C.(2); Olevsky, E.(2);
09:30 AM		12-035 - Invited **Numerical Simulation of Microstructural Evolution During Sintering** Veena Tikare (United States) (1) SNL; Tikare, V.(1); Silling, S.(1); Abdeljawad, F.(1);
10:00 AM		12-032 - Invited **Microstructure Evolution in Metal-Ceramic Systems Under Reducing and Oxidizing Conditions** Ivar Reimanis (United States) (1) CSM; Reimanis, I.(1);
10:30 AM	Coffee	
10:50 AM	Ricardo Castro	12-029 - oral **Densification and sintering of ceramic nanocomposites for mid-IR solid state lasers** Victoria L. Blair (United States) (1) VB; (2) AF; (3) SMK; (4) ZDF; Blair, V.(1); Fry, A.(2); Kilczewski, S.(3); Fleischman, Z.(4);
11:10 AM		12-047 - oral **Surface and interfaces energies of pure and tin-doped magnesium aluminate spinel** Gilberto José Pereira (Brasil) (1) FEI; (2) UC Davis; (3) USP; Pereira, G.J.(1); Muche, D.N.(2); Castro, R.H.R.(2); Gouvêa, D.(3);
11:30 AM		12-040 - oral **Rapid sintering of zirconia nanoceramics in the absence of extensive diffusional processes** Andraž Kocjan (Slovenia) (1) JSI; (2) SU; Kocjan, A.(1); Shen, Z.(2);
11:50 AM	Plenary talk - Mike Murray	

12:30 PM	Lunch	
02:00 PM	Ricardo Castro	12-027 - Invited **Flash sintering of ionic conductors: delay time before current flash and role of electrode reaction** Marlu Cesar STEIL (France) (1) Univ. Grenoble Alpes, Univ. Sav oie Mont Blanc, CNRS, Grenoble INP; Steil, M.C.(1);
02:30 PM		12-038 - Invited **Using Multiple Phases to Enhance Flash Sintering of Ceramics** Martha Mecartney (United States) (1) UC Irvine; Mecartney, M.(1);
03:00 PM		12-050 - oral **Electrical field assisted densification investigated by sinter-forging** Olivier Guillon (Germany) (1) -; (2) JARA-Energy; Guillon, O.(1); Mücke, R.(2); Cao, C.(1);
03:20 PM		12-014 - oral **Field-Enhanced Sintering of Advanced Ceramic Materials** Raymond Brennan (1) REB; (2) VLB; (3) MK; (4) SVR; (5) FK; (6) AF; Brennan, R.(1); Blair, V.(2); Kornecki, M.(3); Raju, S.V.(4); Kellogg, F.(5); Fry, A.(6);
03:40 PM		12-018 - oral **A comparative study of oxides and carbides ceramics sintered by two ultra rapid densification processes** Alexandre allemand (France) (1) CEA-LCTS; (2) Université de Bordeaux-LCTS; (3) CNRS-LCTS; (4) GALTENCO; Allemand, A.(1); Lepetitcorps, Y.(2); Besnard, C.(3); Couillaud, S.(4); Leon, J.(4);
04:00 PM	Coffee-Break	
04:30 PM	Ricardo Castro	12-052 - Invited **Spark Plasma Sintering of some Ferroelectric and Multiferroic Materials** José Antônio Eiras (Brasil) (1) UFSCar; Eiras, J.A.(1);
05:00 PM		12-019 - oral **Spark Plasma Sintering of silicon carbide and titanium diboride: effect of grain size and process parameters on densification and mechanical properties** Marc Singlard (France) (1) IRCER; (2) CIRIMAT; (3) CNES; Singlard, M.(1); Rossignol, S.(1); Vardelle, M.(1); Chevallier, G.(2); Estournès, C.(2); Oriol, S.(3); Fiore, G.(3); Vieille, B.(3);
05:20 PM		12-028 - oral **Microwave assisted sintering kinetics of nanometric hematite** Marina Magro Togashi (Brasil) (1) UFSCar; Togashi, M.M.(1); Perdomo, C.F.(1); Kiminami, R.H.G.A.(1);

20, June - Prelúdio Symposia: J - Frontiers of Glass Science		
Time	Chair	
08:30 AM	Edgar Dutra Zanotto	10-031 - Invited **Borophosphate Glasses for Biomedical Applications** Richard Brow (United States) (1) Misouri S&T; (2) Missouri S&T; Brow, R.(1); Freudenberger, P.(2);
09:00 AM		10-076 - Invited **Therapeutic properties of bioactive glass** Julian Raymond Jones (United Kingdom) (1) Imperial College; Jones, J.R.(1);
09:30 AM		10-003 - Invited **Natural and Unconventional Anthropogenic Glasses: Juxtaposition of Geological and Technical Glass Considerations (Invited)** John McCloy (United States) (1) WSU; Mccloy, J.(1);
10:00 AM		10-047 - Invited **Glassy porous chalcogels: state-of-the-art scientific advances into their adsorption and gas separation properties via first-principles molecular dynamics** Guido Ori (France) (1) IPCMS; Ori, G.(1);
10:30 AM	Coffee	
10:50 AM	Edgar Dutra Zanotto	10-019 - oral **DFT Studies of HfO2-Na2O-SiO2 glasses** Peter Kroll (1) pk; Kroll, P.(1);
11:10 AM		10-081 - oral **Heating rate effect on nucleation rate measurements by Tammann's development method: applications to crystallization of silicate glasses** Alexander Abyzov (Ukraine) (1) Akhiezer Institute for Theoretical Physics; (2) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV); (3) Vavilov State Optical Institute; Abyzov, A.(1); Montazer ian, M.(2); Fokin, V.M.(3); Zanotto, E.D.(2);
11:30 AM		10-035 - oral **Nucleation agents in a new type of glass ceramics with low thermal expansion** Christian Thieme (Germany) (1) CT; (2) MK; (3) KT; (4) CP; (5) TH; (6) CR; Thieme, C.(1); Kracker, M.(2); T hieme, K.(3); Patzig, C.(4); Höche, T.(5); Rüssel, C.(6);
11:50 AM	Plenary talk - Mike Murray	

12:30 PM	Lunch	
02:00 PM	Edgar Dutra Zanotto	10-007 - Invited **Control of crystallization in glass** Jianrong Qiu (China) (1) ZJU; Qiu, J.(1);
02:30 PM		10-062 - oral **Surface crystallization of low thermal expansion glass ceramics** Michael Kracker (Germany) (1) MK; (2) CT; (3) KT; (4) TH; (5) CR; Kracker, M.(1); Thieme, C.(2); Thieme, K.(3); Höche, T.(4); Rüssel, C.(5);
02:50 PM		10-051 - Invited **Numerical studies of crystallization and vitrification: a novel and general method applied to water and B2O3** guillaume pierre jean ferlat (France) (1) Mr; Ferlat, g.p.j.(1);
03:20 PM		10-063 - oral **Million atom MD simulations of crystal nucleation in supercooled Ni** Luis Gustavo Vieira Gonçalves (Brazil) (1) UTFPR; (2) UFSCar; Gonçalves, L.G.V.(1); Zanotto, E.D.(2);
04:00 PM	Coffee-Break	

20, June - Canon Symposia: Q - Porous and Cellular Ceramics		
Time	Chair	
08:30 AM	Fernando dos Santos Ortega	17-060 - oral **Activated carbon and ceramic powder heterodefloculation for porous structure manufacturing** Lucas Freitas Berti (Brazil) (1) UTFPR; (2) UFSC; (3) UNILA; Berti, L.F.(1); Rambo, C.R.(2); Reimbrecht, E.G.(3); Bazzo, E.(2); Hotza, D.(2);
08:50 AM		17-071 - oral **Fabrication and mechanical properites of Porous Si3N4 ceramics prepared via nitridation of Si powder** Yuping Zeng (China) (1) ; Zeng, Y.(1);
09:10 AM		17-066 - oral **Use of cellulosic fibers extracted from paper waste as a template for porous alumina production** Tomaz Rodrigues Araújo (Brasil) (1) UFRN; (2) Melo, D.M.A.; Araújo, T.R.(1); Medeiros, R.L.(1); Oliveira, A.A.S.(1); Silva, F.M.(1); Santos, M.C.(1); Melo, D.M.A.(2); Melo, M.A.F.(1);
09:30 AM		17-070 - oral **Cellular carbon materials from a sustainable source: synthesis and applications** **Gisele Amaral-Labat (Brazil)** (1) USP; (2) INPE; (3) UNINOVE; (4) UFRGS; (5) UDeLaR; (6) PMT -USP; Amaral-labat, G.(1); Quirino, S.(2); Labat Marcos, R.(3); Da Silva, E.L.(4); Cuña, A.(5); Malfatti, C.(4); Baldan, M.(2); Lenz E Silva, G.F.B.(6);
09:50 AM		17-037 - Invited **Advanced Cellular Ceramics by Direct Foaming Methods: Processing and Characterization** Elisângela Guzi de Moraes (Brasil) (1) UFSC; Guzi De Moraes, E.(1);
10:30 AM	Coffee	
10:50 AM	Fernando dos Santos Ortega	17-058 - oral **Synthesis of nanosilica obtained from sugarcane bagasse ash** Elisângela Guzi de Moraes (Brasil) (1) UFSC; Falk, G.S.(1); Novaes De Oliveira, A.P.(1); Guzi De Moraes, E.(1); Maykot, C.K.(1); Teixeira, L.B.(1);
11:10 AM		17-015 - Invited **Liquid-phase preparation of BaTiO3 nanotube arrays and their composite with CoFe2O4** Go Kawamura (Japan) (1) TUT; (2) FAU; Kawamura, G.(1); Matsuda, A.(1); Boccaccini, A.(2);
11:50 AM	Plenary talk - Mike Murray	

12:30 PM	Lunch	
02:00 PM	Fernando dos Santos Ortega	17-039 - oral **Characterization and application of Nb2O5/SiO2 composites prepared by sol-gel process** Luiz Fernando de Sousa Lima (Brazil) (1) LFSL; (2) UFMG; Lima, L.S.(1); Gomes, G.H.M.(2); Mohallem, N.D.S.(2); Coelho, C.R.(2);
02:20 PM		17-067 - oral **Boehmite nanofiber-polysilsesquioxane composite porous monolith and their thermal insulation** Gen Hayase (Japan) (1) TU; Hayase, G.(1);
02:40 PM		17-049 - oral **Functionalization strategies of reticulated porous ceramics (RPCs) generating new functionalities** Ulf Betke (Germany) (1) OvGU Magdeburg; Betke, U.(1); Rannabauer, S.(1); Lieb, A.(1); Scheffler, F.(1); Scheffler, M.(1);
03:00 PM		17-084 - oral **Analysis of the kinetics of polymerization in gelcast ceramic emulsion for the production of porous ceramics** Mariana Cepeda Salama (Brasil) (1) FEI; Salama, M.C.(1); Ortega, F.S.(1);
03:20 PM		17-035 - Invited **Strategies for Robust Porous Ceramics** Katherine T Faber (United States) (1) Caltech; Faber, K.(1); Arai, N.(1); Kuo, T.C.(1);
04:00 PM	Coffee-Break	
04:30 PM	Fernando dos Santos Ortega	17-020 - oral **Porous Geopolymer Components by Additive Manufacturing** Paolo Colombo (Itália) (1) UNIPD; Colombo, P.(1); Scanferla, P.(1); Franchin, G.(1);
04:50 PM		17-085 - Invited **3D Printing of Hierarchical Porous Materials** Andre R Studart (Switzerland) (1) ARS; Studart, A.(1);

20, June - Allegro I Symposia: H - Electric and Magnetic Ceramics		
Time	Chair	
11:50 AM		Plenary talk - Mike Murray
12:30 PM	Lunch	
02:00 PM	Jens Günster	01-024 - Invited **Additive manufacturing of inorganic polymers** Paolo Colombo (Itália) (1) UNIPD; Colombo, P.(1);
02:40 PM		01-072 - oral **LSD- 3D printing: powder based additive manufacturing, from porcelain to technical ceramics** Jens Günster (Alemanha) (1) BAM; Günster, J.(1); Zocca, A.(1); Lima, P.(1); Mühler, T.(1); Lüchtenborg, J.(1);
03:00 PM		01-060 - oral **Determination of wall inclination limit as function of the wall thickness and plasticity for 3D printed extrudable ceramic bodies** JAMIL DUAILIBI Fh. (Brasil) (1) DuraCer; Duailibi Fh., J.(1); Nunes, B.L.(1); Wieck, R.(1);
03:20 PM		01-071 - Invited **Hybrid machining for rapid prototyping of ceramics** Fabrice Petit (Belgium) (1) BCRC; Petit, F.(1);
04:00 PM	Coffee-Break	
04:30 PM	Jens Günster	01-016 - Invited **Microstereolithography of oxide ceramics and composites for biomedical devices** Anne Louise LERICHE (France) (1) UVHC; (2) UL; (3) BCRC; (4) UP; (5) i3s; Leriche, A.L.(1); Dehurtevent, M.(2); Shamary, S.(1); Cu rto, H.(1); Thuault, A.(1); Hornez, J.(1); Petit, F.(3); Cambier, F.(3); Fernandes, M.(4); Monteiro, F.J.(5);
05:10 PM		01-061 - oral **Nanostructured composite filament for Fused Deposition Modeling** Julia Ce de Andrade Pinto (Brazil) (1) UFSC; (2) FGM; Ce De Andrade Pinto, J.(1); Stares, S.L.(1); Nunes, W.D.(1); Hotza, D.(1); Paim, B.A.(2); Fredel, M.C.(1);

20, June - Allegro 2 Symposia: F - Ceramics for energy and environment		
Time	Chair	
08:30 AM	Vincenzo Esposito	06-230 - oral **Conversion of metal oxide suspensions produced by hydrothermal synthesis into nano-inks for inkjet printing** Massimo Rosa (Denmark) (1) DTU; Rosa, M.(1); Xu, Y.(1); Zielke, P.(1); Esposito, V.(1);
09:00 AM		Invited
09:00 AM		06-184 - oral **Functionalized silica xerogels obtained from rice husk for carbon dioxide adsorption** Juan David Pardo (Columbia) (1) UNIVALLE; Pardo, J.D.(1); Gómez, M.A.(1); Calambas, D.S.(1); Delvasto, S.(1); Arango, E.(1); Forero, C.R.(1);
09:40 AM		06-150 - oral **Microstructure and thermoelectric properties of Sr0.9La0.1TiO3 ceramics with nano-sized metal particles as additive** Mengjie Qin (China) (1) NWPU; Qin, M.(1);
10:00 AM		06-034 - oral **Improved Thermoelectric Properties of n-type Bi2S3 via anionic doping** Guanjun QIAO (China) (1) ; Liu, G.(1); Qiao, G.(1); Yang, J.(1); Yan, J.(1);
10:30 AM	Coffee	

10:50 AM	Vincenzo Esposito	06-179 - oral **Y, Lu, La cation substitution for luminescence tuning in MSi2N2O2:Eu2+ (M=Ca, Sr, Ba) phosphors** Malgorzata Maria Sopicka-Lizer (Poland) (1) SUT; Sopicka-lizer, M.M.(1); Michalik, D.(1); Pawlik, T.(1); Krzywda, P.(1);
11:10 AM		06-163 - oral **Structural and vibrational approach on the luminescent BZO ceramic doped with Ce and Hf: A experimental/theoretical study.** Mário Lúcio Moreira (Brasil) (1) UFPel; (2) UFPEL; Moreira, M.L.(1); Ururi, J.L.P.(1); Cava, S.(1); Raubach, C.W.(2);
11:30 AM		06-077 - oral **Influence of Nb on mechanical and optical properties of Nb-doped-TiO2 thin films prepared by sol-gel method.** Gustavo Henrique Magalhães Gomes (Brazil) (1) UFMG; Gomes, G.H.M.(1); Jesus, M.A.M.L.(1); Ferlauto, A.S.(1); Viana, M.M.(1); Mohallem, N.D.S.(1);
11:50 AM	Plenary talk - Mike Murray	
12:30 PM	Lunch	

20, June Vivace 2		
Time	Chair	
08:30 AM	Edson Roberto Leite	**The relevance of Prof. José Arana Varela for advanced ceramics** Edson R. Leite CNPEM-LNNano, Campinas, SP, Brazil Chemistry Department, Federal University of São Carlos
09:30 AM		**Direct Fabrication of Functionalized Graphenes and Their Hybrids Inks via Submerged Liquid Plasma [SLP] and Electrochemical Exfoliation [ECE] in Solutions under Ambient Conditions** Masahiro Yoshimura, Jaganathan Senthilnathan, Kodepelly SanjeevaRao, and Elumalai Satheeshkumar Promotion Centre for Global Materials Research (PCGMR), Dept. of Materials Science and Engineering, National Cheng Kung University, Tainan, Taiwan
10:00 AM		**Controlling the sensitivity and selectivity of metal oxide gas sensors** Marcelo O. Orlandi IQ -UNESP, Araraquara, SP, Brazil
10:30 AM		**Advanced Ceramic Materials for Electronics – 20 years of discussions with Jose Arana Varela"** Danilo Suvorov Advanced Materials Department, Institut "Jozef Stefan", Ljublijana, Slovenia

02:00 PM	Vincenzo Esposito	06-004 - oral **(Sb)SnO2/Ni(OH)2 ceramic electrode for electrooxidation of emergent contaminants** Sergio Mestre (Espanha) (1) UJI; (2) UPV; Mestre, S.(1); Sánchez-rivera, M.J.(1); Pérez-herranz, V.(2); Gozalbo, A.(1);
02:20 PM		06-108 - oral **Behavior of micro and nanoaluminas used in the preparation of colloidal systems and filters for water contaminants** Nelcy Della Santina Mohallem (Brasil) (1) UFMG; Mohallem, N.D.S.(1); De Paulo, P.H.(1); De Castro, M.F.(1);
02:40 PM		06-054 - oral **Mechanosynthesis of magnetically recoverable BiFeO3/Fe3O4 nanocomposite for water treatment applications.** Eduardo Azzolini Volnistem (Brazil) (1) UEM; Volnistem, E.A.(1); Bini, R.D.(1); Santos, I.A.(1); Cótica, L.F.(1); Dias, G.S.(1); Da Silva, V.S.(1);
03:00 PM		06-061 - oral **Comprehensive Study of Mesoporous Aluminosilicate Glasses and Clay-like Layer Compound Somasif as Potential Materials for Dye Removal from Wastewater Effluents** Carsten Doerenkamp (Brazil) (1) USP; Doerenkamp, C.(1); Almeida, F.(1); Costa, M.(1); De Camargo, A.(1); Eckert, H.(1);
03:20 PM		06-029 - oral **Multifunctional sol-gel xTiO2/(100-x)SiO2 thin films: promising surfaces for self-cleaning applications** Magnum Augusto Moraes Lopes Jesus (Brazil) (1) UFMG; (2) CEFET-MG; Jesus, M.A.M.L.(1); Mohallem, N.D.S.(1); Ferreira, A.M.(2); Gomes, G.H.M.(1); Ferlauto, A.S.(1);
03:40 PM		06-155 - oral **Fabrication and properties of Y2O3 transparent ceramic by plasma arc melting** Andrzej Jan Kruk (Poland) (1) WSIZ; (2) AGH; Kruk, A.(1); Madej, D.(2);
04:00 PM	Coffee-Break	

20, June - Vivace I Symposia: C - Bioinspired Ceramics and Composites		
Time	Chair	
08:30 AM	André R. Studart / Eduardo Saiz / Rafael Libanori	03-033 - Invited **Tailoring architecture and microstructure in bio-inspired layered ceramics** Raul Bermejo (Austria) (1) RB; (2) GLM; Bermejo, R.(1); Messing, G.(2);
09:00 AM		03-036 - Invited **Mechanics of Bioinspired Multilayered Ceramic Composites** Nima Rahbar (United States) (1) WPI; Rahbar, N.(1);
09:30 AM		03-039 - Invited **Bioinspired processing of ceramic composites** Florian Bouville (Switzerland) (1) FB; (2) NTU; (3) TN; (4) ARS; Bouville, F.(1); Le Ferrand, H.(2); Niebel, T.(3); Studart, A.(4);
10:00 AM		03-026 - Invited **Fabrication of composites and ceramics with periodic texture and mechanical properties.** Hortense Le Ferrand (Singapore) (1) NTU; Le Ferrand, H.(1);
10:30 AM	Coffee	
10:50 AM	André R. Studart / Eduardo Saiz / Rafael Libanori	03-046 - Invited **Macroscopic Nanoparticle Assemblies: Integration, Functionalization and Applications** Shu-Hong Yu (China) (1) -; Yu, S.(1);
11:20 AM		Flash poster presentation
11:50 AM	Plenary talk - Mike Murray	
12:30 PM	Lunch	

20, June - Vivace I Symposia: P - New trends in silicate and clay-based ceramics		
Time	Chair	
02:00 PM	Wilson Acchar	16-007 - Invited **Viscous flow sintering of large ceramic slabs** Michele Dondi (Italy) (1) CNR-ISTEC Faenza (Italy); (2) Physics and Earth Sciences Dept, Ferrara Univ. (Italy); Dondi, M.(1); Zanelli, C.(1); Conte, S.(1); Soldati, R.(1); Cruciani, G.(2); Ardit, M.(2);
02:30 PM		16-051 - Invited **About the Influence of Particle Size on Thermal Properties Investigated by Means of Thermal Analysis** Ekkehard Füglein (Alemanha) (1) -; (2) EZD; Füglein, E.(1); Wolff -fabris, F.(2);
03:00 PM		16-022 - oral **Crystallinity and density of glass-ceramics obtained from basalt** Luiza Felippi Lima (Brazil) (1) IMC-UCS; Lima, L.F.(1); Cruz, R.C.D.(1);
03:20 PM		16-003 - oral **Solution combustion synthesis of a grey (Co)ceo2 pigment for porcelain stoneware** Sergio Mestre (Espanha) (1) UJI; Mestre, S.(1); Palacios, M.D.(1); Sanz, V.(1); González -dávila, J.M.(1);
03:40 PM		16-070 - oral **Analysis of Sol Gel spray coating layer features over enamel tiles** Santiago Betancourt (Columbia) (1) UPB; (2) EUROCERAMICA; (3) SENCO; Betancourt, S.(1); Mosquera, D.(1); Domingues, M.(1); Rios, C.(2); Villa, C.(3);
04:00 PM	Coffee-Break	
04:50 PM	Wilson Acchar	16-040 - oral **Digital decoration in ceramics: a study on the development of color, profile, colorimetric space and ceramic raw materials.** Julia Soratto Ribeiro (Brazil) (1) SATC; (2) UFSC; (3) UNESC; Acordi, J.(1); Vanderlind, G.E.(2); Sartor, M.N.(2); Melo, A.R.(2); Milak, G.B.(3); Ribeiro, J.S.(3); Mattos, A.(2); Bianchini, S.S.(2);
05:10 PM		16-026 - oral **Circular economy declined for the ceramic tile industry** Michele Dondi (Italy) (1) CNR-ISTEC, Faenza (Italy); (2) Centro Ceramico, Bologna (Italy); Dondi, M.(1); Rambaldi, E.(2); Zanelli, C.(1); Bignozzi, M.C.(2);

21, June - Cantata 1 Symposia: E - Ceramics for agriculture and livestock		
Time	Chair	
08:30 AM	Caue Ribeiro	05-004 - Invited **Luminescent Ceramic Materials Facing Demands for Plant Factories Illumination** Qian Liu (China) (1) SICCAS; Liu, Q.(1); Wan, J.Q.(1); Liu, G.(1);
08:50 AM		05-001 - oral **Overcoating: a strategy for the delivery and control of nutrient release in fertilizers.** Fábio Plotegher (Brazil) (1) DQ; (2) USP; (3) UFSCar; (4) UFSCar/ Embrapa; Plotegher, F.(1); Santos, R.B.(2); Junior, V.R.(2); Majaron, R.F.(3); Majaron, V.F.(3); Polito, W.L.(2); Ribeiro, C.(4);
09:15 AM		05-005 - oral **Evaluation of binder materials for organomineral granulation based on MAP and chicken litter** Carla Oliveira Nascimento (Brazil) (1) UFBA; (2) Embrapa; Nascimento, C.O.(1); Benites, V.M.(2); Fialho, R.L.(1); Cabral -albuquerque, E.M.(1); Mattos, B.B.(2);
09:30 AM		05-016 - Invited **MS3T – A novel multifunctional platform for health management of HLB affected citrus trees** Maria Gabriela Nogueira Campos (Brasil) (1) UNIFAL - Campus de Poços de Caldas; (2) UCF; (3) UF; (4) UT; Nogueira Campos, M.(1); Tetard, L.(2); Woo Hyoung, L.(2); Johnson, E.(3); Petridis, L.(4); Labbe, N.(4); Rajasekaran, P.(2); Soliman, M.(2); Chumbimuni Torres, K.(2); Santra, S.(2);
10:00 AM		Invited Swadeshmukul Santra **Copper, Zinc and Magnesium Nanoparticle based Bactericides/Fungicides for Crop Protection**
10:30 AM	Coffee Break	

10:50 AM	Caue Ribeiro	Invited Markus Niederberger **Nanoparticle Synthesis and Assembly for Energy Conversion and Storage**
11:20 AM		Invited Andre Farias de Moura **Fine-Tuning Light-Matter Interactions of Nanomaterials**
11:35 AM		05-002 - oral **Synthesis of Bi2O3 / BiVO4 heteroestruture and evaluation of its photocatalitic potential under solar radiation** Paulo Henrique Eleuterio Falsetti (Brazil) (1) IFSP; Falsetti, P.H.E.(1); Duque, D.M.S.(1); Mendonça, V. R.(1);
11:50 AM	Plenary talk - Masahiro Yoshimura	
12:30 PM	Lunch	
21, June - Prelúdio Symposium: J Frontiers of Glass Science		
08:30- 10:30 a.m.	Discussion	International research collaboration / JNCS "Frontiers" issue
10:30 AM	Coffee-Break	
10:50- 11:50 a.m.	Discussion	International research collaboration / JNCS "Frontiers" issue

21, June - Vivace I Symposia: C - Bioinspired Ceramics and Composites Chairman: Co-Chairman:		
Time	Chair	
09:00 AM	André R. Studart / Eduardo Saiz / Rafael Libanori	03-037 - Invited **Bioinspired self-monitoring ceramics** Victoria GARCIA ROCHA (Wales) (1) V.G. Rocha; (2) O.T. Picot; (3) C.Ferraro; (4) NN; (5) E.D'Elia; (6) E. Saiz; (7) M. Reece; (8) T. Peijs; (9) JC; (10) T. Saunders; Garcia Rocha, V.(1); Picot, O.(2); Ferraro, C.(3); Ni, N.(4); D'elia, E.(5); Saiz, E.(6); Reece, M.(7); Peijs, T.(8); Chevalier, J.(9); Saunders, T.(10);
09:30 AM		03-041 - Invited **Bioinspired approaches in the mechanics of nanocomposites** Federico Bosia (Italy) (1) FB; (2) NMP; Bosia, F.(1); Pugno, N.(2);
10:00 AM		03-052 - Invited **High-temperature nacre-like ceramics** Pedro Ivo Batistel Galiote Brossi Pelissari (Brazil) (1) UFSCar; (2) ETH; (3) -; (4) E. Saiz; (5) ARS; Pelissari, P.B.G.B.(1); Bouville, F.(2); Pandolfelli, V.C.(1); Carnel li, D.(2); Giuliani, F.(3); Luz, A.(1); Saiz, E.(4); Studart, A.(5);
10:30 AM	Coffee-Break	
10:50 AM	André R. Studart / Eduardo Saiz / Rafael Libanori	03-051 - Invited **Printable Self-healing Graphene-based Composites** Kirstie Ryan (1) -; (2) UoM; Ryan, K.(1); Edmondson, S.(1); Derby, B.(1); Barg, s.(2);
11:20 AM		03-040 - Invited **Programming self-shaping in ceramics through bio-inspired microstructural design** Rafael Libanori (Switzerland) (1) RL; (2) FLB; (3) HLF; (4) ARS; Libanori, R.(1); Bargardi, F.(2); Le Ferrand, H.(3); Studart, A.(4);

POSTER PRESENTATIONS

Symposium A:
Additive Manufacturing of Ceramics

Jens Günster

01-014 20, June
3D Printed SiCN Ceramic Microreactor System from Photo-Curable Preceramic Resin
Ki-Won Gyak (South Korea)
(1) KWG; (2) DPK;
Gyak, K.(1); Kim, D.(2);

01-019 20, June
Properties of porous hydroxyapatite scaffolds obtained by conversion of 3D printed gypsum structures
Alan C. S. Dantas (Brasil)
(1) UNIVASF; (2) BAM;
Dantas, A.(1); Wirth, C.(2);

01-026 20, June
Effects of laser parameters on the fabrication of alumina bodies with boron carbide addition
Rongzhen Liu (China)
(1) HUST;
Liu, R.(1);

01-048 20, June
Reaction sintering of SiC using Nd:YAG laser
Satoshi Suehiro (Japan)
(1) JFCC;
Suehiro, S.(1); Kimura, T.(1);

01-063 20, June
Microstructure and mechanical properties of UHMWPE/calcium phosphate composites manufactured by selective laser sintering
Aline Santos Silva (Brazil)
(1) UFSC;
Silva, A.S.(1); Piaia, L.(1); Salmoria, G.(1); Hotza, D.(1);

01-073 20, June
Surface metal Printing on oxide ceramics
Bruno Pacheco Henriques (Brasil)
(1) UFSC; (2) UMINHO;
Henriques, B.P.(1); Moura, C.(1); Silva, F.S.(2);

01-074 20, June
Viscoelastic properties and Creep-Fatigue behavior of PA2200/HA composites manufactured by selective laser sintering
Dachamir Hotza (Brasil)
(1) UFSC;
Dabbas, F.(1); Salmoria, G.(1); Stares, S.L.(1); Hotza, D.(1);

01-075 20, June
Fabrication of oxid ceramics by using FDM/FFF technology
Frank Jörg Clemens (Switzerland)
(1) Empa;
Clemens, F.J.(1); Gorjan, L.(1);

Symposium B:
Advances in Bioceramics

Juliana Marchi

02-004 19, June
Study of Addition Speed of Reagents in the Synthesis of Hydroxyapatite by the Sol-gel Method Using Chicken Eggshells as Precursors
Adilson Quizunda (Brasil)
(1) UNESA; (2) UERJ; (3) PUC;
Aguilar, M.S.(1); De Campos, J.B.(2); Di Lello, B.C.(1);

02-005 18, June
Vickers microhardness measurements in hydroxiapatite synthesized by the sol-gel method using egg shell as precursor
Marcelo Machado, V (Brasil)
(1) UNESA; (2) UERJ;
Aguilar, M.S.(1); De Campos, J.B.(2); Machado.v, M.(2); Ramos, V.S.(2);

02-008 19, June
Evaluation of calcium aluminate cement based compositions for bone repair via ex vivo tests.
Julia Marinzeck de Alcântara Abdala (Brasil)
(1) Univap; (2) Unesp; (3) UFSCar; (4) UNIVAP;
Abdala, J.M.A.(1); Vasconcellos, L.M.R.(2); Pandolfelli, V

02-009 18, June
Mechanical properties of bone repairing like compositions based on calcium aluminate cement
Gabriela do Vale Vieira (Brasil)
(1) UNIVAP; (2) UFSCar;
Vieira, G.V.(1); Santos, P.C.O.(1); Pandolfelli, V.C.(2); Oliveira, I.R.(1);

02-010 19, June
Cell adhesion on calcium aluminate cement compositions for bone repair application
Ivone Regina Oliveira (Brasil)
(1) UNIVAP; (2) IEAV-CTA; (3) UNESP; (4) UFSCar;
Oliveira, I.R.(1); Origo, F.D.(2); Mello, D.R.(3); Pandolfelli, V.C.(4);

02-011 18, June
Synthesis and characterization of biphasic calcium phosphates for biomedical applications
Hudson de Araújo Batista (Brasil)
(1) UFCG;
Batista, H.A.(1); Santos, P.T.A.(1); Araujo, R.M.E.(1); Oliveira, H.M.L.(1); Leite, R.B.(1); Costa, A.C.F.M.(

02-012 19, June
Silicon nitride ceramics with SiO2, SrO and Al2O3 additions for bone replacements
Cecilia Chaves Guedes-Silva (Brasil)
(1) SENAI-SP; (2) UFABC; (3) USP; (4) IPEN;
Nascimento, S.F.(1); Rodas, A.C.D.(2); Carvalho, F.M.S.(3); Higa, O.Z.(4); Guede

Poster

02-013 18, June
Nanocomposite of MCM-41/Fe3O4/Au for application in hyperthermia
Isabela Barreto da Costa Januário (Brazil)
(1) CDTN;
Januário, I.B.C.(1); Sousa, E.M.B.(1); Macedo, W.A.A.(1); Hneda, M.L.(1);

02-014 19, June
Gold nanorods coated by mesoporous silica for application in hyperthermia
Lucas Bessa Lopes (Brazil)
(1) CDTN;
Lopes, L.B.(1); Sousa, E.M.B.(1);

02-015 18, June
153Sm and 159Gd Doping Boron Nitride Nanotubes: potential application in nanomedicine
Marcelo Fernandes Cipreste (Brazil)
(1) CDTN;
Da Silva, W.M.(1); Coco, A.M.A.(1); Cipreste, M.F.(1); Ferreira, G.A.(1); Sousa, E.M.B.(1);

02-018 19, June
Synthesis and characterization of 89Sr-doped hydroxyapatite nanorods as a potential agent for intervention in bone tumors
Michele Rocha Rezende (Brazil)
(1) CDTN;
Rezende, M.R.(1); Sousa, E.M.B.(1);

02-020 18, June
Hybrid polymeric systems of mesoporous silica/hydroxyapatite nanoparticles applied as antitumor drug delivery platform
Rafaela Caroline Rodrigues dos Apostolos
(1) CDTN;
Andrade, G.F.(1); Apostolos, R.C.R.(1); Silva, W.M.(1); Sousa, E.M.B.(1)

02-021 19, June
Synthesis and characterization of hybrid materials based on mesosporous silica mcm-41 and responsive hydrogels as devices for controlled drug release
Tatiane dos Santos Lisboa (Brazil)
(1) CDTN; (2) UFMG;
Lisboa, T.S.(1); Sousa, E.M.B.(1); Sou

02-022 18, June
Biodegradable Polymers grafted into Multifunctional Mesoporous Silica Nanoparticles for Gene Delivery
Egídio Paulo Francisco Nhavene (Brazil)
(1) CDTN;
Nhavene, E.P.F.(1); Sousa, E.M.B.(1);

02-025 19, June
Synthesis and characterization of bioactive ceramic in CaO-MgO-SiO2 system
Daniel de Rezende Leme (Brazil)
(1) IPEN; (2) UFABC;
Leme, D.R.(1); Morais, V.R.(1); Rodas, A.C.D.(2); Higa, O.Z.(1); Yamagata, C.(1);

02-030 19, June
Obtaining porous bodies of hydroxyapatite and beta tricalcium phosphate using gelatin
Eliana Cristina Da Silva Rigo (Brasil)
(1) USP;
Rigo, E.C.S.(1); Conti, G.T.(1); Vercik, L.C.O.(1); Vercik, A.(1);

02-031 18, June
Study of hydroxyapatite containing propolis of Brazilian origin: characterization, antimicrobial activity and cytotoxic effect materials
Eliana Cristina Da Silva Rigo (Brasil)
(1) USP;
Rigo, E.C.S.(1); Scatolini, A.M.(1); Pugine, S.M.P.(1); Ve

02-032 19, June
Study of obtaining hydroxyapatite-collagen based biocomposite
Luiz Felipe Ribal (Brazil)
(1) UFABC;
Ribal, L.F.(1); Ribeiro, C.(1);

02-037 18, June
Synthesis of Hydroxyapatite from eggshell of chicken
Wladymyr Jefferson Bacalhau Sousa (Brasil)
(1) UFCG; (2) UEPB;
Sousa, W.J.B.(1); Barbosa, R.C.(1); Bezerra Junior, A.G.(1); Tomaz, A.F.(2); Fook, M.V.(1); Farias, K.A.S.(1); Cardoso, M.J.B.(

02-038 19, June
APPLICATION OF THE RIETVELD METHOD IN CERAMIC BIOMATERIALS AS AN ALTERNATIVE TO THE STANDARD FOR THE CHARACTERIZATION OF CRYSTALLINE PHASES
Klaidson Antonio Sousa Farias (Brasil)
(1) UFCG; (2) UEPB; (3) ICV-CSIC;
Farias, K.A.S.(1); Cardoso, M.

02-039 18, June
Synthesis of osseous cement with brushite from wollastonite
Klaidson Antonio Sousa Farias (Brasil)
(1) UFCG; (2) ICV-CSIC;
Farias, K.A.S.(1); Carrodeguas, R.G.(2); Rodriguez, M.A.(2); Sousa, W.J.B.(1); Lima, R.J.S.(1); Morúa, O.C.(1); Cardoso,

02-041 19, June
Development and characterization of calcium phosphate cements containing collagen
Christiane Ribeiro (Brasil)
(1) UFABC;
Ribeiro, C.(1); Lima, V.A.D.(1); Setz, L.F.G.(1);

02-042 18, June
PVA-based magnetic nanocomposite material produced by aqueous tape casting
Antonio Carlos Silva Costa (Brasil)
(1) UFRN;
Costa, A.C.S.(1); Alves, H.P.A.(1); Correa, M.A.(1); Acchar, W.(1);

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02-046 19, June
Influence of Crystalline Composition on Mechanical and Manipulation Properties in Bone Cement obtained from Wollastonite
Otto Cumberbatch Morúa (Brasil)
(1) UFCG; (2) ICV-CSIC;
Cardoso, M.J.B.(1); Morúa, O.C.(1); Farias, K.A.S.(1); Sousa, W.J.

02-047 18, June
Antitumor activity of silver tungstate (Ag2WO4) irradiated by different methods
Thaiane Alcarde Robeldo (Brazil)
(1) UFSCar; (2) UNESP;
Robeldo, T.A.(1); Assis, M.(1); De Foggi, C.C.(1); Kubo, A.M.(1); Borra, R.C.(1); Longo, E.(2);

02-048 19, June
Antifungal activity and biocompatibility of silver tungstate (Ag2WO4) irradiated by different methods
Camila Cristina de Foggi (Brazil)
(1) UFSCar; (2) UNESP;
De Foggi, C.C.(1); Assis, M.(1); Kubo, A.M.(1); Barbugli, P.A.(2); Vergani, C.E.(2);

02-049 18, June
Crystallographic characterization of non-stoichiometric glass-ceramics in LiO2-SiO2 system containing CeO2
Manuel Fellipe Rodrigues Pais Alves (Brasil)
(1) UERJ; (2) EEL/USP; (3) UFF;
Alves, M.F.R.P.(1); Suzuki, P.A.(2); Freitas, B.X.(2); Ghus

02-050 19, June
Mechanical behaviour of dental ceramics based on lithium silicate
Manuel Fellipe Rodrigues Pais Alves (Brasil)
(1) UNESP; (2) UERJ-FAT; (3) UERJ;
Alves, M.F.R.P.(1); Santos, C.(1); Simba, B.G.(2); Campos, L.Q.B.(3); Ferreira, I.S.(1);

02-054 18, June
Preparation and characterization of composite ferrite@SiO2/hydroxyapatite
Tarciana Araújo Santos Polyana (Brasil)
(1) UFCG;
Polyana, T.A.S.(1); Araujo, R.M.E.(1); Batista, H.A.(1); Nepomuceno, F.G.(1); Leite, R.B.(1); Costa, A.C.F.M.(1);

02-057 19, June
Obtainment of calcium phosphate based biocement using fishing industry waste (tilapia carcass)
Tarcília Amaral Corrêa (Brazil)
(1) UENF;
Corrêa, T.A.(1); Holanda, J.N.F.(1);

02-059 18, June
Orthophosphate silica nanocomposite as a bioactive material for medical application
Mateusz Dulski (Poland)
(1) M.D.; (2) K.D.; (3) D.Ch.; (4) T.G.; (5) J.K.; (6) S.S.; (7) A.M-W.;
Dulski, M.(1); Dudek, K.(2); Chalon, D.(3); Goryczka, T.(4); K

02-062 19, June
Evaluation of reduced graphene oxide -reinforced zirconia ceramics processing conditions
Valter Ussui (Brazil)
(1) USP; (2) IPEN;
Ussui, V.(1); Manarão, D.S.(2); Cordeiro, G.L.(1); Tertuliano, A.J.O.(2); Machado, I.F.(2); Lazar, D.R.R.(1); Ces

02-063 18, June
Preparation of Er3+/Yb3+ co-doped Bioactive Material with Containerless Processing
qin li (China)
(1) QL;
Li, q.(1);

02-064 18, June
Influence of manganese on the structure and in vitro behaviour of sol-gel derived bioactive glasses
Breno Rocha Barrioni (Brasil)
(1) UFMG; (2) Imperial College;
Barrioni, B.R.(1); Jones, J.R.(2); Naruphontjirakul, P.(2); Pereira, M.M.(1);

02-065 19, June
Characterization of hydroxyapatite of bone ash for use as Bioceramic
Ricardo Yoshimitsu Miyahara (Brazil)
(1) Unicentro;
Miyahara, R.Y.(1); Bonadio, T.G.M.(1); Freitas, V.F.(1); Oliveira, P.C.(1); Gomes, A.(1);

02-066 18, June
Y-TZP dental ceramics: Sintering process improvement using microwave energy.
Amon Solano (Brasil)
(1) IPEN;
Solano, A.(1); Arata, A.(1); Lima, N.B.(1); Ussui, V.(1); Lazar, D.R.R.(1);

02-067 19, June
Effect of sintering conditions of zirconia-yttria-titania-based ceramics composite on the densification and microstructure
Anelyse Arata (Brasil)
(1) IPEN; (2) Ufto; (3) UFABC;
Arata, A.(1); Ussui, V.(1); Lima, N.B.(1); Lazar, D.R.R.(1); De So

02-069 18, June
Microstructural evaluation of Y-TZP/TiO2 composite
Valter Ussui (Brazil)
(1) IPEN; (2) FOUSP; (3) UFABC; (4) USP;
Ussui, V.(1); Miranda, R.B.P.(2); Lima, N.B.(1); Lazar, D.R.R.(1); Marchi, J.(3); Cesar, P.F.(4);

02-071 19, June
Evaluation and characterization of an innovative treated zirconia as an alternative for Neoporos ® titanium used in implantology
Rúbia Eri Teruya (Brazil)
(1) UFPR; (2) Neodent;
Teruya, R.(1); Guimarães Castro, C.(2); Marino, C.E.B.(1);

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02-072 18, June
Structural characterization of sol-gel derived bioactive glasses containing silver.
Akiko Moura Hanasiro (Brazil)
(1) UFABC; (2) IFSC-USP;
De Queiroz, A.P.(1); Zambanini, T.(1); Hanasiro, A.M.(1); Borges, R.(1); Schneider, J.F.(2); Marchi, J.(

02-073 19, June
Bioactivity behavior of sol-gel derived bioactive glasses containing holmium oxide
Giulia Piagentini Delpino (Brazil)
(1) UFABC;
Piagentini Delpino, G.(1); Zambanini, T.(1); Borges, R.(1); Marchi, J.(1);

02-076 18, June
Synthesis of strontium-containing bioactive glass submicron particles using a rapid route for biomedical applications
Layla Mosqueira (Brasil)
(1) UFMG;
Mosqueira, L.(1); Pereira, M.M.(1); Serakides, R.(1);

02-077 19, June
Study of the structural properties of bioglass-ceramic composites for biomedical applications
José de los Santos Guerra (Brazil)
(1) UFU; (2) Universidad de La Habana;
Levy-santos, L.(1); Mendez-gonzález, Y.(2); Dantas, N.O.(1); De Los Santos

02-078 18, June
Strategies for surface functionalization of sol-gel derived bioactive glasses grafted with functional organosilane groups
Marina Almeida Santos de Nardi (Brazil)
(1) UFABC;
Nardi, M.A.S.(1); Seabra, A.B.(1); Borges, R.(1); Marchi, J.(1);

02-079 19, June
Bioactive Glass Scaffolds for Bone Tissue Engineering Prepared by Gelcasting of Foams
Eliandra Sousa Trichês (Brasil)
(1) UNIFESP;
Trichês, E.S.(1); De Siqueira, L.(1);

02-082 18, June
In vitro biological characterization of biocompatible glasses based on SiO2-CaO-P2O5-AgO system
Juliana Marchi (Brasil)
(1) SENAI; (2) USP; (3) UFABC;
Mendes, A.P.Q.(1); Marchi, J.(2); Rigo, E.C.S.(3); Santos Jr, A.R.(2); Pugine, S.M.P.(3);

02-083 19, June
Development of polymer-ceramic biocomposits for application in endodontia
Josué da Silva Buriti (Brasil)
(1) UFCG;
Buriti, J.S.(1); Barreto, M.E.V.(1); Fook, M.V.(1);

02-088 18, June
Evaluation of controlled crystallization on mechanical properties of phosphate glasses
Denise Stolle da Luz Weiss (Brazil)
(1) ;
Weiss, D.S.(1);

02-089 19, June
In vivo evaluation of drug delivery system for treatment of osteomyelitis associated with bone repair
Karen Cristina Kai (Brasil)
(1) UFABC; (2) FMJ;
Kai, K.C.(1); De Araújo, D.R.(1); Cunha, M.R.(2); Marchi, J.(1);

02-093 18, June
Development of a new sol-gel synthesis route to obtain bioactive glasses containing iron oxide phases for applications in hyperthermia
Roger Borges (Brasil)
(1) UFABC;
Borges, R.(1); Ferreira, L.M.(1); Rettori, C.(1); Marchi, J.(1);

02-095 19, June
Hydroxyapatite/Alginate/Pluronic® biocomposite scaffolds for alendronate delivery in osteoporosis.
Rodrigo Fernando Costa Marques (Brasil)
(1) UNESP; (2) IBEC;
Marques, R.F.C.(1); Da Costa, T.P.(1); Jafelicci Junior, M.(1); Engel, E.(2); Amodi

02-097 18, June
Bioactivity behavior and cytotoxicity of SiO2-NaO2-CaO-P2O3-RE2O3(RE=Yb, Gd) glasses
Telma Zambanini (Brazil)
(1) UFABC;
Zambanini, T.(1);
Symposium C: Bioinspired Ceramics and Composites

Symposium C:
Bioinspired Ceramics and Composites

André R. Studart / Eduardo Saiz / Rafael Libanori

03-001 19, June
New mathematical modelling for grain size distribution adjustment in civil concrete
Caroline Moraes da Cruz (Brasil)
(1) UNIFAL-MG; (2) IFSULDEMINAS; (3) UNIFAL - MG; (4) UNESP;
Maestrelli, S.C.(1); Da Cruz, C.M.(1); Grillo, R.H.F.(2); Roveri

03-002 20, June
New Mathematical Modelling for Grain Size Distribution Adjustment in Civil Concrete
Caroline Moraes Cruz (Brasil)
(1) UNIFAL-MG; (2) UNESP; (3) IFSULDEMINAS;
Cruz, C.M.(1); De Morais, E.M.(2); Grillo, R.F.(3); Del Roveri, C.(1); Maestrelli, S.

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03-007
20, June
Study of the Effect of the Addition of the Limestone Filler Produced in the State of the RN in the Concrete Strength
Amanda Regina de Souza Macedo (Brazil)
(1) UFRN;
Da Luz, D.S.(1); Silva, A.S.(1); Macedo, A.S.(1); Gomes, U.U.(1);

03-008
19, June
Synthesis and antiangiogenic properties of ZnWO4 and ?-Ag2WO4 nanoparticles
Carla Júnia Santos (Brazil)
(1) UNIFEI;
Santos, C.J.(1); Soares, D.F.(1); Filho, F.M.(1);

03-009
20, June
Influence of aluminum powder in mechanical and physical properties of the autoclaved concrete
Arthur Jackson Alves de Sousa (Brazil)
(1) UFRN; (2) UnP;
Da Luz, D.S.(1); Lima, F.M.(2); De Sousa, A.A.(2); Dos Santos, M.B.(2); Silva, A.S.(1); Gom

03-010
19, June
In vitro bioactivity tests in a composite based on magnetite, polyvinylidene fluoride and calcium phosphate using simulated body fluid (SBF)
Milena Schroeder Malherbi (Brazil)
(1) Unicentro; (2) UEM;
Malherbi, M.S.(1); Silva, L.M.(2); Bini, R.

03-011
20, June
Development and characterization of non-sintered blocks of HAp91®/silk fibroin dissolved with formic acid
Sergio Akinobu Yoshioka (Brasil)
(1) USP; (2) PPGIB - USP; (3) JHS;
Yoshioka, S.A.(1); Restrepo, S.G.(1); Vieira, D.(2); Castro Máximo Bi

03-012
19, June
Production and Characterization of Hydroxyapatite/Beta-Tricalcium Phosphate Scaffolds by Gelcasting Method
Eliandra Sousa Trichês (Brasil)
(1) UNIFESP;
Trichês, E.S.(1); Barbosa, L.(1);

03-013
20, June
Synthesis and properties of 0.7PVDF-0.3BTNN30/70 lead-free composites
Jaciele Marcia Rosso (Brazil)
(1) UEM; (2) Unicentro;
Rosso, J.M.(1); Burato, J.A.(1); Volnistem, E.A.(1); Bonadio, T.G.M.(2); Silva, D.M.(1); Sanguino, G.(1); Freitas, V.F.

03-014
19, June
Nanostructuration effects on the dielectric and ferroelectric properties Ba0.2Na0.8Ti0.2Nb0.2O3 polycrystal
Jaciele Marcia Rosso (Brazil)
(1) UEM; (2) Unicentro;
Rosso, J.M.(1); Burato, J.A.(1); Santos, G.M.(1); Bonadio, T.G.M.(2); Silva, D.M.

03-015
20, June
Elastic Wave Band Gaps in a Bio-Inspired Phononic Crystal
Edson Jansen Pedrosa Miranda Jr. (Brasil)
(1) UNICAMP/IFMA; (2) UNICAMP;
Miranda Jr., E.J.P.(1); Dos Santos, J.M.C.(2);

03-016
19, June
Synthesis of Fe3O4 particles for applications in cancer treatments by magnetic hyperthermia.
Fernanda Aparecida Sampaio da Silva (Brazil)
(1) UFF;
Da Silva, F.S.(1); Campos, M.F.(1);

03-017
20, June
Development and production of zirconia-alumina ceramic coatings reinforced with rare earth oxide for application in the exhaust system of gas turbines in the aerospace sector.
Yogendra Prasad Yadava (Brasil)
(1) UFPE;
Gomes, N.L.(1); Yadava, Y

03-018
19, June
Environmental problems in the production of gypsum encourage its recycling and reuse for the production of new composites
Fabio José Esper (Brasil)
(1) USP;
Bartolomei, S.S.(1); Moura, E.(1); Wiebeck, H.(1); Esper, F.J.(1);

03-019
20, June
Synthesis of SnO2 trough eggshell membrane biomimetization: influence of thermal treatment
Rubens Camaratta (Brazil)
(1) R.C.; (2) U.P.N.; (3) K.P.V.;
Camaratta, R.(1); Nunes, U.P.(2); Vieira, K.P.(3);

03-021
19, June
Porous biomimetic sioc-based ceramics obtained from infiltration of wood templates with a preceramic polymer
María Laura Sandoval (Argentina)
(1) INTEMA;
Certuche-arenas, C.S.(1); Sandoval, M.L.(1); Camerucci, M.A.(1);

03-022
20, June
Study of the addition of Nb2O5 in the particulate composites with EUROFER steel through the high energy milling.
Roberta Araujo Cavalcante de Menezes (Brasil)
(1) UFRN;
Menezes, R.A.C.(1); Gomes, U.U.(1); Silva, A.S.(1); Oliveira, L.A.(1);

03-024
19, June
Ceramic and mechanical testing of industry residual of ceramic industries and their utilization in ceramic masses for production of crafts products.
Germannya D´Garcia Silva (Brasil)
(1) UFPE;
Silva, G.D.(1); Silva, J.C.(1); Yadava, Y.P.(1); A

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03-027
20, June
Evaluation of bioactive glass effect on fluid handling capacity of novel 3D composites of chitosan/bioactive glass for wound dressing applications
Talita Martins (Brazil)
(1) UFMG; (2) CEFET-MG;
Martins, T.(1); Costa Júnior, E.S.(2); Pereira,

03-028
19, June
Cobalt therapeutic ion incorporated into the hybrid scaffold polyvinyl alcohol (PVA) / bioactive glass (BG) and its implications in angiogênesis
Andréia Grossi S Laia (Brasil)
(1) UFMG; (2) ICB;
Laia, A.G.(1); De Sá, M.A.(1); Valverde, T.M.(2)

03-035
20, June
Manufacturing and characterization of biocomposites of poly (lactic acid-co-glycolic acid) (plga) with bioceramics of calcium phosphates
Thaianne Balestreri Knopf (Brasil)
(1) UFSC;
Knopf, T.B.(1); Aragones, A.(1); Fredel, M.C.(1);

03-044
19, June
Study of the addition of residues of the sawdust of ornamental rock from parelha's region in rio grande do norte, using as raw material for ceramic coating
Marcondes Mendes Souza (Brasil)
(1) IFRN;
Souza, M.M.(1);

03-045
20, June
Polymer-ceramic composite films: Microstructural and Electric characterizations
Agda Eunice de Souza (Brasil)
(1) UNESP/FCT; (2) FCT/Unesp; (3) FEIS/Unesp; (4) FEIS/UNESP; (5) UNESP;
Souza, A.E.(1); Eunice De Souza, D.E.(2); Rubira, R.J.G.(2);

Symposium D:
Cements and Geopolymers

Rafael G. Pileggi

04-002
8, June
Evaluation of the pozzolanic activity of peat in Portland cement
Sylma Carvalho Maestrelli (Brasil)
(1) UNIFAL-MG; (2) IFSULDEMINAS;
Oliveira, D.C.(1); Cruz, C.M.(1); Grillo, K.F.(2); Del Roveri, C.(1); Grillo, R.F.(2); Maestrelli, S.C.(1);

04-003
19, June
Evaluation of the pozzolanic activity of peat in Portland cement
Sylma Carvalho Maestrelli (Brasil)
(1) UNIFAL-MG; (2) IFSULDEMINAS; (3) UNIFAL - MG;
Maestrelli, S.C.(1); Oliveira, D.C.(1); Grillo, K.F.(2); Da Cruz, C.M.(1); Roveri, C.(3); Grillo, R.H.F.(2);

04-006
18, June
Investigação experimental das propriedades termomecânicas de pastas de cimento aditivadas com Poliuretana (PU) submetidas à elevada temperatura.
Italo Batista da Silva (Brasil)
(1) IFRN; (2) UFRN; (3) UFERSA; (4) UFPB;
Silva, I.B.(1); Martinel

04-007
19, June
Recycling of Polycarbonate Lenses for The Manufacture of Translucent Concrete Block
Aline da Rocha Santos (Brasil)
(1) UMC;
Santos, A.R.(1); Mossri, M.V.M.(1); Cunha, E.S.(1);

04-008
18, June
Portland cement matrix containing micro and nano-silica
Thiago Melanda Mendes (Brasil)
(1) UTFPR; (2) UFSC;
Mendes, T.M.(1); Repette, W.L.(2);

04-010
18, June
Analysis and comparison of chemosynthetic and metakaolin based geopolymer
Mariana Arruda Pereira (Brasil)
(1) UFMG;
Pereira, M.A.(1); Vasconcelos, W.L.(1); Vasconcelos, D.C.L.(1); Lopes, G.B.(1);

04-011
18, June
Partial replacement of fine recycled aggregate in blocks of structural masonry
José Carlos Borba Jr (Brasil)
(1) UFSJ; (2) IFES;
Cavalcante, A.S.G.(1); Elias, R.C.R.(1); Borba Jr, J.(1); Avelar, M.G.(2); Silva, L.S.O.(1);

04-012
19, June
Use of the residue of the grinding machinig process of the industry mechanical metal in concrete manufacturing
João Cláudio Ferreira Soares (Brasil)
(1) CEULM; (2) UEA;
Soares, J.C.F.(1); Fernandes, F.F.(2); Soares, R.P.(1); Silva, C.C.(2); Ol

04-013
18, June
A novel magnesia-alumina based binder for in situ spinel-bonded corundum refractory castables
Dominika Madej (Polônia)
(1) AGH;
Madej, D.(1); Prorok, R.(1);

04-015
20, June
Thermal properties of lightweight concrete formulated using expanded clay and expanded vermiculite
Suelen Mendonça Camargo (Brasil)
(1) UFRN; (2) IFPA; (3) UNIFACEX;
Martinelli, A.E.(1); Camargo, S.M.(2); Sampaio, Z.L.M.(3); Marinho, G.S.(1);

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04-016
18, June
Alkali-activated materials from different aluminosilicate sources: effect of calcium and aluminum availability
Ameni gharzouni (França)
(1) SPCTS; (2) ICMM;
Gharzouni, A.(1); Rossignol, s.(1); Ouamara, I.(1); Sobrados, I.(2);

04-017
19, June
Effect of fiber volume factor incorporated in cement-based composites with and without mineral additions.
Felipe Sérgio Bastos Jorge (Brazil)
(1) CEFET-MG;
Jorge, F.B.(1); Rodrigues, C.S.(1);

04-019
18, June
Utilization of gypsum from construction and demolition waste in Portland cement mortar.
Maria Lucia Pereira Antunes (Brasil)
(1) UNESP/Sorocaba; (2) UNESP;
Antunes, M.L.P.(1); De Sá, A.B.(1); Oliveira, P.S.(1); Souza, C.S.(1); Durrant, S.F.(2)

04-020
18, June
Study of loading influence at different areas of concrete based on concreting time
Gabriel Soares Bento (Brasil)
(1) UNIT; (2) IFS;
Bento, G.S.(1); Júnior, W.S.S.(1); Bispo, I.S.(1); De Castro, A.G.N.(1); Lima, A.C.A.(1); Santos, D.S.(1); Lima

04-023
19, June
Comparative analysis of concrete with oil residues and setting time retarder additive for pavement application.
Sherington Augusto Milani Bigotto (Brazil)
(1) UNESP;
Bigotto, S.M.(1); Fonseca, M.O.(1); Albuquerque, M.F.(1);

04-024
19, June
Evaluation of the reology of mixed mortars containing res-idue from the production of titanium dioxide (URM)
José da Silva Andrade Neto (Brasil)
(1) UFBA;
Albuquerque, D.M.(1); Andrade Neto, J.S.(1); Amorim Júnior, N.S.(1); Ribeiro, D.V.(1);

04-025
18, June
Evaluation of the residue influence from the production of titanium dioxide (URM) in the hydration of mixed pastures of portland cement and hydrated cal
José da Silva Andrade Neto (Brasil)
(1) UFBA;
Albuquerque, D.M.(1); Andrade Neto, J.S.(1);

04-028
20, June
Behavior of the activated alkali cement (AAC) obtained from blast furnace slag, rice husk ash (RHA) and metakaolin (MK)
Andreza Frare (Brazil)
(1) UTFPR; (2) UTFPR-PB;
Frare, A.(1); Perardt, M.(2); Da Luz, C.A.(1); Pereira Filho, J.(1);

04-029
18, June
Activate fly ash reaction using bauxite residue in blended cement
Marcelo Montini (Brazil)
(1) UFSCar; (2) EPFL; (3) Poli-USP;
Montini, M.(1); Li, X.(2); Romano, R.C.O.(3); Rodrigues, J.A.(1); Pileggi, R.G.(3); Scrivener, K.(2);

04-032
18, June
Utilization of waste from TiO2 production for portland cement`s obtention
José da Silva Andrade Neto (Brasil)
(1) UFBA;
Mariani, B.B.(1); Andrade Neto, J.S.(1); Amorim Júnior, N.S.(1); Ribeiro, D.V.(1);

04-035
18, June
Evaluation of pozolanicity of granite rock fine (STONE POWDER)
José da Silva Andrade Neto (Brasil)
(1) UFBA;
Santos, T.A.(1); Andrade Neto, J.S.(1); Amorim Júnior, N.S.(1); Ribeiro, D.V.(1);

04-037
19, June
Incorporation of fine fraction of the civil construction waste (FCCW) to produce alkali-activated cement-based binder and mortars
Nilson Santana de Amorim Júnior (Brasil)
(1) UFBA;
Amorim Júnior, N.S.(1); Andrade Neto, J.S.(1); Cilla, M.S.(1);

04-038
20, June
Advanced oxidative process (aop) in geopolymer slurries with tio2 waste addition
Marcelo Strozi Cilla (Brasil)
(1) UFBA;
Amorim Júnior, N.S.(1); Andrade Neto, J.S.(1); Cilla, M.S.(1); Ribeiro, D.V.(1);

04-040
18, June
Influence of replacement of Portland cement by limestone filler on the hardened state of micro-concretes
Gabriel Carpinelli Perozzi Brasileiro (Brasil)
(1) USP;
Brasileiro, G.C.P.(1); Mesquita, J.A.F.S.(1); Maciel, M.H.(1); Romano, R.C.O.(1);

04-041
19, June
Study of the replacement of portland cement for ground glass in the production of mortar
Erica Natasche de Medeiros Gurgel Pinto (Brasil)
(1) UFERSA;
Pereira, M.M.L.(1); Silva, I.P.D.(1); Freitas, F.G.C.(1); Pinto, E.N.M.G.(1); Cabral, K.C.(1)

04-042
18, June
Rheological properties of cementitious pastes with different types and contents of mineral additions
José Augusto Ferreira Sales de Mesquita (Brasil)
(1) USP;
Mesquita, J.A.F.S.(1); Maciel, M.H.(1); Romano, R.C.O.(1); Pileggi, R.G.(1); Brasile

04-043
18, June
Metakaolin as aluminum source in Supersulfated Cement
Letícia Volkweis (Brazil)
(1) UTFPR;
Volkweis, L.(1); Da Luz, C.A.(1); Pereira Filho, J.(1); Bortolozzo, P.H.(1); Mantelli, D.F.(1); Perardt, M.(1);

04-044
19, June
Alkaline activation of blast furnace slag with red mud: monitoring of chemical reaction and mineralogical changes
Heitor Montefusco Bernardo (Brasil)
(1) USP;
Bernardo, H.M.(1); Romano, R.C.O.(1); Pileggi, R.G.(1); Cincotto, M.A.(1);

04-045
20, June
Carbonation of alkaline activated slag (AAS): a comparison with Portland cement
Mariana Perardt (Brasil)
(1) UTFPR;
Kretschmer, L.C.(1); Pereira, H.L.B.(1); Bortolozzo, P.H.(1); Da Luz, C.A.(1); Perardt, M.(1); Mantelli, D.F.(1); Volkweis, L.(

04-046
19, June
Effect of hydrothermal treatment on phase composition of novel binder from MgO-Al2O3-SiO2-H2O phase system
Ryszard Prorok (Polônia)
(1) AGH;
Prorok, R.(1); Madej, D.(1);

04-047
18, June
Contribuição ao estudo de cimentos supersulfatados: resistência ao ataque de sulfatos
Adernanda Paula dos Santos (Brazil)
(1) UTFPR;
Dos Santos, A.P.(1);

04-048
19, June
Chemical shrinkage of cementitious pastes with incorporation of different mineral additions
Roberto Cesar de Oliveira Romano (Brasil)
(1) USP;
Muniz, G.H.U.(1); Romano, R.C.O.(1); Mesquita, J.A.F.S.(1); Brasileiro, G.C.P.(1); Maciel, M.H.(1);

04-050
18, June
Effect of physical particle characteristics on the consolidation of cementitious suspensions
Marcel Hark Maciel (Brasil)
(1) USP;
Maciel, M.H.(1); Romano, R.C.O.(1); Pileggi, R.G.(1);

04-051
18, June
Use of Civil Construction and Demolition Waste to Produce Concrete Blocks
Afonso Rangel Garcez Azevedo (Brasil)
(1) UNIREDENTOR; (2) REDENTOR; (3) UniRedentor; (4) UENF;
Cerqueira, N.A.(1); Andrade, D.L.(2); Souza, V.B.(1); Azevedo, A.R.G.(3);

04-052
18, June
The use of marble waste in concrete structural blocks
Afonso Rangel Garcez Azevedo (Brasil)
(1) UNIREDENTOR; (2) REDENTOR; (3) UniRedentor; (4) UENF;
Cerqueira, N.A.(1); Andrade, D.L.(2); Silva, M.O.(3); Souza, V.B.(1); Azevedo, A.R.G.(4); Gom

04-053
19, June
Mechanical characterization of concrete with recycled aggregates, fine and coarse
Pedro Valle Salles (Brazil)
(1) CEFET MG;
Salles, P.V.(1);

04-056
20, June
Properties of ultra-high performance concrete mixture made using particle packing theory and with incorporation of carbon nanotubes.
Thiago Marques Viana (Brazil)
(1) CEFET-MG; (2) UFMG;
Viana, T.M.(1); Ludvig, P.(1); Santos, W.J.(2);

04-061
20, June
Characterization of waste foundry sand (WFS) and use for production of concrete blocks
Renata da Silva Magalhães (Brasil)
(1) UNESP/FCT;
Magalhães, R.S.(1); Santos, L.F.(1); Santos, G.T.A.(1); Leme, T.S.(1); Souza, A.E.(1); Teixeira, S.R.(1);

04-062
18, June
Mechanical fracture behavior of cement pastes incorporated with carbon nanotubes and nanofibers synthesized in-situ in Portland cement clinker
Francisco Aristides Santos Neto (Brazil)
(1) CEFET-MG; (2) UFMG; (3) CTNano;
Santos Neto, F.A.(1); L

04-063
19, June
Incorporation of Galvanic Sludge in the production of soil-cement blocks
Igor Lazzaretti (Brazil)
(1) UTFPR-PB; (2) UTFPR;
Navarini, C.(1); Baldin, C.R.B.(1); Pereira Filho, J.(2); Angulski Da Luz, C.(2); Camargo, G.(1); Lazzaretti, I.(1);

04-064
19, June
Análise da utilização de detergente sintético em substituição ao aditivo plastificante em concreto de cimento portland
Erica Natasche de Medeiros Gurgel Pinto (Brasil)
(1) UFERSA;
Pinto, E.N.M.G.(1);

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04-065
18, June
Lightweight Concrete: Analysis of different traces of expanded clay, polystyrene and basaltic gravel
Gabriel Soares Bento (Brasil)
(1) UNIT;
De Santana, V.S.(1); Bento, G.S.(1); Carvalho, L.E.O.(1); Abreu, B.V.(1); Silva, R.A.C.(1);

04-066
19, June
Assessment of damage in concrete cured at different temperatures caused by delayed ettringite formation
Diego Jesus De Souza (Canada)
(1) UO;
De Souza, D.J.(1); Santos, V.(1); Sanchez, L.(1);

04-067
19, June
Tribological and Mechanical Performance of Rock Powder Geopolymer Composite
Cristyan Zenato Rissardi (Brazil)
(1) IMC-UCS;
Rissardi, C.Z.(1); Titton, A.P.(1); Cruz, R.C.D.(1);

04-068
19, June
Water treatment sludge as supplementary cementitious materials in Portland cement
Elisandro Alexandre (Brazil)
(1) UTFPR;
Alexandre, E.(1); Da Luz, C.A.(1); Schuster, G.C.(1); Vicentin, B.(1); Jacobsen, S.(1);

04-069
18, June
The Physical effect of the quartz filler on Portland cement hydration.
Diego Jesus De Souza (Canada)
(1) UO; (2) UFPR; (3) UFOB;
De Souza, D.J.(1); Medeiros, M.H.F.(2); Hoppe Filho, J.(3);

04-070
18, June
study of the use of kaolinite clay in mortars
Afonso Rangel Garcez Azevedo (Brasil)
(1) UENF; (2) UNIREDENTOR;
Marvila, M.T.(1); Alexandre, J.(1); Zanelato, E.B.(1); Azevedo, A.R.G.(1); Goulart, M.A.(1); Cerqueira, N.A.(2); Xavier, G.C.(1); Es

04-074
19, June
Quantitative techniques for assessing damage and the potential of further distress in concrete affected by internal swelling reactions (isr): an overview
Leandro F M Sanchez (Canada)
(1) ;
Sanchez, L.(1); Regis Junior, W.(1); Terra, M.(1);

04-076
19, June
An investigation of binder consumption effects on concrete hardened state.
Mayra Tagliaferri de Grazia (Canada)
(1) uOttawa; (2) USP; (3) Poli-USP;
Grazia, M.T.(1); Sanchez, L.(1); Mesquita, J.A.F.S.(2); Romano, R.C.O.(2); Pileggi, R.G.(3);

04-078
19, June
Efflorescence in calcined kaolin sludge based geopolymers
Ana Paula Kirchheim (Brazil)
(1) APK; (2) EDRR;
Kirchheim, A.(1); Martinez, E.D.R.(2);

04-083
18, June
Estudo comparativo de matrizes álcali-ativadas e de cimento Portland: análise por TG/DTG
Thiago Ricardo Santos Nobre (Brasil)
(1) FOC;
Nobre, T.R.S.(1);

04-084
19, June
Study of soil-cement bricks using mining reject
José Carlos Borba Jr (Brasil)
(1) UFSJ;
Elias, R.C.R.(1); Comerio, L.(1); Duarte, L.N.(1); Bianchi, A.L.(1); Borba Jr, J.(1);

04-085
18, June
Development of ceramic insulators based on aluminum silicate geopolymers with additives and different additions of wood residues to adjust the porosity after burning and acoustical capability without burning.
Damião Carvalho Pereira (Brasil)
(1

04-086
18, June
Structural concrete with addition of polypropylene treated bamboo fibers
Leila Figueiredo De Miranda (Brasil)
(1) MACKENZIE;
Miranda, L.F.(1); Carraro, C.G.(1); Monção, C.P.(1); Munhoz Jr, A.H.(1); Masson, T.J.(1);

04-087
19, June
Analysis of the utilization of synthetic detergent in replacement to plasticizer additive in concrete of portland cement
Erica Natasche de Medeiros Gurgel Pinto (Brasil)
(1) UFERSA;
Silva, A.R.(1); Câmara, M.F.(1); Lopes, T.S.(1); Pereira, M.M

04-089
18, June
Pseudoboehmite addition in concrete
Antônio Hortêncio Munhoz Jr (Brasil)
(1) MACKENZIE; (2) UPM;
Munhoz Jr, A.H.(1); Emílio, R.(2); Monção, C.P.(1); Carraro, C.G.(1); Peres, R.M.(1); Florencio, O.(2); Miranda, L.F.(1);

04-090
19, June
Alternative shrinkage-compensate admixture using an Al-based waste for Ordinary Portland Cement
Elisângela Guzi de Moraes (Brasil)
(1) UFSC;
Souza, M.T.(1); Correa, B.(1); Onghero, L.(1); Repette, W.L.(1); Raupp-pereira, F.(1); Novaes De Olive

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04-091 20, June
Manufacture of low density geopolymer based composites with incorporation of expanded polystyrene spheres.
Kurt Strecker (Brazil)
(1) UFSJ;
Strecker, K.(1); Lombardi, C.T.(1); Azevedo, A.G.(1);

04-092 18, June
Synthesis of zeolite-geopolymer composites via in-situ geopolymerization
Andreia De Rossi (Brazil)
(1) UFSC; (2) IPVC; (3) UNESC; (4) UA;
De Rossi, A.(1); Simão, L.(1); Ribeiro, M.J.(2); Montedo, O.K.(3); Raupp-pereira, F.(1); Novais, R.M.T.(4

04-094 19, June
Use of marble and granite powder as a partial substantiation of the cement for the production of argamassa
Jhonnaldy Nogueira Sena (Brazil)
(1) UFERSA; (2) UFRN;
Sena, J.N.(1); Cavalcante, C.T.D.(1); Bezerra, A.P.(2); Filho, M.S.(1);

04-095 20, June
Mortar with different rice husk ashes in partial replacement of Portland cement: Pozzolanic activity index and hardened state properties.
Camila Crauss (Brazil)
(1) UNISC; (2) UFRGS;
Crauss, C.(1); Krann, M.L.(1); Basegio, T.M.(2); Dos Santos,

04-097 18, June
Characterization of Sugarcane Bagasse Ash for Use in the Production of Geopolymers
Mérilin Cristina dos Santos Fernandes (Brasil)
(1) UNESP;
Fernandes, M.C.S.(1); Luna, C.M.R.(1);

04-098 19, June
Influence of curing method and alkaline activators ratio on the geopolymers composition and compressive strength
Andreia De Rossi (Brazil)
(1) UFSC; (2) IPVC; (3) UA;
De Rossi, A.(1); Ribeiro, M.J.(2); Novais, R.M.T.(3); Labrincha, J.A.(3); Ho

04-099 20, June
Mortars produced with water submitted to a magnetic field
Ana Carolina Parapinski dos Santos (Brazil)
(1) UNILA; (2) USP;
Santos, A.P.(1); Bandeira, C.M.(2); Silva, P.(1); Figueredo, R.O.(1); Cunha, R.R.R.(1);

04-100 18, June
Cemet composite with piezoeletric properties
Bruna Niccoli Ramirez (Brasil)
(1) UMC; (2) UFABC;
Oliveira, W.A.C.(1); Escote, M.T.(2); Ramirez, B.N.(2);

04-101 19, June
Study of common Portland cement/Brazilian bentonite systems
Rennan Willian Maria (Brazil)
(1) USP; (2) ESTÁCIO SÃO PAULO; (3) IFBA; (4) EPUSP;
Valenzuela Diaz, F.M.(1); Maria, R.W.(2); Neves, F.D.(2); Brasil, M.D.(3); Oliveira, O.M.(3); Esper,

04-103 20, June
Properties of concrete formulation with addiction of ceramic scrap like aggregate
Carolina Del Roveri (Brasil)
(1) UNIFAL-MG; (2) IFSULDEMINAS;
Del Roveri, C.(1); Almeida, D.H.(1); Maestrelli, S.C.(1); Grillo, R.H.F.(2); Grillo, K.F.(2);

04-105 20, June
Effect of porcelain tile polishing residue on geopolymer cement
Fernando Pelisser (Brazil)
(1) UFSC; (2) UNESC;
Pelisser, F.(1); Ramos, G.(1); Gleize, P.(1); Bernardin, A.M.(2); Poffo, C.(1);

Symposium E:
Ceramics for agriculture and livestock

Caue Ribeiro

05-003 20, June
Layered double hydroxide as smart fertilizer
Marcela Piassi Bernardo (Brasil)
(1) UFSCar; (2) Embrapa Instrumentação; (3) UFSCar/ Embrapa;
Bernardo, M.P.(1); Guimarães, G.G.F.(2); Ribeiro, C.(3);

05-008 20, June
Photocatalytic degradation of organic compounds over g-C3N4/Nb2O5 heterostructures.
Gelson Tiago dos Santos Tavares da Silva (Brazil)
(1) UFSCar/EMBRAPA; (2) EMBRAPA; (3) USP; (4) UFSCar/ Embrapa;
Da Silva, G.T.S.T.(1); Carvalho, K.T.(2); Lope

05-010 20, June
Highly efficient photo-oxidation of water-soluble and gaseous organic pollutants over ZnO:ZnWO4 heterostructure
Kele Tatiane Gomes Carvalho (Brazil)
(1) EMBRAPA; (2) USP;
Carvalho, K.T.G.(1); Lopes, O.F.(2); Ferreira, D.C.(2); Ribeiro, C.(1);

05-011 20, June
Evaluation of TiO2/MgO heterojunctions in CO2 photoreduction
Juliana Arriel Torres (Brazil)
(1) EMBRAPA; (2) LNNano and CNPEM; (3) UFSCar/EMBRAPA; (4) USP;
Torres, J.A.(1); Nogueira, A.E.(2); Da Silva, G.T.S.T.(3); Lopes, O.F.(4); De Oliveira,

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05-012 20, June
Studies of photocatalytic reduction of carbon dioxide for renewable fuel production using niobium oxide
Joao Otávio de Sousa Mendes (Brazil)
(1) UFSCar/EMBRAPA; (2) EMBRAPA;
Mendes, J.O.S.(1); Carvalho, K.T.G.(2); Da Silva, G.T.S.T.(1); Ribeir

05-013 20, June
Biodegradable oil-based polymeric coatings on urea fertilizer: N release kinetics transformations of urea N in soil
Ricardo Bortoletto-Santos (Brazil)
(1) Embrapa Instrumentação; (2) USP; (3) EMBRAPA;
Bortoletto-santos, R.(1); Guimarães, G.G.F

05-014 20, June
Synthesis and photocatalytic properties of Nb2O5/V2O5 heterostructures
Thaís Aparecida Rodrigues (Brazil)
(1) IFSP;
Rodrigues, T.A.(1); Mendonça, V.R.(1); Duque, D.M.S.(1);

05-015 20, June
Synthesis, processing and photocatalytic properties of ZnO nanoparticles obtained by chemical method
Mateus Tofoli Corrêa (Brazil)
(1) IFSP;
Corrêa, M.T.(1); Mendonça, V.R.(1); Del Duque, D.(1); Koga, R.H.(1);

Symposium F:
Ceramics for Energy and Environment

Vincenzo Esposito

06-002 18, June
Characterization and photocatalitical properties of ZnO nanoparticles processed by high energy ball milling in a shaker mill
Ana Gabriela Storion (Brasil)
(1) UNIFAL-MG; (2) FZEA/USP; (3) UFSCAR; (4) UNIFAL;
Storion, A.G.(1); Pallone, E.M.J.A.

06-006 19, June
Addition of mininig residues in the formulation of ceramic masses of use in tile
Gelmires Araujo Neves (Brasil)
(1) UFCG;
Almeida, E.P.(1); Apolônio, T.G.(1); Carreiro, M.E.A.(1); Santana, L.N.L.(1); Ferreira, H.C.(1); Neves, G.A.(1);

06-009 20, June
Characterization and Comparative Analysis of Nanometric Powders Obtained by High Energy Milling With and Without Acid Leaching For Photocatalytic Application
Lucca Monteiro Silva Semensato (Brasil)
(1) UNIFAL-MG; (2) FZEA/USP;
Semensato, L.M.S

06-011 18, June
Porous ZnO Semiconductors Obtained Through A Sacrifice Phase
Lucca Monteiro Silva Semensato (Brasil)
(1) UNIFAL-MG;
Semensato, L.M.S.(1); Maestrelli, S.C.(1); Mancini, M.H.(1); Estorari, L.F.B.(1); Storion, A.G.(1); Faria, F.P.(1);

06-013 19, June
High wear resistant ceramics obtained from glass bottle waste, wollastonite and corundum
Alexandre Zaccaron (Brasil)
(1) UNESC; (2) UNIBAVE;
Zaccaron, A.(1); Leal, A.R.(2); Nandi, V.S.(2); Rosso, F.(2); Inocente, J.M.(2); Montedo, O.K.(1); Pet

06-015 20, June
Temperature influence on cerium oxide synthesis by microwave hydrothermal method
Lucianna Gama (Brasil)
(1) IFCE; (2) UFPB; (3) UFCG;
Oliveira, M.J.C.(1); Quirino, M.R.(2); Gama, L.(3);

06-017 18, June
Removal of heavy metals from galvanoplasty industry effluents: equilibrium data modeling of isothermic adsorption by 4a zeolite
Elton Mendes (Brasil)
(1) UNESC;
Mendes, E.(1); Rocha, J.V.(1); Mendes, E.(1); Angioletto, E.(1);

06-019 19, June
UV–Vis photocatalytic performance of the S-doped TiO2 and TiO2 thin films for water treatment
Rodrigo Teixeira Bento (Brasil)
(1) IPEN;
Bento, R.T.(1); Szurkalo, M.(1); Oliveira, E.C.(1); Correa, O.V.(1); Pillis, M.F.(1);

06-020 20, June
Microstructural analysis of tricalcium aluminates C3A
Tatiane Manke (Brazil)
(1) UFPel;
Manke, T.(1); Moreira, M.L.(1); Cava, S.(1);

06-021 18, June
Flexible MWCNTs@MoO2-C nanocable composites with excellent electrochemical performance for lithium ion battery anodes
liping zhao (China)
(1) SJTU;
Zhao, l.(1);

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06-022
19, June
Nanostructured thin films for solar hydrogen production
peng zhang (China)
(1) SJTU;
Zhang, p.(1);

06-023
18, June
Ni and Ni-M Nanoparticles Supported on Hierarchical Oxides for Methane Reforming Catalysis
Lian GAO (China)
(1) SJTU;
Gao, L.(1);

06-028
18, June
Study of tio2 nanoparticles obtained by high energy milling for photocatalysis application
Vanessa Vilela Lemos (Brazil)
(1) UNIFAL-MG; (2) FZEA/USP;
Lemos, V.V.(1); Storion, A.G.(1); Paiva, G.(1); Giraldi, T.R.(1); Pallone, E.M.J.A.(2); Maest

06-031
19, June
Influence of Alkalinity on the Synthesis of Zeolite A and Hydroxisodalite from Metakaolin
Raphael Cons Andrades (Brasil)
(1) USP; (2) UFPA; (3) EPUSP; (4) MACKENZIE;
Andrades, R.C.(1); Valenzuela-diaz, F.R.(1); Neves, R.F.(2); Bastos Andrade,

06-032
20, June
Study of the influence of the porosity in ZnO samples applied to Advanced Oxidation Processes for water depollution
Felipe de Paula Faria (Brasil)
(1) UNIFAL-MG; (2) UNIFAL - MG;
Faria, F.P.(1); Storion, A.G.(1); Giraldi, T.R.(1); Roveri, C.(2

06-033
18, June
Offset ink recycling in ceramics
Antônio Hortêncio Munhoz Jr (Brasil)
(1) MACKENZIE; (2) USP; (3) UPM;
Pereira, J.A.L.(1); Munhoz Jr, A.H.(1); Miranda, L.F.(1); Wiebeck, H.(2); Emílio, R.(3);

06-036
19, June
Lithium Lanthanum NiobiumNanoparticles Synthesized by Spray Pyrolysis
Leandro Conceicção (Brazil)
(1) ISI-EQ;
Conceicção, L.(1); Berton, M.A.(1); Lutosa, G.M.(1); Franchetti, M.G.S.(1); Souza, A.(1); Rech, A.(1); Goulart, F.(1); Lopes, L.(1);

06-037
20, June
Effect of the mixture of N2 AND H2 gases in plasma treatment on the optical properties and photocatalytic activity of TIO2 nanoparticles
Ruthilene Catarina Lima da Silva (Brasil)
(1) IFRN; (2) Ufersa; (3) UFERSA;
Lima Da Silva, R.C.(1); Mallak

06-038
18, June
Nickel-based catalysts with hierarchical structure of pores derived from layered double hydroxides for the production of hydrogen from the steam reforming of ethanol
Celso Valentim Santilli (Brasil)
(1) IQ/UNESP; (2) UNESP/IQ;
Gonçalves, R.G.L

06-046
19, June
Sensing Mechanism of Pristine and Pd Decorated SnO Micro-disks Sensors
Marcelo Ornaghi Orlandi (Brasil)
(1) UNESP;
Orlandi, M.O.(1); Suman, P.H.(1); Barbosa, M.S.(1);

06-047
18, June
Study of incorporation of wasted foundry sand and construction and demolition wastes in manufacture of structural concrete blocks
Ana Luisa Rizzatti da Costa (Brazil)
(1) UDESC;
Da Costa, A.R.(1); Dalla Valentina, L.V.O.(1); Folgueras, M.V.(1)

06-051
18, June
A review about Superconductive Magnetic Energy Storage Systems of solenoid geometry
Fernanda Aparecida Sampaio da Silva (Brazil)
(1) UFF;
Pereira, L.F.L.(1); De Campos, M.F.(1); Da Silva, F.S.(1);

06-053
19, June
Optical properties and the catalytic activity of films TiO2 and TiO2/WO3
Luana Góes Soares (Brasil)
(1) UFRGS;
Soares, L.G.(1); Bergmann, C.P.(1); Alves, A.K.(1);

06-056
18, June
Colorimetric analysis of photocromic films of TiO2 and TiO2 doped with tungsten using the CIE-L*a*b* system
Luana Góes Soares (Brasil)
(1) UFRGS;
Soares, L.G.(1); Bergmann, C.P.(1); Alves, A.K.(1);

06-057
18, June
Evaluation of the physical and mechanical properties of cylindrical test bodies of scheelite waste and stone powder.
Ricardo Eugenio Barbosa Ramos Filho (Brasil)
(1) UFRN; (2) IFPB;
Ramos Filho, R.E.B.(1); Duarte, J.B.(1); Fonsêca, N.J.M.(1);

06-058
19, June
Synthesis of Ceramic Powder Based on Lithium Lanthanum Zirconium Nanoparticles
Leandro Conceicção (Brazil)
(1) ISI-EQ;
Conceicção, L.(1); Berton, M.A.(1); Franchetti, M.G.S.(1); Lutosa, G.M.(1);

06-063
20, June
The pH Dependency of Group IB p-type doped ZnO Nanorods by Chemical Bath Deposition
Maziar Montazerian (Brazil)
(1) College of Engineering; (2) Electrical and Computer Engineering; (3) USP; (4) Center for Research, Technology, and Education in

06-065
18, June
Characterization of a Phosphate Doped Spinel Oxide / PANI Nano-composite for High Power Batteries.
Renier Arabolla Rodríguez (Cuba)
(1) IMRE; (2) Instec; (3) IPN; (4) UFMG;
Rodríguez, R.A.(1); Hidalgo, J.C.(2); Martínez, M.G.(3); Cano, A.(3);

06-066
19, June
Structural, microstructural and electrochemical studies of layered Lix(Ni0.33Mn0.33Co0.33)1-xO2 as catho-de materials for rechargeable lithium ion batteries
Gustavo Suárez (Argentina)
(1) INIFTA; (2) CETMIC;
Gamba, M.(1); Ortiz, M.(1); Suárez,

06-068
19, June
Use fraction of silte and clay from red mud for the production of aluminum alloy ceramic coatings
Carime dos Santos Souza (Brasil)
(1) UNESP - SOROCABA; (2) UNESP/Sorocaba; (3) UNESP; (4) Unesp;
Souza, C.S.(1); Antunes, M.L.P.(2); Cruz, N.C.(3

06-069
18, June
Characterization of tubular ceramic supports for the manufacture of carbon membranes
Janice Souza Hamm (Brazil)
(1) UFRGS;
Hamm, J.S.(1); Ambrosi, A.(1); Schindel, L.K.(1); Pollo, L.D.(1); Marcilio, N.R.(1); Tessaro, I.C.(1);

06-070
19, June
Ba-doped calcium cobaltite ceramics prepared by a alternative chemical method
Gabriel Pugliese Balthazar (Brasil)
(1) UNIFEI; (2) UNESP;
Cesarino, E.M.(1); Dos Santos, S.F.(2); Thomazini, D.(1); Gelfuso, M.V.(1); Balthazar, G.P.(1);

06-072
18, June
Simplified synthesis of CaCu3Ti4O12 ceramics based on citric acid
Fabricio Toledo Torres de Almeida (Brazil)
(1) UNIFEI; (2) Universidade Federal de Itajubá-UNIFEI;
De Almeida, F.T.T.(1); Thomazini, D.(1); Gelfuso, M.V.(2);

06-074
19, June
Evaluation of Two-Step Doping of Yttria-Stabilized Zirconia Through Raman Scattering Analysis
Celso Galeno Rêgo Queiroz (Brasil)
(1) UnB;
Queiroz, C.G.R.(1);

06-078
20, June
Photodegradation of Rhodamine B catalyzed by ZnO pellets
Thamara Machado Oliveira Ruellas (Brazil)
(1) UNIFAL-MG;
Ruellas, T.M.O.(1); Domingos, G.H.S.(1); Peçanha, L.O.O.(1); Maestrelli, S.C.(1); Giraldi, T.R.(1);

06-080
18, June
One-step synthesis, structure and methane dry reforming over ceria supported Ni-based catalysts
Glageane da Silva Souza (Brasil)
(1) UFPB; (2) ULCO;
Souza, G.S.(1); Cesario, M.(2); Tidahy, L.(2); Gennequin, C.(2); Abi-aad, E.(2); Macedo, D.A.(

06-083
19, June
Development of nano-filters of activated carbon impregnated with iron oxide nanoparticles to remove hydrogen sulfide from biogas
Diego Cardoso Souza (Brazil)
(1) UnB;
Souza, D.C.(1); Carvalho, C.G.(1); Hidalgo, M.P.(1); Pinheiro, M.S.(1); Alve

06-084
20, June
Sand fraction study for the production of aluminum alloy coatings by plasma assisted eletrialtic oxidation
Renan Fernandes Moraes (Brazil)
(1) UNESP/Sorocaba; (2) UNESP; (3) Mackenzei;
Moraes, R.F.(1); Souza, C.S.(1); Munhoz Junior, A.H.(2); R

06-085
18, June
Photocatalytic efficient activity of TiO2 films deposited on ceramic tiles
Jessica da Rocha Silva (Brazil)
(1) UFRGS;
Silva, J.R.(1); Bergmann, C.P.(1); Alves, A.K.(1); Rodrigues, D.S.(1);

06-087
19, June
Ni-BaCe0,2Zr0,7Y0,1O3-d sintesys for use in solid oxide fuel cell
Melina Taciele de Oliveira Favaro (Brazil)
(1) UEPG;
Chinelatto, A.L.(1); Favaro, M.T.O.(1); Chinelatto, A.S.A.(1); Grzebielucka, E.C.(1);

06-088
20, June
Solid electrolyte of sodium beta-alumina
Vera Lúcia Arantes (Brasil)
(1) USP;
Arantes, V.L.(1);

06-090
19, June
Synthesis and characterization of the composite formed by Ba (Ce0,2Zr0,7Y0,1) O3-d-La0,7Sr0,3FeO3-d for use in fuel cells.
Adilson Luiz Chinelatto (Brasil)
(1) UEPG;
Chinelatto, A.L.(1); Borsato, A.F.(1); Baldykowski, G.L.(1); Grzebielucka, E.

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06-091 20, June
Synthesis by Microwave Assisted Combustion using low ureia content of the Ni-Al2O3 and Ni-Al1,8Ce0,2O3 catalysts for Dry Methane Reforming
Rodolfo Luiz Medeiros (Brazil)
(1) R.L.B.A.M; (2) UFRN; (3) EAJ; (4) D.M.A. Melo; Medeiros, R.L.(1); Mac

06-092 18, June
Processing optimization for (Ba, Ca)(Ti,Zr)O3 based lead free piezoelectric ceramics
Anne Louise LERICHE (France)
(1) UVHC;
Orlik, K.(1); Leriche, A.L.(1); Lorgouilloux, Y.(1); Rguiti, M.(1); Courtois, C.(1);

06-093 19, June
Synthesis and characterization of LaNi(1-x)CrxO(3-d) for use in fuel cells
Janaina Semanech Borcezi (Brazil)
(1) UEPG;
Chinelatto, A.L.(1); Borcezi, J.S.(1); Grzebielucka, E.C.(1); Chinelatto, A.S.A.(1);

06-094 20, June
Synthesis of nanostructured zinc oxide by css and MaHT: the influence of the synthesis method on the morphology and properties
Tania Maria Basegio (Brazil)
(1) UFRGS; (2) UNIPAMPA; (3) UNISC;
Basegio, T.M.(1); Guaglianoni, W.C.(1); Garcia, A.P

06-095 18, June
study of the influence of Mg on ni-based catalysts obtained via one-pot synthesis for dry reforming of methane
Heloisa Pimenta Macedo (Brasil)
(1) R.L.B.A.M; (2) UFRN; (3) EAJ; (4) D.M.A. Melo; Medeiros, R.L.(1); Macedo, H.P.(2); Figueredo, G.

06-102 19, June
Synthesis, characterization and application of a fluorescence doped Alumina powder prepared by wet-chemical synthesis
Mauricio Antonio Custodio de Melo (Brazil)
(1) UEM; (2) IFPR;
Melo, M.A.C.(1); Souza, N.E.(2); Santos, I.A.(1); Capeloto, O.(

06-103 18, June
Structure and electrochemical assessment of Cu-doped Ca-cobaltites by a proteic sol-gel synthesis method
Jakeline Raiane Dora dos Santos (Brazil)
(1) UFRN; (2) UA; (3) UFPB;
Santos, J.R.D.(1); Silva, R.M.(2); Simões, T.A.(2); Grilo, J.P.F.(3);

06-104 18, June
Structure and electrical properties of Ni-doped ceria
Thayse Ricardo Silva (Brasil)
(1) UFPB; (2) UA;
Silva, T.R.(1); Dos Santos, j.r.d.(1); Ferreira, L.S.(1); Grilo, J.(2); Macedo, D.A.(1);

06-106 19, June
N-DOPED TiO2 thin films grown by mocvd for heterogeneous photocatalysis
Eduardo Cesar Oliveira (Brazil)
(1) IPEN - SP; (2) IPEN;
Oliveira, E.C.(1); Bento, R.T.(2); Szurkalo, M.(2); Correa, O.V.(2); Pillis, M.F.(2);

06-111 20, June
Application of the experimental design in the study of the variables of the process of obtaining nano and submutrometric fibers of TIO2 by the method of solution blow spinning
Raquel Santos Leite (Brasil)
(1) UFCG;
Leite, R.S.(1); Costa, D.L.(

06-112 20, June
Silica and N-Carbon/Silica hybrid nanofiber obtained by solution blow spinning (SBS) to dye adsorption
Raquel Santos Leite (Brasil)
(1) UFCG; (2) BRU-USDA; (3) UFPB;
Farias, R.M.C.(1); Leite, R.S.(1); Severo, L.L.(1); Neves, G.A.(1); Glenn, G.

06-118 19, June
Synthesis of Fe2O3/Nb2O5 mixed oxides and its use as catalysts for methylene blue degradation
Islanny Ouriques Brasileiro (Brazil)
(1) UFRN;
Brasileiro, I.O.(1);

06-120 20, June
Thermoelectrical properties of Ca3Co4O9 doped with molybdenum
Everson Junio Ferreira (Brazil)
(1) UNIFEI;
Ferreira, E.J.(1); Filho, F.M.(1);

06-121 18, June
Development of glass-ceramic material using waste foundry sand and limestone
Silvio Rainho Teixeira (Brasil)
(1) UNESP/FCT;
Magalhães, R.S.(1); Teixeira, S.R.(1); Santos, L.F.(1); Santos, G.T.A.(1); Souza, A.E.(1); Leme, T.S.(1);

06-123 19, June
Effect of Process Parameters on Luminescent Properties of CaMoO4 Doped
Ana Paula Azevedo Marques (Brazil)
(1) UNIFESP;
Marques, A.A.(1); Tavares, F.S.(1);

06-124 20, June
Characterizations of the cellulose residues and waste foundry sand and use dropped development of glass-ceramic material
Leila Maria Sotocorno e Silva (Brazil)
(1) UNESP/FCT;
Silva, L.M.S.(1); Santos, L.F.(1); Magalhães, R.S.(1); Santos, G.T.A

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06-125
18, June
Heterogeneous catalysts based on Sr(1-x)K(x)TiO3-delta solid solutions applied to the biodiesel synthesis via ethyl route
Bruno dos Santos Potensa (Brasil)
(1) FCT/UNESP;
Potensa, B.S.(1); Da Silva, S.R.(1); Gonzalez, E.R.P.(1); Lanfredi, S.(1

06-126
19, June
Investigation of the catalytic potential of nickel-doped potassium strontium niobate solid solutions prepared by high-energy ball milling
Bruno dos Santos Potensa (Brasil)
(1) FCT/UNESP;
Potensa, B.S.(1); Da Silva, S.R.(1); Gonzalez, E.R.P.(1)

06-127
20, June
Recycled ceramic material with thermal insulation properties
Francine Machado Nunes (Brazil)
(1) UFPEL;
Rangel, E.M.(1); Nunes, F.M.(1); Osório, A.G.(1); Machado, F.M.(1); Camaratta, R.(1);

06-128
18, June
Electrochemical characterization of Ca-cobaltite synthesized by solid state reaction
Jakeline Raiane Dora dos Santos (Brazil)
(1) UFPB; (2) UFRN;
Fulgêncio, E.B.G.A.(1); Santos, J.R.D.(2); Silva, R.M.(1); Melo, K.P.(1); Campos, L.A.(1); Macedo

06-132
19, June
Incorporation of mould flux waste for continuous casting of steel in red ceramics
Thaís Queiroz da Silva Gomes (Brazil)
(1) UENF; (2) EEL - USP;
Gomes, T.Q.S.(1); Vieira, C.M.F.(1); Vernilli, F.(2); Delaqua, G.C.G.(1);

06-133
20, June
Synthesis and Characterization of Nano CexOy/Al2O3 Mixed Oxide by Sol-Gel Method
Antonio José Nascimento Dias (Brasil)
(1) INT; (2) UERJ;
Dias, A.J.N.(1); Nascimento, S.(2); Caldeira, H.S.(2);

06-134
20, June
Conventional and microwave sintering of BaCe0.2Zr0.7Y0.1O3-d perovskites
Adriana Scoton Antonio Chinelatto (Brasil)
(1) UEPG; (2) Universidade Federal de Itajubá-UNIFEI; (3) UNIFEI;
Chinelatto, A.S.A.(1); Gelfuso, M.V.(2); Thomazini, D.(3); Giacomozzi, F.I.(1); Ouba, A.K.O.(1); Chinelatto, A.L.(1);

06-135
18, June
Properties of iron oxide nano-powders obtained by a proteic sol-gel method
Jakeline Raiane Dora dos Santos (Brazil)
(1) UFPB; (2) UFRN; (3) UA;
Silva, R.M.(1); Lima, A.V.B.(1); Santos, J.R.D.(2); Morais, A.(1); Fulgêncio, E.B.G.A.(1); Melo, K.

06-138
19, June
New titanium-niobium-tungsten oxide for photocatalytic degradation of different substrates in aqueous solution
Válber Rodrigo Ribeiro de Medeiros (Brazil)
(1) UFRN;
Rodrigues, M.V.(1); Medeiros, V.R.R.(1); Moriyama, A.L.L.(1); Souza, C.P.(1);

06-139
18, June
Synthesis and characterization of the composite with mixed conductivity for fuel cell
Ana Karolina Mayer Lima (Brazil)
(1) UEPG;
Chinelatto, A.L.(1); Lima, A.K.M.(1); Grzebielucka, E.C.(1); Chinelatto, A.S.A.(1);

06-140
18, June
Synthesis, processing and characterization of NiO/Ni-GDC composites
Allan Jedson Menezes De Araújo (Brazil)
(1) UFRN; (2) UA; (3) UFPB;
Araújo, A.J.M.(1); Campos, L.F.A.(2); Dutra, R.P.S.(2); Nascimento, R.M.(1); Grilo, J.P.F.(3); Macedo, D.A.

06-141
19, June
Development of methodology to capture the gases generated in the production of ceramic materials using galvanic sludge as raw material
Regina Felisberto (Brazil)
(1) IIFRS- Campus Porto Alegre; (2) UFRGS;
Felisberto, R.(1); Basegio, T.M.(2); P

06-142
20, June
Optimization The Efficiency Photovoltaic Solar Cell Using Semiconductor Nanomaterials, graphene and natural dyes.
Vanessa Lacerda Menezes (Brasil)
(1) UnB;
Hidalgo, M.P.(1); Martins, I.L.M.(1); Brito, R.(1); Silveira, L.(1); Gomes, T.(1); Mene

06-143
20, June
Use of the solution blow spinning technique to obtain ZNO nanofibers.
Danúbia Lisboa Costa (Brasil)
(1) UFCG;
Costa, D.L.(1); Leite, R.S.(1);

06-144
19, June
Evaluation of thermal performance and durability of the external vertical sealing system using ceramic plates containing sludge from a water treatment plant and rice husk ash
Antonio Rodrigues Petterle (Brazil)
(1) Unipampa; (2) UFRGS;
Petterl

06-145
20, June
Production of Ba2AlNbO6 Ceramics and Study of Their Stability in Crude Petroleum for the Conservation of Metallic Sensing Elements used in Petroleum Extraction
Rebeka Oliveira Domingues (Brasil)
(1) UFPE;
Lima, M.M.(1); Cirino, J.A.(1); Ferrei

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06-147 20, June
Integration of metal nanoparticles in sol-gel process to prepare photocatalytic and microbicidal coatings
Nora Pellegri (Argentina)
(1) IFIR - UNR - CONICET; (2) UNR - FCByF;
Porta Rambaldi, E.(1); Roldan, M.V.(1); Mamana, N.(1); Cogliati, S.

06-151 18, June
Synthesis and characterization of molybdenum carbide for use as heterogeneous photocatalyzers
Suylan Lourdes de Araújo Dantas (Brasil)
(1) UFRN;
Dantas, S.L.A.(1); Moriyama, A.L.L.(1); Souza, C.P.(1);

06-156 19, June
Blocking effect in promising proton conductors based on Ba3Ca1.18Nb1.82-xRxO9-d (R = Y3+, Gd3+, Sm3+, Nd3+) ordered perovskites for PC-SOFCs
João Elias F. S. Rodrigues (Brasil)
(1) IFSC-USP;
Rodrigues, J.E.(1); Francisco, L.(1); Correr, W.R.(1

06-159 20, June
Mill scale waste from steelmaking industry as raw material for reddish clayey ceramic production
Carlos Mauricio Fontes Vieira (Brasil)
(1) UENF;
Delaqua, G.C.G.(1); Amaral, L.F.(1); Vieira, C.M.F.(1);

06-161 18, June
Synthesis and magnetic characterization of ni nanoparticles in ceramic matrix
Daniel Zanetti de Florio (Brasil)
(1) UFABC; (2) IPEN;
De Florio, D.Z.(1); Tinti, V.B.(1); Fonseca, F.C.(2);

06-164 19, June
Hydrocycloning and Characterization of kaolin wastes
Chrystiano Araujo Ferreira (Brasil)
(1) UFPB;
Ferreira, C.A.(1); Dutra, R.P.S.(1); Caetano, A.L.A.(1); Ferreira, H.S.(1); Dos Santos Silva, I.D.(1);

06-165 18, June
Growth of niobium nitrate thin films on porous metallic substrates
Natália Freitas Daudt (Brasil)
(1) UFSM; (2) USACH;
Daudt, N.F.(1); Denardin, J.C.(2); Pereira, J.F.(1); Arnemman, E.R.(1); Dorneles, L.S.(1); Schneider, A.D.(1); Matzenbacher,

06-166 18, June
Evaluation of tin-doped indium oxide synthesized by Pechini polymeric precursor route as eletrocatalyst support for ethanol electrooxidation
Dolores Ribeiro Ricci Lazar (Brasil)
(1) IPEN;
Lazar, D.R.R.(1); De Camargo, E.F.(1); Cordeiro, G.L.(1

06-168 19, June
Zeolite layer on geopolymeric support
Wlodzimierz Mozgawa (Poland)
(1) M.K.; (2) W.M.;
Mozgawa, W.(1); Król, M.(2);

06-170 18, June
New perovskites for use in protonic solid oxide fuel cells
Rafael de Freitas Cuer (Brazil)
(1) UFABC;
Cuer, R.F.(1); De Florio, D.Z.(1);

06-171 18, June
Sorption properties of new type zeolite granulate
Magdalena Król (Poland)
(1) M.K.;
Król, M.(1);

06-172 19, June
Preparation of electrolytes deposited via dip coating for anode supported SOFCs
Nataly Messina Pecelin (Brazil)
(1) UFABC;
Pecelin, N.M.(1); De Florio, D.Z.(1);

06-173 20, June
Influence of the hydroxyapatite and functionalization on the electrical properties of pvdf fuel cells membranes
Júnio Augusto Rodrigues Pasqual (Brasil)
(1) UFRGS;
Pasqual, J.R.(1); Pereira, B.L.(1); Dick, T.(1); Santos, L.A.L.(1); De Sousa, V

06-176 18, June
Meso/macroporous ceramics for catalytic conversion of lignocellulosic biomass into chemicals of industrial interest
Maria José Fonseca Costa (Brazil)
(1) USP; (2) EESC/USP;
Costa, M.F.(1); Ferreira, E.B.(2); Eckert, H.(1);

06-178 18, June
Study of the photocatalitic activity of MnO2 / In2O3 thin films obtained by spin coating in the degradation of the methylene blue dye
laurenia martins p. garcia (Brasil)
(1) UFRN; (2) UFG; (3) UFSCar;
Ferreira, T.L.B.(1); Garcia, I.m.(1); Rodr

06-185 20, June
Electrochemical Characterization of Mn doped Tin Halide Perovskite
Margaret Dawson (Brazil)
(1) UFSCAR; (2) UNESP; (3) EMBRAPA; (4) UFSCar;
Dawson, M.(1); Soares, G.B.(2); Morelli, M.R.(3); Ribeiro, C.(4);

06-197
18, June
Study of the photocatalitic effects of the tio2 film applied in ceramics tiles
Morgana Nuernberg Sartor (Brazil)
(1) SATC; (2) UFSC; (3) UNESC;
Sartor, M.N.(1); Vieira, G.M.(1); Melo, A.R.(1); Acordi, J.(2); Milak, G.B.(3); Mattos, A.(1); Marq

06-201
19, June
Anomalous electronic conductivity in polycrystalline hematite ceramic electrodes modified with SnO2: the existence of preferential pathways
Mario Rodrigo dos Santos Soares (Brazil)
(1) UFSCAR; (2) CNPEM-LNNano;
Soares, M.R.S.(1); Leite, E.R.(2

06-203
20, June
Studies of sintering effects in electrical and electro-catalytic properties of LaNi1-xFexO3 (x = 0; 0.3; 0.6; 0.9) series
Mario Rodrigo dos Santos Soares (Brazil)
(1) UFSCAR; (2) CNPEM-LNNano;
Gozzo, C.B.(1); Soares, M.R.S.(1); Leite, E.R.(2);

06-204
18, June
Optical Properties of Sub-Stoichiometric Tantalum Oxide Thin Films from Spectroscopic Ellipsometry
Andre Santarosa Ferlauto (Brazil)
(1) UFABC; (2) UFMG; (3) UFRGS;
Ferlauto, A.S.(1); Palhares, J.H.Q.(2); Medeiros-ribeiro, G.(2); Radtke, C.(3)

06-205
19, June
Influence of synthesis conditions on TiO2 composition and photocatalytic activity employing microwave assisted hydrothermal method
Ana Rita Ferreira Alves Teixeira (Brasil)
(1) UFPB;
Teixeira, A.F.A.(1); Pontes, L.F.B.L.(1); Santos, I.M.G.(1);

06-206
20, June
Analysis of technical feasibility of the catalyst waste from petroleum fluid catalytic cracking as raw material for red ceramics production
Lucas Fonseca Amaral (Brasil)
(1) UENF;
Amaral, L.F.(1); Teixeira, G.(1); Delaqua, G.C.G.(1); Nicolite,

06-207
18, June
Incorporation of residual dust generated in step of alumina electrofused production in red ceramic.
Geovana Carla Girondi Delaqua (Brasil)
(1) UENF; (2) EEL - USP;
Nicolite, M.(1); Delaqua, G.C.G.(1); Amaral, L.F.(1); Vernilli, F.(2); Vieira,

06-209
19, June
Influence of yttrium and zirconium as solid solutions and pinning points on the obtaining of sodium-beta''-alumina electrolytes
Daisy Catharina Rodrigues (Brasil)
(1) UFSCar;
Rodrigues, D.C.(1); Souza, D.P.F.(1);

06-212
18, June
Porous TiO2 microspheres synthesized by internal gelation method
Gabriel Lima Oliveira (Brasil)
(1) IPEN;
Oliveira, G.L.(1); Andreoli, M.(1); Genova, L.A.(1);

06-215
18, June
Ba-doped calcium cobaltite ceramics prepared by a alternative chemical method
Daniel Thomazini (Brasil)
(1) UNIFEI; (2) UNESP;
Cesarino, E.M.(1); Dos Santos, S.F.(2); Thomazini, D.(1);

06-216
19, June
Influence of F- on the synthesis of BaCeO3-based proton conductors
Haruan Barreto Braga Capela Do Nascimento (Brasil)
(1) UFSCar;
Nascimento, H.B.B.C.(1); Kiminami, R.H.G.A.(1); Godinho, M.J.(1);

06-217
20, June
Kinetic study of the carbothermic reduction of zinc ferrite for the recycling zinc
Leidy Julieth Hernández Buitrago (Brazil)
(1) USP; (2) PMT-USP;
Hernández Buitrago, L.J.(1); Lenz E Silva, G.F.B.(2); Amaral-labat, G.(1);

06-223
19, June
Characterization of clays of the South of the State of Espírito Santo, Brazil
Monica Castoldi Borlini Gadioli (Brasil)
(1) CETEM; (2) IFES;
Gadioli, M.C.B.(1); Sant'ana, M.K.(2);

06-225
19, June
Analysis of Potential Photocatalytic of a Commercial Pigment Red Type Oxide based on the Fe2O4 in Degradation of Phenol-Red Dye using UV-visible radiation.
Fabiano Rafael Praxedes (Brazil)
(1) FCT/UNESP;
Praxedes, F.R.(1); Nobre, M.A.L.(1); La

06-226
18, June
Ionic conductivity of Sr- and Mg-doped lanthanum gallate with La1.55Sr0.55Ga3O7+delta addition
Talita Gishitomi Fujimoto (Brasil)
(1) IPEN;
Fujimoto, T.G.(1); Muccillo, E.N.S.(1);

06-231
19, June
The effect of solid content on spray drying of boron carbide
Fernando Augusto Andrade (Brazil)
(1) Mr;
Andrade, F.A.(1); Nunes, P.C.R.(1); Silva, R.A.(1);

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06-235 18, June
Gradual Internal Reforming process: development of catalyst layer for Solid Oxide Fuel Cells operating with methane and bioethanol
Marlu Cesar STEIL (France)
(1) Univ. Grenoble Alpes, Univ. Savoie Mont Blanc, CNRS, Grenoble INP; (2) Univ. Greno
Symposium G: Education in Ceramics

Symposium G:
Education in Ceramics

Renata Ayres Rocha / Andraž Kocjan

07-001 20, June
Effect of Bologna plan in the Spanish ceramic education at the university level
Enrique Sánchez (Espanha)
(1) UJI;
Mestre, S.(1); Sánchez, E.(1);

07-004 20, June
Approaching Educators and Students in the Teaching of Ceramic Materials through the Use of Computational Simulation
Rodolfo Timoteo da Silva (Brazil)
(1) UFGD;
Da Silva, R.T.(1); Silveira, W.(1);

07-008 20, June
Waste management: a research proposal using Problem Based Learning in the municipality of Dourados-MS
Wagner da Silveira (Brasil)
(1) UFGD;
Silveira, W.(1); Pereira, P.V.(1); Rocha, A.(1); Souza, R.(1); Faverão, B.N.(1); Silva, M.R.(1);

07-021 20, June
Phases diagram: a shared learning
priscila brentan praxedes (Brasil)
(1) PUC;
Praxedes, P.B.(1);

07-023 20, June
Technological and mineralogical characterization of the rocks collected in the municipality of parelhas / RN - Part 1
Mauro Froes Meyer (Brasil)
(1) IFRN; (2) ifrn;
Meyer, M.F.(1); Silva, P.A.S.(1); Pinto, Y.F.L.C.(1); Carvalho, d.l.a.(2); Car

07-024 19, June
Evaluation of the participants perception of the university project "Caminhos de Barro"
Afonso Rangel Garcez Azevedo (Brasil)
(1) UENF;
Azevedo, A.R.G.(1); Alexandre, J.(1); Xavier, G.C.(1); Marvila, M.T.(1); Zanelato, E.B.(1); Goulart, M.A.(1

07-027 20, June
Strategies and approaches of the experimental activities in the ceramic processing program of materials engineering undergraduate course at UFABC
Renata Ayres Rocha (Brasil)
(1) UFABC;
Rocha, R.A.(1); Trombini, V.(1); Raimundo, D.S.(1);

07-028 20, June
Teaching properties of silicon oxide from the processes in microelectronics: a matter of contextualized learning in the classroom
Daniel Scodeler Raimundo (Brasil)
(1) UFABC;
Raimundo, D.S.(1);

07-029 20, June
Obtaining new ceramic products using waste from Ceramic Industries.
Orley Magalhães Oliveira (Brasil)
(1) IFBA; (2) EPUSP; (3) MACKENZIE;
Oliveira, O.M.(1); Valenzuela-diaz, F.R.(2); Silva Valenzuela, M.G.(2); Munhoz Jr, A.H.(3);

07-030 20, June
Technological and mineralogical characterization of the rocks collected in geological mapping in the municipality of parelhas / rn part 2
Mauro Froes Meyer (Brasil)
(1) IFRN;
Meyer, M.F.(1); Souza, M.M.(1); Silva, P.A.S.(1); Pinto, Y.F.L.C.(1)

07-031 20, June
Visual analysis of ceramic combinations with educational purposes for the development of artisan products
Hernan Darío Castaño Castrillón (Columbia)
(1) ITM;
Castaño Castrillón, H.D.(1); Suárez Moreno, V.L.(1);

Symposium H:
Electric and Magnetic Ceramics

José Antonio Eiras

08-001 20, June
Production of Calcium Titanate from Unconventional Titanium Sources
Guilherme Gralik (Brasil)
(1) IFSC;
Gralik, G.(1);

08-002 18, June
Composition-driven structural and magnetic phase evolution in Bi1-xAexFe1-xTixO3 series
Uladzimir Khomchanka (Portugal)
(1) CFisUC;
Khomchanka, U.(1); Paixão, J.A.(1);

08-003 19, June

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Development of a Microwave Absorbing Material Based on Molybdenum-doped niobium pentoxide
Diêgo Pires Gurgel (Brasil)
(1) UFRN; (2) ; (3) UFERSA;
Gurgel, D.P.(1); Queiroz Júnior, I.S.(2); Silva Júnior, M.Q.(3); De Andrade, H.D.(3); Gomes, U.U.

08-006 20, June
Effect of processing parameters in the microstructure of ni-zn ferrites obtained by conventional method
Melise Cardoso Antunes (Brasil)
(1) UNIFESP; (2) IAE;
Gama, A.M.(1); Antunes, M.C.(2); Gonçalves, E.S.(1);

08-009 19, June
Electrical and magnetic properties of nanostructured (Bi0,85La0,15)FeO3 powders and ceramics
Roger Carvalho Oliveira (Brazil)
(1) UEM; (2) UFSCar;
Oliveira, R.C.(1); Eiras, J.A.(2); Garcia, D.(2); Santos, I.(1); Dias, G.S.(1); Volnistem, E.A.(

08-010 20, June
On the synthesis of single-phase and nanostructured (Bi1-xLax)FeO3 powders
Roger Carvalho Oliveira (Brazil)
(1) UEM; (2) UFSCar;
Oliveira, R.C.(1); Eiras, J.A.(2); Garcia, D.(2); Santos, I.(1); Dias, G.S.(1); Cótica, L.F.(1); Volnistem, E.A.(1

08-013 18, June
Synthesis and Characterization of the Ferroelectric Ceramic Material Sodium and Potassium Niobate (KNN) by the oxide mixing route
Gabriel Alexsandro Freitas Vilhalva (Brazil)
(1) UFGD;
Corrêa Queiróz Mendonça, O.A.(1); Botero, E.R.(1); Vilhalv

08-017 19, June
Giant tunability of sol-gel derived BaFe12-xZrxO19 ceramics under extremely low electric bias
Piyi Du (China)
(1) Zhejiang university;
Du, P.(1);

08-020 20, June
Synthesis and Characterization of Fast Fired Multiferroic Magnetoelectric Bi1-xMnxFeO3
Gustavo Sanguino Dias (Brazil)
(1) UEM;
Dias, G.S.(1); Volnistem, E.A.(1); Guimarães, P.V.(1); Cótica, L.F.(1); Santos, I.A.(1);

08-021 18, June
Preparation of Dy3+-Doped Calcium Magnesium Silicate phosphors by a new synthesis method and its Luminescence Characterization
Vinicius Ribas de Morais (Brazil)
(1) IPEN;
Morais, V.R.(1); Yamagata, C.(1); Leme, D.R.(1);

08-023 19, June
Piezoelectric and ferroelectric studies of BNT–BT ceramics near the morphotropic-phase-boundary composition
Andrea Prado (Argentina)
(1) INTEMA; (2) ICV-CSIC; (3) IGC;
Prado, A.(1); Ramajo, L.(1); Rubio-marcos, F.(2); Webber, K.(3); Castro, M.

08-024 18, June
Magnetic glass-ceramics produced from wastes
Tales Goncalves Avancini (Brazil)
(1) UFRGS; (2) UFSC;
Avancini, T.G.(1); Alves, A.K.(1); Arcaro, S.(1); Novaes De Oliveira, A.P.(2); Souza, M.T.(2);

08-025 18, June
Study of the electrical and magnetic properties of ceramic tapes TZ-3YE/MP produced by aqueous tape casting.
Hugo Plínio de Andrade Alves (Brazil)
(1) UFRN;
Alves, H.P.A.(1); Costa, A.C.S.(1); Correa, M.A.(1); Acchar, W.(1);

08-028 19, June
Modeling the magnetoelectric effect in BiFeO3-PbTiO3 compounds by using the Finite Element Method
Daniel Matos Silva (Brazil)
(1) UEM; (2) Unicentro;
Silva, D.M.(1); Freitas, V.F.(2); Santos, I.A.(1);

08-029 20, June
Using the Finite Element Method for the investigation of the magnetoelectric effect in laminar composites
Daniel Matos Silva (Brazil)
(1) UEM;
Silva, D.M.(1); Gaiotto, F.J.(1); Pereira, J.R.D.(1); Santos, I.A.(1);

08-030 18, June
Fabrication and characterization of BaFe12O19 thin films by physical sputtering for magnetoelectric composites
Vinicius Pretti Rossi (Brazil)
(1) UFSCar;
Rossi, V.P.(1); Zabotto, F.L.(1); Garcia, D.(1); Eiras, J.A.(1); Gonçalves, A.M.(1); Boni

08-031 19, June
Production and characterization of glass ceramics with Strontium titanate nanoparticles produced by microwave-assisted hydrothermal process.
Wagner da Silveira (Brasil)
(1) UFGD; (2) UNESP/FCT; (3) Unesp;
Silveira, W.(1); Souza, A.E.(2); Teixe

08-032 20, June
Gas sensing properties of TiO2-SnO2 nanocomposites
Anna Maria Szczygielska (Poland)
(1) AGH; (2) PAN;
Szczygielska, A.M.(1); Pedzich, Z.(1); Maziarz, W.(2);

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08-038 18, June
Preparation of laminates based on Bi4Ti3O12 (BIT) by tape casting and lamination process - dielectric, magnetic and structural characterization
Ana Paula da Silva Peres (Brasil)
(1) UFRN;
Peres, A.P.S.(1); Costa, A.C.S.(1); Acchar, W.(1); Corr

08-039 19, June
Structural and electromagnetic effects caused by the addition of niobium pentoxide in tne cobalt ferrite
Francisco Eduardo Carvalho (Brasil)
(1) IEAv; (2) ; (3) UNIFEI; (4) UA;
Carvalho, F.E.(1); Lemos, L.v.(2); Migliano, A.C.C.(1); Da Silva,

08-043 19, June
Magnetic behavior of MgxZn1-xFe2O4 ferrite
valesca Donizeti Oliveira (Brazil)
(1) UNIFEI; (2) Unifei; (3) FEPI;
Da Silva, M.R.(1); Oliveira, v.D.(2); Mendonça, C.S.P.(1); Oliveira, A.F.(2); Rubinger, R.M.(2); Ribeiro, V.A.S.(3); Souza, F.H.(1)

08-045 20, June
Preparation and characterization of BaZr0.08Ti0.92O3 nanoparticles by the modified pechini method using microwave energy
Laís Pacheco Caminata (Brazil)
(1) UFSCar;
Caminata, L.P.(1); Perdomo, C.F.(1); Kiminami, R.H.G.A.(1);

08-049 18, June
Understanding the role of grain size on the structural and dielectric properties of BZT-BCT systems
Cristina Elena Ciomaga (Romania)
(1) UAIC; (2) ICMATE-CNR;
Ciomaga, C.(1); Curecheriu, L.(1); Padurariu, L.(1); Buscaglia, M.(2); Buscaglia, V.

08-050 19, June
Influence of gadolinium doping on structural properties of zinc ferrite spinel
Tayanne Cristina Marques Araújo Pereira (Brazil)
(1) UFMA;
Borges, M.F.(1); Sodré, L.C.S.(1); Pereira, T.C.M.A.(1); Santos, I.S.(1); Silva, F.C.(1); Sinfrônio, F.S.

08-052 20, June
Novel method for the synthesis of Dy-doped yttrium disilicate phosphors
Chieko Yamagata (Brazil)
(1) IPEN;
Yamagata, C.(1); Morais, V.R.(1); Rezende, D.L.(1);

08-053 19, June
Preparation and dielectric properties of Ag-BaTiO3 composite ceramics
Cristina Elena Ciomaga (Romania)
(1) UAIC; (2) IFT;
Ciomaga, C.(1); Curecheriu, L.(1); Turcan, I.(1); Lukacs, A.(1); Stoian, G.(2); Lupu, N.(2); Mitoseriu, L.(1); Padurariu,

08-055 19, June
Preparation and dielectric properties of Ag-BaTiO3 composite ceramics
Cristina Elena Ciomaga (Romania)
(1) UAIC; (2) IFT;
Ciomaga, C.(1); Curecheriu, L.(1); Turcan, I.(1); Lukacs, A.(1); Padurariu, L.(1); Stoian, G.(2); Lupu, N.(2); Mitoseriu,

08-056 18, June
Synthesis and characterization of magnetite nanoparticles using the modified sol-gel method
Ana Laura Caseiro (Brasil)
(1) UFSCar;
Caseiro, A.(1); Togashi, M.M.(1); Perdomo, C.F.(1); Kiminami, R.H.G.A.(1);

08-057 18, June
Effects of the calcination temperature on the structural properties of MFe2O4 (M = Co, Ni) ferrites by a proteic sol-gel method
Jakeline Raiane Dora dos Santos (Brazil)
(1) UFPB; (2) UA; (3) UFRN;
Ferreira, L.S.(1); Grilo, J.(2); Morales, M.A.

08-059 20, June
Synthesis and characterization of K0.5Na0.5NbO3-BaTiO3-based lead-free piezoelectric ceramics
Andrea Prado (Argentina)
(1) INTEMA; (2) ICV-CSIC;
Prado, A.(1); Ramajo, L.(1); Rubio-marcos, F.(2); Castro, M.(1);

08-061 18, June
Characterization of the electrical and magnetic properties of NixZn1-xFe2O4 ferrite
Manoel Ribeiro da Silva (Brasil)
(1) Unifei; (2) UNIFEI; (3) FEPI;
Oliveira, v.D.(1); Da Silva, M.R.(2); Mendonça, C.S.P.(2); Rubinger, R.M.(1); Oliveira, A.F.

08-062 19, June
The role of gettering in silicon solar cells
Girley Ferreira Rodrigues (Brasil)
(1) UMC;
Rodrigues, G.F.(1);

08-063 20, June
Synthesis and characterization of Bi0.5(Na0.8K0.2)0.5TiO3-based ceramics obtained through the sol-gel method
Javier Camargo (Argentina)
(1) INTEMA;
Camargo, J.(1); Parra, R.(1); Ramajo, L.(1); Castro, M.(1);

08-064 18, June
Impedance analysis of CaZrO3 samples synthesized by microwave-assisted hydrothermal method
Wagner Dias Macedo Junior (Brasil)
(1) UNESP/FCT; (2) UNESP; (3) FE-IS/UNESP;
Junior, W.D.M.(1); Souza, A.E.(1); Teixeira, S.R.(1); Longo, E.(2); Sakamo

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08-065
19, June
Analysis of the structural and magnetic properties of the system BaTi0.7Fe0.3O3 doped with Mn ions
Ricardo Augusto Mascarello Gotardo (Brazil)
(1) UTFPR; (2) UEM;
Gotardo, R.A.M.(1); Silva, P.V.A.(1); Rosso, J.M.(2); Cótica, L.F.(2); Santos, I

08-066
19, June
Electrical, Magnetic and Structural Characterizations in Mn and Cr Doped 0.9BiFeO3-0.1BaTiO3 Compositions
Ricardo Augusto Mascarello Gotardo (Brazil)
(1) UTFPR; (2) UEM;
Gotardo, R.A.M.(1); Alonso, R.S.(1); Rosso, J.M.(2); Santos, G.M.(2); Sil

08-067
18, June
Structural and dielectric properties of Ni0,1Zn0,5Co0,4Fe2O4 ferrite nanoparticles
Tayanne Cristina Marques Araújo Pereira (Brazil)
(1) UFMA; (2) IFMA;
Pereira, T.C.M.A.(1); Borges, M.F.(1); Fonseca, R.S.P.(1); Castro Junior, M.C.(2); Menezes,

08-068
19, June
Study of the crystal and electronic structures of (Bi1-xNdx)FeO3 compositions using Rietveld refinements and the maximum entropy method
Odair Gonçalves Oliveira (Brazil)
(1) UEM;
Oliveira, O.G.(1); Mincache, A.J.(1); Dias, G.S.(1); Santos, I.A

08-069
19, June
Dielectric Properties of Potassium Sodium Niobate Ceramics Prepared by Spark Plasma Sintering
SILVANIA Lanfredi (Brasil)
(1) FCT/UNESP; (2) UCBN;
Lanfredi, S.(1); Noudem, J.(2); Nobre, M.A.L.(1); Lira, K.H.(1);

08-070
18, June
Ab initio Studies of the Bi1-xNdxFeO3 Multiferroic compositions
Odair Gonçalves Oliveira (Brazil)
(1) UEM;
Oliveira, O.G.(1); Mincache, A.J.(1); Perin, G.H.(1); Silveira, L.G.D.(1); Dias, G.S.(1); Santos, I.A.(1); Cótica, L.F.(1);

08-071
19, June
Ba-DOPED BiFeO3 nanocrystalline powder obtained by a modified pechini method using microwave energy
Ariane Vilca Suarez (Brasil)
(1) UFSCar;
Suarez, A.V.(1); Perdomo, C.F.(1);

08-072
18, June
Ba-DOPED BiFeO3 nanocrystalline powder obtained by a modified pechini method using microwave energy
Ariane Vilca Suarez (Brasil)
(1) UFSCar; (2) UNIFAL-MG;
Suarez, A.V.(1); Perdomo, C.F.(1); Gunnewiek, R.F.K.(2);

08-073
18, June
Processing issues and their influence in the magnetoelectric performance of (K,Na)NbO3/CoFe2O4-based layered composites
Washington Santa Rosa (Brazil)
(1) UFSCar; (2) ICMM-CSIC; (3) IFSC-USP;
Rosa, W.S.(1); Venet Zambrano, M.(1); Algueró, M.(2

08-074
19, June
Development of BaTiO3 e SrTiO3 by the Microwave-Assisted Hydrothermal (MAH) method using different mineralizers
Nathanael Felipe Guedes Silva (Brasil)
(1) UNESP/FCT;
Silva, N.F.G.(1); Magalhães, R.S.(1); Santos, L.F.(1); Junior, W.D.M.(1); Sou

08-076
20, June
Novel method for the synthesis of Dy-doped yttrium disilicate phosphors
Chieko Yamagata (Brasil)
(1) IPEN;
Yamagata, C.(1); Leme, D.R.(1); Morais, V.R.(1);

08-082
18, June
Effect of Mg doping on structural and electrical properties of BaZr0.1Ti0.9O3 ceramics
Marcelo Stachiotti (Argentina)
(1) IFIR - UNR; (2) FCByF - UNR;
Stachiotti, M.(1); Di Loreto, A.(2); Machado, R.(1); Frattini, A.(2);

08-084
19, June
Photophysical properties of RE3+ (RE = Pr, Sm, Eu, Tb, Dy and Tm) doped Ag2WO4
Ivo Mateus Pinatti (Brazil)
(1) UFSCar;
Pinatti, I.M.(1); Longo, E.(1); Rosa, I.(1);

08-086
19, June
Dielectric and Magnetic Properties of NixPb1-xTiO3 Solid Solution and Composite: Coexistence of Ferroelectric and Antiferromagnetic Order
João Elias F. S. Rodrigues (Brasil)
(1) IFSC-USP; (2) UFSCar;
Rodrigues, J.E.(1); Da Costa, R.(2); Gualdi

08-088
18, June
Thin film heterostructures based on copper sulfide and tin dioxide for electronic applications
Luis Vicente de Andrade Scalvi (Brasil)
(1) UNESP;
Lima, J.V.M.(1); Boratto, M.H.(1); Scalvi, L.V.A.(1);

08-090
19, June
Fabrication and characterization of (LaxSr1-x)CoO3 thin films by RF-Sputtering.
Ricardo Pereira Bonini (Brazil)
(1) UFSCar;
Bonini, R.P.(1); Gonçalves, A.M.(1); Eiras, J.A.(1); Zabotto, F.L.(1);

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08-091
20, June
Characterization of rare earth-nickel nanostructures
Bruna Niccoli Ramirez (Brasil)
(1) UFABC;
Ramirez, B.N.(1); Sena, M.(1); Escote, M.T.(1);

08-092
18, June
Relaxation properties of bulk Co2Z with W and Y-phases in the 0.5-7 GHz frequency range at different temperatures
Rodrigo Gabas Amaro Lima (Brazil)
(1) IEAv; (2) UFCG;
Migliano, A.C.C.(1); Lima, R.G.A.(1); Costa, A.C.F.M.(2); Lemos, L.V.(1);

08-093
19, June
Dielectric dispersion in lead–free based BNT–BT ceramic system
Yanela Mendez-González (Cuba)
(1) Universidad de La Habana; (2) UFU;
Mendez-gonzález, Y.(1); Pentón-madrigal, A.(1); Peláiz-barranco, A.(1); De Los Santos Guerra, J.(2);

08-094
18, June
Influence of the donor-cations concentration on the physical properties of barium titanate based ceramics
Marco Aurélio Oliveira (Brazil)
(1) UFU; (2) IFSC-USP;
Oliveira, M.A.(1); M'peko, J.(2); Hernandes, A.C.(2); De Los Santos Guerra, J.(1);

08-095
18, June
Influence of Processing Condition on Dielectric Properties of K0,5Na0,5NbO3/CoFe2O4 Magnetoelectric Composites
Leonardo Luís Lemes (Brazil)
(1) UFSCar;
Lemes, L.L.(1); Zabotto, F.L.(1); Garcia, D.(1);

08-096
19, June
High-Temperature Dielectric Permittivity Characterization of Curie's Temperature Shifting and Correlation with the Changing Dielectric Loss in a Semiconductor Ferroelectric
Marcos Augusto Lima Nobre (Brasil)
(1) FCT/UNESP; (2) MCTI;
Nobre, M.A

08-097
20, June
Grain and Grain-Boundary Electric Resistance Characterization via Impedance Spectroscopy
Marcos Augusto Lima Nobre (Brasil)
(1) FCT/UNESP; (2) MCTI;
Nobre, M.A.L.(1); Praxedes, F.R.(1); Bellucci, F.S.(2); Lanfredi, S.(1);

08-098
18, June
Synthesis and deposition of graphene films reduced with nitrogen
Melyssa Freitas Melo (Brazil)
(1) UFABC;
Melo, M.F.(1); Sparvoli, M.(1);

08-100
19, June
One-pot synthesis: A simple and fast method for obtaining YBCO superconductors
Claudio L Carvalho (Brasil)
(1) unesp;
Carvalho, C.(1);

08-102
18, June
Photocatalytic evaluation of the magnetic core@shell system (Co,Mn)Fe2O4@TiO2 obtained by the modified Pechini method
Alex Meireles Neris (Brasil)
(1) UFPB; (2) UFPR; (3) Estácio Alexandrino; (4) UFRN; (5) UFSCar;
Neris, A.M.(1); Schreiner, W.

08-103
19, June
Influence of the lanthanum content on the physical properties of Bi5Fe0.5Co0.5Ti3O15 multiferroic system
José de los Santos Guerra (Brazil)
(1) Universidad de La Habana; (2) FEIS, UNESP; (3) UFU; (4) IPIC; (5) Normandie Université;
González-ab

08-104
19, June
Correlation between band-gap, luminescence and volume of unit-cell in rare-earth doped lead titanate ceramics
José de los Santos Guerra (Brazil)
(1) Universidad de La Habana; (2) UASP; (3) ILCVN-UNILA; (4) CEAC; (5) CINVESTAV; (6) UFU;
Calderó

08-105
18, June
Preparation and investigation of magnetic properties of nano-sized garnets for application in magnetic hyperthermia.
Barbara Sartorelli Caldeira (Brazil)
(1) UNESP; (2) UFSCar; (3) UNIFEI;
Caldeira, B.S.(1); Simões, A.Z.(1); Longo, E.(2); Garc

08-108
19, June
Low Temperature Frequency Dependence of Magnetoelectric effect in PMN-PT/CoFe2O4 and PMN-PT/NiFe2O4 multiferroic composites
Alexandre José Gualdi (Brazil)
(1) UFSCar; (2) UTSA;
Gualdi, A.J.(1); Zabotto, F.L.(1); Garcia, D.(1); Bhalla, A.(2); G

08-110
20, June
Microwave absorption characteristics of Ba-Sr-Co-Ti hexaferrite polyaniline composites
charanjit singh (India)
(1) Dr.;
Singh, c.(1);

08-112
18, June
Sol-gel synthesis and characterization of PZT-PFN thin films
Nora Pellegri (Argentina)
(1) IFIR - UNR - CONICET;
Imhoff, L.(1); Barolin, S.(1); Pellegri, N.(1); Stachiotti, M.(1);

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08-113
19, June
Structural, microstructural and dielectrical properties of PLMN-PT ceramics doped with Yb.
Ducinei Garcia (Brasil)
(1) UdeA; (2) UFSCar; (3) UDEA;
Aristizábal Valencia, M.E.(1); Garcia, D.(2); Eiras, J.A.(2); Londoño, F.A.(3);

08-115
20, June
Microstructural and electrical properties related to the growth conditions of xBaTiO3/(1-x)Fe2CoO4 composite fibers prepared by LHPG technique
Aloadir Lucas Santos de Oliveira (Brazil)
(1) UFSCar;
Milton, F.P.(1); Oliveira, A.L.S.(1); Viana, D

08-116
18, June
Synthesis and characterization of PVDF/KNN composites
Rodrigo Felipe Carneiro Capetta (Brazil)
(1) UFGD;
Falcao, E.A.(1); Botero, E.R.(1); Capetta, R.F.C.(1);

08-117
19, June
Development of BaTiO3 / BiFeO3 composites for application in solar cells.
Renato Boschilia Junior (Brazil)
(1) UNIFESP;
Boschilia Junior, R.(1); Antonelli, E.(1);

08-119
19, June
Ba-DOPED BiFeO3 nanocrystalline powder obtained by a modified pechini method using the microwave energy
Ariane Vilca Suarez (Brasil)
(1) UFSCar; (2) UNIFAL-MG;
Kiminami, R.H.G.A.(1); Suarez, A.V.(1); Togashi, M.M.(1); Perdomo, C.F.(1); Gunnewi

08-120
18, June
Self-biased magnetoelectric effect in particulate composites driven by grain size reducing
Flávio Paulo Milton (Brasil)
(1) UFSCar;
Viana, D.S.F.(1); Oliveira, A.J.A.(1); Jimenez, K.R.C.P.(1); Milton, F.P.(1); Zabotto, F.L.(1); Eiras, J.A.(1);

08-121
19, June
Study of the thermo-optical properties of PLZT 9 and 10/65/35 as a function of temperature
Evaristo Alexandre Falcao (Brazil)
(1) UFGD; (2) UEM; (3) USP; (4) UFSCar;
Falcao, E.A.(1); Santos, I.A.(2); Pereira, J.R.D.(2); Medina, A.N.(2); Baesso

08-122
20, June
Effect of polarization, domain structure and interfaces on the photovoltaic properties of ferroelectric thin films
José Antônio Eiras (Brasil)
(1) UFSCar;
Gonçalves, A.M.(1); Eiras, J.A.(1);

08-126
19, June
Sintering Behavior of Nanostructured Mixed Metal Oxides Synthesized by Fast Polymeric Precursor Method
Claudia Fernandez Perdomo (Brasil)
(1) UNIFAL-MG; (2) UFSCar;
Cardoso, A.L.F.(1); Gunnewiek, R.F.K.(1); Kiminami, R.H.G.A.(2); Perdomo, C.F.

08-128
18, June
Growth and electrical characterization of undoped and Cu-doped (K Na)NbO3 single crystals
Marcus Vinicius Silva (Brazil)
(1) UNIFESP;
Silva, M.V.(1);

08-130
18, June
Investigation of sintering kinetics of (KxNa1-x)NbO3 based lead-free piezoceramics produced by Spark Plasma Sintering
Camila Alves Souza (Brasil)
(1) UNIFESP; (2) UFSCar;
Souza, C.A.(1); Lente, M.H.(1); Eiras, J.A.(2);

08-136
18, June
Magneto-dielectric properties studies of the matrix composite [SrFe12O19(SFO)1-X - BiFeO3(BFO)X]
Juscelino Chaves Sales (Brasil)
(1) UFC; (2) UVA;
Morais, J.E.V.(1); Bessa, V.L.(1); Sales, J.C.(2); Maia, R.G.(1); Silva, M.A.S.(1); Sombra, A.S.

08-139
18, June
Dielectric Study in the Microwave Range for Ceramic Composites Based on Sr2CoNbO6 and TiO2 Mixtures
Juscelino Chaves Sales (Brasil)
(1) UFC; (2) UVA;
Morais, J.E.V.(1); Oliveira, R.G.M.(1); Sales, J.C.(2); Castro, A.J.N.(1); Silva, M.A.S.(1);

08-140
18, June
Phase transitions of (Pb0.60Ca0.40)TiO3 ceramics based on their electromechanical resonance characterization as a function of temperature
Catarine Padovani Moreira (Brazil)
(1) UFSCar; (2) CNPEM;
Garcia, D.(1); Miranda, M.M.J.(1); Milton, F.P.

08-143
19, June
Electronic ceramics fractal microstructure analysis - Minkowski Hull and grain boundaries
Vojislav V Mitic (Serbia)
(1) 1; (2) 2; (3) 3;
Mitic, V.(1); Kocic, L.(2); Paunovic, V.(2); Fecht, H.(3);

08-148
18, June
Synthesis and down-conversion luminescence of LaNbO4:Pr3+ phosphor
Juscelino Chaves Sales (Brasil)
(1) UFC; (2) UECE; (3) UVA;
Nascimento, J.P.C.(1); Carmo, F.F.(1); Façanha, M.X.(2); Vasconcelos, S.J.T.(1); Sales, J.C.(3); Sombra, A.S.B.(1);

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08-153
19, June
Potentiality of mesoporous silica ordered as support for pvdf nano composites
Edvanio Chagas (Brazil)
(1) IFMS/UFGD; (2) UFGD; (3) UFBA;
Chagas, E.(1); Soares, C.P.T.(2); Botero, E.R.(2); Andrade, R.C.(3); Falcao, E.A.(2);

08-154
19, June
Optical properties of lead-free piezophotonic ceramics
Manuel Henrique Lente (Brasil)
(1) UNIFESP; (2) UFSCar;
Lente, M.H.(1); Eiras, J.A.(2); Santos, M.C.(1);

08-155
19, June
Magnetic properties of magnetite-based glass-ceramics obtained from iron-rich scale and borosilicate glass
Tales Gonçalves Avancini (Brazil)
(1) UFRGS;
Avancini, T.G.(1);

08-156
19, June
Fast-synthesis of nanoscaled lanthanum-dopped bismuth ferrite
Rodolfo Foster Klein Gunnewiek (Brasil)
(1) UNIFAL-MG; (2) UFSCar;
Gunnewiek, R.F.K.(1); Cancellieri, I.C.(1); Garcia, L.A.(1); Perdomo, C.F.(2);

08-157
18, June
Field-dependent permittivity description in PMN ceramics
Elton Carvalho Lima (Brazil)
(1) UFT; (2) UFU; (3) UNESP;
Lima, E.C.(1); Araújo, E.B.(2); De Los Santos Guerra, J.(3);

08-158
18, June
Investigation of the physical properties of rare-earths modified BFO multiferroic ceramics
José de los Santos Guerra (Brazil)
(1) UFU; (2) Universidad de La Habana;
Martínez-camejo, Y.(1); Peláiz-barranco, A.(2); De Los Santos Guerra, J.(1);

08-159
18, June
Ferroic properties of nickel-ferrite based ceramic composites
José de los Santos Guerra (Brazil)
(1) IFTM; (2) ALFRED; (3) UTSA; (4) UFU;
Junio De Portugal, R.(1); Betal, S.(2); Dutta, M.(3); Guo, R.(3); Bhalla, A.(3); De Los Santos Guerra, J.

08-160
18, June
Preparation and characteristics of the SOL-GEL (Ba,La)TiO3 powders and related ceramics
Vasile Adrian Surdu (Romania)
(1) UPB; (2) ICF; (3) UAIC;
Stanciu, C.(1); Crisan, M.(2); Surdu, V.A.(1); Dragan, N.(2); Crisan, D.(2); Mitoseriu, L.(3); Curecheriu, L.(3); Vasile, B.(1); Ianculescu, A.(1);

08-161
18, June
Numerical comparison of usual Arrhenius-like equations for modeling ionic transport in solids
Rafael Bianchini Nuernberg (Brasil)
(1) UFSCar;
Nuernberg, R.B.(1);

Symposium I:
Engineering Ceramics, Mechanical Behavior and Fractography

Humberto N. Yoshimura

09-001
18, June
A study of the compressive strength and deformability of pressed and burned blocks of Red Ceramics for Structural Masonry
Afonso Rangel Garcez Azevedo (Brasil)
(1) UNIREDENTOR; (2) UENF;
Cerqueira, N.A.(1); Azevedo, A.R.G.(2); Souza, V.B.(1);

09-004
18, June
Effect of the addition of refractory clay in obtaining tialite and in its physical and mechanical properties
Vitor Guilherme Oliveira (Brasil)
(1) UNIFAL-MG;
Oliveira, V.G.(1); Maestrelli, S.C.(1); Ferraço, F.(1); Del Roveri, C.(1); Da Cruz, C

09-006
18, June
Concrete with addition of vitreous residue: statistical analysis and market employability
Carlos Alberto Araújo de Lima (Brasil)
(1) ;
Araújo De Lima, C.A.(1); Wolff, M.P.M.(1); Freitas, D.R.(1);

09-007
18, June
Characterization of construction waste and demolition and analysis of the qualities of concrete pre molded pieces for paving of urban ways
Joyce Tatiani Masselani Francisco (Brasil)
(1) UNESP; (2) UNESP/FCT;
Francisco, J.T.M.(1); Teixeira, S.R

09-010
19, June
Effect of granulometry of glass powder used in partial replacement to cement in concrete
Daniele Rodrigues Freitas (Brasil)
(1) IFMA - PEDREIRAS; (2) IFMA;
Freitas, D.R.(1); Paiva, A.E.M.(2); Silva, V.R.C.(2);

09-013
20, June
Zirconia-ceramic versus metal-ceramic: thermal expansion mismatch and residual stresses
Alice Natsuko Jikihara (Brazil)
(1) FOUSP;
Jikihara, A.N.(1);

09-014
18, June
High performance concrete: technical relations in its production associated with the conventional concrete

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Mônica Mollina Moreira (Brazil)
(1) UNESP; (2) UNIFEV;
Junior, V.A.S.(1); Albuquerque, M.F.(2); Moreira, M.M.(1); Rocha, J.A.(1);

09-015 19, June
Synthetic latex influence on mechanical and rheological concrete properties
Maria da Consolação Fonseca Albuquerque (Brazil)
(1) UNESP; (2) UNIFEV;
Junior, V.A.S.(1); Albuquerque, M.F.(2); Moreira, M.M.(1); Rocha, J.A.(1); Escremin, J.V.(1); J

09-017 20, June
Study of densification by pressing and sintering of NaCl and KCl salts
Pedro Augusto Machado Vitor (Brasil)
(1) UFRGS;
Vitor, P.A.M.(1); Alves, A.K.(1); Bergmann, C.P.(1); Santos, P.H.F.(1);

09-018 18, June
Study of Erosive Wear by Jet Slurry Erosion of Woka 3653 Coating Tungsten Carbide (86WC-10Co4Cr), Obtained by the HVOF technique.
Freddy Galileo Santacruz (Brazil)
(1) UFRGS;
Santacruz, F.G.(1); Bergmann, C.P.(1); Takimi, A.S.(1);

09-019 19, June
Influences of Pd ion implantation, surface polarity, and active elements on the wettability of Al-X/6H-SiC system at 1323 K
Guiwu Liu (China)
(1) ;
Huang, Z.(1); Wang, T.(1); Zhang, X.(1); Liu, G.(1); Qiao, G.(1);

09-036 18, June
Study of the effect of diatomy in physical properties of concrete
Amanda Regina de Souza Macedo (Brasil)
(1) UFRN;
Macedo, A.R.S.(1); Gomes, U.U.(1); Silva, A.S.(1); Da Luz, D.S.(1);

09-037 19, June
Passive Vibration Control Using a Metaconcrete Thin Plate
Fabiana Maria Silva (Brasil)
(1) UNICAMP/IFMA; (2) UNICAMP;
Miranda Jr., E.J.P.(1); Angelin, A.F.(2); Silva, F.M.(2); Dos Santos, J.M.C.(2);

09-038 20, June
Mechanical description of gypsum reinforced with sisal fiber
Alan Christie Da Silva Dantas (Brasil)
(1) UNIVASF; (2) UNVASF;
Silva, A.P.(1); Oliveira, F.R.S.B.(1); Pereira, A.F.C.(1); Olivier, N.C.(2); Dantas, A.C.S.(1);

09-039 18, June
Sintering and flexural strength of zircon (ZrSiO4) stabilized aluminum titanate (Al2TiO5) ceramics
María Agustina Violini
(1) CETMIC;
Violini, M.A.(1); Conconi, M.S.(1); Suárez, G.(1); Rendtorff, N.M.(1);

09-040 19, June
Mechanical properties of lanthanum silicate oxyapatite (LSO) ceramics
Ramiro Julián Moreira Toja (Argentina)
(1) CETMIC; (2) NIMS;
Moreira Toja, R.J.(1); Uchikoshi, T.(2); Suárez, G.(1); Rendtorff, N.M.(1); Sakka, Y.(2); Aglietti, E.F.(1);

09-041 20, June
Analysis of microstructural properties of concretes recycled with cdw by x-ray diffraction
Luisa Andreia Gachet-Barbosa (Brasil)
(1) UNICAMP;
Gachet-barbosa, L.A.(1); Oliveira, A.G.(1); Candian, J.(1); Vilhena, M.(1); Alves, S.M.(1); Lintz, R.

09-043 18, June
Production of self-compacting concrete with expanded clay and rubber residue -lightweight aggregates
Luisa Andreia Gachet-Barbosa (Brasil)
(1) UNICAMP;
Gachet-barbosa, L.A.(1); Lintz, R.C.C.(1); Angelin, A.F.(1);

09-044 19, June
Mechanical analysis of polymeric composites reinforced with bananary fibers and copper benefit residues
Druscilla Mafalda Zaghetti (Brasil)
(1) UFPA/CAMTUC;
Zaghetti, D.M.(1); El Banna, W.R.(1); Lima, F.C.C.(1); Oliveira, P.E.S.(1); Da Trindad

09-047 20, June
Evaluation of Al2O3 content and B2O3/SiO2 ratio in SiO2-Al2O3-B2O3-TiO2-La2O3 glasses on the infiltration behavior and optical and mechanical properties of alumina composites
Henrique Takaaki Tamoto
(1) UFABC; (2) UNESC;
Tamoto, H.T.(1); Chim

09-049 18, June
Dependence of tetragonal-ZrO2 grain size on the bending strength of Y-TZP ceramics
Leonardo Queiroz Bueno Campos (Brazil)
(1) UERJ-FAT; (2) UERJ; (3) UNESP; (4) UFF;
Santos, C.(1); Alves, M.F.R.P.(1); Ferreira, I.S.(1); Campos, L.Q.B.(2); More

09-052 20, June
Development and analysis of recycled mortar with total and partial replacement of the sand by construction and demolition residue
Leonardo Barga (Brazil)
(1) Toledo Prudente;
Barga, L.(1); Chaves, F.P.(1); Fróis, M.R.(1); Reis, E.A.P.(1);

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09-053 18, June
Biaxial flexural strength in Y-TZP and finite element simulation (FEM)
Leonardo Queiroz Bueno Campos (Brasil)
(1) UERJ; (2) UFF; (3) UNESP;
Santos, C.(1); Da Silva, P.C.(2); Simba, B.G.(3); Alves, M.F.R.P.(1); Moreira, L.P.(2); Campos, L.Q.B.(

09-055 19, June
Dense aluminum borate (Al18B4O33) ceramics by direct sintering of milled powders
Gustavo Suárez (Argentina)
(1) CETMIC; (2) ICV-CSIC;
Suárez, G.(1); Hernandez, M.F.(1); Baudin, C.(2); Pena, P.(2); Aglietti, E.F.(1); Rendtorff, N.M.(1);

09-057 20, June
Study of the effects of CaCl2 salt on hydration of MgO in aluminous concrete.
Raquel Gomes Araujo (Brazil)
(1) IFMA;
Sousa, R.E.(1); Paiva, A.E.M.(1); Araujo, R.G.(1);

09-058 18, June
Analysis of the elastic modulus of Al2O3-MgO refractory concrete during the hydration process with addition of CaCl2.
Raquel Gomes Araujo (Brazil)
(1) IFMA;
Sousa, R.E.(1); Paiva, A.E.M.(1); Araujo, R.G.(1);

09-059 19, June
Effect of permanence time at the maximum temperature of sinterization in the physical-mechanical properties of test specimens obtained from compositions containing clays and aluminum waste
Karina Ruiz Silva (Brasil)
(1) UFCG;
Silva, V.J.(1); T

09-060 20, June
Efficiency of silica powder milling in stirred media mill
Willian Ferreira Camargo (Brazil)
(1) IMC-UCS;
Camargo, W.F.(1); Brunatto, M.L.(1); Cruz, R.C.D.(1);

09-061 18, June
Development of ceramic cutting tool for low-usability metals machining
Vânia Trombini (Brasil)
(1) UFABC;
Trombini, V.(1); Santos, S.F.(1); Becker Da Silva, D.A.(1);

09-063 18, June
Effects of Milling Time on Mechanical Properties of Spark Plasma Sintered WC-10wt%Fe3Al cermet
Luis Antonio Ccopa Ybarra (Brazil)
(1) UNINOVE / UFABC; (2) UFABC; (3) USP;
Ybarra, L.C.(1); Chimanski, A.(2); Machado, I.F.(3); Yoshimura, H.N.(2);

09-065 20, June
Synthesis and Characterization of a WCCoCr/NiCr Nanocomposite Obtained by High Energy Ball Milling
Waleska Campos Guaglianoni (Brazil)
(1) WCG;
Guaglianoni, W.C.(1);

09-066 18, June
Dynamic Fatigue of Na2O-CaO-SiO2-P2O5 and Li2O-2SiO2 Glasses
Iolanda Justus Dechandt (Brazil)
(1) UEPG; (2) UFSCar;
Dechandt, I.J.(1); Zanotto, E.D.(2); Serbena, F.C.(1);

09-068 19, June
Thermal analyzes of the starting powders and NbC-Ni cermet with addition of TiC and W.
Daniel Ayarroio Seixas (Brazil)
(1) UFABC; (2) BRATS;
Seixas, D.A.(1); Yoshimura, H.N.(1); Santos, S.F.(1); Rodrigues, D.(2);

09-069 20, June
A promising pathway to make in situ growth of In nanoparticles: Electron/Laser irradiation on InP semiconductor
Marcelo Assis (Brasil)
(1) UFSCar; (2) UNESP; (3) UJI; (4) UL;
Assis, M.(1); Longo, E.(2); De Foggi, C.C.(1); Andrés, J.(3); Mingue

09-072 18, June
Synthesis of niobium nitride at low temperature
Rayane Ricardo da Silva (Brasil)
(1) UFRN;
Silva, R.R.(1); Moriyama, A.L.L.(1); De Souza, C.P.(1);

09-073 19, June
Finite element models for analysis of the influence of masonry panels on multi-concrete frames
Fabrício Balestrin (Brazil)
(1) UTFPR - PB; (2) UTFPR; (3) UNIPAR;
Balestrin, F.(1); Gomes, F.A.A.(2); Dalcanal, P.R.(2); Valdameri, C.Z.(3);

09-078 20, June
Comparative analysis of quality and costs of the ceramic tiles type of channel produced and commercialized in Teresina city - Piauí
Lailson Ancelmo (Brasil)
(1) UNINOVAFAPI;
Ancelmo, L.(1);

09-079 18, June
Analysis of the technical and environmental feasibility of a ceramic composite (ceramic block) produced with an incorporation of kraft paper fibers
Lailson Ancelmo (Brasil)
(1) UNINOVAFAPI;
Ancelmo, L.(1);

09-080 19, June
Consolidation of binderless NbC by spark plasma sintering
Sydney Ferreira Santos (Brasil)

(1) UFABC; (2) USP;
De Siqueira, L.E.C.(1); Cuppari, M.G.V.(1); Trombini, V.(1); Machado, I.F.(2); Santos, S.F.(1);

09-089 20, June
Quality evaluation of a clayey block for its use in the production of glazed ceramic tiles
Amanda Lucia Chaparro (Columbia)
(1) UFPS; (2) UDP;
Sanchez, J.(1); Florez, A.O.(1); Chaparro, A.L.(2);

09-090 18, June
Physical aspects and modeling of the fracture in rocks and cementitious materials
Omar Rodriguez-Villarreal (Mexico)
(1) UANL;
Rodriguez-villarreal, O.(1);

09-091 19, June
Study of permeable concrete
Rosa Cristina Cecche Lintz (Brasil)
(1) UNICAMP;
Lintz, R.C.C.(1); Canteras, F.B.(1); Gachet-barbosa, L.A.(1); Silva, V.F.(1); Teixeira, I.(1);

09-092 20, June
The use of alternative materials in the production of high performance concrete
Rosa Cristina Cecche Lintz (Brasil)
(1) UNICAMP; (2) IFMA; (3) UNIFEI;
Lintz, R.C.C.(1); Silva, F.M.(1); Gachet-barbosa, L.A.(1); Gomes, A.E.(2); Dos Santos, J.M.C

09-097 18, June
Non destructive test in ceramic coating using a prototype for detection of pathology
Jonas Alexandre (Brasil)
(1) UENF;
Pessanha, D.F.(1); Alexandre, J.(1); Azevedo, A.R.G.(1);

09-099 18, June
Nanotribology and Nanoindentation Response of WC-Fe3Al cermets prepared by Spark Plasma Sintering
Luis Antonio Ccopa Ybarra (Brazil)
(1) UNINOVE / UFABC; (2) UFABC;
Ybarra, L.C.(1); Chimanski, A.(2); Yoshimura, H.N.(2);

09-100 20, June
Experimental and theoretical analysis on porosity of fired clay bricks manufactured with Ground Date Pits
Nasser Chelouah (Algeria)
(1) UB;
Chelouah, N.(1);

09-103 19, June
Effects of vinyl acetate-ethylene copolymer admixture on mechanical properties of a geopolymer mortar
Walter Contabile Martins (Brazil)
(1) UFABC;
Martins, W.C.(1); Yoshimura, H.N.(1);

09-104 20, June
Development and characterization of ceramic composites (AL2O3-TiO2) reinforced with CEO2 for the manufacture of inert coatings in metallic tanks of the petroleum industry.
Noelle D'emery Gomes Silva (Brasil)
(1) UFPE;
Silva, N.D.G.(1); Domingu

09-107 18, June
Optimization of green machining of ZrO2 via a simple and small CNC mill
Luis Antônio Genova (Brasil)
(1) IPEN;
Genova, L.A.(1); Silva, A.A.(1);

09-108 19, June
Effect of the incorporation of green lake clay in the property of impact and crystallinity of polypropylene
Francisco Rolando Valenzuela-Diaz (Brasil)
(1) IPEN; (2) EPUSP;
Sales, J.N.(1); Poveda, P.N.S.(1); Garcia, R.H.L.(1); Valenzuela-diaz,

09-112 20, June
Size distribution analysis of zirconia grains in ceramic composite microstructure for space use
Daniel Alessander Nono (Brasil)
(1) INPE;
Nono, D.A.(1); Souza, R.L.G.(1); Mendes, J.P.(1); Silva, I.C.F.(1); Nono, M.C.A.(1);

09-113 18, June
Fracture stress analysis of alumina matrix with zirconia nanograins for space applications
Renata Lopes Gonçalves Souza (Brazil)
(1) INPE;
Souza, R.L.G.(1); Nono, D.A.(1); Mendes, J.P.(1); Silva, I.C.F.(1); Nono, M.C.A.(1);

09-115 19, June
Granulometrical classification study from the densimeter method
Camila Tavares Brasileiro (Brasil)
(1) UFPB;
Santana, G.L.(1); Ferreira, H.S.(1); Brasileiro, C.T.(1); De Azeredo, G.A.(1);

09-116 20, June
Study of stability of Al2O3-Y2O3-TiO2 composite ceramics in crude petroleum environment for inert coating applications in petroleum industry
Milena Gonçalves Lima (Brazil)
(1) UFPE;
Lima, M.G.(1); Yadava, Y.P.(1); Ferreira, R.A.S.(1);

09-120 18, June
Hibrid Compounds of Pseudoboehmite and Graphene Oxide
Renato Meneghetti Peres (Brasil)
(1) MACKENZIE; (2) EPUSP; (3) Mackenzie;
Peres, R.M.(1); Munhoz Jr, A.H.(1); Miranda, L.F.(1); Rossi, M.V.(1); Nagima, V.X.(1); Valenzuela-diaz, F.R.(2); Em

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09-122 19, June
Interdisciplinarity in the production of ceramic artifacts, in the municipality of cunha, são paulo, brazil
Caio Fernandoo Da Silva (Brazil)
(1) UNIFEI; (2) UNIFATEA;
Machado Junior, W.A.(1); Da Silva, C.F.(2); Domingos, B.S.M.(2); Ribeiro, R.

09-123 20, June
The Long-term Stability of Embedded Aluminum Nanoparticles in Glass
Janet Callahan (Estados Unidos)
(1) -;
Callahan, J.(1);

09-125 18, June
Mechanical Behaviour of Zirconia-Toughened Alumina Laminates with or without Y-PSZ Intermediate Layers
Marcelo Daniel Barros (Brasil)
(1) UFSC; (2) TUHH;
Barros, M.D.(1); Rachadel, P.L.(1); Fredel, M.C.(1); Janssen, R.(2); Hotza, D.(1);

Symposium J: Frontiers of Glass Science

Edgar Dutra Zanotto

10-004 19, June
Ca and Sr Bonding in Mixed Alkali/Alkaline Earth Phosphate Glasses
José Fabián Schneider (Brazil)
(1) IFSC-USP;
Schneider, J.F.(1); Morguetto, G.F.(1); Tsunaki, L.B.(1);

10-008 20, June
Effect of crystalline volume fraction and crystal size on the tribological properties of lithium disilicate glass-ceramics
Crislaine Cruz (Brazil)
(1) UEPG; (2) IFPR;
Cruz, C.(1); Mathias, I.(1); Senk, M.V.(2); Serbena, F.(1);

10-010 18, June
Bioactivity of 2Na2O.1CaO.3SiO2 glass with K, Sr and P additions
Karen Cristiane Ribeiro (Brazil)
(1) UEPG;
Ribeiro, K.C.(1); Dechandt, I.J.(1); Souza, G.B.(1); Serbena, F.(1);

10-013 19, June
Borate and silicate glasses as high-dose linear response dosimeters
Marcello Rubens Barsi Andreeta (Brasil)
(1) IFG; (2) UFSCar; (3) IPEN/CNEN;
Oliveira, L.N.(1); Andreeta, M.R.B.(2); Schimidt, F.(1); António, P.L.(3); Nascimento, E.O.(1); Cal

10-014 20, June
Facture toughness measurements by COD of SrO-MgO-Al2O3-B2O3-SiO2 glass-ceramics composites for use as SOFC sealants
Leonardo Sant'Ana Gallo (Brasil)
(1) UEPG; (2) UAM;
Sant'ana Gallo, L.(1); Moreira Justo, V.(1); De Souza Just, L.(1); Antunes

10-016 18, June
Effect of Crystal Size and Crystallinity on the Fracture Toughness and Strength of Stoichiometric Lithium Disilicate Glass-Ceramics
MARIZA VEIGA SENK (Brazil)
(1) UEPG; (2) UFSCar;
Senk, M.V.(1); Zanotto, E.D.(2); Serbena, F.C.(1); Mathias, I.

10-017 19, June
Mechanical properties of barium disilicate glass-ceramics
Simone do Rocio Ferraz Sabino (Brazil)
(1) UEPG; (2) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);
Sabino, S.R.F.(1); Rodrigues, A.M.(2); Silva, L.D.(2)

10-018 18, June
Glass formation and crystallization in V2O5 - Bi2O3 - Fe2O3 glasses
Rodolfo Foster Klein Gunnewiek (Brasil)
(1) UNIFAL-MG;
Almeida, N.P.(1); Gunnewiek, R.F.K.(1); Cassanjes, F.C.(1);

10-022 18, June
Mechanical properties of glass-ceramic sealants of the system BaO/SrO-MgO-B2O3-SiO2
Francisco Carlos Serbena (Brazil)
(1) UEPG; (2) ICV; (3) UAM;
Moreira Justo, V.(1); Pascual, M.J.(2); Rodríguez-lopez, S.(3); Gallo, L.S.(1); Serbena, F.C.(1);

10-024 19, June
Dynamic Processes in Silica and Alumina Glasses
Marcio Luis Ferreira Nascimento (Brasil)
(1) UFBA;
Nascimento, M.L.F.(1);

10-025 20, June
Diffusion, Viscosity and Ionic Transport Properties in Lead Metasilicate Glass
Marcio Luis Ferreira Nascimento (Brasil)
(1) UFBA; (2) UFSCar;
Nascimento, M.L.F.(1); Cassar, D.R.(2); Rodrigues, A.C.M.(2);

10-033 18, June
Glass Stability of Alkali and Alkaline Earth-Silicate and -Germanate Glasses
Jeanini Jiusti (Brazil)
(1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);
Jiusti, J.(1); Mattos, M.N.(1); Andreeta, M.R.B.(1); Zanott

10-036
19, June
Electron Paramagnetic Resonance of Vanadium-Doped SbPO4 – GeO2 Glasses
Claudio Jose Magon (Brazil)
(1) USP; (2) UNITO; (3) UNESP; (4) UEL; (5) ;
Magon, C.J.(1); Donoso, J.P.(1); Silva, I.A.(1); Chiesa, M.(2); Morra, E.(2); Montesso, M.(3); Man

10-038
19, June
Raman scattering and molecular dynamic simulations investigation of lead metasilicate glass and supercooled liquid structures
David Vieira Sampaio (Brazil)
(1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV); (2) U

10-039
18, June
Microstructure and mechanical properties of nucleant-free glass-ceramics of the Li2O-CaO-SiO2 system
Gisele Guimarães Santos (Brazil)
(1) UFSCar (CeRTEV); (2) UEPG; (3) ; (4) Center for Research, Technology, and Education in Vitreous Materials

10-040
19, June
Optical Study of Eu-Doped Oxyfluoroborate and Oxyfluorogermanate Glasses
Eduar Enrique Carvajal (Columbia)
(1) UFSCar; (2) USP; (3) University of Sao Paulo;
Carvajal, E.E.(1); De Camargo, A.(2); Donoso, J.P.(2); Eckert, H.(3);

10-041
20, June
Machine learning prediction of the liquidus temperature for oxide glass-formers
Graziela Pentean Bessa (Brazil)
(1) UFSCar; (2) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);
Bessa, G.P.(1); Cassar, D.R.(1); Zan

10-042
19, June
Fluoride loss in fluoride-phosphate glasses: dependence of composition and glass structure on preparation conditions
Doris Möncke (Greece)
(1) NHRF;
Möncke, D.(1);

10-043
18, June
Glass stability and crystallization kinetics on the SrO-CaO-B2O3-SiO2-TiO2 glass system
Aluisio Alves Cabral (Brazil)
(1) IFMA; (2) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV); (3) UFSCar; (4) ICV;
Cabral, A.A

10-046
19, June
Lithium metasilicate produced under high pressure and high temperature and their thermal stability at atmospheric pressure
Silvio Buchner (Brazil)
(1) UFRGS; (2) Vavilov State Optical Institute; (3) PUC-PR;
Buchner, S.(1); Kulbieda, F.R.(1); F

10-052
19, June
Structural and EPR studies of Cu2+ ions in NaPO3 – Sb2O3 – CuO glasses
Douglas Faza Franco (Brazil)
(1) ; (2) UFSCar; (3) USP; (4) IQ-UNESP; (5) UFJF;
Franco, D.F.(1); Carvajal, E.E.(2); Donoso, J.P.(3); Magon, C.J.(3); Fares, H.(4); Silva, M.

10-053
18, June
Variations of Qn distribution in bioactive glasses containing strontium oxide and alumina
Mariana Silva Araujo (Brasil)
(1) IPEN; (2) Ipen;
Araujo, M.S.(1); Silva, A.C.(1); Costa E Silva, D.L.(1); Mello-castanho, S.R.(2);

10-055
19, June
Structural Reinforcement of Nb2O5 in Soda-Lime Borosilicate Glasses for Nuclear Waste Immobilization
Danilo Lopes Costa e Silva (Brasil)
(1) IPEN; (2) Ipen;
Silva, D.L.C.(1); Silva, A.C.(1); Araujo, M.S.(1); Mello-castanho, S.R.(2);

10-057
19, June
Investigation of the thermal and structural properties of TeO2-based glass-ceramics
Renato Cruvinel Oliveira (Brazil)
(1) FEIS, UNESP; (2) UFU;
Oliveira, R.C.(1); Dantas, N.O.(2); De Los Santos Guerra, J.(2); Silva, A.C.A.(2);

10-061
18, June
Young's modulus of glass ceramics obtained from igneous rock: impulse excitation x instrumented indentation
Angelo Pradella Titton (Brazil)
(1) IMC-UCS;
Titton, A.P.(1); Cruz, R.C.D.(1);

10-064
19, June
Alternative route for improving mechanical properties of glasses using high pressure.
Leonardo Resende (Brasil)
(1) UFRGS;
Resende, L.(1); Buchner, S.(1);

10-067
18, June
Crystallization kinetics of devitrite-combeite glasses
Guilherme da Silva Macena (Brazil)
(1) EESC/USP; (2) Vavilov State Optical Institute;
Macena, G.S.(1); Ferreira, E.B.(1); Fokin, V.M.(2);

10-070
18, June
3D finite element analysis of residual tensile stresses on bilayered dental ceramic systems.
Johnata Cavalcanti Fonseca (Brazil)
(1) EESC/USP; (2) USP;
Fonseca, J.C.(1); Ferreira, E.B.(1); Salomão, R.(2); Paccola, R.(1);

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10-074 19, June
Dopant Concentration Dependence of Structural and Optical Properties in Lead Silicate Glasses Doped with Nickel, Cobalt and Chromium
Rafaella Bartz Pena (Brazil)
(1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);

10-075 18, June
Sintering and rounding kinetics of irregular glass particles
Raphael Midea Cuccovia Vasconcelos Reis (Brazil)
(1) UFF; (2) INVAP- SE; (3) UERJ; (4) EESC/USP; (5) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);
Re

10-078 18, June
Influence of Gd2O3 in the physical and structural properties of new transparent gemanoborate glasses.
Roger Gomes Fernandes (Brazil)
(1) UNESP; (2) ; (3) IQ-UNESP;
Fernandes, R.G.(1); Franco, D.F.(2); Nalin, M.(3);

10-080 19, June
Structure and Optical Properties of Borophosphate Glasses
Thais Mota Carvalho (Brazil)
(1) UFF;
Carvalho, T.M.(1); Ferreira, E.A.(1); De Souza, M.L.(1); Da Silva, L.(1);

Symposium K:
Frontiers of Glass Technology

Mathieu Hubert

11-005 18, June
Chemical durability of type I glass vials
Sandra Balan Mendoza Jaime (Brasil)
(1) ITAL;
Jaime, S.B.M.(1); Bócoli, P.F.J.(1); Kiyataka, P.H.M.(1);

11-008 18, June
Study of devitrification and sinterability of SiO2–CaO – K2O – ZrO2 and SiO2 – Li2O – ZrO2 system frits
Ana Paula Fonseca Albers (Brazil)
(1) UNIFESP;
Albers, A.P.F.(1); Quinteiro, E.(1); Trichês, E.S.(1); Freitas, L.S.(1);

11-013 18, June
Feasibility of incorporating wood ash as a partial replacement of silica in the production of soda-lime glasses
Luiz Veriano Oliveira Dalla Valentina (Brasil)
(1) UDESC; (2) udesc;
Mezaroba, G.(1); Tomiyama, M.(2); Dalla Valentina, L.V.O.(1);

11-016 18, June
Preliminary Kinetic Study of Chemical Tempering of Float Glass
Pedro Costa Braga (Brazil)
(1) EPUSP;
Braga, P.C.(1); Beneduce, F.(1);

11-020 18, June
Mechanical properties of transparent glass-ceramics for ballistic armours
Débora Cristina Niero Fabris (Brasil)
(1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);
Fabris, D.C.N.(1); Villas Boas, M.O.C.(1); Zanot

11-022 18, June
Effect of heat treatment on the porosity of SLS foam glass
Manoel Cruz Barbosa Neto (Brasil)
(1) UFSCar; (2) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV);
Barbosa Neto, M.C.(1); Crovace, M.C.(1); Zanotto, E.D.(

11-023 18, June
Laser-induced surface crystallization of eutectic composition glass
Ângela Santana Nunes (Brasil)
(1) UFSCar;
Nunes, A.S.(1); Andreeta, M.R.B.(1);

11-024 18, June
Soda lime silica glasses obtained from industrial solid wastes
Mariana Silva Araujo (Brasil)
(1) IPEN;
Araujo, M.S.(1); Prado, U.S.(1); Genova, L.A.(1);

11-028 18, June
Development of a glass with ultraviolet absorption by adding frits to flint glass
Fernando Santos Ortega (Brasil)
(1) Wheaton; (2) FEI;
Sasso, D.D.(1); Ortega, F.S.(2);

11-029 18, June
Effect of cullet addition on the crystallization of glasses based on blast furnace slag
Catia Fredericci (Brasil)
(1) IPT;
Fredericci, C.(1);

11-031 18, June
Wettability of commercial solar control glass, Part A: influence of the coating film composition
Natalia Massaro (Brasil)
(1) USP; (2) CBC;
Massaro, N.(1); Vaccioli, K.(1); Valera, T.S.(1); Luiz, M.N.(2); Balani, V.(2); Chagas, D.C.(2); Toffol

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11-032 18, June
Wettability of commercial solar control glass, Part B: influence of the temperature and substrate angle.
Kleber Vaccioli (Brasil)
(1) USP; (2) CBC;
Vaccioli, K.(1); Massaro, N.(1); Valera, T.S.(1); Toffoli, S.M.(1); Luiz, M.N.(2); Balani, V.(2

11-033 18, June
Production of glass from thin quartzite-processing residue
Vinicius Rodrigues Gomes (Brazil)
(1) UENF; (2) CETEM;
Gomes, V.R.(1); Babisk, M.P.(1); Vidal, F.W.H.(2); Vieira, C.M.F.(1); Sampaio, J.A.(1);

11-035 18, June
Pores: the plague of glass-ceramics
Oscar Peitl (Brasil)
(1) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV; (2) Center for Research, Technology, and Education in Vitreous Materials (CeRTEV); (3) FSU;
Peitl, O.(1)

Symposium L:
Fundamentals of Sintering and Advanced Sintering Processes

Ricardo Castro

12-001 20, June
Effect of sintering parameters and anodic oxidation on electrical properties of niobium electrolytic capacitors
Edson Silva do Nascimento (Brasil)
(1) UFRN;
Nascimento, E.S.(1); Mello Jr, M.M.B.(1); Karimi, M.M.(1); Gomes, U.U.(1);

12-002 20, June
High Pressure / High Temperature Sintering of Polycrystalline Diamond with Different Binders
Mariana Chianca Lúcio Silva (Brasil)
(1) UFRN; (2) UENF;
Silva, M.C.L.(1); Karimi, M.M.(1); Gomes, U.U.(1); Filgueira, M.(2);

12-003 18, June
Study of the influence of nickel addition in alumina by the route of powder metallurgy
Valter Bezerra Dantas (Brasil)
(1) UFRN; (2) ufrn;
Oliveira, A.G.(1); Gomes, U.U.(1); Oliveira, L.A.(2); Dantas, V.B.(1);

12-004 20, June
Estudo da evolução da moagem na mistura dos pós de Al2O3/Ni
Valter Bezerra Dantas (Brasil)
(1) UFRN; (2) ufrn;
Oliveira, A.G.(1); Gomes, U.U.(1); Oliveira, L.A.(2); Dantas, V.B.(1);

12-007 20, June
Study of the sintering of MgAl2O4 (MA) spinel powders obtained by combustion in solution.
Pedro Augusto Machado Vitor (Brasil)
(1) UFRGS;
Vitor, P.A.M.(1); Bragança, S.R.(1); Bergmann, C.P.(1);

12-009 20, June
Sintering behavior of nickel-zirconia composites
Vera Lúcia Arantes (Brasil)
(1) USP; (2) EESC-USP;
Arantes, V.L.(1); Coutinho, R.B.(2); Martins, S.S.(2);

12-010 20, June
Development of 3Y-ZrO2/alumina functionally graded materials by two-step sintering
Vera Lúcia Arantes (Brasil)
(1) USP;
Arantes, V.L.(1);

12-012 20, June
Synthesis of Li-doped gamma-alumina nanopowders
Rahpael Anacleto Martins Pires de Oliveira (Brazil)
(1) USP;
De Oliveira, R.M.P.(1); Gouvêa, D.(1); Caliman, L.B.(1);

12-016 20, June
Flash sintering of 3Y-TZP/Al2O3 composites
Raphael Euclides Prestes Salem (Brasil)
(1) UTFPR; (2) UEPG; (3) USP; (4) FZEA/USP;
Salem, R.E.P.(1); Monteiro, F.R.(2); Ojaimi, C.L.(3); Campos, J.V.(4); Chinelatto, A.L.(2); Chinelatto, A.S.A.(2); P

12-020 18, June
Addition of ultradispersed oxides in nano alumina to promote sintering at low temperatures
Larissa Bezerra Silva (Brasil)
(1) UFRN;
Silva, L.B.(1); Peres, A.P.S.(1); Costa, A.C.S.(1); Acchar, W.(1);

12-021 20, June
Sintering behavior of TiO2 nanoceramic by Spark Plasma Sintering
Diego Seiti Fukano Viana (Brasil)
(1) UFSCar; (2) UDEA;
Alvarez Roca, R.(1); Viana, D.S.F.(1); Eiras, J.A.(1); Londoño, F.A.(2);

12-022 20, June
Surface segregation of Li2O onto the magnesium spinel nanopowders prepared by precipitation in ethanol
André Avancini Bernardes (Brazil)
(1) USP; (2) IPT;
Bernardes, A.A.(1); Caliman, L.B.(1); Guimarães, K.L.(2); Gouvêa, D.(1);

12-023 20, June
Investigation of hot pressing parameters of bismuth germanate (Bi4Ge3O12) scintillator ceramics
Ivus Lorenzo Oliveira Matos (Brazil)
(1) UFS;
Matos, I.L.O.(1); Andrade, A.B.(1); Macedo, Z.S.(1); Giroldo Valério, M.E.(1);

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12-024
20, June
Copper-Dopped Zinc Oxide Nanoparticles Synthesis by a Fast Polymer Precursor Based Method
Diógenes Ferreira Almeida (Brazil)
(1) UNIFAL;
Almeida, D.F.(1); Garcia, L.A.(1);

12-025
20, June
Spark plasma sintering of nano-composites PZT-Fe2CoO4
Claudia Fernandez Perdomo (Brasil)
(1) UFSCar; (2) UFPR;
Perdomo, C.F.(1); Do Nascimento, W.J.(2); Eiras, J.A.(1); Garcia, D.(1); Kiminami, R.H.G.A.(1);

12-030
20, June
Characterization of ZnO films deposited by sol-gel dip-coating
Matias Tejerina (Argentina)
(1) CETMIC; (2) INTEMA;
Suárez, G.(1); Tejerina, M.(1); Parra, R.(2);

12-034
20, June
Numerical Simulation of Density and Temperature Evolution in Alumina Compacts
Vinícius de Souza Godim de Oliveira (Brazil)
(1) UFSC;
De Oliveira, V.S.G.(1); Hotza, D.(1); González, S.Y.G.(1);

12-036
20, June
Production of composite Ag-NbC through vacuum sintering activate by mechanical synthesis, in situ , from Ag, Nb, and graphite powders.
Uílame Umbelino Gomes (Brasil)
(1) UFRN;
Mello Júnior, M.M.B.(1); Menezes, R.A.C.(1); Silva, H.F.M.(1); Gome

12-037
20, June
COMPARATIVE ANALYSIS OF POROSITY CERAMIC COATING PLATE BASED ON THE TEMPERATURE OF SINTERIZATION
Kelliany Medeiros Costa (Brazil)
(1) UFAL;
Costa, K.M.(1); Carnaúba, T.M.G.V.(1); De Abreu, F.C.(1); Cavalcanti Da Silva, J.E.(1); Macedo Friess X

12-041
20, June
Sintering of Recycled WC-Co-Ni by Pulsed Electric Current Sintering
Catia Fredericci (Brasil)
(1) IPT; (2) Proart; (3) USP; (4) BRATS;
Fredericci, C.(1); Da Silva, M.(2); Tertuliano, A.J.O.(3); Machado, I.F.(3); Rodrigues, D.(4);

12-045
20, June
Effect of Polishing on the Frictional Resistance of Ceramic Brackets
Catia Fredericci (Brasil)
(1) IPT; (2) Inser;
Fredericci, C.(1); Martins, R.(2);

12-048
20, June
Deposition of Si on ceramic tungsten carbide inserts by laser methods
Rene Martins Volu (Brasil)
(1) ITA; (2) IEAv; (3) IFSP; (4) INPE; (5) PROMARKING;
Volu, R.M.(1); Silva, S.A.(2); Santos, C.L.(3); Contin, A.(4); Claudino, M.F.(5); Vasconcel

12-049
20, June
Sintering of tungsten carbide (WC) coatings on 4340 steel with CO2 laser
Rene Martins Volu (Brasil)
(1) IEAv; (2) ITA;
Dyer, S.A.S.(1); Volu, R.M.(2); Jardim, V.R.(1); Vasconcelos, G.(1);

12-053
20, June
Boron carbide interlayers on WC-CO inserts by MOPA laser methods
Andre Contin (Brasil)
(1) UFG; (2) ITA; (3) IEAv; (4) PROMARKING; (5) UNIFESP; (6) INPE;
Contin, A.(1); Volu, R.M.(2); Dyer, S.A.S.(3); Claudino, M.F.(4); Damm, D.D.(5); Corat, E

12-054
20, June
Evaluation of 3YTZP films deposited by electrophoretic deposition on titanium and irradiated with Nd:YAG laser
Rene Ramos Oliveira (Brasil)
(1) IPEN;
Xavier, G.L.(1); Ussui, V.(1); Oliveira, R.R.(1); De Rossi, W.(1); Lima, N.B.(1); De Castro,

12-057
20, June
A comparative performance of the (Al2O3) cutting tools when dry turning two cast irons
José Vitor Candido (Brasil)
(1) UNESP;
Candido, J.V.(1);

12-058
20, June
Study of the stability of Ca2MgZrO6 and Ca2NiZrO6 ceramics in crude petroleum and their comparison of potentiality for use as ceramic substrates for temparature sensors in the petroleum industry
Rebeka Oliveira Domingues (Brasil)
(1) UFPE;
Dom

12-059
20, June
Grain boundary and surface area evaluation of Ca or Mg-doped SnO2 nanopowders
Gilberto José Pereira (Brasil)
(1) FEI;
Pereira, G.J.(1); Batista, F.(1);

12-060
20, June
YBCO superconducting nanotubes synthesized by electrospinning technique
Diego Anísio Modesto (Brazil)
(1) UFABC;
Modesto, D.A.(1); Medina, M.S.(1); Bernardi, J.C.(1); Lanfredi, A.J.C.(1); Escote, M.T.(1);

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Symposium M:
Green and Energy Efficient Processing

Rodrigo Moreno / Sonia R. H. Mello Castanho

13-002 18, June
Evaluation of the potential of the sludge from the pulp and paper industry in fitting blocks.
Afonso Rangel Garcez Azevedo (Brasil)
(1) UENF; (2) IME; (3) UNIREDENTOR; (4) UCAM;
Azevedo, A.R.G.(1); Alexandre, J.(1); Xavier, G.C.(1); Marvila, M

13-004 18, June
Development of artificial stone base of oyster shells for application in workbenches.
Thamyres Hellen Silva (Brasil)
(1) UFSC; (2) UFSC/UMINHO; (3) UMINHO;
Silva, T.H.(1); Henriques, B.P.(2); Silva, F.S.(3); Guimarães, J.M.(1); Fredel, M.C.(1)

13-005 19, June
Waste printed circuit boards for the mortar production
José Ricardo Ferrari (Brasil)
(1) Ifes; (2) IFES;
Ferrari, J.R.(1); Silva, R.V.(2); Louzada, D.M.(1); Tinti, I.C.(1);

13-007 18, June
Synthesis of the PrNi0.8Co0.2O3 and LaNi0.8Co0.2O3 cathodes by the gelatin method for application in solid oxide fuel cells (SOFC).
Thaís de Oliveira Almeida (Brasil)
(1) UFPB;
Queiroz, D.F.(1); Aquino, F.M.(1); Silva, F.F.(1); Almeida, T.O.(1

13-008 19, June
Development of ceramic materials PrNiO3 AND PrCoO3 for application in cathode of solid oxide cells
Virgínia Vieira Aires (Brasil)
(1) UFPB;
Aires, V.V.(1); Queiroz, D.F.(1); Aquino, F.M.(1); Da Silva, I.B.(1); Almeida, T.O.(1);

13-009 18, June
Influence of synthesis methods on microstructure of SrCoO3-d cathode for solid oxide fuel cells (SOFC)
Thaís de Oliveira Almeida (Brasil)
(1) UFPB;
Almeida, T.O.(1); Aquino, F.M.(1); Da Silva, I.B.(1); Queiroz, D.F.(1); Aires, V.V.(1); Silva,

13-010 19, June
Synthesis and characterization of LaCoO3 and LaNiO3 perovskites obtained by the gelatin method used as cathodes in SOFCs
Iago Bezerril da Silva (Brasil)
(1) UFPB;
Da Silva, I.B.(1); Aquino, F.M.(1); Queiroz, D.F.(1); Almeida, T.O.(1); Aires, V

13-011 18, June
Thermal stability of rubidium birnessite-type material synthesized from Mn residues from Amazon Region
Thayná Ferreira Azevedo (Brazil)
(1) UFOPA; (2) IFMA; (3) UFPA; (4) MLU;
Do Mar, I.c.(1); Azevedo, T.F.(1); Figueira, B.A.M.(1); Rivas Mercu

13-013 19, June
The electrolytic conversion of ambient CO2 mediated by molten carbonates in multi-walled carbon nanotubes
Sabrina Arcaro (Brasil)
(1) UFRGS;
Arcaro, S.(1); Dos Santos, W.F.(1); Alves, A.K.(1); Bergmann, C.P.(1); Wermuth, T.B.(1);

13-014 18, June
Hydrothermal Synthesis of Octahedral Molecular Sieve (OMS-1) from Mn oxide residues
Thayná Ferreira de Azevedo (Brazil)
(1) UFOPA; (2) IFMA;
Azevedo, T.F.(1); Rezende, D.S.(1); Mendes, K.(1); Figueira, B.A.M.(1); Rivas Mercury, J.M.(2);

13-017 19, June
Nanostructured Oxides Based on Niobate with Tetragonal Tungsten Bronze Structure Synthesized by Spray Pyrolysis Method.
SILVANIA Lanfredi (Brasil)
(1) FCT/UNESP; (2) CNRS, Grenoble INP;
Lanfredi, S.(1); Praxedes, F.R.(1); Djurado, E.(2); Nobre

13-020 18, June
Synthesis of 13X molecular sieve employing Kaolin residues from Amazon Region
Thayná Ferreira de Azevedo (Brazil)
(1) UFOPA; (2) UFPA;
Silva, E.B.(1); Figueira, B.A.M.(1); Vasconcelos, A.A.(1); Silva, G.C.T.(2); Azevedo, T.F.(1);

13-022 19, June
Synthesis, characterization, and evaluation of optical properties of potassium niobate (KNbO3) by microwave-assisted hydrothermal method (MaHS)
Tiago Bender Wermuth (Brasil)
(1) UFRGS;
Wermuth, T.B.(1); Bergmann, C.P.(1); Baibich, M.N.(1); Ame

13-023 18, June
Microwave-assisted synthesis and photocatalytic activity of TiNb2O7 nanoparticles
João Batista Rodrigues Neto (Brazil)
(1) UFSC; (2) EMPA; (3) ICV;
Rodrigues Neto, J.B.(1); Falk, G.S.(1); Borlaf, M.(2); Novaes De Oliveira, A.P.(1); Moreno, R.(

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13-026 19, June
Silica-soda-lime glass production from solid wastes generated by São Tomé stones processing and its characterization
Julia Santos Pereira (Brazil)
(1) CEFET MG; (2) SMMA; (3) UEMG;
Pereira, J.S.(1); Abreu, W.M.(2); Cardoso, A.V.(3);

13-029 18, June
Adsorption of tannic acid on ?-Al2O3 and its effect on the suspension stability and particles dispersion
Jaíne Webber (Brasil)
(1) UCS-IMC; (2) IMC-UCS;
Webber, J.(1); Cruz, R.C.D.(2); Zorzi, J.E.(2);

13-030 19, June
New liquid-liquid interface route to obtain ZnS nanoparticles.
Yuri Vinicius Bruschi de Santana (Brazil)
(1) UTFPR; (2) IQ/UNESP;
De Santana, Y.V.B.(1); Longo, E.(2);

13-032 18, June
Addition of eggshell waste in traditional ceramic
Francine Machado Nunes (Brazil)
(1) UFPEL;
Nunes, F.M.(1); Rangel, E.M.(1); Camaratta, R.(1); Machado, F.M.(1);

13-047 18, June
Simulation model of the temperature inside an intermittent kiln of the clay ceramic industry
Bruno Lima Souza (Brazil)
(1) IFF;
Lima, Y.S.(1); Morais, A.S.C.(1); Ferreira, C.N.(1); Souza, B.L.(1);

13-049 19, June
Preparation of YTZP/SiC/SiO2 materials by colloidal processing and SPS
Rodrigo Moreno (Espanha)
(1) ITM; (2) ICV;
Navarro Lopez, L.(1); Borrell, A.(1); Gutiérrez-gonzález, C.(1); Salvador, M.D.(1); Moreno, R.(2);

13-050 18, June
Hydrothermal synthesis of sodalite from a kaolin waste by alkali fusion treatment
Amanda Maria Vieira (Brazil)
(1) UFOPA; (2) IFPA; (3) UFPA;
Vieira, A.M.(1); Figueira, B.A.M.(1); Santos, M.P.(1); Vasconcelos, A.A.(1); Da Luz, P.T.S.(2); Maia,

13-055 19, June
Use of agar gel as additive in alumina injection molding
Leonardo Oliveira (Brazil)
(1) ITA; (2) IAE;
Thomazini, E.F.(1); Oliveira, L.(2); Cairo, C.A.A.(2); Graça, M.L.A.(2);

13-056 18, June
Electronic Materials Science and Energy Fractal Nature
Vojislav V Mitic (Serbia)
(1) 1; (2) 2; (3) 3; (4) 4;
Mitic, V.(1); Kocic, L.(2); Paunovic, V.(2); Lazovic, G.(3); Tidrow, S.(4); Vosika, Z.(2);

13-057 19, June
High Performance of Solar cell based on Brazilian natural dyes and nano semiconductors: TiO2nd SnO2-F using solar simulator
Icoana Lais Leitão Mascarenhas Martins (Brazil)
(1) UnB; (2) EPUSP; (3) USP;
Martins, I.L.M.(1); Hidalgo, M.P.(1); Brit

13-061 19, June
The effect of enhancement of ceramics by incorporation of industrial laundry water cleaning sludge
Priscila Brentan Praxedes (Brazil)
(1) PUCPR;
Praxedes, P.B.(1);

Symposium N:
High and Ultra High Temperature Ceramics

William (Bill) E. Lee / Victor C. Pandolfelli / Jon Binner / Christos Aneziris

14-025 20, June
Processing and characterization of a novel CBN/Nb-Ni cutting tool material
Marcello Filgueira (Brazil)
(1) UENF; (2) UFRN;
Filgueira, M.(1); Oliveira, M.P.(1); Guimarães, R.S.(1); Barros, R.A.(1); Karimi, M.M.(2); Gomes, U.U.(2);

14-026 18, June
Is it possible to sinter binderless Si3N4 bodies for metalworking purpose?
Marcello Filgueira (Brazil)
(1) uenf; (2) UENF; (3) UERJ;
Filgueira, M.(1); Nascimento, A.L.(2); Souza, D.(1); Guimarães, R.S.(1); Santos, C.(3);

14-031 19, June
Brazilian Refractory Grade Bauxite: A New Alternative to Refractories Makers and Users.
André Luis Pereira (Brasil)
(1) MC; (2) CURIMBABA;
Pereira, A.L.(1); Dos Reis, M.A.(1); Ferreira, L.L.H.C.(2); Nakachima, P.M.(1);

14-032 20, June
Densification and microstructure of Si3N4-TiN ceramic composites
Cecilia Chaves Guedes-Silva (Brasil)
(1) IPEN; (2) USP;
Ferreira, T.S.(1); Carvalho, F.M.S.(2); Guedes-silva, C.C.(1);

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14-044
18, June
Evaluation of SiC sintering via liquid phase using as additive the systems TiO2/Al2O3 and TiO2/Y2O3
Marcela Rego Oliveira (Brasil)
(1) EEL/USP;
Oliveira, M.R.(1); Ribeiro, S.(1);

14-045
19, June
Effect of MgO addition on mullite synthesis "in situ"
Thays Allana Olcoski (Brazil)
(1) UEPG; (2) USP; (3) uepg;
Olcoski, T.A.(1); Chinelatto, A.S.A.(2); Chinelatto, A.L.(2); Salem, R.E.P.(3);

14-058
20, June
Sialon-based composites prepared from the aluminium oxynitride SHS-derived powders
Miroslaw M. Bucko (Poland)
(1) AGH;
Bucko, M.(1);

14-059
18, June
Effect of the adhered ladle slag on the decarburization of MgO-C bricks
Marcos Nahuel Moliné (Argentina)
(1) INTEMA; (2) CINI;
Moliné, M.N.(1); Galliano, P.(2); Tomba Martinez, A.G.(1);

14-065
20, June
Impact of thermal coatings on the optimization of an industrial furnace
Carlos Eduardo de Meo (Brazil)
(1) UFSCar;
De Meo, C.E.(1); Pandolfelli, V.C.(1); Sako, E.Y.(1); Pelissari, P.B.G.B.(1); Béttega, R.(1);

14-070
19, June
The insulation and safety layer function in the performance of steel ladles
Murilo Henrique Moreira (Brazil)
(1) UFSCar; (2) USP;
Campos, M.G.G.(1); Dos Santos, M.F.(1); Pelissari, P.B.G.B.(1); Sako, E.Y.(1); Angélico, R.A.(2); Pandolfelli, V.

14-076
18, June
Development of Thermal Spray System of Ceramic Powder - using plasma torch of long arc
Roberson José da Silva (Brazil)
(1) ITA;
Da Silva, R.J.(1); Rita, C.C.P.(1); Maciel, H.S.(1); Petraconi Filho, G.(1);

14-077
18, June
Ceramic Covering of SiO2 by Using a Long Arc Thermal Plasma Torch
Roberson José da Silva (Brazil)
(1) ITA;
Da Silva, R.J.(1); Rita, C.C.P.(1); Maciel, H.S.(1); Petraconi Filho, G.(1);

14-079
19, June
Effect of reinforcement additions on mechanical, thermal, oxidation and ablation properties of ZrB2 based ultra-high temperature ceramic composites
Rahul Mitra (India)
(1) S. Kashyap; (2) M. Mallik; (3) R. Mitra;
Kashyap, S.(1); Mallik, M.(2);

14-080
20, June
Evaluation of the use of hydraulic alumina for the production of calcium hexaluminate
Vitoria Marques Cesar Leite (Brasil)
(1) UNIVAP; (2) Univap; (3) USP;
Leite, V.M.C.(1); Gonçalves, E.P.(2); Salomão, R.(3); Oliveira, I.R.(2);

14-083
18, June
Influence of the addition of man-made ceramic fiber on the physical properties of refractory concretes
Rodrigo de Lima Ribeiro (Brazil)
(1) PMT-USP;
Ribeiro, R.L.(1); Lenz E Silva, G.F.B.(1);

14-084
19, June
Processing and Characterization of Cf/C Composites with ZrB2 and ZrC Addition
Rosa Maria da Rocha (Brasil)
(1) IAE; (2) DCTA;
Rocha, R.M.(1); Pardini, L.C.(2); Souza, M.A.M.(1);

14-085
20, June
Dense HfC with High Fracture Toughness through Microstructure Design using a Novel SiCN-C Sintering System
Na Ni (China)
(1) NN;
Ni, N.(1);

14-086
18, June
Thermal conductivity study of zirconia co-doped with yttria and niobia for TBC application
Renata Jesuina Takahashi (Brasil)
(1) Unifesp; (2) IAE; (3) UNIFESP;
Takahashi, R.J.(1); Assis, J.M.K.(2); Neto, F.P.(2); Reis, D.A.P.(3);

14-087
19, June
Ablative properties of ZrB2-based ceramic materials tested in a hypersonic plasma wind tunnel
Cristian Cley Parteniani Rita (Brasil)
(1) ITA/FATEC; (2) ITA; (3) IAE; (4) UNESP;
Rita, C.C.P.(1); Campos, T.M.B.(2); Caliari, F.R.(2); Rocha, R.M.(

14-088
20, June
Hypersonic plasma wind tunnel testing of ceramic composite based on ZrB2-SiC
Cristian Cley Parteniani Rita (Brasil)
(1) ITA/FATEC; (2) ITA; (3) IAE; (4) UNESP;
Rita, C.C.P.(1); Miranda, F.S.(2); Rocha, R.M.(3); Campos, T.M.B.(2); Essiptchouk,

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14-089 18, June
Microstructure characteristics of EB-PVD perovskite thermal barrier coatings
Bogdan S. Vasile (Romênia)
(1) PU; (2) UPB; (3) UP; (4) IMNR;
Vasile, B.(1); Surdu, V.A.(2); Birca, A.(1); Vasile, O.(1); Andronescu, E.(1); Trusca, R.(3); Piticescu,

14-090 19, June
Investigation of the ablation process of ZrB2-SiC materials by mass spectrometry
Cristian Cley Parteniani Rita (Brasil)
(1) ITA/FATEC; (2) ITA; (3) IAE; (4) UNESP;
Rita, C.C.P.(1); Miranda, F.S.(2); Da Silva, R.J.(2); Rocha, R.M.(3); Essiptcho

14-091 20, June
Graphene oxide and multi walled carbon nanotubes introduced in AL2O3-SIC-SIO2-C refractory castable used in blast furnace trough: effects on rheology and high-temperature properties
Norval Rodrigues de Oliveira Jr (Brazil)
(1) rhimagnesita; (2)

14-095 19, June
Cadastro
João Mesquita (Brazil)
(1) JM;
Mesquita, J.(1);

14-096 20, June
The hole of silica fume as a solid dispersant for multi-walled carbon nanotubes in calcium aluminate cement based refractory castable
Norval Rodrigues de Oliveira Jr (Brazil)
(1) rhimagnesita; (2) PUC Minas; (3) CDTN;
Oliveira Jr, N.R.(1); Fernandes, M.R.F.(2); Furtado, C.(3); Ribeiro, F.A.(3); Brito, M.A.(1); Dutra, P.(3); Santos, A.P.(3);

Symposium P:
New trends in silicate and clay-based ceramics

Wilson Acchar

16-005 20, June
Objective criterion for evaluation of the quality decoration in ceramic floor tiles production prior to the sintering process.
Fabio Ferraço (Brasil)
(1) UNIFAL-MG; (2) UFSCar;
Ferraço, F.(1); Rusilo, L.C.(1); Boschi, A.O.(2);

16-006 20, June
Incorporation of quartzite residues in ceramic mass for porcelain tile production
Karina Ruiz Silva (Brasil)
(1) UFCG; (2) UFPB;
Silva, K.R.(1); Campos, L.F.A.(2); Santana, L.N.L.(1);

16-011 20, June
Characteristics of the rocks of the Estrada Nova Formation as ceramic raw material in the State of São Paulo-Brazil
Sergio Ricardo Christofoletti (Brasil)
(1) IF; (2) Rochaforte; (3) UNIFAL - MG;
Christofoletti, S.R.(1); Roveri, C.(2); Rocha,

16-012 20, June
Controlling Intermolecular Magnetic Interactions in Inorganic-Organic Hybrid Systems – Synthesis and Characterization of Intercalated Radicals into Fluoromica Clay
Carsten Doerenkamp (Brazil)
(1) USP; (2) WWU;
Doerenkamp, C.(1); Klabunde, S.(2

16-013 20, June
Reology and tixotropy of dispersion of new bentonitic clay occurrences of the paraíba state, brazil, for use in organic drilling fluids
Isabelle Albuquerque Silva (Brasil)
(1) UFCG;
Silva, I.A.(1); Silva, D.S.(1); Pereira, I.D.S.(1); Sousa, F.

16-014 20, June
Study of adsorption processes using clays as adsorbents for removal of rhodamine b
Ivna Daniele Souza Pereira (Brasil)
(1) UFCG;
Pereira, I.D.S.(1); Silva, I.A.(1); Da Silva, V.C.(1); Neves, G.A.(1); Menezes, R.R.(1); Ferreira, H.C.(1); Neto,

16-015 20, June
Influence of moisture content and curing time on cations exchange and rheology of Bentonite clay for use in aqueous drilling fluids
Isabelle Albuquerque Silva (Brasil)
(1) UFCG;
Silva, D.S.(1); Silva, I.A.(1); Sousa, F.K.A.(1); Neves, G.A.(1);

16-016 20, June
Characterization of Digital Printer Inkjet for Ceramic Coatings
Douglas de Souza Rodrigues (Brazil)
(1) UFRGS;
Rodrigues, D.S.(1); Silva, J.R.(1); Bergmann, C.P.(1); Alves, A.K.(1);

16-017 20, June
Effect of talc addition on the sintering of traditional triaxial ceramics compositions
Eduardo Quinteiro (Brasil)
(1) UNIFESP; (2) U;
Quinteiro, E.(1); Cabrelon, M.D.(1); Araújo, I.N.(2);

16-021 20, June
Characterization of water treatment sludge and clay: feasibility in the manufacture of ceramic artifacts
Felipe Pires Chaves (Brazil)
(1) Toledo Prudente; (2) UNESP/FCT; (3) UNESP;
Chaves, F.P.(1); Barga, L.(1); Teixeira, S.R.(2); Reis, E.A.P.

16-024
20, June
Foundry industry waste incorporation into ceramic material for wall tiles application
Camila Stockey Erhardt Stockey Erhardt (Brazil)
(1) UFRGS; (2) UNISC;
Erhardt, C.S.(1); Rodriguez, A.L.(2);

16-025
20, June
Technological characterization of Jaguari-Mirim River sediments, at Santa Luzia Mining / SP
Carolina Del Roveri (Brasil)
(1) UNIFAL-MG;
Alves, D.F.(1); Del Roveri, C.(1); Navarro, F.C.(1); Matt, V.(1);

16-027
20, June
Influence of deflocculant in the granulometric distribution of bentonite
Bruna Michele Arruda de Brito Buriti (Brasil)
(1) UFCG;
Buriti, B.M.A.B.(1); Araújo, M.E.B.(1); Cartaxo, J.M.(1); Neves, G.A.(1);

16-028
20, June
The effect of Na2O, K2O, Li2O addition on structure of glass-ceramic materials from SiO2-Al2O3-CaO-MgO-R2O system modified by variable molar ratio of SiO2/Al2O3.
Janusz Partyka (Poland)
(1) JP; (2) KP; (3) ML; (4) MMB;
Partyka, J.(1); Pasiut,

16-029
20, June
The Passa Dois Group (Corumbataí and Estrada Nova Formation) in the State of São Paulo, Brazil: source of raw material for the ceramics industry.
Sergio Ricardo Christofoletti (Brasil)
(1) IF; (2) Unesp Rio Claro / Fapesp;
Christofoletti, S.R.

16-031
20, June
Development of ZnO white opaque glazes
Magdalena Lesniak (Poland)
(1) ML; (2) JP; (3) MG; (4) MS;
Lesniak, M.(1); Partyka, J.(2); Gajek, M.(3); Sitarz, M.(4);

16-033
20, June
Electron Paramagnetic Resonance Study of Cu2+-Intercalated Bentonites
Jose Pedro Donoso (Brazil)
(1) USP; (2) UTEM; (3) U Chile;
Donoso, J.P.(1); Magon, C.J.(1); Silva, I.A.(1); Benavente, E.(2); Gonzalez, G.(3);

16-036
20, June
Characterization and application of a zinc clay smectite synthetic
Francisco Rolando Valenzuela-Diaz (Brasil)
(1) EPUSP; (2) UFPA;
Carvalho, T.C.(1); Hidelbrando, E.A.(2); Neves, R.F.(2); Valenzuela-diaz, F.R.(1);

16-038
20, June
Intercalation of Kaolinite from the Rio Capim-PA-Brazil with Dimethyl Sulfoxide under Hydrothermal Conditions
Francisco Rolando Valenzuela-Diaz (Brasil)
(1) UFPA; (2) EPUSP;
Neves, R.F.(1); Carvalho, T.C.(2); Silva Valenzuela, M.G.(2); Angélic

16-039
20, June
Analysis of the influence of the fusibility and coefficient of thermal expansion on the centre curvature of ceramic tiles - a statistical approach
Antonio Gabriel Del Rio (Brazil)
(1) SENAI SP;
Del Rio, A.G.(1); Talarico, A.B.(1); Rodrigues, B

16-041
20, June
Manufacturing and Characterization of ceramic filter using a Brazilian bentonite modified aiming to use in waste cooking oil recycling
Christiano Gianesi Bastos Andrade (Brasil)
(1) EPUSP; (2) UFPA; (3) USP;
Bastos Andrade, C.G.(1); Freitas, G

16-042
20, June
Ceramic characterization of raw material with a high content of organic matter reduced by composting
Carolina Del Roveri (Brasil)
(1) UNIFAL; (2) UNIFAL-MG;
Silva, B.F.(1); Damasceno, L.S.(1); Maestrelli, S.C.(2); Costa, R.B.(1); Del Roveri, C

16-043
20, June
Study of correlation between determination methods of cations exchange capacity (CEC) of bentonitic clays
Camila Tavares Brasileiro (Brasil)
(1) UFSCar; (2) UFPB;
Brasileiro, C.T.(1); Ferreira, H.S.(2); Silva, L.D.C.(2); Almeida Filho, H.D.(2)

16-045
20, June
Study of the tailings of hydrocyclone purified bentonitic clays
itallo gonçalves morais (Brazil)
(1) ; (2) UFCG; (3) ufcg;
Morais, i.g.(1); Silva, I.A.(2); Brito, B.M.(3); Menezes, R.R.(2); Neves, G.A.(2);

16-049
20, June
Organic modification of brazilian smectite clay using different methods
Ticiane Sanches Valera (Brazil)
(1) USP;
Valera, T.S.(1); Lins, P.G.(1);

16-052
20, June
Characterization of organophilized clays by contact angle measurement
Francesca Tatiana Albino (Brazil)
(1) UFSC; (2) T-cota;
Albino, F.T.(1); Alfaro, M.E.(1); Hotza, D.(1); Garcia, D.E.(1); Da Silva, H.C.(2);

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16-053
20, June
Determination of Life Time of Red Ceramic Parts Incorporated with Ornamental stone Residue
Gustavo Castro Xavier (Brasil)
(1) UENF; (2) IME; (3) UFV;
Xavier, G.C.(1); Alexandre, J.(1); Azevedo, A.R.G.(1); Monteiro, S.N.(2); Pedroti, L.G.(3);

16-054
20, June
Study of Red Ceramic Behavior with Activated Carbon Residue
Lucas Alexandre Ruths (Brazil)
(1) UTFPR; (2) UNICENTRO;
Ruths, L.A.(1); Miyahara, R.Y.(2);

16-055
20, June
Characterization and Evaluation of Syenite rocks of Poços de Caldas (MG) in the Manufacture of Frits and Glazes.
Carolina Del Roveri (Brasil)
(1) UNIFAL-MG;
Gouvêa Júnior, J.(1); Del Roveri, C.(1); Maestrelli, S.C.(1);

16-056
20, June
Use of homogeneous pegmatite as raw material in ceramic coating manufacturing
Thalles Confessor Lima (Brasil)
(1) IFRN;
Lima, T.C.(1); Souza, M.M.(1); De Farias, D.S.U.(1); Almeida, A.B.(1); Sousa, J.B.M.(1);

16-057
20, June
Influence of the addition of glass waste for the production of ceramic arts facilities of the itaocara region.
Afonso Rangel Garcez Azevedo (Brasil)
(1) UENF; (2) UNIREDENTOR;
Azevedo, A.R.G.(1); Alexandre, J.(1); Marvila, M.T.(1); Zanelato, E

16-059
20, June
Effects of red mud on properties of red ceramics
Ulisses Soares Prado (Brasil)
(1) UENF; (2) IPEN; (3) IME;
Babisk, M.P.(1); Amaral, L.F.(1); Ribeiro, L.S.(1); Prado, U.S.(2); Monteiro, S.N.(3); Vieira, C.M.F.(1);

16-060
20, June
Study of the incorporation of vegetable biomass in red ceramics
Michelle Pereira Babisk (Brasil)
(1) UENF;
Babisk, M.P.(1); Barreto, G.(1); Delaqua, G.C.G.(1); Vieira, C.M.F.(1);

16-061
20, June
The Influence of a Natural Additive Obtained from Fique Leaf Juice (Furcraea SPP) in the Properties of Clay Masses
lida patricia paz villegas (Columbia)
(1) Univalle;
Paz Villegas, l.p.(1);

16-063
20, June
Reactive formations Northeast of Brazil: characterization and capacity expansion analisys
Danielly Vieira Lucena (Brasil)
(1) IFPB; (2) UFCG;
Lucena, D.V.(1); Da Rocha, C.O.(1); Barbosa, M.S.(1); Souto, C.R.A.(2); Severo, I.P.(1); Barros, F.O.

16-064
20, June
The kaolin of the amazon region and its potential for the manufacture of ceramic materials
Lillian Cardoso Nascimento (Brazil)
(1) UFAM;
Nascimento, L.C.(1); Lima, R.H.C.(1);

16-068
20, June
Analysis of the potential use of PR-Prudentópolis in Porcelain Clay Mass
José Ilo Pereira Filho (Brazil)
(1) UTFPR-PB; (2) UTFPR;
Baldin, C.R.B.(1); Navarini, C.(1); Santos, G.R.(2); Pereira Filho, J.(2); Lazzaretti, I.(1); Siqueira, T.E.(2);

16-069
20, June
Mixture design of Colombian clays to obtain light weight aggregates
Santiago Betancourt (Columbia)
(1) UPB;
Betancourt, S.(1); Carvajal, I.(1); Martinez, J.D.(1); Betancurt, M.(1);

16-071
20, June
Analysis of the efflorescence formation in red ceramics with incorporations of steel waste after washing process
Danilo Silva Luz (Brasil)
(1) Unifesspa; (2) UNIFESSPA;
Luz, D.S.(1); Barbosa, A.C.(1); Sousa, R.C.(2); Fagury Neto, E.(2); Rabelo

16-072
20, June
Study of electric arc furnace steel waste efflorescence formation incorporated in red ceramics
Adriano Alves Rabelo (Brasil)
(1) Unifesspa; (2) UNIFESSPA;
Barbosa, A.C.(1); Luz, D.S.(1); Sousa, R.C.(2); Fagury Neto, E.(2); Rabelo, A.A.(2);

Symposium Q:
New trends in silicate and clay-based ceramics

Fernando dos Santos Ortega

17-006
19, June
Synthesis and Characterization of Pseudoboehmite obtained by sol-gel method started with aluminum nitrate (Al(NO3)3) and potassium hydroxide (KOH)
Renato Meneghetti Peres (Brasil)
(1) MACKENZIE; (2) EPUSP; (3) Mackenzie;
Peres, R.M.(1); Munhoz

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17-007
20, June
Evaluation of the influence of synthesis parameters in the textural characteristics of SBA-15 mesoporous silicas with addition of alumina
Jéssica Oliveira Notório Ribeiro (Brasil)
(1) UFMG; (2) Statoil;
Ribeiro, J.O.N.(1); Vasconcelos, D.C.L.

17-008
19, June
Production of porous spheres based on Alumina/Calcium carbonate coated with silver nanoparticles
Ligia Maria Manzine Costa (Brasil)
(1) USP;
Costa, L.M.(1); Poiani, A.B.(1); Salomão, R.(1);

17-009
20, June
Production of calcium hexaluminate porous spheres with hierarchical structure.
Ligia Maria Manzine Costa (Brasil)
(1) USP;
Costa, L.M.(1); Poiani, A.B.(1); Salomão, R.(1);

17-010
19, June
X-ray absorption fine structure spectroscopy and photoluminescence study of multifunctional europium (III)-doped hydroxyapatite in the presence of cationic surfactant medium.
Thiago Augustus Remacre Munareto Lima (Brasil)
(1) IFS;
Lima, T.A.R.

17-013
19, June
Influence of composition on production of scaffolds made of aluminate cement base
Iranel de las Nieves Gonzalez (Brasil)
(1) UNIVAP; (2) Univap; (3) UFSCar;
Gonzalez, I.N.(1); Dos Santos, K.W.(2); Oliveira, I.R.(1); Pandolfelli, V.C.(3);

17-016
20, June
Synthesis and characterization of Mesoporous silica under different thermal conditions
Carlos Patrick Tomazelli Soares (Brazil)
(1) UFGD; (2) IFMS/UFGD; (3) IFBA;
Soares, C.P.T.(1); Chagas, E.(2); Andrade, R.C.(3); Falcão, E.A.(1); Botero, E.(

17-017
19, June
Synthesis and thermal behavior of sol-gel derived zirconium oxide
Débora Guimarães da Silva (Brazil)
(1) UFMG;
Silva, D.G.(1); Paraguay, L.F.G.(1); Vasconcelos, W.L.(1);

17-018
20, June
Effect of sol-gel processing parameters on structure of zirconia
Débora Guimarães da Silva (Brazil)
(1) UFMG;
Silva, D.G.(1); Paraguay, L.F.G.(1); Vasconcelos, W.L.(1);

17-024
20, June
Vitrocrystalline Foams Produced from Discarded Glasses Bottles and Pine Scales
Naiane Paiva Stochero (Brasil)
(1) UFSC;
Stochero, N.P.(1); Chami, J.R.S.(1); De Moraes, E.G.(1); Novaes De Oliveira, A.P.(1);

17-026
19, June
Ceramic Shell Foams Produced by Direct Foaming and Gelcasting of Proteins: Microstructural and Fluid dynamic Characterization
Naiane Paiva Stochero (Brasil)
(1) UFSC;
Stochero, N.P.(1); De Moraes, E.G.(1); Novaes De Oliveira, A.P.(1); Moreira,

17-030
20, June
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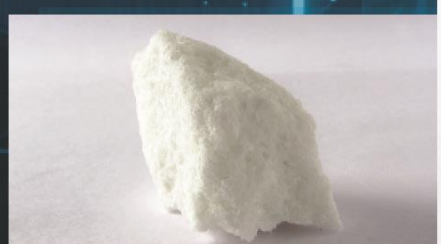


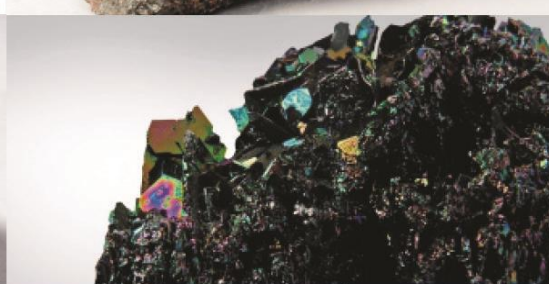

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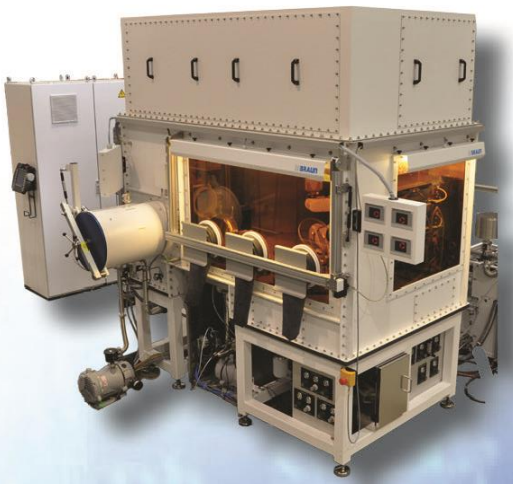

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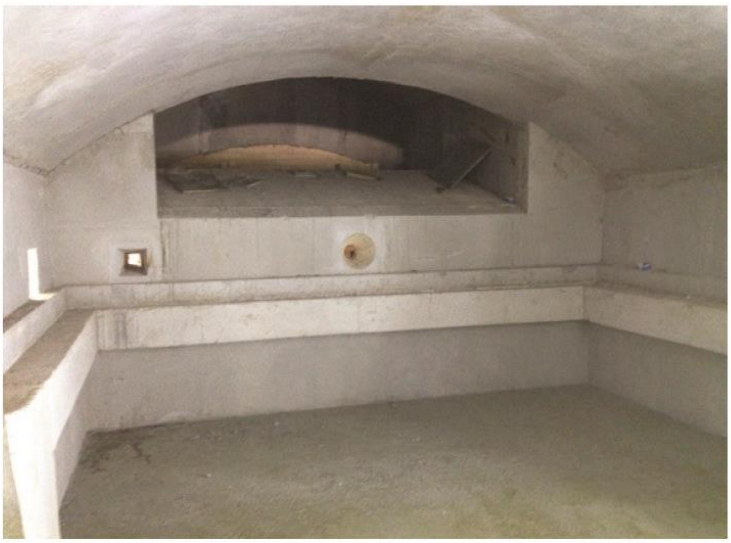

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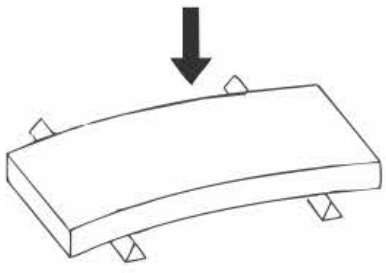

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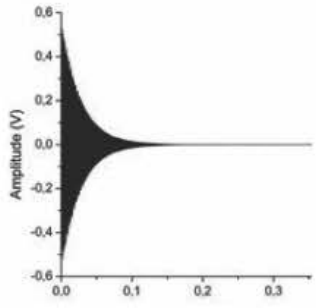

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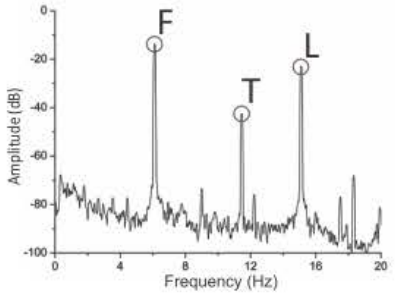

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