Invited Speaker	Presentation
Pavol Sajgalik, Institute of Inorganic Chemistry	GB chemistry of silicon nitride based nano-composites – implications to mechanical, tribological and chemical properties
Ajay Misra, NASA Glenn Research Center	Advanced Ceramic Materials for Future Aerospace Applications
Samuel Bernard, European Membrane Institute	Metal-Supported Polymer-Derived Ceramics for Hydrogen Generation
George Wicks, Wicks Consulting Services, LLC	Tiny Bubbles: Porous Wall Hollow Glass Microspheres (PWHGMs) in Energy, Environmental Remediation, Defense and Medicine
Walter Krenkel, University of Bayreuth	Ceramic Matrix Composites Based on Liquid Phase Routes
Mohan Manoharan, GE Aviation	Industrialization of Ceramics for Aerospace Applications
Francis Cambier, Belgian Ceramic Research Centre	Processing of graded ceramic-metal composites for functional applications
Anne Leriche, University of Valenciennes	Influence of porous scaffolds structure on their mechanical properties and cell colonization ability
Gerd Meyer, Iowa State University	The Rare Earth Elements among the Critical Elements
Danilo Suvorov, Jozef Stefan Institute	New trends of electronic materials for future needs
Thomas Wyrobek, Hysitron, Inc.	On the Evolution of Nanomechanical Characterization for Brittle Solids
Gerard Vignoles, University Bordeaux	Status of CMCs and C/Cs in the EU: markets, research & development, perspectives
Monica Ferraris, Politecnico di Torino	Recent development in joining of CMC
Hua-Tay Lin, Guangdong University of Technology	Advanced Si-based Ceramics for Clean Energy Technologies
Anil Virkar, University of Utah	Ceramics in Electrochemical Energy Conversion, Energy Storage and Fuel Synthesis
Michael Vick, U.S. Naval Research Laboratory	Cost Effective Ceramics in High Efficiency Microturbines
Alexander Michaelis, Fraunhofer IKTS	Future potential of advanced ceramics and contribution of Fraunhofer for technology transfer to industry
Michael Hoffmann, Karlsruhe Institute of Technology (KIT)	Advanced Ceramics for Automotive Industry
William Lee, Imperial College London	The UK Ceramic Community's Interaction with the EU and the USA: Learning from Both
Girish Kale, University of Leeds	Phase transformation and ac-electrical conductivity of Ho2(ZrxTi1-x)2O7 solid solution series
Sanjay Mathur, University of Cologne	Metal Oxide Semiconductors for Energy Harvesting Applications
Richard Sisson, WPI	Resilience, Sustainability ad Robustness in Ceramic Processing
Jerzy Lis, AGh University of Science and Technology	The experiences in research and transfer of innovative high tech ceramic technologies in Poland
Stefania Hapis, Technical University Darmstadt	Atomic arrangement of Polymer-Derived Ceramics studied by Pair Distribution Function from Electron Diffraction in TEM
Bert Conings, Hasselt University	Perovskite solar cells – a tale of fascination
Masao Kamimura, Tokyo University of Science	Biofunctional polymer modification on ceramic nanophosphors for near-infrared biophotonics
Danny Vanpoucke, Ghent University	Computational Materials Science: Where Theory meets Experiment
Marta Quintanilla Morales, Institut National de la Recherche Scientifique	How dark is the dark side of lanthanide-based upconversion: quantum yield and possibilities of enhancement
Shinhu Cho, University of Illinois at Urbana-Champaign	Effect of fiber length on dynamic and static mechanical properties of milled, carbon fiber-reinforced, potassium geopolymer composite

Invited Speaker	Presentation
Waltraud Kriven, University of Illinois at Urbana-Champaign	HT Mechanical Properties of Alumina or Mullite Fiber/Weave Reinforced Geopolymer Composites
Fongjan Jirasit, RMUTL	Long-term development of mechanical strength of alkali-activated metakaolin (MK), fly ash (FA), slag (H) and hybrids (FA/MK, H/MK)
Nadia Houta, GEMH-CEC	Influence of halloysite nanotubes on the microstructure and mechanical resistance of textured ceramic substrates shaped by tape-casting
Sylvie Rossignol, SPCTS	Geopolymer binder for building systems effect of silica on geopolymer reactivity
Dinesh Medpelli, Arizona State University	Synthesis and Characterization of Geopolymer Nanoaggregates and Their Ion-exchange Properties
Claus Rüscher, University of Hannover	Ammonia-borane geopolymer (AB-G) composite
Marcelo Cilla, Federal University of São Carlos	Effect of triglyceride source on the physical properties of geopolymer foams obtained by the saponification / peroxide / gelcasting combined route
Surojit Gupta, University of North Dakota	Current Progress in the Development of Next Generation Green Manufacturing Technologies
Marjaana Karhu, VTT Technical Research Centre of Finland	Sustainable design driven philosophy:case studies of sustainable materials and processing
Hubert Rahier, Vrije Universiteit Brussel	Plant ashes as activator for alkali activation
Cengiz Bagci, Hitit University	Microstructural investigation of carbothermally reacted geopolymer composites, made under specific alkaline conditions
Ameni Gharzouni, SPCTS	Effect of the reactivity of the alkaline solution on geopolymer formation
Daniel Chua, National University of Singapore	Carbon-based materials by Pulsed Laser Deposition and some applications
K. Richardson, University of Central Florida	Engineering Novel Infrared Glass Ceramics for Advanced Optical Solutions
Valerio Pruneri, ICFO-The Institute of Photonic Sciences	Ultrathin materials and nano-structuring for multifunctional transparent surfaces
Michel Mortier, PSL Research University	Laser performances of diode-pumped Yb:CaF2 optical ceramics obtained with an energy-efficient process
Nate Quitoriano, McGill University	Low temperature deposition of photoluminescent Si nanocrystals in a silica matrix
Oussama Moutanabbir, Ecole Polytechnque de Montreal	in situ Studies of the Thermal Stability of Group IV Binary and Ternary Alloys
Emiliano Descrovi, politecnico di torino	Light manipulation through surface waves in dielectric multilayers
Ryuzi Katoh, Nihon university	Charge separation and recombination processes in bare and dye-sensitized TiO2 nanoparticles
Akihiro Furube, National Institute of Advanced Industrial Science and Technology	Ultrafast spectroscopic study on interfacial electron transfer in some sensitized solar cell systems
Riad Nechache, Institut National de la Recherche Scientifiqure (INRS)	Perovskite materials on Silicon for photovoltaics
Christine Luscombe, University of Washington	Solution processed organic/inorganic photovoltaics
Mauro Epifani, CNR-IMM	Composing Metal Oxide Nanocrystals for Improved Gas-Sensors: from Surface Modification to Inter-Oxide Cross-Talk
Roger Narayan, UNC/NCSU Joint Dept of Biomedical Engineering	Two photon polymerization of inorganic-organic hybrid materials for medical implant applications
Fiorenzo Vetrone, Université du Québec	Lanthanide-Doped Nanoparticles: Versatile Near-Infrared Excited Optical Bioprobes
Gunnar Westin, Uppsala University	Complex oxides through alkoxide based solution synthesis
Cerasela Zoica Dinu, West Virginia University	Metal oxide heterogeneous interfaces for robust photocatalysis
Joseph Grady, NASA Glenn Research Center	A Fully Nonmetallic Turbine Engine by Additive Manufacturing Technologies

Invited Speaker	Presentation
Yuanyuan Liu, University of Manchester	Controlling the Coffee Stain from Inkjet Printed Drops
Jens Günster, BAM	Dense powder beds for powder-based additive manufacturing of ceramics
Martin Schwentenwein, Lithoz GmbH	New Materials for Additive Manufacturing of High-Performance Ceramics
Octavian Bunoiu, West University of Timisoara	Effective segregation coefficient of rare - earth ions in fluorite crystals
Zhanggui Hu, Technical Institute of Physics and Chemistry,CAS	Large-size Nonlinear Optical LBO Crystal Growth
Seizi Nishizawa, University of Fukui	Terahertz Time-Domain Spectroscopy Application to Non-destructive Quality Evaluation of Industrial Crystalline Materials
Gisele Maxwell, Shasta Crystals Inc	Coilable Single Crystals Fibers of Doped-YAG for High Power Laser Applications
Philippe Goldner, Chimie Paristech	Rare Earth Doped Crystals for Quantum Information Storage
Luisa Bausa, Universidad Autonoma de Madrid	Optical sources at the nanoscale by the interaction between localized surface plasmons and nonlinear solid state gain media
Kiyoshi Shimamura, National Institute for Materials Science	Garnet single crystals for efficient phosphor and optical isolator applications
Kenji Toda, Niigata university	Growth of Oxide and Nitride Phosphor Single Crystal using Gas Phase Method
Vladimir Kochurikhin, General Physics Institute	Recent progress in growth of rare-earth vanadate single crystals by the Edge-Defined Film-Fed-Growth (EFG) technique
Dae-Ho Yoon, SungKyunKwan Univeristy	Crystalline Phosphor Ceramic Plate for Next Generation Automobile Head Lamp
Patrice Camy, University of Caen	Impact of rare-earth ion clustering on the spectroscopic and thermo-mechanical properties of the Yb3+ and Nd3+ doped laser crystals
Klaus Becker, TU Braunschweig	A High-Temperature Optical Spectroscopy Study of Lithium Niobate, LiNbO3
Xutang Tao, Shandong University	Crystal growth,linear and nonlinear optical properties of BaTeMo2O9
Claude Delmas, CNRS	Solid state electrochemistry: a tool for synthesis and characterization of solids
Christo Guguschev, Leibniz Institute for Crystal Growth	Influence of oxygen partial pressure on SrTiO3 crystal growth from non-stoichiometric melt
Detlef Klimm, Leibniz Institute for Crystal Growth	Reactive Atmospheres for Oxide Crystal Growth
Andrey Medvedev, OAOFomos-Materials""	Application of Langasite Family Crystals in Piezoelectric Devices
Keigo Hoshikawa, Shinshu University	Growth of Oxide Crystals Using the Traditional Vertical Bridgman Method
Alain Largeteau, ICMCB-CNRS	Hydrothermal Crystal Growth and applications
Mariola Ramirez, Universidad Autonoma Madrid	Simultaneous generation of multiple nonlinear processes in patterned ferroelectrics
Hiroaki Takeda, Tokyo Institute of Technology	Piezoelectric single crystals excluding polar axis for high temperature sensor application
Yuji Noguchi, The University of Tokyo	Materials Design for Enhancing Piezoelectric Properties of High-Quality Bi-based Ferroelectric Single Crystals
Mario Maglione, ICMCB-CNRS	Ferroelectric and relaxor BCTZ piezoelectric single crystals
Kazuhiko Echizenya, JFE MINERAL COMPANY,LTD.	Relaxor-based single crystals grown by continuous feeding
Edith Bourret, Lawrence Berkeley National Laboratory	Discovery, Growth and Characterization of Scintillators
John Frank, Saint-Gobain Crystals	Co-doping technique in scintillation materials synthesis

Invited Speaker	Presentation
Andrzej Mycielski, Institute of Physics Polish Academy of Sciences	(Cd,Mn)Te as a New Material for X - ray and Gamma – ray Detectors
Kevin Stevens, Northrop Grumman SYNOPTICS	Crystal Growth at Northrop Grumman SYNOPTICS
Robert Feigelson, Stanford University	Growth of Halide Single Crystals by the EFG Method
Christophe Dujardin, University Lyon1	Shaped Scintillating Materials
Ralph James, Brookhaven National Laboratory	Compound Semiconductor X- and Gamma-Ray Radiation Detectors
Leo Schowalter, Crystal IS	Development of single-crystal AlN for high performance, ultraviolet (UVC) LEDs
Tatsuo Fujimoto, Nippon Steel & Sumitomo Metal Corp.	Recent progress in SiC single crystal wafers for power electronic device applications
Yuichi Oshima, National Institute for Materials Science	Halide Vapor Phase Epitaxy of β-Ga2O3
Takehiro Yoshida, Hitachi Metals, Ltd.	Recent progress of GaN substrates manufactured by VAS method
Kohei Sasaki, Tamura corporation	Homoepitaxial growth on single-crystal β-Ga2O3 substrates by molecular beam epitaxy
Ben Depuydt, Umicore	Germanium: From the first application of Czochralski crystal growth to the foundation of high-efficiency multi-junction solar cells
Matthias Bickermann, Leibniz Institute for Crystal Growth (IKZ) Berlin	Preparation and properties of bulk aluminum nitride (AlN) crystals and substrates
Koichi Kakimoto, Kyushu University	SiC crystal growth of elecrical and optical devices
Elvira Fortunato, FCT-UNL	New Challenges for Transparent Conducting and Semiconducting Oxides
Marinela Miclau, National Institute for Research and Development in Electrochemistry and Condensed Matter	Recent advances in the hydrothermal synthesis of Cu–delafossite nanocrystals
Laura Esposito, CNR	Complex layered SSL sources produced by a multipurpose, adaptable and fast ceramic process
Yasuyuki Fujiwara, Shinshu University	Single-Crystal Growth of Solid Electrolyte LixLa(1-x)/3NbO3 by Unidirectional Solidification Method
Rishi Raj, University of Colorado at Boulder	The Phenomenon of Flash Sintering: Scientific and Technological Implications
Thomas Tsakalakos, Rutgers University	Flash Sintering of Ultrahigh Melting Temperature Covalent Nonoxide Ceramics at Low Temperatures with Low DC Electric Fields
Claude Estournes, CIRIMAT	Carbon nanotube (CNT)-copper composites: Powder, Spark Plasma Sintering, microstructure and mechanical properties
Kazushige Ohno, IBIDEN	Next Generation Diesel Particulate Filter (DPF) Development and Implementation Strategy
Cato Laurencin, University of Connecticut Health Center	Regenerative Engineering: The Theory and Practice of a Next Generation Field
Sanjay Mathur, University of Cologne	Chemically Processed Nanostructured Ceramics: Opportunities for Energy and Health Applications
David Clarke, Harvard University	Materials Selection for the Next Generation Thermal Barrier Coatings
Dietmar Koch, Institute of Structures and Design	Internal pressure test and finite element analysis of a C/C-SiC rocket nozzle
Noel Nemeth, NASA Glenn Research Center	FEAMAC-CARES: CARES (Ceramics Analysis and Reliability Evaluation of Structures) and MAC/GMC (Micromechanics Analysis Code/ Generalized Method of Cells) Software Coupling Development
Randall Hay, Air Force Research Laboratory	Quantification and Modeling of Environmental Effects on SiC Fibers
Xiaowei Yin, Northwestern Polytechical University	C/SiC composites with a self-healing SiBC matrix fabricated by liquid silicon infiltration
Yanchun Zhou, Institute of Metal Research	Theoretical Prediction and Experimental Investigation on the Thermal and Mechanical Properties of Bulk Yb2SiO5 and β-Yb2Si2O7

Invited Speaker	Presentation
Jacques Lamon, CNRS, ENS	Investigation of the flexural strength of continuous fiber reinforced ceramic matrix composites
William Clegg, University of Cambridge	Deformation of fine-grained CrAlN hard coatings
Oyelayo Ajayi, Argonne Nat Lab	Synergy of Ceramic Coatings and Lubricant Technologies on Scuffing of Surfaces
Wai-Yim Ching, University of Missouri-Kansas City	Use of Ab Initio Data in Materials Informatics: Application to MAX Phases
Liping Huang, Rensselaer Polytechnic Institute	Understanding Intrinsic Ductility of Glass from Its Elastic Response
Gerard Vignoles, University Bordeaux	Image-based modeling of stitched C/C composites
Jingyang Wang, Institute of Metal Research	Strategy to achieve lower intrinsic lattice thermal conductivity
Hans Seifert, Karlsruhe Institute of Technology	Thermodynamic modeling and simulations for Lithium-ion batteries and their materials
Leonhard Mayrhofer, Fraunhofer IWM	Highly Selective Hybrid Gas Sensors: Insights from DFT
Qing-Miao Hu, Insitute of Metal Research, Chinese Academy of Sciences	Composition dependent hardness of covalent solid solutions and its electronic structure origin
Xing-Qiu Chen, Institue of Metal Research, Chinese Academy of Sciences	Nonlocal Exchange-Interaction Effects in Accurately Determining Vacancy Formation Enthalpy of Solids
Paul Rulis, University of Missouri - Kansas City	An ab initio Electronic Structure and Bonding Study of Elemental Boron, Boron Rich Crystals, and Amorphous Hydrogenated Boron Carbide
Katsuyuki Matsunaga, Nagoya University	Atomic Structure and Bonding of Metal Atoms Adsorbed on Titania Surfaces
Jean-Marc Leyssale, CNRS	Atomistic modeling of 2D and 3D nanocrystalline graphenic carbons: Structure and elastic properties
Bin Liu, Oak Ridge National Laboratory	Segregation and trapping of oxygen vacancies near the SrTiO3 Σ3 (112) [-110] tilt grain boundary
Brian Good, NASA Glenn Research Center	Kinetic Monte Carlo Simulation of Oxygen Diffusion in Ytterbium Disilicate
Eva Zarkadoula, Oak Ridge National Laboratory	Molecular Dynamic Simulations of Synergistic Effects in Ion Track Formation
Jian Luo, UCSD	Systematics of Grain Boundary Transitions and Diagrams
Yanwen Zhang, Oak Ridge National Laboratory	Effects of irradiation and dopants on grain growth in nanocrystalline oxides
Kazuyoshi Ogasawara, Kwansei Gakuin University	Multiplet Energy Diagrams of d3 Ions Based on First-Principles Calculations for Theoretical Design of Red Phosphors for White LEDs
Ali Erdemir, Argonne National Laboratory	Extraordinary Friction and Wear Behavior of One-atom-thick Graphene
Tim Hosenfeldt, Schaeffler Technologies GmbH & Co. KG	Surface Technology as Key Technology for Future Mobility
Masahiro Yoshimura, Cheng Kung University	Electrochemical Assisted Microstructure Control for Ceramic Coatings on Metallic Materials by Growing Integration Layer [GIL] Method
O. Eryilmaz, Argonne National Laboratory	Hard Coatings in a Challenging Tribological Application
M. Ürgen, Istanbul Technical University Department of Metallurgical and Materials Engineering	Aluminizing-Alloying of Metal Surfaces with Cathodic Arc Plasma Treatment
Jochen Schneider, RWTH Aachen Univeristy	Quantum mechanically guided materials design approaches for industrial coating applications
C. Lorenzo Martin, Argonne National Laboratory	Impact of lubricant chemistry on friction and wear behavior of thin-film ceramic coatings
R. Tietema, IHI Hauzer Techno Coating B.V.	Innovative process technologies for enhanced product performance
Hiroshi Tamagaki, Kobe Steel, Ltd.	Deposition technologies of carbon-based coating; unbalanced magnetron sputtering and MF-AC PECVD

Invited Speaker	Presentation
Takashi Goto, IMR Tohoku University	Sintering Combined with Coating for Developing High Performance Ceramics
Tadachika Nakayama, Nagaoka univ of Tech	Fabrication of Barium-Ferrite and Polymer Hybrid System with Highly Regulated 3D micro Structures
Ramesh Peelamedu, BTU INTERNATIONAL	Processing of Carbonaceous Materials using Microwave Energy
Junichi Tatami, Yokohama National University	Fabrication of High-Strength Si3N4 Ceramics by Post-reaction Sintering Technique Using Waste Si Sludge
Soshu Kirihara, Osaka University	Creation of ceramics micro components and fine coated layers by using nanoparticles paste stereolithography and thermal spraying
Eric Wuchina, Office of Naval Research	High-Temperature Materials for Hypersonic Applications
Miladin Radovic, Texas A&M University	The Role of Microstructure on Mechanical Behavior of Ti2AlC
Xiaohui Wang, Institute of Metal Research	A novel Ti3AlC2-derived composite with unexpectedly excellent wear resistance and anomalous flexural strength
Martin Dahlqvist, Linköping University	Magnetic properties and stability of Mn2GaC and effects of Cr-Mn alloying
James Smialek, NASA Glenn Research Center	Alumina-Forming MAX Phases in Turbine Material Systems
Weigang Zhang, Institute of Process Engineering, Chinese Academy of Sciences	Preparation and Microstructure Investigation of UHTC Fibers
Wai-Yim Ching, University of Missouri-Kansas City	A Genomic Approach to MAX Phases: An Overview
William Clegg, University of Cambridge	The relevance of kinking in the hysteresis of MAX phases
William Fahrenholtz, Missouri University of S & T	Thermal Properties of Zirconium Diboride Ceramics
Anne Joulain, Pprime Institute	Plasticity in MAX Phases at low and high temperature: a multiscale experimental approach
Mark Mitchell, EON Consulting	Development of a Standard for the use of composites in a High Temperature Reactor
Konstantina Lambrinou, SCK-CEN	Corrosion-resistant nano-laminated ternary carbides for use in heavy liquid metal coolants
Michel Barsoum, Drexel University	Potential and Opportunities for MAX Phase in Nuclear Applications
Kumar Sridharan, University of Wisconsin	Corrosion of Materials in Molten LiF-BeF2 (FLiBe) Salt for Fluoride Salt-Cooled High Temperature Reactor
Christina Back, General Atomics	SiC-SiC Composite Technology Needs and Developments for the Energy Multiplier Module Reactor, EM2
Cédric Sauder, DEN/SRMA/LTMEX	Mechanical Behaviour of SiC/SiC composites after immersion in a Sodium environment at 550°C and up to 2000h
Weon-Ju Kim, Korea Atomic Energy Research Institute	Mechanical Behavior and Chemical Compatibility of SiC-Based Ceramics and Composites for Nuclear Applications
Steven Zinkle, University of Tennessee	Materials Options for Accident Tolerant Fuels in Light Water Reactors
Greg Hilmas, Missouri University of Science and Technology	Ultra-High Temperature Ceramics and their Potential in Nuclear Applications
Shoko Suyama, Toshiba Corporation	Development of SiC composite for light-water reactor accident tolerant fuels
Michael Jenkins, Bothell Engineering and Science Technologies	Hoop Tensile Strength of Composite Tubes for LWRS Applcations Using Internal Pressurization: Draft ASTM Test Method
Alex Cozzi, Savannah River National Lab	Stabilization of Concetrated Low Activity Waste in a Cementitious Waste Form
Jake Amoroso, Savannah River National Laboratory	Ceramic Waste Forms for Immobilization of Waste from Commercial Fuel Reprocessing
Jarrod Crum, Pacific Northwest National Laboratory	Glass Ceramic Waste Form Development for High-Level Waste from Reprocessed Spent Nuclear Fuel

Invited Speaker	Presentation
Theodore Besmann, Oak Ridge National Laboratory	Compatibility in Advanced/Accident Tolerant Nuclear Fuels
Rajendra Bordia, Clemson University	Precursor Derived Composite Ceramic Joints for Ceramics and Ceramic Matrix Composites
Monica Ferraris, Politecnico di Torino	Pressure-less joining of silicon carbide based components
Saša Novak, Jozef Stefan Institute	On the Research Activities and Achievements in SiCf/SiC Composites for Fusion Structural Applications
Izabela Szlufarska, University of Wisconsin	Radiation effects on defect mobility in SiC
Ji-Jung Kai, National Tsing-Hua University	Irradiation-induced microstructural evolution and swelling of 3C-SiC
Soshu Kirihara, Osaka University	Porosity Control in Ceramics Coated Layers by Friction Effect Modulations on Tilted Thermal Nanoparticles Spraying
Yiguang Wang, Northwestern Polytechnical University	Failure mechanisms associated with the silica scale in BSAS coated C/SiC composites
Hans-Peter Bossmann, Alstom (Switzerland) ltd	Field Experience in Heavy Duty Gas Turbines Operating in CMAS Type Conditions
Maurice Gell, University of Connecticut	Development and Commercialization of Solution Precursor Plasma Spray Thermal Barrier Coatings
Soumendra Basu, Boston University	Functionally Graded Mullite-Based Hybrid EBC/TBC Coatings for Si-Based Ceramics in Gas Turbines
Uwe Schulz, DLR	Lifetime of new single and double layer EB-PVD thermal barrier coatings and their beavior under deposits
Federico Cernuschi, RSE	Non destructive assessment of interface damage progression of TBC samples subject to FCT or burner rig ageing
Yasunobu Mizutani, Toho Gas Co., Ltd.	Recent Development of Micro CHP Systems for Household (ENE-FARM) in Japan
Briggs White, Dept. of Energy	SECA Program Status - 2015
Ulrich Vogt, Empa	Chemical and microstructural investigations for chromium transport in intermediate temperature solid oxide electrolysis cells
Jeff Stevenson, Pacific Northwest National Laboratory	Solid Oxide Fuel Cell Materials Development at PNNL
Keiji Yashiro, Tohoku University	Surface Reaction of Doped Lanthanum Cobaltite System
Nicola Perry, Kyushu University	Tailoring Chemo-Mechanical Coupling to Enhance Durability of Mixed Conducting Perovskite Electrodes
Hirofumi Sumi, National Institute of Advanced Industrial Science and Technology (AIST)	Development of microtubular solid oxide fuel cells using hydrocarbon fuels
Dario Montinaro, SOFCpower SpA	Development of solid oxide cells and stack materials for intermediate temperature SOFC and SOEC applications
Scott Barnett, Northwestern Univ	High Efficiency Electrical Energy Storage Using Reversible Solid Oxide Cells
Anil Virkar, University of Utah	Reversible Solid Oxide Fuel Cells using Mixed Ionic-Electronic Conducting Electrolytes: Performance and Stability
Josef Schefold, European Institue for Energy Research	Steam Electrolysis with Electrode and Electrolyte Supported Solid Oxide Cells: Stability Testing Focussing on the 5000+ Hours Time Scale
Enrico Traversa, King Abdullah University of Science and Technology	Proton-Conducting Solid Oxide Electrolysis Cells (SOECs) with Chemically Stable Electrolytes
Tatsumi Ishihara, Kyushu University	Dopant effects on La0.4Ce0.6O2 sintering temperature for anode supported Solid Oxide Fuel Cells using LaGaO3 electrolyte
Meike Schlupp, Empa, Swiss Federal Laboratories for Materials Science and Technology	Improving performance and long-term stability of solid oxide cells by integration of AA-CVD thin films
Juergen Rechberger, AVL List GmbH	AVL SOFC Systems for Stationary and Mobile Applications
Jian Luo, UCSD	Understanding Intergranular Films and Grain Boundary “Phase” Transitions

Invited Speaker	Presentation
Kelvin Xie, Johns Hopkins University	'Seeing' the Atoms in Boron Carbide with Atom Probe Tomography
Martin Harmer, Lehigh University	Grain Boundary Complexions – Implications to Ceramic Armor Development
Wayne Kaplan, Technion - Israel Institute of Technology	Adsorption Transitions and Controlling the Microstructural Evolution of Ceramic Systems
K. Madhav Reddy, Tohoku University	Atomic structure and deformation behaviour of boron-rich solids
Roger French, Case Western Reserve University	van der Waals Interactions and Hamaker Coefficients: At Atomically Abrupt Grain Boundaries in SrTiO3 And In Intergranular Films in Re-M-O-N:Si3N4
Jacob Stiglich, Ultramet	Tantalum-based Diffusion Coating for Increasing the Biocompatibility of Conventional Metal Implant Alloys
Federico Rosei, INRS	Nanoscale structure and modification of Biomaterials
Alastair Cormack, Alfred University	Modelling the Reactivity of Bioactive Glasses with Water
Leena Hupa, Åbo Akademi University	Finding Optimized Compositions for Bioactive Glasses in Novel Applications
Nathan Mellott, Alfred University	Chemical Durability of Oxide Bioceramics
Cuneyt Tas, University of Illinois	Submicron Spheres of Amorphous Calcium Phosphate forming in a Stirred SBF Solution at 55°C
Laurie Gower, University of Florida	Combining Soft and Hard Biomimetic Processing to Emulate Bone's Nano- and Micro-Structure
David Grossin, Université de Toulouse	Processing techniques and Characterizations of metastable biomimetic nanocrystalline apatites: Towards a new generation of calcium phosphate coatings and ceramics
Cuneyt Tas, University of Illinois	Simultaneous Testing of Calcite, Vaterite and Aragonite in Lac-SBF at 37 C
Anna Tampieri, CNR ISTEC (Faenza, Italy)	Smart bio-inspired nano-composites for tissue regeneration
Thierry Azaies, Pierre & Marie Curie University	Characterization of surface species in bone mineral and biomimetic apatites
Mohamed Rahaman, Missouri University of Science & Technology	Potential of Bioactive Glass as Synthetic Scaffolds in the Repair of Structural Bone Defects
Simone Sprio, National Research Council of Italy	New biomimetic strategies for regeneration of load-bearing bones
Steven Jung, MO-SCI Corporation	Review of the 2nd Innovations in Bioceramics Conference
Jacqueline Johnson, UTSI	Computed radiography with glass ceramic imaging plates
Yu Zhang, New York University College of Dentistry	Functionally Graded Ceramics for Next-generation Dental Restorations
Delbert Day, Missouri University of Science and Engineering	Multifunctional Glass Microspheres for Medical Applications
Akiyoshi Osaka, Okayama University	Synthesis of hollow silica flowers and titania nano-flowers for biomedical applications
Sudipta Seal, University of Central Florida	Rare Earth Nanoceria in Wound healing
Leif Hermansson, Doxa AB	On the Formation of Apatites in Chemically Bonded Bioceramic Systems
Enrico Bernardo, University of Padova	Novel porous bioceramics from the firing of silicone/calcite mixtures
Nina Kosova, Institute of Solid State Chemistry and Mechanochemistry	Avenue towards the development of new nanostructured composite cathode materials for lithium-ion batteries
Karena Chapman, Argonne National Laboratory	In-situ Characterization of Electrode Materials for Lithium Batteries
Shen Dillon, University of Illinois Urbana-Champaign	In-situ characterization of deformation creep response Li-ion electrode materials

Invited Speaker	Presentation
Chongmin Wang, Pacific Northwest National Laboratory	In-Situ TEM study of energy storage materials
Partha Mukherjee, Texas A&M University	Mechano-Electrochemical Interactions in Intercalation Electrodes
Robert Dominko, National Institute of Chemistry	Factors influencing Li-S battery cycle life – a combined in-situ analytical work
Michael Badding, Corning Incorporated	Lithium Metal Phosphate Solid Electrolytes via Reactive Sintering
Shyue Ping Ong, University of California San Diego	Design of Solid-state Electrolytes using High-throughput First Principles Computations
Claude Delmas, ICMCB -CNRS	Overlithiated layered oxides for energy storage
Dany Carlier, ICMCB-CNRS	The Nax(Co,Mn)O2 and Nax(Fe,Mn)O2 layered oxides used in Na Batteries : structural transformations and redox processes
Ganpati Ramanath, Rensselaer Polytechnic Institute	Realizing high thermoelectric figure of merit bulk nanomaterials through directed nanostructure synthesis, assembly and doping
Ryoji Funahashi, National Institute of Advanced Industrial Science & Technology	Development and application of oxide and silicide thermoelectric modules
Jian He, Clemson University	Quest for Higher Performance Thermoelectric Materials via Defect Engineering
Lilia Woods, University of South Florida	Novel Materials for Thermoelectric Applications via Collaborative Theoretical and Experimental Studies
Joerg Teubert, Justus-Liebig-Universität Giessen	Novel Group III-Nitride Optochemical Nanosensors
Anna Llordés, Lawrence Berkeley National Laboratory	Constructing Nanocrystal-in-glass Composite Materials from Colloidal Building Units
Ausrine Bartasyte, CNRS (UMR 6174) –UFC- ENSMM-UTBM	Can LiNbO3 be an alternative for PZT in vibrational energy harvesters?
Yoon-Bong Hahn, Dept of Earth and Envron Sci	Simultaneous Detection of Glucose, Cholesterol and Urea with Integrated ZnO Nanorods Field-Effect Transistor Array Biosensors
Chung-Li Dong, National Synchrotron Radiation Research Center	Interfacial Electronic Structure of Energy Conversion/Storage Materials Studied with In Situ X-ray Spectroscopy
Sanjay Mathur, University of Cologne	SOLAROGENIX - Visible Light Active Metal Oxide Nano-catalysts for Sustainable Solar Hydrogen Production
Shaohua Shen, Xi'an Jiaotong University	Surface engineered doping of hematite nanorod arrays for efficient solar water splitting
Masahiro Yoshimura, National Cheng Kung Univ.	One-Step Fabrication of Functionalized Graphene Materials via Submerged Liquid Plasma (SLP) in Solvent under Ambient Conditions
Ru-Shi Liu, University of Taipei	Star Shape Au/Ag with Nano Diamond for the Application in Hyperthemia
Mualla Oner, Chemical Engineering Department	Preparation and characterization of hydroxyapatite reinforced polyhydroxyalkanoate composites
Gloria Tabacchi, University of Insubria	Modeling molecular precursors conversion to advanced materials
Paolo Fornasiero, University of Trieste	Serendipity or design of catalysts and photo-catalysts?
Inigo Bretos, ICMM-CSIC	Synthesis Strategies for the Low-Temperature Processing of Functional Oxide Thin Films by Advanced Solution Methods
An Hardy, Hasselt University and imec division imomec	Nanostructured metal oxides by wet chemical synthesis with applications for energy and health
Partha Mukherjee, Texas A&M University	Physicochemical Interplay in Electrode Processing for Energy Storage
Federico Rosei, INRS	The role of surfaces and interfaces in multifunctional materials
Xavier Obradors, ICMAB - CSIC	High current multilayered and nanocomposite YBa2Cu3O7 superconductor thin films and coated conductors derived from chemical solutions
Rogier Besselink, University of Twente	A novel malonamide bridged silsesquioxane precursor for enhanced dispersion of transition metal ions in hybrid silica membranes

Invited Speaker	Presentation
Alessandro Martucci, Università di Padova	Nanostructured thin films from nanocrystalline inks
Talita Mazon, Center for Information Technology Renato Archer	Synthesis and characterization of ZnO nanostructures/graphene oxide composites and its application in devices
Ziqi Sun, University of Wollongong, Australia	Nanostructure engineering of metal oxides for solar energy harvesting
Gunnar Westin, Uppsala University	Complex shape and composition metals and metal-in-ceramic nano-composites
Andrea Illiberi, TNO	Atmospheric vapor-phase-deposition of TCOs for PV
Shaoming Dong, Shanghai Institute of Ceramics, Chinese Academy of Sciences	Multi-scale enhanced C/SiC composites with one dimension nano structure
Tohru Sekino, Osaka University	Enhanced Spinodal Phase Separation of SnO2-TiO2 Ceramics by Iron Doping and their Electrical Properties
Yiquan Wu, New York State College of Ceramics at Alfred University	Transparent ceramic chips for solid-state laser applications
Pavol Sajgalik, Institute of Inorganoc Chemistry, Slovak Academy of Sciences	Additive-free hot-pressed silicon carbide ceramics – a material with exceptional mechanical properties
Yu Zhou, Harbin Institute of Technology	Mechanical properties and plasma sputtering resistances of textured h-BN ceramic composites
Michel Barsoum, Drexel University	From MAX to MXene - From 3D to 2D
Rodrigo Moreno, Institute of Ceramics and Glass-CSIC	Colloidal processing of ceramic oxides containing carbon nanodispersoids
Nobuhito Imanaka, Osaka University	Catalytic Combustion Type Carbon Monoxide Gas Sensor With Novel Oxidation Catalysts
Kevin Ewsuk, Sandia National Laboratories	Characterization and Modeling of Glass Chemistry-Structure-Property Relations To Develop Advanced Glass Composite Joining Materials
Rajendra Bordia, Clemson University	Analysis and Simulation Guided Processing of Hierarchical Porous Ceramics
Vojislav Mitić, Serbian Academy of Sciences	Fractal aspects of the Coble's model corrections
Koji Morita, National Institute for Materials Science	Influence of Spark-Plasma-Sintering (SPS) Parameters on Optical Transparency of MgAl2O4 Spinel
Gian Domenico Soraru, University of Trento	Si-based Functional Ceramics from Preceramic Polymers
Zoltan Lences, Institute of Inorganoc Chemistry, Slovak Academy of Sciences	Influence of Lanthanoid Dopant and N/O Substitution on the Electronic Structure and Luminescent Properties of Silicon Oxynitride Phosphors
Abhaya Bakshi, Saint-Gobain	Treatment of Produced Water Using Silicon Carbide Membrane Filters
Akitoshi Nakagawa, MEIDENSHA CORPORATION	Ceramics Flat-sheet Membrane for Waste Water Treatment
Ingolf Voigt, Fraunhofer Institute for Ceramic Technology and Systems IKTS	Design of pores in inorganic membranes for efficient separation of liquids and gases
Zhiping Lai, King Abdullah University of Science and Technology	Fabrication of High-flux Ceramic Hollow Fibers for Gas and Liquid Separations
Gian Domenico Soraru, University of Trento	Polymer-Derived Ceramic (PDC) Aerogels
Govindan Sundararajan, ARCI	Processing, Structure and Thermal Properties of Solid-state Sintered SiC Foams by Aqueous Gelcasting
Artemiy Shamkin, OOO Corning SNG	Mechanical characterization of porous ceramics
Do Kyung Kim, KAIST	Hierarchical Porous Ceramics Fabricated by Freeze-Casting Method and Their Energy and Environmental Applications
Kazuyoshi Kanamori, Kyoto University	Monolithic porous silsesquioxanes and ceramic derivatives from sol-gel chemistry and carbothermal reduction