

# European Union – USA

## Engineering Ceramics

### Summit

Monday, January 23, 2012  
**EU/USA Summit I**

1:30 PM-3:20 PM

Room: Coquina Salon F

Session Chair(s): Sanjay Mathur

**1:30 PM**

**(ICACC-EUUSA-001-2012) Porous Wall, Hollow Glass Microspheres (Invited)**

George Wicks\*, Savannah River National Lab, USA

**2:00 PM**

**(ICACC-EUUSA-002-2012) New ceramic membranes for energy- and environmental applications (Invited)**

Alexander Michaelis\*, Ingolf Voigt, Fraunhofer Institute for Ceramic Technologies and Systems IKTS, Germany

**2:30 PM**

**(ICACC-EUUSA-003-2012) Next Generation Microturbine with Ceramic Hot-Section (Invited)**

James Kesseli\*, Thomas Wolf, James Nash, Brayton Energy, USA

**3:00 PM**

Break

### **EU/USA Summit II**

3:20 PM-5:50 PM

Room: Coquina Salon F

Session Chair(s): Mrityunjay Singh

**3:20 PM**

**(ICACC-EUUSA-004-2012) Advances in Ceramic Membranes for H<sub>2</sub>/Syngas Production and Clean Energy Applications (Invited)**

Jack C. Chen\*, Dale M Taylor, Michael F Carolan, Ceramatec, Inc., USA; David W Studer, Air Products and Chemicals, Inc., USA

**3:50 PM**

**(ICACC-EUUSA-005-2012) Polymer-Derived-Ceramics Research and Development in Europe (Invited)**

Paolo Colombo\*, University of Padova, Italy

**4:20 PM**

**(ICACC-EUUSA-006-2012) Innovations in bioactive ceramics and glasses for tissue engineering, drug delivery and regenerative medicine (Invited)**

Aldo Boccaccini\*, University of Erlangen-Nuremberg, Germany

**4:50 PM**

**(ICACC-EUUSA-007-2012) Silica Mesoporous Particles in Nanomedicine: State of the Art (Invited)**

Alfonso Garcia-Bennett\*, Uppsala University, Sweden

**5:20 PM**

**(ICACC-EUUSA-008-2012) Nonhydrolytic Sol-Gel Reactions for the Synthesis of Oxide Materials (Invited)**

Jiri Pinkas\*, Masaryk University, Czech Republic

## **Tuesday, January 24, 2012**

### **EU/USA Summit III**

8:00 AM-9:50 AM

Room: Coquina Salon F

Session Chair(s): Mrityunjay Singh

**8:00 AM**

**(ICACC-EUUSA-009-2012) Ceramic Matrix Composite Turbine Vane for Rotorcraft Engines (Invited)**

Michael C Halbig\*, NASA Glenn Research Center, USA

**8:30 AM**

**(ICACC-EUUSA-010-2012) Status of Carbon/Ceramic Brakes: Properties, Production and Perspectives (Invited)**  
Walter Krenkel\*, University of Bayreuth, Germany; Ralph Renz, Porsche AG, Germany

**9:00 AM**

**(ICACC-EUUSA-011-2012) Recent developments in joining issues and ceramic matrix composites (Invited)**

Monica Ferraris\*, Politecnico di Torino, Italy

**9:30 AM**

Break

### **EU/USA Summit IV**

9:50 AM-11:50 AM

Room: Coquina Salon F

Session Chair(s): Sanjay Mathur

**9:50 AM**

**(ICACC-EUUSA-012-2012) Synthesis of silicon-carbon nanoceramics in high temperature aerosol reactor (Invited)**

Anna Lahde\*, University of Eastern Finland, Finland

**10:20 AM**

**(ICACC-EUUSA-013-2012) The State of Ceramics Research at Corning (Invited)**  
Christine Heckle\*, Corning Incorporated, USA

**10:50 AM**

**(ICACC-EUUSA-014-2012) Inorganic Nanofibers via Electrospinning - on the Road to Industrial Application (Invited)**  
Kerstin Schierle-Arndt\*, F. Major, E. Klimov, M. Gärtner, BASF SE, Germany

**11:20 AM**

**(ICACC-EUUSA-015-2012) Strategic Initiative Materials (SIM): Joint materials research between Flemish research institutes and industry (Invited)**  
Marlies K. Van Bael\*, An Hardy, Hasselt University, Belgium

### **EU/USA Summit V**

1:30 PM-3:20 PM

Room: Coquina Salon F

Session Chair(s): Alexander Michaelis

**1:30 PM**

**(ICACC-EUUSA-016-2012) Solar Hydrogen Production with Disorder-Engineered Titania (Invited)**

Samuel Mao\*, EETD Advanced Energy Technologies, USA

**2:00 PM**

**(ICACC-EUUSA-017-2012) Challenges for Ceramic Materials in Breakthrough Energy Applications (Invited)**

Klemens Joachim\*, Deutsche Gesellschaft für Materialkunde e.V. (DGM), Germany

**2:30 PM**

**(ICACC-EUUSA-018-2012) New approaches for silicon in three valuable energy management applications (Invited)**

John Carberry\*, Mossey Creek Energy, USA

**3:00 PM**

Break

## **EU/USA Summit VI**

3:20 PM-5:50 PM

Room: Coquina Salon F

Session Chair(s): Walter Krenkel

### **Ceramic Composites for Engineering Applications (Invited)**

Julian Martinez-Fernandez\*, Joaquin Ramírez-Rico, Francisco M Varela-Feria, Carmen Vera-García, Antonio Gutierrez-Pardo, University of Seville-CSIC, Spain; Mrityunjay Singh, Ohio Aerospace Institute, NASA Glenn Research Center, USA

**3:20 PM**

**(ICACC-EUUSA-019-2012) Status of PVD**

**Technology in Poland (Invited)**

Witold Gulbinski\*, Koszalin University of Technology, Poland

**3:50 PM**

**(ICACC-EUUSA-020-2012) Miniaturized Surface Ionization Gas Sensors (Invited)**

Gerhard Mueller\*, Angelika Hackner, Sebastian Beer, EADS Innovation Works, Germany; Francisco Ramirez-Hernandez, Institut de Recerca en Energia de Catalunya (IREC), Spain; J. Daniel Prades, Universitat de Barcelona, Spain; Juan R Morante, Institut de Recerca en Energia de Catalunya (IREC), Spain; Sanjay Mathur, University of Cologne, Germany

**4:20 PM**

**(ICACC-EUUSA-021-2012) Plasma technologies for energetics and sensing: towards the metal oxide highway via the nano-road (Invited)**

Davide Barreca\*, Padova University, Italy

**4:50 PM**

**(ICACC-EUUSA-022-2012) Importance of Precursor Chemistry in Atomic Layer Deposition (Invited)**

Markku Leskela\*, University of Helsinki, Finland

**5:20 PM**

**(ICACC-EUUSA-023-2012) Bio-inspired**