

## ***Program***

# **Ceramic Matrix Composites II: Science and Technology of Materials, Design, Applications, Performance and Integration**

**November 13 – 18, 2022  
LaFonda on the Plaza  
Santa Fe, New Mexico, USA**

### **Conference Chairs**

**Dr. Ram Darolia**  
GE Aviation (Retired), USA

**Prof. Yutaka Kagawa**  
Tokyo University of Technology, Japan

**Prof. Jon Binner**  
University of Birmingham, United Kingdom

**Prof. Rishi Raj**  
University of Colorado, USA

**Prof. Dietmar Koch**  
University of Augsburg, Germany

**Prof. Gerard Vignoles**  
University of Bordeaux, France

### **Conference Secretaries**

**Prof. Ken Goto**  
Japan Aerospace exploration agency (JAXA),  
Japan

**Dr. Satoshi Kitaoka**  
Japan Fine Ceramics, (JFCC), Japan



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**Previous conferences in this series**

***Advanced Ceramic Matrix Composites:  
Science and Technology of Materials, Design,  
Applications, Performance and Integration***

**November 5 - 9, 2017**

**Santa Fe, New Mexico, USA**

*Conference Chairs:*

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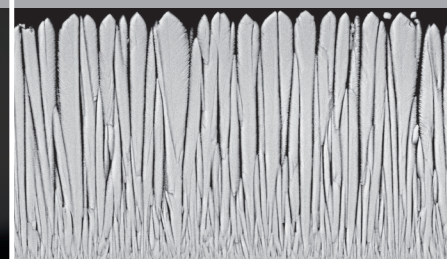
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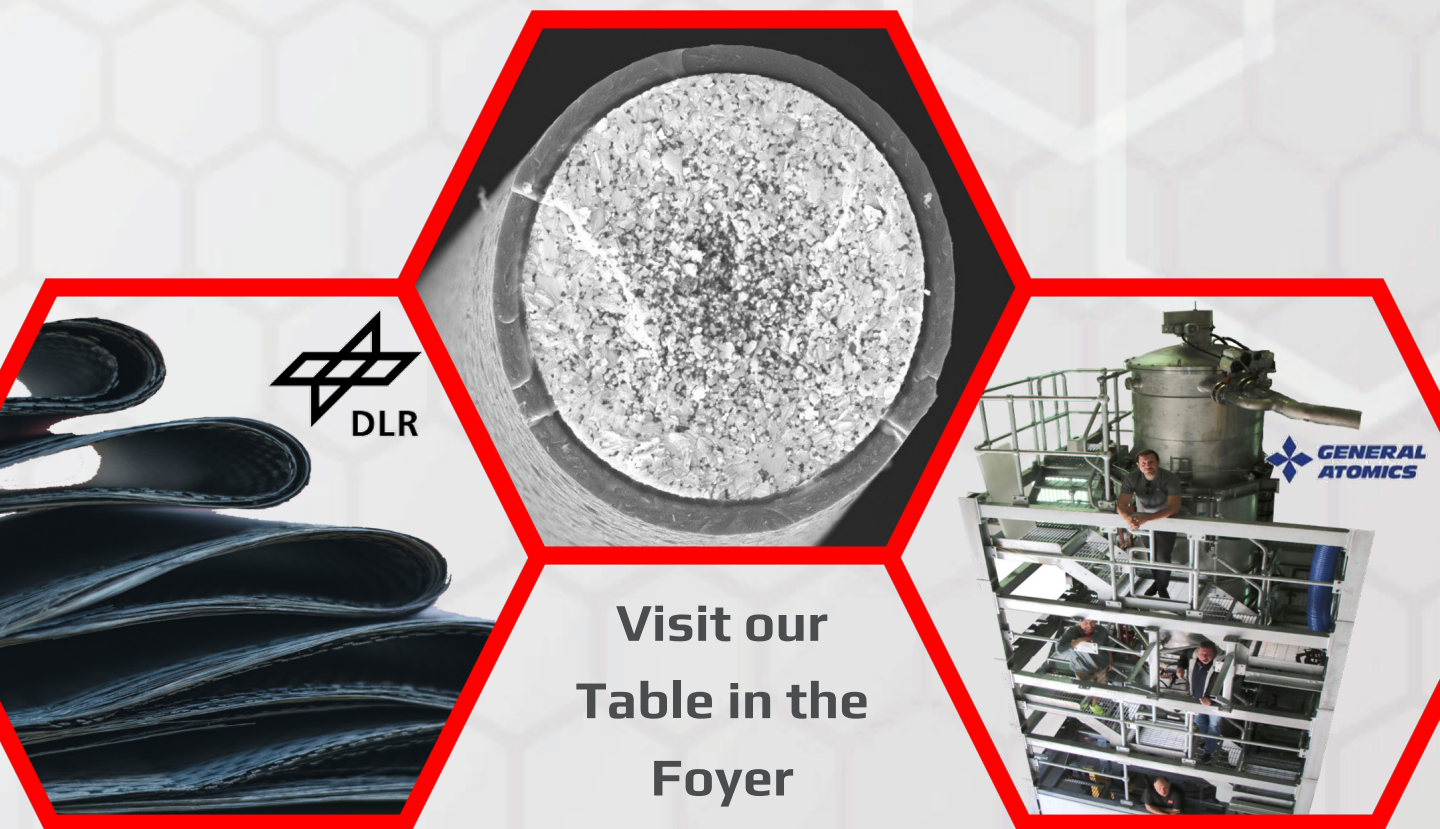




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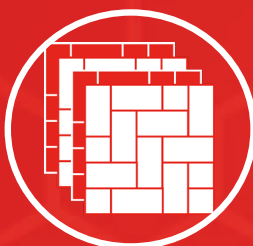


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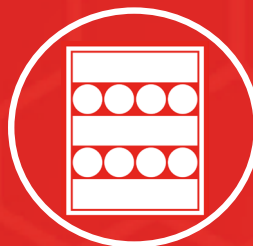
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### **Sunday, November 13, 2022**

16:30 – 18:30	Conference check-in (Mezzanine)
18:30 – 20:30	Reception (with music from local Native American musician, Sky Redhawk) followed by Dinner

### ***Locations and Notes***

- *Technical and poster sessions will be in the Lumpkins Ballroom.*
- *Meals will be in La Terraza. Coffee breaks will be in the Mezzanine.*
- *The ECI on site office will be in the Stilha Room.*
- *Please wear your mask except when giving a presentation or actively eating or drinking. Please maintain physical distancing as much as possible.*
- *Audio, still photo and video recording by any device (e.g., cameras, cell phones, laptops, PDAs, watches) is strictly prohibited during the technical sessions, unless the author and ECI have granted prior permission.*
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- *Emergency Contact Information: Because of privacy concerns, ECI does not collect or maintain emergency contact information for conference participants. If you would like to have this information available in case of emergency, please use the reverse side of your name badge.*



## **Monday, November 14, 2022**

07:00 – 08:30 Breakfast

08:30 – 08:45 **Opening Remarks**  
Conference Chair and ECI Liaison: Ram Darolia

### **Session 1: Overviews and Applications** Chairs: Marc Montaudon, Eric Bouillon

08:45 – 09:15 **Ceramic Matrix Composites (CMCs) at GE: From inception to commercialization**  
Krishan Luthra, GE Research, USA

09:15 – 09:45 **Industrialization of ceramic matrix composites for aerospace applications**  
Mano Manoharan, GE Aviation, USA

09:45 – 10:15 **Development of ceramic matrix composites for 2500°F turbine engine applications**  
Olivier Sudre, Pratt & Whitney, USA

10:15 – 10:45 Coffee Break

10:45 – 11:15 **Brief overview of CMCs engine components experiments coupled with representative sub-element tests**  
Eric Bouillon, Safran Ceramics, France

11:15 – 11:45 **Multi-scale study of ceramic composite materials for aeronautical applications**  
Sébastien Denneulin, Safran Ceramics, France

11:45 – 12:15 **SiC/SiC ceramic matrix composite – A turbine engine perspective**  
Thomas Nixon, Rolls-Royce Corporation, USA

12:15 – 12:45 **Development of CMC for nuclear fuel components**  
Toshiki Nishimura, Toshiba Energy Systems & Solutions Corporation, Japan

12:45 – 14:15 Lunch

### **Session 1: Overviews and Applications (continued)** Chairs: Yutaka Kagawa, Takeshi Nakamura

14:15 – 14:45 **International reliability assessment project through standard PateranoSiC(SiC/SiC)**  
Chikara Fujiwara, Tokyo University of Technology, Japan

14:45 – 15:15 **Overview of CMC activities: From high temperature characterization to applications**  
Guillaume Pujol, DGA, France

15:15 – 15:45 **Industrial application of all oxide ceramic matrix composites**  
Walter Pritzkow, Walter E.C. Pritzkow Spezialkeramik, Germany

15:45 – 16:15 Coffee Break

**Monday, November 14, 2022 (continued)**

- |               |  |
|---------------|--|
| 16:15 – 16:45 | <b>Advances and technical challenges in development of CMC</b><br>Takeshi Nakamura, IHI Corporation, Japan   |
| 16:45 – 17:15 | <b>Current trends in CMC research &amp; development across DLR's technology programs</b><br>Peter Mechnich, German Aerospace Center (DLR), Germany |
| 17:15 – 18:15 | <b>Discussion</b><br>Leader: Frank Zok   |
| 18:30 – 20:00 | Dinner   |
| 20:00 – 21:00 | Poster Session / Social Hour   |

## **Tuesday, November 15, 2022**

07:00 – 08:30 Breakfast

### **Session 2: Processing and Characterization**

Chairs: Krishan Luthra, Dietmar Koch

08:30 – 09:00 **Multiphysics modeling of ceramic-matrix composites processing by thermal-gradient chemical vapor infiltration**  
Gerard Vignoles, University of Bordeaux, LCTS, France

09:00 – 09:30 **In-situ observation and multi-physics simulation of reactive melt Infiltration of silicon melt into SiC-C Preform**  
Takeshi Yoshikawa, The University of Tokyo, Japan

09:30 – 10:00 **Processing and characterization of layered UHTCMCs reinforced with continuous or discontinuous carbon fibers**  
Antonio Vinci, National Research Council of Italy, CNR-ISTEC, Italy

10:00 – 10:30 Coffee Break

10:30 – 11:00 **Processing, performance and process modeling of preceramic polymers**  
Thomas Key, Air Force Research Laboratory, USA

11:00 – 11:30 **Effect of matrix porosity and prepreg-tack on mechanical properties and processing of oxide ceramic matrix composites**  
Stefan Schafföner, University of Bayreuth, Germany

11:30 – 12:00 **CVI manufacturing routes of non-oxide CMCs**  
Ryan Skillett, Archer Technicoat Ltd., United Kingdom

### **Session 3: Physical and Mechanical Property Testing and Characterization**

Chair: Ken Goto, Michael Cinibulk

12:00 – 12:30 **Small-scale testing of ceramic matrix composites**  
Oriol Gavalda-Diaz, Imperial College London, United Kingdom

12:30 – 13:00 **Simulation assisted study on structural degradation in advanced SiC/SiC CMC component during high-temperature fatigue**  
Eiichi Sato, ISAS/JAXA, Japan

13:00 – 14:00 Lunch

14:00 Free time / Explore Santa Fe on your own

Dinner on your own

**Wednesday, November 16, 2022**

07:00 – 08:30 Breakfast

**Session 3: Physical and Mechanical Property Testing and Characterization (continued)**

Chairs: Ken Goto, Michael Cinibulk

08:30 – 09:00 **Multicriteria optimization as enabler for Sustainable Ceramic Matrix Composites (SCMC)**

Dietmar Koch, University of Augsburg, Germany

09:00 – 09:30 **Cumulative fracture behavior of short fiber type C/SiC**

Ken Goto, Japan Aerospace Exploration Agency, Japan

09:30 – 10:00 **Fragmentation, sliding and interface degradation in SiC/SiC composites**

Frank Zok, UC Santa Barbara, USA

10:00 – 10:30 Coffee Break

10:30 – 11:00 **A method for estimating constitutive properties of a C/C-SiC composite materials based on a Brazilian disc specimen**

Royi Padan, Tel-Aviv University, Israel

11:00 – 11:30 **Utilizing the electrical properties of non-oxide ceramic composites to diagnose damage development, test conditions and defects**

Gregory Morscher, University of Akron, USA

11:30 – 12:00 **Detection of damage evolution in SiC/SiC under tensile loading using Talbot-Lau X-ray interferometer**

Yoshihisa Tanaka, Tokyo University of Technology, Japan

12:00 – 14:00 Lunch

14:00 – 14:30 **Microscale characterization of CMCs using 3D tomography techniques and machine learning algorithms to quantify and correlate initial microstructure to damage evolution**

Ashley Hilmas, Air Force Research Lab, USA

14:30 – 14:50 **Micro-scale observation of cracking in SiC/BN/SiC ceramic matrix composites**

Kaitlin Detwiler, Air Force Research Laboratory, USA

**Session 4: Modeling and Simulation**

Chairs: Gerard Vignoles, Gregory Morscher

14:50 – 15:20 **Lifetime prediction of self-healing ceramic-matrix composites using a multi-physics image-based model**

Guillaume Couégnat, CNRS, France

15:20 – 15:50 **Models for subcritical crack growth during static fatigue of SiC fiber in air and steam**

Randall Hay, USAF/AFRL, USA

15:50 – 16:20 Coffee Break

**Wednesday, November 16, 2022 (continued)**

16:20 – 17:20	<b>Discussion</b> <b>Leader:</b> Olivier Sudre
17:20 – 19:00	Free time / Networking
19:00 – 21:30	Reception and Banquet

**Thursday, November 17, 2022**

07:00 – 08:30 Breakfast

**Session 4: Modeling and Simulation (continued)**

Chairs: Gerard Vignoles, Gregory Morscher

08:30 – 09:00 **Generation and evaluation of 3D digital twin of ceramic matrix composites using deep convolutional neural networks**  
Naohiro Shichijo, Hitotsubashi University, Japan

09:00 – 09:30 **Nonlinear continuum damage models for ceramic matrix composites with significant in plane ply anisotropy**  
Craig Przybyla, Air Force Research Laboratory, USA

09:30 – 10:00 **Proposition and validation of a damage and failure approach for 3D woven composite materials with ceramic matrix: From elementary coupons to composite structures**  
Frédéric Laurin, ONERA, University Paris Saclay, France

10:00 – 10:30 Coffee Break

**Session 5: New Developments and Applications**

Chairs: Satoshi Kitaoka, Peter Mechnich

10:30 – 11:00 **New BN coating on SiC fibers as the interphase of SiC/SiC composites**  
Takahiro Sekigawa, Mitsubishi Heavy Industries Aero Engines, Ltd., Japan

11:00 – 11:30 **Laser-CVD silicon carbide fibers as non woven preforms in fiber-reinforced SiC-SiC composites**  
Jeff Vervlied, Free Form Fibers, USA

11:30 – 12:00 **Development of oxide-based CMCs with high thermal stability**  
Isao Yamashita, Tosoh Corporation, Japan

12:00 – 12:30 **Ceramic matrix composites for liner system of radioactive waste disposal cells**  
Emilie Perret, High Performance Multifunctional Materials Domain IRT Saint Exupéry, France

12:30 – 14:00 Lunch

**Session 6: Environmental Behavior**

Chairs: Elizabeth Opila, Douglas Kiser

14:00 – 14:30 **Synergistic degradation mechanisms of SiC/BN/SiC in oxidizing environments at intermediate temperatures under load**  
Elizabeth Opila, University of Virginia, USA

14:30 – 15:00 **Modeling environmental degradation in SiC/BN/SiC CMCs**  
Pavel Mogilevsky, UES Inc., USA

15:00 – 15:30 **NASA Glenn high temperature EB-coated CVI SiC/SiC minicomposite testing and characterization**  
Douglas Kiser, NASA Glenn Research Center, USA

**Thursday, November 17, 2022 (continued)**

15:30 – 16:00	Coffee Break
16:00 – 17:00	<b>Discussion</b> Leader: Allan Katz
18:30 – 20:00	Dinner



**Friday, November 18, 2022**

07:00 – 08:30 Breakfast

**Session 7: Environmental Barrier Coatings**

Chairs: Kang Lee, Ravisankar Naraparaju

08:30 – 09:00 **The current status of advanced environmental barrier coatings for ceramic matrix composites at NASA**  
Kang Lee, NASA Glenn Research Center, USA

09:00 – 09:30 **Mass transfer control in multilayer EBC systems at high temperatures**  
Satoshi Kitaoka, Japan Fine Ceramics Center, Japan

09:30 – 10:00 **TGO growth behavior of modified environmental barrier coating systems**  
Dianying Chen, Oerlikon Metco (US) Inc., USA

10:00 – 10:30 Coffee Break

10:30 – 11:00 **Solid particle erosion of environmental barrier coatings and ceramic matrix composites**  
Michael Presby, NASA Glenn Research Center, USA

11:00 – 11:30 **Development of EBCs and T/EBC multi-layer coatings: Challenges and implications**  
Ravisankar Naraparaju, German Aerospace Center (DLR), Germany

11:30 – 12:30 **General Discussion – Areas for further research, development and collaboration, Next conference**  
Ram Darolia, Yutaka Kagawa, Dietmar Koch, Gerard Vignoles

12:30 Boxed Lunch

Departures

## **Poster Presentations**

1. **Burner rig optimization for high temperature materials and coating systems**  
Christopher Ferguson, The University of Akron, USA
2. **WITHDRAWN**
3. **Influence of ecological optimized manufacturing on the production costs of C/C structures using CVI technology**  
Denny Schüppel, Compositel United e. V, Germany
4. **Fabrication method of Yb based Oxide matrix for CMC**  
Hiroto Hirano, IHI, Japan
5. **Joining of SiC-SiC composites by embedded-wire CVD**  
Jeff Vervlied, Free Form Fibers, USA
6. **Crack growth of pre-preg laminate composite subjected to elevated temperature fatigue post ballistic impact**  
Gregory Morscher, The University of Akron, USA
7. **Detection of micro cracking and SiC fiber distribution and its relationship between dark-field images using Talbot-Lau interferometer**  
Keiju Kawamura, Tokyo University of Technology, Japan
8. **Durability investigation of burner rig of Yb<sub>2</sub>SiO<sub>5</sub> environmental barrier coatings**  
Masahiro Negami, Kawasaki Heavy Industries, Ltd., Japan
9. **Cracking detection of a unidirectionally-reinforced SiC/SiC composite by X-ray Talbot-Lau interferometry**  
Masaki Kotani, Japan Aerospace Exploration Agency (JAXA), Japan
10. **Chemical and mechanical analysis of high temperature SiC/SiC CMC materials**  
Michael Goode, University of Oxford, United Kingdom
11. **Advanced materials development under NASA's Hybrid Thermally Efficient Core (HyTEC) project**  
Michael Presby, NASA Glenn Research Center, USA
12. **Optimizing RMI atmosphere for SiC/SiC composites fabrication**  
Natsuki Murata, Tokyo University of Technology, Japan
13. **Additive manufacturing of C/C-SiC by fused filament fabrication**  
Stefan Schafföner, University of Bayreuth, Germany
14. **Measurement method of in-situ tensile strength of SiC fiber in SiC/SiC composite**  
Takumi Kiyohara, Tokyo University of Technology, Japan
15. **Measurement of exothermic reaction temperature during RMI process**  
Takumi Sato, Tokyo University of Technology, Japan
16. **Tensile loading-unloading behavior in SiC/SiC CMC at room and elevated temperature in air using a new mechanical testing machine**  
Tetsuya Narita, Tokyo University of Technology, Japan



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## Calendar of ECI Conferences

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### 2022

- Oct 30-Nov 3      **20AE**      **ELECTROPHORETIC DEPOSITION VII: FUNDAMENTALS AND APPLICATIONS** (Santa Fe, New Mexico)  
A.R. Boccaccini, Univ. of Erlangen-Nuremberg; B. Ferrari, Spanish Research Council; A.J. Pascall, Brookhaven National Laboratory; T. Uchikoshi, National Institute for Materials Science
- Nov 13-18      **21AS**      **CERAMIC MATRIX COMPOSITES II** (Santa Fe, New Mexico)  
Y. Kagawa, Tokyo University of Technology; R. Darolia, GE Aviation (retired); R. Raj, University of Colorado; G. Singh, Kansas State University; D. Koch, University of Augsburg; G. Vignoles, University of Bordeaux; J. Binner, University of Birmingham
- Dec 10-14      **21AB**      **POLYMER REACTION ENGINEERING XI** (Scottsdale, AZ)  
T. McKenna, Universite Claude Bernard, France; C. Sayer, Federal University of Santa Catarina, Brazil; J. Schork, Georgia Tech; USA; John Tsavalas, University of New Hampshire, USA; Jose Ramon Leiza, University of the Basque Country, Spain; Robin Hutchinson (Queen's University, Canada; Brian Greenhalgh, ExxonMobil Chemicals, USA; Markus Busch, TU Darmstadt, Germany; J.. Reimers, ExxonMobil Chemicals, USA
- Dec 18-21      **20AY**      **ADVANCES IN COSMETIC FORMULATION DESIGN II** (Durham, NC)  
S. Amin, University of Miami; P. Somasundaran, Columbia University

### 2023

- March 19-24      **22AD**      **ELECTRIC FIELD ENHANCED PROCESSING OF ADVANCED MATERIALS III: COMPLEXITIES AND OPPORTUNITIES** (Tomar, Portugal)  
R. Raj, University of Colorado at Boulder; Luis Perez-Maqueda, CICA, Spain
- April 23-28      **23AC**      **CELL CULTURE ENGINEERING XVIII** (Cancun, Mexico)  
L. Palomares, IBT-UNAM; C. Goudar, Amgen; T. Wang, Roche
- May 7-12      **23AP**      **PYROLIQ II – 2023: Pyrolysis and Liquefaction of Biomass and Wastes** (Hernstein, Austria)  
F. Berruti, ICFAR & Western University; A. Dufour, CNRS, ENSIC; M. Garcia-Perez, Washington State University; W. Prins, University of Ghent
- May 14-17      **23AU**      **2023 INTERNATIONAL CONFERENCE ON SEMICONDUCTOR TECHNOLOGY FOR ULTRA LARGE SCALE INTEGRATED CIRCUITS AND THIN FILM TRANSISTORS (ULSIC VS TFT 8)** (Hokkaido, Japan)  
Y. Kuo, Texas A&M University
- May 28-June 2      **21AG**      **ALKALI ACTIVATED MATERIALS AND GEOPOLYMERS: SUSTAINABLE CONSTRUCTION MATERIALS AND CERAMICS MADE UNDER AMBIENT CONDITIONS** (Cetraro (Calabria), Italy)  
W.M. Kriven, University of Illinois at Urbana-Champaign; C. Leonelli, Universita' degli Studi di Modena e Reggio Emilia; J.L. Provis, University of Sheffield; A.R. Boccaccini, University of Erlangen-Nuremberg
- June 11-15      **21AO**      **ADVANCES IN OPTICS FOR BIOTECHNOLOGY, MEDICINE AND SURGERY** (Tomar, Portugal)  
M. Niedre, Northeastern University; F. Leblond, Polytechnique Montreal
- May/June      **23AI**      **INNOVATIVE MATERIALS FOR ADDITIVE MANUFACTURING II (IMAM II)** (Riga, Latvia)  
D. Schmidt (Luxembourg Institute of Science and Technology (LIST); N. Gupta, New York University; E. Eastwood, DOE; B.G. Compton; University of Tennessee, Knoxville; G.M. Gladysz, Los Alamos National Laboratory
- July 16-21      **21AV**      **SIXTH INTERNATIONAL WORKSHOP ON STRESS-ASSISTED CORROSION DAMAGE** (Washington, DC area)  
A.K. Vasudevan, Office of Naval Research (retired); R. Latanision, Exponent, Inc.; H. Holroyd, Luxfer (retired); F. Friedersdorf, Luna Innovations Inc.

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July 24-28	<b>21AH</b>	<b>ASSOCIATION IN SOLUTION V</b> (Azores, Portugal) I. Voets, Eindhoven University of Technology; J. Strakel, Wageningen University; J. Conrad, University of Houston
September 4-8	<b>22AJ</b>	<b>TERATECH 2023: 10<sup>th</sup> International Symposium on Terahertz-related Devices and Technologies</b> (Aizu-Wakamatsu, Japan) General Chair: Taiichi Otsuji, Tohoku University; LOC Chair: Maxim Ryzhii, University of Aizu, LOC Co-Chair: Junichiro Kono, <b>Co-Chair</b> of the <b>LOC</b> : Akira Satou, Tohoku University, Technical Program Chair: Junichiro Kono, Rice University; TPC <b>Co-Chair</b> : Alexey Belyanin, Texas A&M University
September 10-13	<b>23AT</b>	<b>SINGLE USE TECHNOLOGIES VI</b> (Boston, USA) M. Barbaroux, Sartorius; S. Kane, Takeda; S. Yoon, University of Massachusetts, Lowell
September 17-21	<b>23-AH</b>	<b>INTERNATIONAL HYDROGEN CONFERENCE: UNDERSTANDING HYDROGEN-MATERIALS INTERACTIONS</b> (Park City, Utah) M. Martin, NIST; J. Burns, University of Virginia
September 17-21	<b>23AB</b>	<b>BIO-CHAR III (Tomar, Portugal)</b> F. Berruti, Western University, Canada; D. Chiaramonti, Politecnico di Torino and RE-CORD, Italy; S. Fiore, Politecnico di Torino, Italy; M. Garcia-Perez, Washington State University, USA; O. Masek, University of Edinburgh, UK
October 1-6	<b>23AE</b>	<b>ENZYME ENGINEERING XXVII</b> (Singapore) Ang Ee Lui, A*Research, Singapore; Li Zhi, National University of Singapore; Yan Feng, Shanghai Jiao Tong University
<b><u>2024</u></b>		
January 7-12	<b>20AT</b>	<b>TRANSITION OF ENERGY SYSTEMS TOWARDS SUSTAINABILITY</b> (India TBA) S. De, S. Bandyopadhyay, IIT, Bombay
February 4-8	<b>24AT</b>	<b>ADVANCING MANUFACTURE OF CELL AND GENE THERAPIES VIII</b> (Coronado, CA) F. Masri, Cell & Gene Catapult; C. Yeager, Georgia Institute of Technology; G. Maheshwari, BMS; J. Moscariello, BMS
February TBA	<b>21AD</b>	<b>ADVANCED MEMBRANE TECHNOLOGY VIII: ENVIRONMENT, FOOD, HEALTH AND NEW FRONTIERS</b> (Casablanca, Morocco) J. Hestekin, University of Arkansas; U. Beusche, W.L. Gore, Inc.; D. Bhattacharyya, University of Kentucky
April 4-7	<b>20AP</b>	<b>DELIVERY OF NUCLEIC ACID THERAPEUTICS II: BIOLOGY, ENGINEERING AND DEVELOPMENT</b> (Siracusa, Sicily) L. Sepp-Lorenzino, Intellia Therapeutics; S. F. Dowdy, University of California San Diego School of Medicine; M. Stanton, Generational Bio
Spring	<b>24AI</b>	<b>ULTRA-HIGH TEMPERATURE CERAMICS: MATERIALS FOR EXTREME ENVIRONMENT APPLICATIONS V</b> (Italy) D. Sciti, Institute for Science and Technology of Ceramics, CNR;
April TBA	<b>24AK</b>	<b>MICROBIAL ENGINEERING III</b> (TBA) E. Keshavarz-Moore, University College London; T. Sauer, Sanofi
April/May	<b>20AF</b>	<b>SYNTACTIC AND COMPOSITE FOAMS VI</b> (Tallin, Estonia) G.M. Gladysz and K.K. Chawla, University of Alabama at Birmingham; A. R. Boccaccini, University of Erlangen-Nuremberg; M. Fukushima, National Institute of Advanced Industrial Science and Technology
TBA	<b>24AH</b>	<b>NANOTECHNOLOGY IN MEDICINE III: ENABLING NEXT GENERATION THERAPIES</b> (TBA) <b>K. Rege, Arizona State University; S. De Smedt, Ghent University S. Varghese, Duke University</b>
May 19-24	<b>24AA</b>	<b>VACCINE TECHNOLOGY IX</b> (Los Cabos, Mexico) C. Lutsch, Sanofi Pasteur; L. Lua, University of Queensland; F. Godia, Universitat Autònoma de Barcelona; T. Tagmyer, Merck
TBA	<b>24AM</b>	<b>BIOCHEMICAL AND MOLECULAR ENGINEERING XXIII</b> (TBA) <b>M. O'Malley, University of California at Santa Barbara; B. Pfleger, University of Wisconsin</b>
Sept 29-Oct 4	<b>24AN</b>	<b>NANOMECHANICAL TESTING IN MATERIALS RESEARCH AND DEVELOPMENT IX</b> (TBA, Europe) M. Sebastiani, Rome TRE University
October TBA	<b>24AB</b>	<b>INTEGRATED CONTINUOUS BIOMANUFACTURING VI</b> (TBA, USA) A. Azevedo, Instituto Superior Técnico; A. Noyes, Codiak Bio;; K. Brower, Sanofi

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The program has been developed and is overseen by volunteers both on the international Board of Directors and international Conferences Committee. More than 1,900 conferences have taken place to date. The conferences program is administered by a professional staff and the conferences are designed to be self-supporting.

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To serve the engineering/scientific community with international, interdisciplinary, leading edge engineering research conferences

### **ECI Purposes**

The advancement of engineering arts and sciences by providing a forum for the discussion of advances in the field of science and engineering for the good of mankind by identification and administration of international interdisciplinary conferences

To work with engineering, scientific and social science societies and the interested general public to jointly sponsor conferences and to take other actions that will foster complementary programming.

To initiate conferences that will have a significant impact on engineering education, research practice and/or development.

### **ECI Encouragement of New Conference Topics**

The ECI Conferences Committee invites you to suggest topics and leaders for additional conferences and encourages you to submit a proposal for an ECI conference.

Ideally, proposals should be submitted from 18 to 24 months in advance of the conference although the staff can work on a shorter timeline.

The traditional format for an ECI conference is registration Sunday afternoon with technical sessions held each morning and evening through Thursday or Friday noon. Afternoons are used for informal gatherings, poster sessions, field trips, subgroup meetings and relaxation. This format has served well to build important professional networks in many areas.

ECI welcomes proposals for shorter conferences and for conferences which span weekends in order to reduce the number of working days participants are away from their offices.

## **ECI Works With You**

ECI works with conference chairs in two complementary ways. First, an experienced member of the Conferences Committee acts as your technical liaison from the proposal stage through the conference itself. He or she is always available to consult with you on any conference issue.

Second, after your proposal has been approved by the Conferences Committee, the ECI staff will assume responsibility for the administration of the conference.

Your primary responsibilities will be recruiting the organizing committee, developing the technical program and securing third-party funding necessary to support the travel of key speakers.

The responsibilities of ECI's "full service" staff include -- but are not limited to -- the following:

- Recommend, negotiate, contract and make substantial deposits for housing, meals, meeting space, A/V equipment and tours.
- Maintain web sites for the conference and for submission of abstracts.
- Publicize via electronic and print media.
- Administer all finances including grants, contributions and purchase orders. (ECI makes grant funds available as soon as a grant is approved.) There is no need for chairs to set up a conference bank account or file tax returns for their conference.
- Process all applications and registrations.
- Produce bound program/abstracts book.
- Contract for the publication of print or electronic proceedings, if any.
- Provide on-site staff during the conference.

For more information, please contact the ECI Director at [Barbara@engconfintl.org](mailto:Barbara@engconfintl.org)