

Conference Program

Tuesday, June 21, 2022

	Forum Hall C1	Forum Hall C3
10:00 – 11:00	Opening Ceremony	
11:30–12:30	<p>Powders/Mixes to Enhance Performance of Ceramic Components organized by cfi - ceramic forum international</p> <div style="border: 1px solid black; padding: 5px;"> <p><u>Moderator:</u> Karin Scharrer, cfi - ceramic forum international</p> <p><u>Speakers:</u> Ultra-high Fracture Toughness of Ytria-stabilized Zirconia Kouhei Hosoi, Tosoh</p> <p>Almatis Expands its Calcined Aluminas into a Higher Purity Range Tobias Früh, Almatis</p> <p>Boron Nitride- the Ceramic Booster for Thermal Conductivity Michaela Schopp, Henze Boron Nitride Products</p> <p>Innovative Zirconia-based Material Shaped by SLA 3D printing Maxence Bourjol, 3D CERAM SINTO</p> </div>	<p>Prospects for a Climate-neutral Brick and Tile Industry: Roadmap for a Greenhouse Gas Neutral Brick and Roof Tile Industry in Germany organized by ZI Brick and Tile Industry International</p> <div style="border: 1px solid black; padding: 5px;"> <p><u>Moderator:</u> Wolfgang Deil, Bauverlag GmbH, ZI Brick and Tile Industry International</p> <p><u>Speaker:</u> Transition of the German Brick and Roof Tile Industry to Greenhouse Gas Neutrality by 2050 Katharina Armbrecht, Head of Energy and Environment BVZi - Federal Association of the German Brick and Tile Industry</p> </div>
13:00–14:00	<p>Innovations in Process Technology to Improve Material and Energy Efficiency organized by cfi - ceramic forum international</p> <div style="border: 1px solid black; padding: 5px;"> <p><u>Moderator:</u> Karin Scharrer, cfi - ceramic forum international</p> <p><u>Speakers:</u> Minimizing Carbon Footprint in Sintering Furnaces: Is Hydrogen Fuel a Feasible Alternative? Dr. Narayana K. Karthik, CREMER Thermoprozessanlagen</p> <p>IntrinSiC - Advancing Efficiency with 3D-printed Technical Ceramics Dr. Lars Schnetter, Schunk Ingenieurkeramik</p> <p>RECOSiC: Recycled High-quality SiC to Reduce Carbon Footprint Matthias Hausmann, ESK-SiC; Dr. Jörg Adler, Fraunhofer IKTS</p> <p>Multi-Material Jetting - Complex Requirements and the Manufacturing of Multi-Functional Components Dr. Steven Weingarten, Dr. Uwe Scheithauer, Fraunhofer IKTS</p> </div>	<p>Decarbonizing the Brick Industry: Technological Approaches organized by VDMA</p> <div style="border: 1px solid black; padding: 5px;"> <p><i>Speakers tba</i></p> </div>

<p>14:30–15:30</p>	<p>Panel: Additive Manufacturing organized by CERAMIC APPLICATIONS</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Industrial Applications Enabled by Additive Manufacturing Dr. Malte Hartmann, BOSCH Advanced Ceramics</p> <p><u>Moderator:</u> Karin Scharrer, CERAMIC APPLICATIONS</p> <p>AM Towards Series Production – the Path to Industrial Performance <u>Speakers:</u></p> <ul style="list-style-type: none"> • Dr. Lars Schnetter, Schunk Ingenieurkeramik • Dr. Holger Wampers, Alumina Systems • Iris Heibel, BOSCH Advanced Ceramics • Dr. Christophe Chaput, 3DCERAM SINTO • Dr. Johannes Homa, Lithoz </div>	<p>Prospects for a Climate-neutral Brick and Tile Industry: Support Programme 'Decarbonising in Industry' organized by ZI Brick and Tile Industry International</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Moderator:</u> Wolfgang Deil, Bauverlag GmbH, ZI Brick and Tile Industry International</p> <p><u>Speaker:</u> Sebastian Varga, KEI - Competence Centre Climate Protection in Energy Intensive Industries</p> </div>
<p>16:00–17:00</p>	<p>Focus on Powder Metallurgy - Binder Based Additive Manufacturing (AM) of Metals organized by the Institute of Applied Powder Metallurgy and Ceramics at RWTH Aachen e. V. (IAPK)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Speakers:</u> MoldJet® - Maximum Productivity with Additive Manufacturing Robert Teuber, Fraunhofer IFAM Dresden</p> <p>Sinter-based Additive Manufacturing – Application Areas of Cold Metal Fusion (CMF) and Lithography-based Metal Manufacturing (LMM) Mike Schimmelpfennig, MetShape GmbH</p> </div>	<p>The Carbon Challenge - Steps and Leaps to Master the Future: Latest Developments with Refractories in Products and Applications organized by Deutsche Feuerfest Industrie e.V.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Moderator: Thomas Kaczmarek, Deutsche Feuerfest Industrie e.V.</p> </div>

Wednesday, June 22, 2022

	Forum Hall C1	Forum Hall C3
10:00–11:00	<p>Time to Market Redefined: 3D Printing in Ceramics organized by AM Ceramics</p> <p><u>Moderator:</u> Uwe Scheithauer, Fraunhofer IKTS</p> <p><u>Speakers:</u> Dr. Luca Pelliccia, RF Microtech Dr. Clara Minas-Payamyar, Schunk Ingenieurkeramik Niels Benson, AirCode</p>	<p>New Ways of Extrusion Construction: Technology, Textile Reinforced Concrete and High Temperature Ceramics organized by Institut für Baustoffforschung</p> <p><u>Moderator:</u> Matthias Kalthoff, Institute of Building Materials Research RWTH Aachen University</p> <p><u>Speakers:</u> Hans-Jörg Walter, HÄNDLE GmbH Maschinen und Anlagenbau Thorsten Tonnesen, Institute of Mineral Engineering (GHI) RWTH Aachen University Matthias Kalthoff, Institute of Building Materials Research RWTH Aachen University</p>
11:30–12:30	<p>Rewrite the Rules: Inspiring Innovations in Ceramics organized by AM Ceramics</p> <p><u>Moderator:</u> Uwe Scheithauer, Fraunhofer IKTS</p> <p><u>Speakers:</u> New Standards of Slurry-based 3D-Printing of Ceramics Dr. Thomas Mühler, QEP3D GmbH</p> <p>Process Design for Lithography-based Ceramic Manufacturing of Multi-Materials Prof. Dr. Serkan Nohut, Lithoz/Piri Reis University</p> <p>High Resolution 3D Printing of Transparent Fused Silica Glass Dr. Frederik Kotz Helmer, Glassomer GmbH</p>	<p>Prospects for a Climate-neutral Brick and Tile Industry: Hydrogen as an Alternative Fuel for Decarbonisation organized by ZI Brick and Tile Industry International</p> <p><u>Moderator:</u> Wolfgang Deil, Bauverlag GmbH, ZI Brick and Tile Industry International</p> <p><u>Speakers:</u> Eckhard Rimpel (Deputy Director IZF – Institute of Brick Research Essen)</p>
13:00–14:00	<p>The Innovation Hub of the European Cluster of Ceramics #1: The Future of Ceramics in Limoges organized by Pôle Européen de la Céramique</p> <p><u>Moderator:</u> Alexandra Beaudrouet, European Cluster of Ceramics</p> <p><u>Speakers:</u> Olivier Durand, Center for Technology Transfers in Ceramics Claude Schneider, 3D Minerals</p>	<p>Efficiency and Productivity in Brick and Roof Tile Making: State-of-the-Art Technology organized by VDMA</p> <p><u>Speakers tba</u></p>

<p>14:30–15:30</p>	<p>The Innovation Hub of the European Cluster of Ceramics #2: A Powerful Network to Get High-performance Products organized by Pôle Européen de la Céramique</p> <div data-bbox="350 300 1338 562" style="border: 1px solid black; padding: 5px;"> <p><u>Moderator:</u> Alexandra Beaudrouet, European Cluster of Ceramics</p> <p><u>Speakers:</u> Marion Sarrias, Marion Technologies Cédric Chevalier, PBMC SA Alain Charbonnier, Microcertec Frédéric Bajard, BINC Industries Olivier Burnet, Grindosonic</p> </div>	<p>Innovation in Ceramics: Research and Application organized by INTERCERAM & Keramische Zeitschrift</p> <div data-bbox="1587 300 2576 846" style="border: 1px solid black; padding: 5px;"> <p><u>Moderator:</u> Jan Werner, FGK - Forschungsinstitut Glas Keramik GmbH (Research Institute for Glass Ceramics)</p> <p><u>Speakers:</u> Development of Simultaneous Pistonextrusion Technology for Producing Core Shell Ceramics Sebastian Sanger, FGK - Forschungsinstitut Glas Keramik GmbH (Research Institute for Glass Ceramics) Marc Jahn, LOOMIS PRODUCTS Kahlefeld GmbH</p> <p>State of Development of 3D Printing at FGK with the Competence Center for Additive Manufacturing of Inorganic Non-metallic Materials Murat Demirtas, FGK - Forschungsinstitut Glas Keramik GmbH (Research Institute for Glass Ceramics)</p> <p>Highlights of Applied Science, Research and Development of Silicate Ceramics at FGK Research Institute Christoph Piribauer, FGK - Forschungsinstitut Glas Keramik GmbH (Research Institute for Glass Ceramics)</p> </div>
<p>16:00–17:00</p>	<p>Focus on Powder Metallurgy – Digital Twins in the Powder Metallurgical Process Chain organized by the Institute of Applied Powder Metallurgy and Ceramics at RWTH Aachen e. V. (IAPK)</p> <div data-bbox="350 1008 1338 1318" style="border: 1px solid black; padding: 5px;"> <p><u>Speakers:</u> The Digital Twin in Powder Metallurgy - How can Numerical Simulations map our Process Chain? Prof. Christoph Broeckmann, Institute for Materials Applications in Mechanical Engineering (IWM), Aachen University</p> <p>Digital Thermal Process Twins for the Optimization of Debinding and Sintering Dr. Gerhard Seifert, Fraunhofer ISC, Fraunhofer-Center HTL</p> <p>Dorst IoT Solutions – Digital Production on Powder Compacting Systems Herbert Grobl, Dorst Technologies</p> </div>	<p>Prospects for a Climate-neutral Brick and Tile Industry: Optimisation of the Tunnel Kiln Process through Internal Hot Gas Circulation organized by ZI Brick and Tile Industry International</p> <div data-bbox="1587 1008 2576 1163" style="border: 1px solid black; padding: 5px;"> <p><u>Moderator:</u> Wolfgang Deil, Bauverlag GmbH, ZI Brick and Tile Industry International</p> <p><u>Speaker:</u> Eckhard Rimpel, Deputy Director IZF - Institute of Brick Research Essen</p> </div>

Thursday, June 23, 2022

	Forum Hall C1	Forum Hall C3
10:00–11:00	<p>Ceramic Components for Analytics: Innovative Use in Agriculture, Electronics and Medical organized by CERAMIC APPLICATIONS</p> <p><u>Moderator:</u> Karin Scharrer, CERAMIC APPLICATIONS</p> <p><u>Speakers:</u> Porous Ceramics and Agriculture: a Natural Alliance for a New generation of Smart Sensors Fernando Sarría, FERNANDO SARRIA AGROTECHNOLOGIES, S.L. Ulrich Werr, RAUSCHERT HEINERSDORF-PRESSIG GMBH</p> <p>Silicon Nitride and Silicon Carbide Special Qualities – Recent Developments and Potential for Analytics and Electronics Dr. Ulrich Degenhardt, QSIL Ingenieurkeramik</p> <p>Ceramic Components for Analytics Based on 3D-printing Joachim Vogt, Fraunhofer HTL</p> <p>High-dynamic Thermal Cycler for Technical and Medical Applications Dr. Lars Rebenklau, Dr. Uwe Scheithauer, Fraunhofer IKTS</p>	<p>Southeast Asia as a Growth Market for the Ceramics Industry – Opportunities and Challenges organized by MMI Asia Pte Ltd</p> <p><u>Speaker:</u> Dr. Somnuk Sirisoonthorn, President, The Thai Ceramics Society</p>
11:30–12:30	<p>Ceramic Components for Power Supply: Ceramics Supports the Non-fossil Approach organized by CERAMIC APPLICATIONS</p> <p><u>Moderator:</u> Karin Scharrer, CERAMIC APPLICATIONS</p> <p><u>Speakers:</u> Wear- and Corrosion Resistant High-Temperature Coatings Applied via Wet-chemical Coating Technology Joachim Vogt, Fraunhofer HTL</p> <p>3D Printed Cores Dedicated to Single Crystal Csting Maxence Bourjol, 3D CERAM SINTO</p> <p>Industrial Applications Enabled by Additive Manufacturing Dr. Malte Hartmann, BOSCH Advanced Ceramics</p> <p>Active Metal Brazed Cu-Si3N4 Composites for Power Electronics Dr. Axel Rost, Fraunhofer IKTS</p>	<p>Prospects for a Climate-neutral Brick and Tile Industry: Optimisation of the Tunnel Kiln Process through Internal Hot Gas Circulation organized by ZI Brick and Tile Industry International</p> <p><u>Moderator:</u> Wolfgang Deil, Bauverlag GmbH, ZI Brick and Tile Industry International</p> <p><u>Speaker:</u> Eckhard Rimpel, Deputy Director IZF - Institute of Brick Research Essen</p>

<p>13:00–14:00</p>	<p>Ceramic Components for Mobility: Ceramics Moves People organized by CERAMIC APPLICATIONS</p> <p><u>Moderator:</u> Karin Scharrer, CERAMIC APPLICATIONS</p> <p><u>Speakers:</u> Additional Benefit of Silicon Nitride / Silicon Carbide Ceramics for Renewable Energy and Mobility Applications Toni Steiner, QSIL Ingenieurkeramik</p> <p>Breakthrough Innovations in the world of Ultra-fine Grinding Applied to Batteries Materials Zoé Buniazet, Saint-Gobain</p> <p>An Overview of Possible CMC Applications in Gasturbines for Aviation Dr. Peter Vierhaus; Fraunhofer HTL</p> <p>Functionalized Transparent Ceramics - Tough and Intelligent Solutions Dr. Michael Zins, Fraunhofer IKTS</p>	<p>From the Mechanizing to Automatizing: Global Applications of ECTS Technology organized by VDMA</p> <p><u>Speakers tba</u></p>
<p>14:30–15:30</p>	<p>Panel Ceramic Injection Molding organized by Expert Group CIM-Partner & CERAMIC APPLICATIONS</p> <p><u>Moderator:</u> Dr. Moritz von Witzleben, Inmatec</p> <p>Expert Group CIM-Partner CERAMIC APPLICATIONS</p> <p>CIM Towards New Dimensions</p> <ul style="list-style-type: none"> • Dr. Karin Hajek, Inmatec • Dr. Axel Müller-Köhn, Fraunhofer IKTS • Jens Graf, Kläger Spritzguss • Marko Mätzig, Arburg 	<p>Innovation in Ceramics: Research and Application organized by INTERCERAM & Keramische Zeitschrift</p> <p><u>Speakers:</u></p> <p>How to Get More Information from your Sample - The Complementary Use of SEM and Raman Johannes Kehren, Koblenz University of Applied Sciences</p> <p>Raman Imaging - More Than Just Pretty Pictures Sinje Zimmer, Koblenz University of Applied Sciences</p> <p>From Pictures to Numbers - Optical Microstructure Analysis of Electroceramic Materials Alexander Schuster, Koblenz University of Applied Sciences</p>
<p>16:00–17:00</p>	<p>Focus on Powder Metallurgy – Additive Manufacturing (AM) of Tool Materials organized by the Institute of Applied Powder Metallurgy and Ceramics at RWTH Aachen e. V. (IAPK)</p> <p><u>Speakers:</u> Binderjetting-Technology in Hardmetal Production Dr. Juan Trasorras, Global Tungsten & Powders Corp., USA</p> <p>Carbon- and Carbide-containing Materials for L-PBF Dr. Horst Hill, Deutsche Edelstahlwerke Specialty Steel GmbH & Co. KG</p> <p>Tools Steels in Additive Manufacturing Dr. Anke Kaletsch, Institute of Applied Powder Metallurgy and Ceramics at RWTH Aachen e.V. (IAPK)</p>	<p>Prospects for a Climate-neutral Brick and Tile Industry: Hydrogen as an Alternative Fuel for Decarbonisation organized by ZI Brick and Tile Industry International</p> <p><u>Moderator:</u> Wolfgang Deil, Bauverlag GmbH, ZI Brick and Tile Industry International</p> <p><u>Speaker:</u> Eckhard Rimpel, Deputy Director IZF - Institute of Brick Research Essen</p>

Friday, June 24, 2022

	Forum Hall C1	Forum Hall C3
10:00–11:00		CareerDay: Study Programmes in the Ceramic Field <i>(Session in German language)</i> <div style="border: 1px solid black; background-color: #f9cb9c; padding: 2px; margin-top: 5px;">Speakers tba</div>
11:30–12:30		CareerDay: Introducing Different Options after Graduation <i>(Session in German language)</i> <div style="border: 1px solid black; background-color: #f9cb9c; padding: 2px; margin-top: 5px;">Speakers tba</div>
13:00 – 14:30		CareerDay: What Do Companies Expect from Graduates? <i>(Session in German language)</i> <div style="border: 1px solid black; background-color: #f9cb9c; padding: 2px; margin-top: 5px;">Speakers tba</div>