CICMT 2022 - Ceramic Interconnect and Ceramic Microsystems Technologies

Vienna, July 13-15, 2022



CICMT 2022

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The Ceramic Interconnect and Ceramic Microsystems Technologies (CICMT) conference brings together a diverse set of disciplines to share experiences and promote opportunities to accelerate research, development and the application of ceramic interconnect and ceramic microsystems technologies. This international conference features ceramic technology for both microsystems and interconnect applications in a multi-track technical program. The Ceramic Interconnect track focuses on cost-effective and reliable high-performance ceramic interconnect products for extreme environments in the automotive, aerospace, lighting, solar, and communication industries. The Ceramic Microsystems track focuses on emerging applications and new products that exploit the ability of 3D ceramic structures to integrate interconnect/packaging with microfluidic, optical, micro-reactor and sensing functions. Multilayer ceramic, thin film, tape casting, thick film hybrid, direct write, and rapid prototyping technologies are common to both tracks, with emphasis on materials, processes, prototype development, advanced design, and application opportunities. Planned sessions and paper topics include:

1. Functional materials for passive/active devices and their properties

- Microwave/mm-wave LTCC/ULTCC dielectric
- Ferroelectric/piezoelectric/pyroelectric/ferrite/ multiferroic materials
- Sensitive ceramics/thermoelectric/electrocaloric materials
- Dielectric/ferroelectric/piezoelectric composites
- Pastes/inks/slurries for electronics

2. Material processing and device manufacturing technologies

- LTCC/HTCC and multilayer ceramic and glass processing
- Emerging ultralow temperature, room temperature processing, and cold sintering processing
- Additive manufacturing / 3D printing / direct writing
- · Advanced thick film processing
- Fine structuring technologies
- · Emerging embedding/integration technologies

3. Design, modeling, simulation, characterization and reliability

- · Metamaterials design, realization and characterization
- High frequency devices design/modeling/ simulation
- Materials and devices characterization
- Material and device reliability, lifetime, and failure estimation
- Thermal management/thermal transfer simulation

4. Devices and systems for emerging applications

- Circuits, antennas, and filters for MHz, GHz and THz for communications
- Automotive/aerospace/medical electronics/ optoelectronics
- Flexible/wearable electronics
- Integrated physical/chemical/biological sensors and actuators
- Packaging and integration issues for MEMS and BioMEMS devices
- Batteries/fuel cells/ energy conversion systems
- · Micro-reactors/micro-fluidic devices

Please submit your 500+ word abstract electronically by April 3, 2022 using the online system at https://www.conftool.net/cicmt2022/

Full papers are due by May 15, 2022 and should be uploaded separately after it has been determined whether the abstract has been accepted. All papers will be presented and published in English. If you have problems with the online system, please email the conference office: cicmt2022@mcc-events.de.

Venue

Austrian Economic Chambers Vienna, Austria

Contact

Local Conference Committee cicmt2022@mcc-events.de https://imapseurope.org/event/cicmt-2022/