

# **CEC/ICMC 2023 Abstracts & Technical Program**



**Sunday 9 July 2023 - Thursday 13 July 2023**  
**Hawaii Convention Center**

## **Submission Categories**

**CALL FOR SPECIAL & JOINT SESSIONS**

The CEC and ICMC Organizers invite the community to propose Special and/or Joint Sessions within the general scope of the Conference. To submit your special and/or joint session proposal, please email the appropriate Program Chairs listed **here** prior to the abstract submission deadline to include the session title and abstract along with the motivation of the special and/or joint session.

**CEC Submission Categories**

**CEC-01 – Large-Scale: Refrigeration and Liquefaction**

**CEC-02 – Large-Scale: Systems, Facilities and Testing**

**CEC-03 – Cryocoolers: Non-Aerospace**

**CEC-04 – Cryocoolers: Aerospace**

**CEC-05 – Components: Expanders, Pumps, Compressors, Heat Exchangers, etc.**

**CEC-06 – Applications: Superconducting Systems**

**CEC-07 – Applications: Instrumentation, Visualization, and Controls**

**CEC-08 – Applications: Cryo-fuels Testing and Logistics**

**CEC-09 – Applications: Aerospace**

**CEC-10 – Applications: Quantum Systems and Materials**

**CEC-11 – Applications: Medicine and Biology**

**CEC-12 – Fundamentals: Thermal Properties and Theory/Numerical Studies**

**CEC-13 – Miscellaneous**

**CEC-14 – Special Sessions (select only if requested by a committee member to submit your abstract)**

## **ICMC Submission Categories**

**ICMC-01 – NbTi/Nb<sub>3</sub>Sn/A15**

**ICMC-02 – MgB<sub>2</sub> Wires and Tapes**

**ICMC-03 – BSCCO Wires and Tapes**

**ICMC-04 – REBCO Coated Conductors**

**ICMC-05 – Flux Pinning and Critical Current**

**ICMC-06 – LTS and HTS Cables**

**ICMC-07 – HTS and MgB<sub>2</sub> Bulks**

**ICMC-08 – Fe-based and New Superconducting Materials**

**ICMC-09 – Modelling and AC Losses**

**ICMC-10 – Aging/Fatigue of LTS & HTS (e.g., Rotating Machines, Pulsed Magnets, ...)**

**ICMC-11 – Thin Films, Multilayers, and Artificial Structures**

**ICMC-12 – Cryogenic Materials Testing and Methods**

**ICMC-13 – Metallic, Ceramic, Composite and Polymeric Materials**

**ICMC-14 – Insulation/Conduction, Resins and Impregnation, and Dielectric Properties**

**ICMC-15 – Thermal, Electrical, and Magnetic Properties, Radiation, Degradation**

**ICMC-16 – 3D Printed Materials**

**ICMC-17 – Superconductor Measurements: Mechanical, Electrical, AC Loss and Stability**

**ICMC-18 – Topological Materials for Electronics**

**ICMC-19 – Applications: Microelectronics, Photonics, Sensors, Detectors, Computation (Quantum, neuromorphic, others)**

**ICMC-20 – Applications: Power Electronics, Electric Propulsion, Transportation**

**ICMC-21 – Applications: Fusion and Accelerator Magnet Technologies**

**ICMC-22 – Applications: Superconductors in Space**

**ICMC-23 – Hydrogen Technologies and Compatible Materials**

**ICMC-24 – Sustainability / Life Cycle Analysis**

**ICMC-25 – Low Temperature Materials Database (select only if requested by a committee member to submit your abstract)**

**ICMC-26 – Special Sessions (select only if requested by a committee member to submit your abstract)**