ICEC/ICMC 2014 Conference

Monday 7 July 2014 - Friday 11 July 2014

Scientific Programme

Scope:

We wish to bring together the world's experts, engineers, fellows, students, exhibitors and customers on cryogenic engineering, technology, and applications as well on cryogenic materials including super-conductors and applications. Presentations are requested for both oral and poster sessions on the key topics (tracks) listed herebelow.

Courses:

The conference starts on the Monday with 3 free parallel courses on Cryocoolers, Cryostat Design and Power Applications of Superconductivity.

Plenary, invited and regular oral sessions, and poster sessions:

From Tuesday through Thursday there is a daily program of 2 plenary presentations by keynote speakers, 2x3 parallel oral sessions including 18 invited presentations, and the poster session.

The program counts 6 plenary orals, 18 invited and 108 regular orals presented in 3 days. Posters are presented in 3 sessions on wide 2x1 m^2 poster boards integrated with the exhibition area.

Technical Excursions:

On Friday there are 3 parallel technical excursions:

The 1st tour is to two sites, to AmpaCity in Essen, German (fault current limiter & cable project of RWE, Nexans and KIT) and to HMFL, the High Magnet Field Laboratory in Nijmegen featuring 33 T facilities and a 45 T hybrid under construction.

The 2nd tour is to three sites, first to Philips Healthcare, then to Stirling Cryogenics and finally to Thales Cryogenics, all in the Eindhoven area.

The 3rd tour is to the NanoLab of the MESA^{+} institute on nanotechnology and the Cryogenics and Superconductivity Labs of the EMS group at the University of Twente.

Social Program:

The rich social program following an all-in concept comprises the Welcome Reception and snacks on Monday evening, Exhibitor's Reception and snacks on Tuesday evening, Museum Tour and Walking Dinner on Wednesday evening and the Conference Banquet in town on Thursday evening, as well as all lunches on Tuesday, Wednesday and Thursday.

Exhibition:

Some 25 exhibitors, companies and organizations will show their products and services. Potential exhibitors are referred to the conference website for information and possible arrangements.

<u>**The sorting categories for the abstracts (or tracks) are listed herebelow:**</u>

C-01: Large scale refrigeration, liquefaction

C-02: Cryocoolers- Pulse tube, Stirling, Magnetic and other coolers

C-03: Expanders, Pumps, compressors, regenerators and other components

C-04: Space cryogenic applications

C-05: Cryostat technology

C-06: Heat transfer and thermo-physical properties of solids and fluids

C-07: Magnet technology

C-08: Fusion magnets and conductors

C-09: Accelerators and detectors

C-10: Superconducting current leads and links

C-11: Cryogenics for power applications and transportation

C-12: Various applications of superconductors

C-13: LNG and hydrogen systems

C-14: New devices and novel concepts

C-15: Biological, medical and food applications

C-16: Instrumentation and process control

C-17: Safety, reliability and standards

M-01: NbTi/Nb3Sn processing and properties

M-02: RE123 conductors processing and properties

M-03: BSCCO wires and tapes processing and properties

M-04: MgB2 processing and properties

M-05: Thin Films

M-06: HTS Bulk

M-07: Pnictides and new superconducting materials

M-08: Superconductor stability and AC losses

M-09: Flux pinning and critical current

M-10: Metallic and composite materials processing and properties

M-11: Insulation and impregnation materials

M-12: Radiation and other degradation effects

M-13: Cryogenic materials testing and methods

M-14: Cryogenic low and high power electronics