Conference Agenda

31st August, Thursday

8:00 to 8:40	**Opening day: Registration & Coffee break**
8:40 to 9:00	**Welcome Speech**

Session A: Innovative applications (Chairman: Pr. P. Vanderbemden/Pr. J. Durrell)

9:00 to 9:25 **A-I**	**Invited speaker: Mitsuru Izumi** *National Institute of Technology & Tokyo University of Marine Science and Technology, Japan* **Status and prospects for low-speed bulk superconducting electric machines**
9:25 to 09:50 **A-II**	**Invited speaker: John Durrell** *University of Cambridge, United Kingdom* **The Characterisation of Bulk Rare-Earth Superconducting Undulators**
9:50 to 10:05 **A-III**	**Tetsuya Ida** *Tokyo University of Marine Science and Technology, Japan* **Magnetization method of HTS bulk by single pulse magnetic field with waveform control**

Industrial session: Dialogue between users and manufacturers (Chairman: Pr. P. Vanderbemden/Pr. J. Durrell)

10:05 to 10:20 **I-I**	**Plechacek Jan** *CAN SUPERCONDUCTORS, Czech Republic* **Current Progress in HTS Bulks and Materials for Industrial Applications**
10:20 to 10:35 **I-II**	**Bai Song** *Shanghai Superconductor, China* **The progress of the second generation high temperature superconductor tapes in Shanghai Superconductor Technology Co., Ltd.**
10:35 to 11:00	**Coffee break & Poster presentation**

Session B: Innovative applications and characterization (Chairman: Pr. M. Izumi/Pr. D. Zhou)

11:00 to 11:25 **B-I**	**Invited speaker: Zhihao Ke** *Southwest Jiaotong University* **The Development Status and Prospect of HTS Pinning Maglev in SWJTU**
11:25 to 11:50 **B-II**	**Invited speaker: Taketsune Nakamura** *Kyoto University, Japan* **R&D Status and Future Prospects of High Temperature Superconductor induction/Synchronous Motors Cooled by Liquid Hydrogen**
11:50 to 12:15 **B-III**	**Invited speaker: Philippe Vanderbemden** *University of Liège, France* **Superconducting magnetic shields combining bulk superconductors and tapes**
12:15 to 12:30 **B-IV**	**Tetsuo Oka** *Shibaura Institute of Technology, Japan* **HTS Bulk Magnets Cooled by a Refrigerator and Latest Efforts for Their Application Research**
12:30 to 14:00	**Lunch**

Session C: Processing and optimization of ReBCO bulk-I (Chairman: Pr. T. Prikhna/Dr. J. Plechacek)

14:00 to 14:25 **C-I**	**Invited speaker: Xin Yao** *Shanghai Jiao Tong University, China* **Natural strategies for creating non-equilibrium morphology with self-repairing capability towards rapid growth of YBCO bulks**
14:25 to 14:50 **C-II**	**Invited speaker: Pavel Diko** *Institute of Experimental Physics SAS, Slovak Republic* **Microstructure and superconductig properties of REBCO bulks studied at DMP IEP SAS Košice**
14:50 to 15:05 **C-III**	**Cuiping Zhang** *SMRC, Northwest Institute for Non-ferrous Metal Research, China* **Crystallographic Phase Transition and Growth Mechanism of Bulk Superconductor TSPMP-YBCO Single Domain and its Application on Superconducting Bearing**
15:05 to 15:20 **C-IV**	**Josef Baumann** *University of Cambridge, United Kingdom* **Understanding the mechanical and flux trapping properties of non-oxygenated YBCO, YBCO and YBCO(Ag) single grains**
15:20 to 15:45	**Coffee break & Poster presentation**

Session D: Processing and optimization of ReBCO bulk-II (Chairman: Pr. X. Yao/Dr. B. Savaskan)

15:45 to 16:10 **D-I**	**Invited speaker: Filip Antoncik** *University of Chemistry and Technology Prague, Czech Republic* **Advancements in Melt-assisted Single-domain REBCO Bulk Growth**
16:10 to 16:35 **D-II**	**Invited speaker: Difan Zhou** *Shanghai University, China* **REBCO bulk superconductors prepared by liquid assistant growth and their trapped field performance**
16:35 to 16:50 **D-III**	**Daniela Volochova** *Institute of Experimental Physics SAS, Slovak Republic* **Macroscopic superconducting properties of GdBCO bulk superconductors with different height**
17:00 to 19:00	**Social Event**
20:00 to 23:00	**Gala Dinner**

1st September, Friday
Session E: Characterization and Simulation (Chairman:Pr. L. Gozzelino/Pr. M. Miryala)

8:30 to 8:55 **E-I**	**Invited speaker: Wanmin Yang** *Shaanxi Normal University, China* **A new kind of flux pinning centers of $Gd_2Ba_2Sr_2CuZrO_y$ nanoparticles to fabricate high quality GdBCO bulk superconductors**
8:55 to 09:10 **E-II**	**Sait Baris Guner** *Recep Tayyip Erdogan University, Turkey* **Trapped Field and Levitation Performances of YBCO Bulk Superconductors**
9:10 to 09:25 **E-III**	**Michel Houbart** *University of Liège, France* **Overcoming the demagnetization of superconducting linear Halbach array**
9:25 to 09:40 **E-IV**	**Bakiye Çakır** *Artvin Çoruh University, Turkey* **Critical Current Density Distribution Map of the Bulk YBCO Superconductor**
09:40 to 09:55 **E-V**	**Akash Garg Agarwal** *Shibaura Institute of Technology, Japan* **Investigation of the Impact of Liquid Sources on Levitation Force and Trapped Field Performance of Ternary Bulk (Gd, Y, Er)-123 Fabricated Using Infiltration Growth Process**
09:55 to 10:10 **E-VI**	**Jean-Guy Caputo** *INSA Rouen, France* **Mathematical analysis of the flux-jump model**
10:10 to 10:25 **E-VII**	**Cyril Tain** *Université de Rouen Normandie & INSA Rouen, France* **Use of gauges in the Time Dependent Ginzburg Landau model of superconductivity**
10:25 to 10:50	**Coffee break & Poster presentation**

Session F: Recent trends of MgB_2 application (Chairman: Pr. A. Yamamoto/Dr. J-G. Caputo)

10:50 to 11:15 **F-I**	**Invited speaker: Muralidhar Miryala** *Shibaura Institute of Technology, Japan* **Recent developments in Bulk MgB_2: Affordable and High-Performance Material for Practical Use**
11:15 to 11:40 **F-II**	**Invited speaker: Tetiana Prikhna** *V. Bakul Institute for Superhard Materials, Ukraine; Leibniz-Institut für Festkörper- und Werkstoffforschung Dresden e. V., Germany; Institut de Ciencia de Materials de Barcelona, Spain* **Magnesium diboride- and ReBCO - based materials for application in liquid hydrogen**
11:40 to 12:05 **F-III**	**Invited speaker: Laura Gozzelino** *Politecnico di Torino & Istituto Nazionale di Fisica Nucleare, Sezione di Torino, Italy* **Thermo-magnetic instability influence on the shielding properties of MgB_2 bulk samples**
12:05 to 12:20 **F-IV**	**Burcu Savaşkan** *Karadeniz Technical University, Turkey* **MgB_2 bulk superconductors fabricated by in-situ route for levitation applications**
12:20 to 12:35 **F-V**	**Yiteng Xing** *Laboratoire de Cristallographie et sciences des matériaux, France* **Investigation of Superconducting Magnetic levitation with MgB_2 bulk cryomagnets: the effect of the sample size and working temperature**
12:35 to 14:00	**Lunch**

Session G: Processing and characterization of iron-based & MgB_2 & HTS materials: (Chairman: Pr. P. Diko/Pr. Y. Ma)

14:00 to 14:25 **G-I**	**Invited speaker: Yanwei Ma** *Institute of Electrical Engineering, Chinese Academy of Sciences, China* **Fabrication of High Performance Iron-Based Superconducting Materials**
14:25 to 14:50 **G-II**	**Invited speaker: Akiyasu Yamamoto** *Tokyo University of Agriculture and Technology & JST-CREST, Japan* **Process machine learning, twinning network graph analysis & record high trapped magnetic field of Ba122 polycrystalline bulk superconductors**
14:50 to 15:05 **G-III**	**Minoru Maeda** *Kangwon National University, South Korea* **Structural disorder and its anisotropy in multi-band MgB_2 materials with high critical current performance**
15:05 to 15:20 **G-IV**	**Nicolas Rotheudt** *University of Liège, France* **Design of a bespoke 3-axis cryogenic Hall probe and application to measuring the flux density produced by bulk superconductors with a triangular cross-section**
15:20 to 15:35 **G-V**	**Michela Fracasso** *Politecnico di Torino & Istituto Nazionale di Fisica Nucleare, Sezione di Torino, Italy* **Trapped field ability of a MgB_2 disk: experimental and numerical investigation**
15:35 to 16:00	**Conclusions and end of the conference**

31st August - 1st September
Session H: Poster Presentation

H-I	**Şeyda Duman** *Artvin Çoruh University & Karadeniz Technical University, Turkey* **A Study of Fluctuation Induced Conductivity Analysis for Welded TSMG YBCO Using a Solder Material Produced by Different Melting Methods**
H-II	**Tatsuki Tagashira** *Keio University, Japan* **Application of superconducting levitation to vibration-based energy harvesters**
H-III	**Kento Takemura** *Shibaura Institute of Technology, Japan* **Control of joint part properties in GdBCO bulk superconductor joined by ErBCO superconductor**
H-IV	**Yuhi Yamanouchi** *Tokyo University of Marine Science and Technology, Japan* **Design of a linear generation module for undulator-type tidal current power generation**
H-V	**Koyo Kimura** *Keio University, Japan* **Effectiveness of LCR electromagnetic shunt damper for superconducting magnetic levitation system with nonlinear vibration characteristics caused by magnetic forces**
H-VI	**Bruno Douine** *Université de Lorraine, France* **High Temperature Superconducting bulks for electrical machine application**
H-VII	**Katarína Zmorayová** *Institute of Experimental Physics SAS, Slovak Republic* **Microstructure of DyBCO bulk superconductors prepared using single-direction melt growth (SDMG) method.**

H-VIII	**Veronika Kucharova** *Institute of Experimental Physics SAS, Slovak Republic* **Preparation, microstructure and superconducting properties of EuBCO-Ag bulk samples**
H-VIV	**Minato Hiroki** *Keio University, Japan* **Relationship between magnetic support configuration and vibration suppression effect by a gyroscopic damper for a high-temperature superconducting levitation system**
H-X	**Sébastien Lemonnier** *Institut franco-allemand de recherches de Saint-Louis,France* **Spark Plasma Sintering of pure dense MgB_2 ceramics: myth or reality?**
H-XI	**Akira Murakami** *National Institute of Technology, Ichinoseki College, Japan* **Tensile properties of superconducting bulk $REBa_2Cu_3O_y$ material fabricated by the infiltration growth technique without Pt addition**
H-XII	**Nagisa Kawasumi** *Tokyo University of Marine Science and Technology, Japan* **Transient measurement of two-dimensional magnetic flux density distribution on HTS bulk surface**
H-XIII	**Jefry-Samson Thonikuzhiyil** *Normandie Univ, ENSICAEN, UNICAEN, CNRS, CRISMAT, 14000 Caen, France* **Magnetic Performance Study on NdFeB/ Sr-Ferrite composite Permanent magnets: towards a new track for magnetic levitation**
H-XIV	**Yiteng XING** *Normandie Univ, ENSICAEN, UNICAEN, CNRS, CRISMAT, 14000 Caen, France* **High critical current density of MgB_2 bulk superconductor fabricated by Spark Plasma Sintering**
H-XV	**Pierre Bernstein** *Normandie Univ, ENSICAEN, UNICAEN, CNRS, CRISMAT, 14000 Caen, France* **Magnetic Dipoles Including Magnets and Superconductors with Adjustable Field**