

Oral Sessions

Flux pinning

Chairpersons: Xavier Obradors (ICMAB/CSIC) and Takanobu Kiss (Kyushu University)

WB5-1-INV 9:30–10:00

Flux pinning in REBCO thin films doped with artificial pinning centers

*KANAME MATSUMOTO¹, Tadayo Nishihara¹, Tomoya Horide¹, Alok Jha¹, Yutaka Yoshida², Satoshi Awaji³, Ataru Ichinose⁴

1. Kyushu Institute of Technology; 2. Nagoya University; 3. Tohoku University; 4. CRIEPI

WB5-2-INV 10:00–10:30

Recent Activities on R&D of Coated Conductors in JAPAN

*Teruo IZUMI

AIST (National Institute of Advanced Industrial Science and Technology)

WB5-3 10:30–10:45

Characterization of YBa₂Cu₃O_y coated conductors with BaHfO₃ nanoparticle flux pinning centers by metal organic deposition

*Ryo Teranishi¹, Hiroshi Horita¹, Yukio Sato¹, Kenji Kaneko¹, Teruo Izumi², Satoshi Awaji³

1. Kyushu University; 2. National Institute of Advanced Industrial Science and Technology; 3. Tohoku University

WB5-4 10:45–11:00

Development of Artificial Pinning Center Introduced Coated Conductor by MOD Method Using a New Raw Material Solution

*Kazunari Kimura¹, Ryusuke Hironaga¹, Tatsunori Nakamura¹, Kyo Takahashi¹, Yasuo Hikichi¹, Yasuo Takahashi¹, Tsutomu Koizumi¹, Takayo Hasegawa¹, Koichi Nakaoka², Teruo Izumi²

1. SWCC Showa Cable Systems Co., Ltd.; 2. National Institute of Advanced Industrial Science and Technology (AIST)

MgB₂

Chairpersons: John H. Durrell (University of Cambridge) and Hideki Tanaka (Hitachi)

WB6-1-INV 11:15–11:45

Recent development of MgB₂ wires and (Ba,K)Fe₂As₂ tapes in NIMS

*Hiroaki Kumakura, Shujun Ye, Zhaoshun Gao, Akiyoshi Matsumoto, Kazumasa Togano

National Institute for Materials Science

WB6-2-INV 11:45–12:15

Trapped Field Properties of MgB₂ Superconducting Bulks Magnetized by Field-cooled and Pulsed Field Magnetizations

*Tomoyuki Naito, Arata Ogino, Yuhei Takahashi, Hidehiko Mochizuki, Hiroyuki Fujishiro

Iwate University

WB6-3 12:15–12:30

Record critical current density in bulk MgB₂ using carbon-coated amorphous boron and optimum sintering conditions

*Muralidhar Miryala¹, Masaki Higuchi¹, Kazuo Inoue¹, Pavel Diko², Miles Jirsa³, Masato Murakami¹

1. Graduate School of Science and Engineering, Shibaura Institute of Technology; 2. Institute of Experimental Physics, SAS, Slovak Republic; 3. Institute of Physics, Czech Academy of Sciences, Praha, Czech Republic

WB6-4 12:30–12:45

The performance improvement of MgB₂ prepared by the Mg diffusion method with the MgB₄ addition

*Hong Zhang¹, Lei Li¹, Yong Zhao^{1,2}, Yong Zhang¹

1. Key Laboratory of Maglev Train and Maglev Technology of Ministry of Education, Superconductivity and New Energy R&D Center, Southwest Jiaotong University, China;
2. School of Physical Science and Technology, Southwest Jiaotong University, China