Oral Sessions

HTS 1

Chairpersons: Amit Goyal (The State University of New York at Buffalo) and Yasuhiro Iijima (Fujikura)

WB1-1-INV 9:30–10:00

Status of high performance REBCO coated conductors for high field applications

*Venkat Selvamanickam

University of Houston

WB1-2-INV 10:00–10:30

Optimal, Nanodefect Configurations via Strain-Mediated Assembly for Optimized Vortex-Pinning in Superconducting Wires from 4.2K-77K

*Amit Goyal

University at Buffalo; The State University at New York

WB1-3 10:30–10:45

Statistical Behavior of Positional Variation of Critical Current Density in Long RE-123 Coated Conductors

*Takanobu Kiss[1], Kohei Higashikawa[1], Takahiro Fukuzaki[1], Yuta Onodera[1], Takumi Suzuki[1], Masayoshi Inoue[1], Takato Machi[2], Akira Ibi[2], Teruo Izumi[2]

1. Dept. of Electrical Engineering, Kyushu University; 2. National Institute of Advanced Industrial Science and Technology

WB1-4 10:45–11:00

Correlated Study between Critical Current Density at 77 K and That of Low Temperature In-Filed Conditions of Various REBCO Coated Conductors

*Masayoshi Inoue[1], Kazutaka Imamura[1], Takumi Suzuki[1], Shogo Ichimura[1], Takahiro Fukuzaki[1], Kohei Higashikawa[1], Teruo Izumi[2], Takanobu Kiss[1]

1. Kyushu University; 2. AIST

HTS 2

Chairpersons: Venkat Selvamanickam (University of Houston) and Kaname Matsumoto (Kyushu Institute of Technology)

WB2-1-INV 11:15–11:45

Development of Uniform and Productive Process for BMO-Doped REBCO Coated Conductor by Hot Wall-PLD on IBAD Template Technique

*Yasuhiro Iijima, Kazuomi Kakimoto, Mitsunori Igarashi, Shinji Fujita, Wataru HIrata, Shogo Muto, Tomo Yoshida, Yutaka Adachi, Kunihiro Naoe

Fujikura Ltd.

WB2-2-INV 11:45–12:15

Recent progress of manufacturing HTS tapes and its applications at SuperOx

*Sergey Lee[1], Valery Petrykin[1], Naoyuki Hirata[1], Juhyun Chung[1], Miyuki Nakamura[1], Shinya Hasuo[1], Alexei Mankevich[2], Vsevolod Chepikov[2], Anton Markelov[2], Mikhail Moyzykh[2], Alexander Molodyk[2], Sergey Samoilenkov[2]

1. Superox Japan LLC; 2. CJSC SuperOx

WB2-3-INV 12:15–12:45

Recent development of DI-BSCCO wire

*Kohei Yamazaki, Shin-ichi Kobayashi, Goro Osabe, Tomohiro Kagiyama, Masashi Kikuchi, Takayoshi Nakashima, Soichiro Takeda, Takuro Kadoya, Tomoyuki Okada, Kazuhiko Hayashi, Takeshi Kato

Sumitomo Electric Industries, Ltd.

Lunch Break 12:45–14:00

Superconducting bulk materials

Chairpersons: Tomoyuki Naito (Iwate University) and Muralidhar Miryala (Shibaura Institute of Technology)

WB3-1-INV 14:00–14:30

The generation of high fields in (RE)$Ba_2Cu_3O_{7-\delta}$ and MgB_2 bulk superconductors

*John H. Durrell

University of Cambridge, Department of Engineering

WB3-2-INV 14:30–15:00

Potential of RE123 bulks from viewpoints of materials science

*Jun-ichi Shimoyama[1], Takumi Sato[1], Takanori Motoki[1], Yui Setoyama[2], Kazuya Matsumoto[2], Kohji Kishio[2]

1. Aoyama Gakuin University; 2. University of Tokyo

WB3-3 15:00–15:15

Microstructure and Trapped Field of YBCO Bulk Superconductors Fabricated by Interior Seeding.

*Pavel Diko[1], Monika Radušovská[1], Samuel Piovarči[1], Chan-Joong Kim[2], B.-H. Jun[2], S.-D. Park[2]

1. Institute of Experimental Physics, Slovak Academy of Sciences, Košice, Slovakia; 2. Korea Atomic Energy Research Institute, Daejeon, Korea

WB3-4 15:15–15:30

Two directional growth of a Y123 grain in melt-processed YBCO bulk

superconductor with interior seeding

*Chan Joong Kim[1], Soon Dong Park[1], Byung Huk Jun[1], Sang Heon Lee[2]

1. Neutron Utilization Technology Division, Korea Atomic Energy Research Institute;
2. Department of Electronc Engineering, Sunmoon University

Characterization, fabrication and new materials

Chairpersons: Jun-ichi Shimoyama (Aoyama Gakuin University) and Sergey Lee (SuperOx Japan)

WB4-1-INV 15:45–16:15

Spatially Resolved Measurements on Critical Current in Coated Conductors and MgB_2 Wires

*Kohei Higashikawa[1], Masayoshi Inoue[1], Shinji Fujita[2], Mitsunori Igarashi[2], Kazuomi Kakimoto[2], Yasuhiro Iijima[2], Zhenan Jiang[3], Rodney Badcock[3], Nicholas Long[3], Robert Buckley[3], Teruo Izumi[4], Akiyoshi Matsumoto[5], Hiroaki Kumakura[5], Takanobu Kiss[1]

1. Kyushu University; 2. Fujikura Ltd.; 3. Robinson Research Institute, Victoria University of Wellington; 4. National Institute of Advanced Industrial Science and Technology; 5. National Institute for Materials Science

WB4-2 16:15–16:30

Evaluation of low electric field characteristics in multi-filamentary Bi-2223 tape under high magnetic fields

*YUTA ONODERA, KOHEI HISAJIMA, SHYAM MOHAN, KAZUTAKA IMAMURA, TAKUMI SUZUKI, KOHEI HIGASHIKAWA, MASAYOSHI INOUE, TAKANOBU KISS

Kyushu University

WB4-3 16:30–16:45

Carrier-Doping Dependence of Critical Current Density in $Ba_{1-x}K_xFe_2As_2$ Single Crystals and Superconducting Wires

*Sunseng Pyon, Takahiro Suwa, Tsuyoshi Tamegai

Dept. of Appl. Phys., Univ. of Tokyo

WB4-4 16:45–17:00

Development of Scribing Technique to Fabricate Multi-Filamentary Structure of Coated Conductors

*Takato Machi, Akira Ibi, Teruo Izumi

AIST

WB4-5 17:00–17:15

Calculation of Magnetic Force on Magnetic Levitation Tool with Superconducting Bulks by Finite Element Method

December 14

*Yuta Hiramatsu, Yu Takahashi, Edmund Soji Otabe, Keisuke Suzuki, Yuki Tanaka, Masaru Kiuchi

Kyushu Institute of Technology