Scientific Schedule of IWCC11

July 28(Mon), 2003

Get-together Party

17:00–20:00 Regstration is available from 15:00.

July 29(Tue), 2003

9:00–9:10 Opening

Plenary Talk (T. Takizawa, M. Murakami)

9:10–10:00 PL1

Progress of coated conductors and its evaluations
Shoji Tanaka (Superconductivity Research Laboratory)

10:00–10:50 PL2

Microscopic observation of vortex pinning by lorentz microscopy
Akira Tonomura (Hitachi, RIKEN, JST)

Coffee Break

Coated Conductor (T. Matsushita, T. Tamegai)

11:10–11:40 CC1(invited)

Fabrication of coated conductors by inclined substrate deposition and oxygen doping of grain boundaries
U. (Balu) Balachandran (Argonne National Laboratory)

11:40–12:10 CC2(invited)

Long-length YBCO coated tapes with extra-high engineering current density
Alexander Usoskin (Zentrum für Funktionswerkstoffe gGmbH)

Lunch

13:30–14:00 CC3(invited)

Transport E-J characteristics in YBCO coated conductors
Takanobu Kiss (Kyushu University)

14:00–14:30 CC4(invited)

Current-flow in epitaxial YBCO on RABiTS
Amit Goyal (Oak Ridge National Laboratory (ORNL))

14:30–14:50 CC5

Continuous fabrication of coated conductor using RABiTS and PLD
Chan Park (Korea Electrotechnology Research Institute (KERI))

14:50–15:10 CC6

Magnetic flux pinning properties of YBCO thin films grown on $StTiO_3$(100) and MgO(100) substrates
Kaname Matsumoto (Kyoto University)

15:10–15:30 CC7

Progress of PLD and IBAD processes for YBCO wire in SRL Nagoya Coated Conductor Center —New method for coated conductor using self-epitaxial PLD-CeO_2 buffer—
Yutaka Yamada (SRC-ISTEC)

Coffee Break

Flux Pinning (U. Balachandran, E.S. Otabe)

15:50–16:10 FP1

Flux pinning properties of c-axis correlated pinning centers in PLD-YBCO films
Hiroshi Yamada (National Institute of Advanced Industrial Science and Technology)

16:10–16:30 FP2

Pinning effects of Zn impurities in $YBa_2Cu_3O_y$ single crystals
Norio Kobayashi (Tohoku University)

16:30–16:50 FP3

Controlling the motion of magnetic flux quanta by asymmetric V-shaped pinning lattices
Bei Yi Zhu (RIKEN)

16:50–17:10 FP4

Effect of chemical inhomogeneities on the pinning properties of Bi2212 single crystals
Noriko Chikumoto (SRL-ISTEC)

July 30(Wed), 2003

MgB_2 1 (H. Kumakura, S.-H. Moon)

9:00–9:30 MB1(invited)

Effect of nano-dopants and sample size on critical current density in the superconducting MgB_2

Shi Xue Dou (University of Wollongong)

9:30–10:00 MB2(invited)

Critical currents in neutron irradiated MgB_2 single crystals

Michael Eisterer (Atomic Institute of the Austrian Universities)

10:00–10:30 MB3(invited)

Critical current densities and trapped fields of dense MgB_2 bulk superconductors

Sang-Im Yoo (Seoul National University)

Coffee Break

MgB_2 2 (S. X. Dou, M. Eisterer)

10:50–11:10 MB4

Fabrication and critical current densities of PIT processed MgB_2 tapes

Hiroaki Kumakura (National Institute for Materials Science)

11:10–11:30 MB5

The effect of sample size on magnetic J_c and flux pinning in MgB_2

Hua Kun Liu (University of Wollongong)

11:30–11:50 MB6

Enhanced critical current properties observed in Na_2CO_3 doped MgB_2

Shinya Ueda (University of Tokyo)

11:50–12:10 MB7

The superconducting properties and microstructure of MgB_2 thin films prepared by ex-situ annealing process

Seung-Hyun Moon (Seoul National University)

Lunch

Bulk1 (S.-I. Yoo, S. Awaji)

13:30–14:00 BK1(invited)

Pinning centers in NEG123 active at liquid oxygen temperature (90 K)

Muralidhar Miryala (ISTEC-SRL)

14:00–14:20 BK2

Processing and the high performance of large single grain (rare earth) -Ba-Cu-O

Hiroshi Ikuta (Nagoya University)

14:20–14:40 BK3

High critical current density in Y- and (Gd, Y)-Ba-Cu-O bulk superconductors with very fine RE211 particles

Shinya Nariki (SRL-ISTEC)

14:40–15:00 BK4

Pinning effects of the RE_2BaCuO_5 precipitate particles in melt-processed $REBa_2Cu_3O_x$ superconductors

Hiroyuki Fujimoto (Railway Technical Research Institute)

Coffee Break

Poster Session (N. Sakai, A. Goyal)

15:30–18:00 Poster Session

PO1

AC loss and current distribution measurements for superconducting tape
Tosin S. Famakinwa (Chubu University)

PO2

Gapless state in $CeRu_2$ studied by point contacts
Andriy V. Moskalenko (CREST)

PO3

Controlling the vortex lattice melting via force-free current
Ciro Cattuto (RIKEN)

PO4

Synthesis and characterisation of $RuSr_2Nd_xGd_{1-x}Cu_2O_8$ compounds ($x = 0,\ 0.09,\ 0.18,\ 0.35$)
Paolo Mele (ISTEC-SRL)

PO5

Magnetization analysis of sintered Bi2223 by new critical state model
Yoshihide Kimishima (Graduate School of Yokohama National University)

PO6

Improvement of the mechanical properties and cryostability of bulk superconductor with impregnation technique
Masaru Tomita (Railway Technical Research Institute)

PO7

Fabrication and transport property of directionally solidified Y123 thin fiber
Yuichi Nakamura (Toyohashi University of Technology)

PO8

Fabrication and superconducting properties of Ho-Ba-Cu-O bulk superconductors
Hironobu Tanaka (Nihon-University, ISTEC)

PO9

Pinning properties of periodic artificial pinning center by microfablication
Naoyuki Harada (Yamaguchi University)

PO10

Numerical simulation of contactless measurement method for critical current density —Application of element-free Galerkin method—
Kyoko Hasegawa (University of Tsukuba)

PO11

Angular dependence of critical current in a YBCO coated IBAD tape
Masayoshi Inoue (Kyushu Unversity)

PO12

Joining of Y-Ba-Cu-O/Ag bulk superconductors using an Er-Ba-Cu-O/Ag solder
Kazumasa Iida (SRL-ISTEC)

PO13

Y-123 films prepared on 110<110> textured Ag tapes
Toshiya Doi (Kagoshima University)

PO14

Numerical evaluation of maximum stress of a bulk superconductor in field-cooled magnetization
Masanori Tsuchimoto (Hokkaido Institute of Technology)

PO15

Effects of subgrains on critical current properties in melt-processed RE-Ba-Cu-O bulk superconductor
Kei Ogasawara (Tokyo Gas Co., Ltd.)

PO16

Modeling of magnetic characteristics of high-temperature superconductors
Muneo Futamura (Shinshu University)

PO17

Scaling behavior of critical currents of Josephson junction networks with structural disorder
Takaaki Kawaguchi (Shimane University)

PO18

Pinning property of Bi-2212 single crystals with columnar defects
Kazunori Okamura (Kyushu Institute of Technology)

PO19

Evaluation of E-J characteristics of Bi-2223 silver-sheathed tape wire using Campbell's method
Masaru Kiuchi (Kyushu Institute of Technology)

PO20

Copper sheath MgB_2 wires fabricated by an in-situ PIT method
Satoshi Shimura (SRL-ISTEC)

Banquet

18:00–20:30

July 31(Thu), 2003

Vortex (N. Chikumoto, E. H. Brandt)

9:00–9:30 VR1(invited)

Crossing-Lattices State in $Bi_2Sr_2CaCu_2O_{8+y}$
Tsuyoshi Tamegai (University of Tokyo)

9:30–10:00 VR2(invited)

Pancake stacks in crossing lattices of layered superconductors - vortex snakes
Alexander N Grigorenko (Manchester University)

10:00–10:20 VR3

Effects of twin planes on vortex phase transition in high magnetic fields in YBCO single crystals
Tomoyuki Naito (Japan Advanced Institute of Science and Technology)

10:20–10:40 VR4

Devices for controlling the motion of magnetic flux quanta in layered superconductors
Sergey Savel'ev (RIKEN)

Coffee Break

Bulk2 (M. Miryala, H. Fujimoto)

11:00–11:20 BK5

Peak effect with titled fields in melt-processed (Sm, Eu)$Ba_2Cu_3O_y$ superconductors
Anming Hu (Superconductivity Research Laboratory)

11:20–11:40 BK6

Transport properties for (Nd, Eu, Gd)$Ba_2Cu_3O_7$ bulk with a high irreversibility field
Satoshi Awaji (Tohoku University)

11:40–12:00 BK7

Flux motion and its temperature dependence in the YBCO bulk superconductors during pulse field magnetization
Katsunori Yoshizawa (Nihon University)

Lunch

Electromagnetic Properties1 (K. Yamafuji, T. Fujiyoshi)

13:30–14:00 EM1(invited)

Shaking of the critical state by a small transverse ac field can cause rapid relaxation in superconductors
Ernst H. Brandt (Max-Planck-Institute für Metallforschung)

14:00–14:30 EM2(invited)

Low Temperature Laser Scanning imaging of dissipation in high-T_c structures
Dmytro Abraimov (University of Wisconsin)

14:30–14:50 EM3

Microstructure dependence of critical current in silver sheathed Bi2223 tapes
Kozo Osamura (Kyoto University)

14:50–15:10 EM4

Transport critical current properties of artificial grain boundary in joining of Y-Ba-Cu-O bulks
Naomichi Sakai (SRL-ISTEC)

Coffee Break

Electromagnetic Properties2 (H. Weber, K. Osamura)

15:30–15:50 EM5

Inductive J_c measurement in bulk superconductors using third harmonic voltages
Hirofumi Yamasaki (National Institute of Advanced Industrial Science and Technology)

15:50–16:10 EM6

A simple method to identify high J_c films with large area
Sundaresan Athinarayanan (NeRI, AIST)

16:10–16:30 EM7

On the method to drive E-J characteristics of high-T_c superconducting materials from the relaxation of the magnetization
Takanori Fujiyoshi (Kumamoto University)

16:30–16:50 EM8

Effects of grain boundaries upon microwave dissipation and surface resistance in superconductors
Yasunori Mawatari (National Institute of Advanced Industrial Science and Technology)

16:50–17:00 Closing