

Poster Sessions

Magnet protection

Chairperson: Tsuyoshi Wakuda (Hitachi)

APP1-1 16:00–18:00

Detection Method of Normal transitions in a High Temperature Superconducting Coil wound with a plurality of YBCO superconductors by the Active Power Method and H-coils

*Ryo Kadowaki, Nozomu Nanato

Okayama University

APP1-2 16:00–18:00

Locating of Normal Transitions in A Bi2223 High Temperature Superconducting Coil by Using Capacitor Type Voltage Terminals and the Active Power Method

*Kohei Okura, Nozomu Nanato, Yasunobu Kumagai, Hiroki Aoyama

Okayama University

APP1-3 16:00–18:00

Detection of Normal Transitions in a Hybrid Single-phase Bi2223 High Temperature Superconducting Transformer by using the Active Power Method and a Magnetic Flux Detection Coil

*Shingo Nakamura, Nozomu Nanato, Shinichi Tanaka

Okayama University

APP1-4 16:00–18:00

Protection System for Normal Transitions in a Single-phase 1 kA Class Bi2223 High Temperature Superconducting Transformer by Using the Active Power Method

*Noriyuki Koide, Nozomu Nanato, Takaaki Ono, Takahumi Adachi

Okayama University

APP1-5 16:00–18:00

Quench Behaviors and Characteristics of the Metal-Insulated 2G HTS Coil with Parallel Resistors

*Beomyong Eom, Myung-Hwan Sohn, Kideok Sim, Haejong Kim Kim, Kichul Seong

Korea Electrotechnology Research Institute

APP1-6 16:00–18:00

Conduction Cooling System based Design and the Experimental analysis of A

Metal Insulated HTS Magnet

*Jongho Choi, Chan-Kyeong Lee, Sung-Kyu Kim, Minwon Park, In-Keun Yu
Changwon National University

APP1-7 16:00–18:00

Study on the Control of Current Bypassing and the Thermal Behavior in the Non-Insulated HTS Coil

*Kentaro Tami, Daiseki Kanenoto, SeokBeom Kim, Hiroshi Ueda
Okyayama University

NMR

Chairperson: Shoichi Yokoyama (Mitsubishi Electric)

APP2-1 16:00–18:00

Study on the Permanent Current Switch in HTS Coils Wound with 2G Wire for Compact NMR Magnets

*Keito Sugo, SeokBeom Kim, Hiroshi Ueda, Ryo Saito
Okayama University

APP2-2 16:00–18:00

Study on the magnetic field homogeneity and shimming method of Halbach arrayed permanent magnets for compact NMR relaxometry

*Ryota Nomura, Katuya Hojo, Susumu Fukada, Shinya Ohara, SeokBeom Kim,, Hiroshi Ueda
Okayama University

APP2-3 16:00–18:00

Numerical study to obtain the improved field homogeneity of HTS bulk magnet with enlarged inner diameter for compact NMR relaxometry

*Susumu Fukada, SeokBeom Kim, Hiroshi Ueda, Katsuya Hojo
Okayama University

Magnetic field application

Chairperson: Mitsuho Furuse (AIST)

APP3-1 16:00–18:00

Side-suspended High- T_c Superconducting Maglev Prototype Vehicle Running at a High Speed in an Evacuated Circular Test Track

Dajin Zhou¹, Chenyu Cui¹, Lifeng Zhao¹, Yong Zhang¹, Xiqing Wang¹, *Yong Zhao^{1,2}

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

APP3-2 16:00–18:00

Study of Running Stability in Side-Suspended HTS-PMG Maglev Circular Line System

*Dajin Zhou¹, Linbo Li¹, Chenyu Cui¹, Yong Zhang¹, Yong Zhao^{1,2}

1. Key Laboratory of Magnetic Levitation Technologies and Maglev Trains (Ministry of Education of China), Superconductivity and New Energy R&D Center, Southwest Jiaotong University, China; 2. School of Physical Science and Technology, Southwest Jiaotong University

APP3-3 16:00–18:00

Nonlinear Vibration Behavior of High-Tc Superconducting Bulks Above a Permanent Magnetic Guideway

*Jipeng Li¹, Haitao Li¹, Botian Zheng^{1,2}, Huan Huang¹, Jun Zheng¹, Zigang Deng¹

1. Applied Superconductivity Laboratory, State Key Laboratory of Traction Power, Southwest Jiaotong University, China; 2. School of Electrical Engineering, Southwest Jiaotong University

APP3-4 16:00–18:00

Curve Negotiation Ability of High Temperature Superconducting Maglev Above Different Permanent Magnet Guideways

*Haitao Li, Zigang Deng, Jipeng Li, Hengpei Liao, Jun Zheng, Botian Zheng

Applied Superconductivity Laboratory, State Key Laboratory of Traction Power, Southwest Jiaotong University

APP3-5 16:00–18:00

Numerical Analysis of Fundamental Characteristics of Superconducting Magnetic Bearings for a Polarization Modulator

Yusuke Terachi¹, *Hiroyuki Ohsaki¹, Yutaka Terao¹, Yuki Sakurai², Tomotake Matsumura³, Hajime Sugai², Shin Utsunomiya², Hirokazu Kataza³, Ryo Yamamoto³

1. Graduate School of Frontier Sciences, The University of Tokyo, Japan; 2. Kavli IPMU, The University of Tokyo, Japan; 3. ISAS/JAXA, Japan

APP3-6 16:00–18:00

Fundamental study on the magnetic field control method using multiple HTS coils for Magnetic Drug Delivery System

*Ryoma Hirano, Takuya Nakagawa, Yoshikazu Tomisaka, Hiroshi Ueda, SeokBeom Kim
Okayama University

APP3-7 16:00–18:00

Power Transfer Characteristics by Different Multi Antennas of Wireless Power Charging System for Superconducting MAGLEV Train

*Yoon Do CHUNG¹, Chang Young LEE², Young Gun PARK³

1. Dept. of Electrical Engineering, Suwon Science College; 2. Korea Railroad Research Institute; 3. Dept. of Electrical & Electronics Engineering, Yonsei University

Magnet system

Chairperson: Shinji Matsumoto (NIMS)

APP4-1 16:00–18:00

Microstructure observations on butt joint for JT-60SA CS coil

*Tetsuhiro Obana¹, Masayuki Tokitani¹, Kazuya Takahata¹, Kaname Kizu², Haruyuki Murakami²

1. NIFS; 2. QST

APP4-2 16:00–18:00

An effective cryostat design of conduction-cooled HTS magnets for a 300 kW-class HTS DC induction furnace

*Chankyeong Lee¹, Jongho Choi¹, Minwon Park¹, In-keun Yu¹, Seokho Kim¹, Kiduk Sim²

1. Changwon National University; 2. Korea Electrotechnology Research Institute

APP4-3 16:00–18:00

Optimal design and fabrication of a high current HTS DC reactor with conduction cooling system

*Van Quan Dao, Taekue Kim, Jongho Choi, Minwon Park, In-Keun Yu

Changwon National University