

International Workshop on Superconductivity in Diamond and Related Materials



IWSDRM2005 SCIENTIFIC PROGRAM

Conference Room 1, 1F, Sengen-Site, NIMS, December 7-9, 2005
Conference fee: Free (On-site registration is available)
<http://www.nims.go.jp/htc-ijj-device/IWSDRM2005/>

December 7 (Wednesday)

Chairman: Nobuyoshi Yamada

1:00-1:20 *Opening Remarks*
Yoshihiko Takano

Chairman: Christoph E. Nebel

1:20-1:50 *High Pressure Synthesis and Characterization of Superconducting Boron-Doped Diamond*
Evgueni A. Ekimov

1:50-2:20 *Superconducting and normal state properties of heavily hole-doped diamond, synthesized at high pressure*
Vladimir A. Sidorov

2:20-2:50 *Superconductivity in Highly B-doped (111) and (100) Homoepitaxial Thin Films by MPCVD*
Tomohiro Takenouchi

2:50-3:10 Coffee Break

Chairman: Masashi Tachiki

3:10-3:40 *Superconducting single crystalline boron-doped diamond : experimental indications of a BCS-type pairing mechanism*
Etienne Bustarret

3:40-4:10 *Characterization of transport properties of doped diamond*
Christoph E. Nebel

4:10-4:40 *Electronic structure of B 2p and C 2p in boron doped diamond by soft x-rays absorption and emission spectroscopy*
Jin Nakamura

4:40-5:10 *Soft x-ray angle-resolved photoemission study of superconducting diamond films*
Takayoshi Yokoya

5:10-5:40 *Superconductivity in the p-electron system*
Jun Akimitsu

December 8 (Thursday)

Chairman: Tamio Oguchi

9:00-9:25 *Superconducting transition temperatures of hole-doped diamonds*
Masashi Tachiki

9:25-9:50 *Theory of Superconductivity in Boron Doped Diamond*
Ganapathy Baskaran

9:50-10:15 *Hole-doped diamond: a 3D version of MgB₂?*
Lilia Boeri

10:15-10:35 Coffee Break

Chairman: Ganapathy Baskaran

10:35-11:00 *First-Principles Study of C₆B₂ and Related Compounds*
Kazuaki Kobayashi

11:00-11:25 *Geometry, Electronic Structure, and Energetics of B-Doped Diamond*
Susumu Saito

11:25-11:50 *Electronic Structure of B-doped Diamond and Metal Carbides*
Tamio Oguchi

11:50-12:00 Group Photo

Chairman: Takayoshi Yokoya

1:30-1:55 *VUV Laser Photoemission Spectroscopy of Superconducting Diamond*
Kyoko Ishizaka

1:55-2:20 *BCS optical behavior of Superconducting Diamond*
Stefano Lupi

2:20-2:45 *STM Studies of Boron-Doped Diamond Thin Films*
Terukazu Nishizaki

2:45-3:10 *X-Ray Emission and Absorption Study of Semiconducting and Metallic Boron-Doped Diamonds*
Akitaka Sawamura

3:10-3:30 Coffee Break

Chairman: Jun Akimitsu

3:30-3:55 *Phonon softening in superconducting diamond*
Moritz Hoesch

3:55-4:20 *¹¹B-NMR in boron-doped diamond films*
Hidekazu Mukuda

4:20-4:45 *Fabrication and characterization of 18 K phase in an yttrium sesquicarbide system*
Takayuki Nakane

4:45-5:10 *Superconductivity of nitride semiconductor InN*
Takashi Inushima

6:00-9:00 Banquet

December 9 (Friday)

Chairman: Jun'ichiro Mizuki

9:00-9:30 *Superconductivity in the intercalated graphite compounds C₆Yb and C₆Ca*
Siddharth S. Saxena

9:30-9:55 *Superconducting proximity effect in single-wall carbon nanotubes between NbN electrodes*
Yuan-Liang Zhong

9:55-10:20 *Superconductivity in C₆₀ and Graphite Doped with Yb and Sm*
Katsumi Tanigaki

10:20-10:40 Coffee Break

Chairman: Siddharth S. Saxena

10:40-11:05 *Superconductivity in Heavily Doped Si₄₆ and Si₁₃₆ sp³-Network Compounds*
Takeshi Rachi

11:05-11:30 *Anisotropic Superconductivity in Layered Silicides*
Tsuyoshi Tamegai

11:30-11:45 *Comparison of Physical Properties of BaAlSi and CaAlSi*
Tsuyoshi Nakagawa

11:45-1:00 Sushi Lunch at Yagura

Chairman: Tsuyoshi Tamegai

1:30-1:45 *Anomalous electronic states in graphite studied by angle-resolved photoemission spectroscopy*
Katsuaki Sugawara

1:45-2:15 *Superconductivity, Electron-Phonon Interaction, and the Zero-Point Renormalization of the Semiconducting Gaps*
Manuel Cardona

2:15-2:40 *Growth and characterization of n-type diamond thin films*
Satoshi Koizumi

2:40-3:05 *Growth of heavily phosphorus-doped diamond by CVD technique*
Hiromitsu Kato

3:05-3:25 Coffee Break

Chairman: Evgueni A. Ekimov

3:25-3:40 *Graphite and Diamond viewed by Stereo Atomscope*
Fumihiko Matsui

3:40-3:55 *Local boron site of B-Diamond determined by photoelectron intensity angular distribution*
Yukako Kato

3:55-4:20 *Ab initio Materials Design for Functional p- and n-type Diamond*
Hiroshi Katayama-Yoshida

Chairman: Yoshihiko Takano

4:20-4:30 *Closing Remarks*
Hiroshi Kawarada