金沢大学重点戦略経費政策課題対応型研究推進セミナー

Understanding of diamond electronic junctions and interfaces via atomic and Kelvin force microscopy

講演者: RNDr. Bohuslav Rezek, Ph.D.

Head of Laboratory of Functional Nano-Interfaces at the Department of Thin Films and Nanostructures, Institute of Physics, Academy of Sciences of the Czech Republic

日時: 2011年11月10日 15:00~16:00

場所: 自然科学2号館 2A416

概要:

- Introduction of Institute of Physics and my group
- Principles of AFM/KFM, advantages and limitations
- Deducing electronic and opto-electronic properties, band diagrams
- Atomic surface terminations of diamond (hydrogen, oxygen)
- Ohmic, Schottky, and organic diamond junctions
- Recognition of covalent links in diamond-organic systems
- Differences and similarities of intrinsic and boron doped diamonds
- Differences and similarities of mono- and nano-crystalline diamonds
- Towards applications (opto-electronics, bio-electronics, self-assembly)

連絡先:理工研究域電子情報学系 徳田規夫(4875)