

Workshop for Quantum Beam Science
held by Frontier Research Center for Applied Atomic Sciences, Ibaraki
University under the sponsorship of J-PARC (KEK)

On Dr. Rob Robinson's visit to our center during his stay at J-PARC (KEK), we held a workshop for research front of material structures by using quantum beams. Here, we select topics on current status of Australian facilities, current statuses of iMATERIA and iBIX, a new technique using quantum beam, solid-state physics by using inelastic scattering techniques, and biology with XAFS. We welcome your attendance to this workshop!

Date : 23 August (Tuesday) 13:30 - 16:25

Venue : Ibaraki Univ. Lecture Room C204 in Ibaraki Quantum Beam Research Center
(IQBRC)

13:30 – 13:40 Mitsuru Baba (Dean of Frontier Research Center and Graduate School of Science and Engineering), Opening remarks

13:40 - 14:25 Rob Robinson (Former director of Bragg Institute, ANSTO), "Opportunities for Research using OPAL, the new Australian Research Reactor"

14:25 - 14:40 Toru Ishigaki (Frontier Research Center), "Current Status of iMATERIA"

14:40 - 15:05 Kenji Ohoyama (Institute of Quantum Beam Science), "Local Structure Study of Doped Functional Materials by Atomic Resolution Neutron Holography"

15:05 – 15:15 Break

15:15 - 15:35 Ichiro Tanaka (Institute of Quantum Beam Science), "Cryoprotectant-Free High-Pressure Freezing and Dynamic Nuclear Polarization for More Sensitive Detection of Hydrogen in Neutron Protein Crystallography"

15:35 – 16:00 Takahide Yamaguchi (Institute of Quantum Beam Science), "'Side Loop' Regulates Cu Site Properties of Blue Copper Protein through Non-Covalent Weak Interaction"

16:00 – 16:25 Kazuaki Iwasa (Frontier Research Center), "Anharmonic Atomic Vibrations and Structural Instability in Caged Lattice Systems"