International Workshop on the Frontiers of Functional Materials Research

Dec. 18th, 2023

Venue: Meeting Room, South Multidisciplinary Research Laboratory 2

IMRAM, Tohoku University (Katahira Campus)

Special guest



09:55 – 10:00 Opening remark (and free coffee)

10:00 – 10:40 **Asst. Prof. Prashun Gorai (Colorado School of Mines)**

"A Journey from Atoms to Materials: Designing Functional Materials for Energy and Microelectronics"

10:40 – 11:20 Assoc. Prof. Yoshiomi Hiranaga (RIEC, Tohoku Univ.)

"Nanoscale ferroelectric characterization based on local capacitance measurements and more"

11:20 – 12:00 Assoc. Prof. Takashi Nakamura (IMRAM, Tohoku Univ.)

"Defect engineering for energy materials"

~~~Lunch break (free lunch)~~~

13:00 – 13:40 **Assoc. Prof. Shunsuke Kurosawa (NICHe, Tohoku Univ.)** 

"Growth and Scintillation Properties for Li<sub>2</sub>HfBr<sub>6</sub> for Neutron and Gamma Rays Detection"

13:40 – 14:20 Senior Asst. Prof. Kazuyuki Iwase (IMRAM, Tohoku Univ.)

"Novel metal oxides with controlled electronic structure for water electrolysis"

~~~Coffee break (free coffee)~~~

14:30 – 15:10 Assoc. Prof. Eric Jianfeng Cheng (AIMR, Tohoku Univ.)

"Addressing interfacial contact challenge between garnet ceramic electrolytes and cathodes in solid-state Li metal batteries"

15:10 – 15:50 Assoc. Prof. Saneyuki Ohno (IMRAM, Tohoku Univ.)

"Exploration of ion conducting solids toward solid-state batteries"

Prashun Gorai

Assistant Professor

Colorado School of Mines,

National Renewable Energy Laboratory