



Symposium A-4, IUMRS-ICAM 2017



“Magnetic oxide thin films and hetero-structures”

The 3rd Bilateral MRS-J/E-MRS Symposium

<http://www.iumrs-icam2017.org/program/forums/a-4.html>

Call for Papers (The deadline: 28 Feb., 2017)

<http://www.iumrs-icam2017.org/program/cfp.html>

Recently, curious and inherent properties closely related to the correlation between charge, spin, and orbital often observed in magnetic oxides have attracted considerable attention from a point of view of condensed matter physics, solid-state chemistry, electronics, and many materials-oriented sciences and technologies. The magnetic oxides have exploited emerging fields of magnetics including spintronics, multiferroics-related technologies, magnetophotonics, biomagnetics, and so forth. In particular, thin films and heterostructures of magnetic oxides can provide us with intriguing and important magnetic properties and functionalities peculiar to the structures and morphologies such as giant magnetoresistance, exchange bias, strain-induced ferromagnetism, and so forth. The present symposium focuses on fundamental aspects to direct basic theories on device physics for progressive information technology devices, sensors, novel materials consisting of ubiquitous elements, and to innovate a next generation's creative device development matching an environmental harmonized resource strategy.

Topics (but not limited to):

1. Preparation of magnetic oxide thin films and heterostructures
2. Structural analysis of magnetic oxide thin films and heterostructures
3. Magnetic properties of new compounds and composites
4. Clarification of mechanism behind the magnetic functionalities
5. Applications to spintronics, multiferroics, magnetophotonics, and biomagnetics

Keynote Lectures given by:

Dr. Ulrich Habermeier (Max Planck Institute, Germany)

Prof. Gertjan Koster (Univ. Twente, The Netherlands)

Dr. Jobu Matsuno (RIKEN)

Invited Speakers:

Prof. Jean-Marc Triscone (Univ. Geneva, Switzerland), Dr. Vincent Cros (CNRS Thales, France), Dr. Alejandro Schulman (AIST), Dr. Miho Kitamura (KEK), Dr. Hiroyuki Nakamura (Max Planck Institute, Germany), Dr. Hiroshi Idzuchi (Harvard Univ., USA), Prof. Jinn P. Chu (Nat. Taiwan Univ. Sci. Technol., Taiwan), Prof. S. Lakshmi Reddy (S.V.D. College, India), Prof. Reji Philip (Raman Res. Inst., India)

Organizers:

K. Tanaka (Kyoto Univ.), H. Nishikawa (Kindai Univ.), N. Iwata (Nihon Univ.), T. Nakajima (AIST), K. Fujiwara (Tohoku Univ.), K. Yasui (Nagaoka Univ. Technol.), P. Mele (Muroran Inst. Technol.), A. Hoffmann (Argonne Nat. Lab., USA), G. Rijnders (Univ. Twente, The Netherlands), J. Santamaria (Complutense Univ. Madrid, Spain), Y. Takamura (UC Davis, USA), T. Endo (Sagamihara Surf. Treat. Lab.), P. Wellmann (Univ. Erlangen-Nuremberg, Germany)



See also website of the Team Harmonized Oxides.

<http://www.nims.go.jp/nqe/sa/tho/index.html>