

# International Workshop on the Theory of Dense Kondo Systems

March 19–20, 2013

Osaka University Nakanoshima Center



*30 Years after the Yoshimori-Kasai Model and Beyond*

**March 19, 2013**

Opening Remarks by Prof. Hideaki Kasai (13:00–13:05)

13:05 – 13:45 Prof. Nguyen Hoang Luong (Vietnam National University)

Nanotechnology Development and Application in Life Science

13:45 – 14:25 Dr. Emi Minamitani (RIKEN)

The Kondo Effect in Nanostructure on Surfaces – Importance of the Symmetry

14:25 – 15:05 Prof. Bach Thanh Cong (Vietnam National University)

Theory for the First Order Magnetization Process in some Colossal Magnetoresistance

15:05 – 15:45 Dr. Mary Clare Sison Escaño (University of Fukui)

Quantum Simulation and Design of Magnetic and Catalytic Materials for Energy Applications

Coffee Break (15:45–16:00)

16:00 – 16:40 Dr. Yoshio Miura (Tohoku University)

A Theoretical Study on Electronic Structures and Spin-Dependent Transport Properties of Magnetic Tunnel Junctions

16:40 – 17:20 Dr. Daisuke Matsunaka (Osaka University)

A Theoretical Study of Impurity Effects on High-Tc Cuprate Superconductors and Diluted Magnetic Semiconductors

17:20 – 18:00 Kazuki Kojima (Osaka University)

Theoretical Study of the Structure and Magnetic Property in Co/Ni Multi-layer on W(110)

Banquet (18:00–20:00)

**March 20, 2013**

13:00 – 13:30 Nguyen Tien Quang (Osaka University)

Theoretical Investigation on NO Oxidation on Oxygen-precovered Pt<sub>4</sub>/CeO<sub>2</sub>

13:30 – 14:00 Abdulla Ali Abdulla Sarhan (Osaka University)

Effect of the Electron Density of States Variation on Transport through Adsorbates

14:00 – 14:30 Tran Linh Phan Thuy (Osaka University)

Oxygen Vacancy Migration in Alkaline-earth Doped Monoclinic Lanthanum Germanate

Coffee Break (14:30–14:45)

14:45 – 15:15 Nguyen Hoang Linh (Osaka University)

Density Functional Theory Based Analysis of Oxygen Adsorption on Anatase (001) Surface

15:15 – 15:45 Triati Dewi Kencana Wungu (Osaka University)

Theoretical Study on Lithium-montmorillonite

15:45 – 16:15 Yuji Kunisada (Osaka University)

Ortho-Para H<sub>2</sub> Conversion on Clean and Modified Surfaces

16:15 – 16:45 Prof. Hideaki Kasai (Osaka University)

Introduction of the Yoshimori-Kasai Model

Closing Remarks by Prof. Yoshitada Morikawa (16:45–16:50)



Moderators: Prof. Wilson Agerico Diño (Day 1) Chantaramolee Bhume (Day 2)