



Tokyo Tech



Tokyo Tech International Symposium New Horizon of Electronic Materials Using Abundant Elements

Date: 13:20-19:30, 3rd June, 2015

Venue: Lecture Hall in Genso cube

Organized by

Tokyo Institute of Technology

Co-organized by

Materials Research Center for Element Strategy

Tokodai Institute of Element Strategy sponsored by MEXT

ACCEL Hosono Electricle Project by sponsored by JST

Endorsed by

Materials Engineering Committee of Science Council of Japan

Registration Fee: Free

Program

13:20

Opening Remarks

Yoshinao Mishima (President of Tokyo Institute of Technology, Japan)

Invited Lectures

13:30-14:10

Young Hee Lee (Sungkyunkwan University, Korea)
2D Wonderland

14:10-14:50

Claes-Göran Granqvist (Uppsala University, Sweden)

In Harmony with the Environment: New Materials Harnessing Nature's Energy Flows

14:50-15:30

John Robertson (University of Cambridge, UK)
Extreme Materials of Simple Composition

15:30-15:50 Break

15:50-16:30

James L. Dye (Michigan State University, USA)

Sequestered Alkali Metals – Abundant and Versatile Materials

16:30-17:10

Kee Joo Chang (Korea Advanced Institute of Science and Technology, Korea)

Electronic and transport properties of graphene and molybdenum dichalcogenides

17:10-17:50

Hideo Hosono (Tokyo Institute of Technology, Japan)

Materials Science and Application of Electrides

17:50

Closing Remarks

Hideo Hosono (Director of MCES, Tokyo Institute of Technology, Japan)

18:00-19:30

Reception @ University Hall (¥4,000)

Contact: Secretariat Desk of Symposium, Dr Satoru Fujitsu in Genso Cube
fuji@lucid.msl.titech.ac.jp, Jpn-45-924-5128

Dear Colleagues planning to join this symposium, please mail to this address.



Tokodai Institute for Element Strategy



Materials Research Center for Element Strategy



ACCEL Hosono Electricle Project



Tokyo Tech



UPPSALA
UNIVERSITET

Tokyo Institute of Technology and Uppsala University Joint Workshop Theoretical and Computational Approach to New Materials

Date: 10:00-19:00, 4th June, 2015: Lecture Session
10:00-16:00, 5th June, 2015: Discussion Session

Venue: Lecture Hall in Genso cube

Organized by

Tokyo Institute of Technology and Uppsala University

Co-organized by

Materials Research Center for Element Strategy

Tokodai Institute of Element Strategy sponsored by MEXT

ACCEL Hosono Electride Project by sponsored by JST

Endorsed by

Materials Engineering Committee of Science Council of Japan

Registration Fee: Free

Program

4th June: Lecture Day

9:50

Opening Remarks

Makoto Ando (Vice-President of Tokyo Institute of Technology)

Key-note Lecture

10:00-10:40

Claes-Göran Granqvist (Uppsala University, Sweden)

Uppsala University: Old and New

Plenary Lecture

10:40-11:20

Kee Joo Chang (Korea Advanced Institute of Science and Technology, Korea)

First-principles materials design via an inverse method based on conformational space annealing

11:20-12:00

John Robertson (University of Cambridge, UK)

Computational Design of new Electronic Functional Materials

Lunch

Invited Lecture

13:00-13:40

Tomas Edvinsson (Uppsala University, Sweden)

Theoretical Calculations of Energy Relevant Materials - Towards Time Resolved Relativistic Quantum Mechanics in Materials Science

13:40-14:20

Susumu Saito (Tokyo Institute of Technology, Japan)

Designing Materials for Electronics using B, C, and N

14:20-15:00

Shuichi Murakami (Tokyo Institute of Technology, Japan)

Weyl-semimetallic phase and chiral transport in chiral crystals



Tokodai Institute for Element Strategy



Materials research Center for Element Strategy



ACCEL Hosono Electride Project



Tokyo Tech



UPPSALA
UNIVERSITET

Joint Workshop (continued)

Break

15:20-16:00

Biplab Sanyal (Uppsala University, Sweden)

Electronic structure of correlated electron systems by ab initio theory

16:00-16:40

Fumiyasu Oba (Tokyo Institute of Technology, Japan)

Accurate predictions of defect properties in semiconductors:

Towards understanding and screening of materials

16:40-17:20

Tomofumi Tada (Tokyo Institute of Technology, Japan)

High-throughput ab initio modeling for two-dimensional electride materials

17:30-18:00

Guide Tour in Genso Cube

18:00-19:00

Free Discussion @ Robby on front of Lecture Hall (¥2,000)

5th June: Discussion Day

10:00-15:00

40 min per 1 topic (topic presentation 15 min + discussion 25 min)

Topic presenter (random order)

Satoru Matsuishi (Tokyo Institute of Technology, Japan)

Hydride ion substitution to oxides and related compounds

Soshi Iimura (Tokyo Institute of Technology, Japan)

Syntheses and physical properties of iron-based superconductors $\text{LnFeAsO}_{1-x}\text{H}_x$

Zewen Xiao (Tokyo Institute of Technology, Japan)

Electronic Structure and Native Defects of Air-Stable and Lead-Free Perovskite Variant Cs_2SnI_6 for Photovoltaic Application

Naoki Ohashi (National Institute of Materials Science, Japan)

Hard-x-ray photoemission in terms of crystalline polarity and x-ray polarization

Keiji Kojima (High Energy Accelerator Research Organization, Japan)

Bipartite magnetic parent phases in the iron oxypnictide superconductor

Taisuke Ozaki (The University of Tokyo, Japan)

Open source package OpenMX for first-principles electronic structure calculations

Contact: Secretariat Desk of Workshop, Dr Satoru Fujitsu in Genso Cube
fuji@lucid.msl.titech.ac.jp, Jpn-45-924-5128

Dear Colleagues planning to join this workshop, please mail to this address.



Tokodai Institute for Element Strategy



Materials research Center for Element Strategy



ACCEL: Hosono Electride Project



Tokyo Tech



UPPSALA
UNIVERSITET

ご参加を希望される方へ

(Symposium)

Tokyo Tech International Symposium

New Horizon of Electronic Materials Using Abundant Elements Opening

(6月3日(水)@東京工業大学元素戦略研究センター)

および/または

(Workshop)

Tokyo Institute of Technology and Uppsala University Joint Workshop

Theoretical and Computational Approach to New Materials

(6月4日(木)-5日(金)@東京工業大学元素戦略研究センター)

にご参加を希望される方は

fuji@lucid.msl.titech.ac.jp へ

- ① お名前
- ② ご所属
- ③ 参加いただける会合 (Symposium, Workshop または両方)
- ④ Symposium の Reception (参加費¥4,000 を現地にて申し受けます)、Workshop の Free Discussion (参加費¥2,000) を現地にて申し受けます) への参加の有無
をご連絡ください。

045-924-5128(藤津悟フジツサトル)への電話でも受け付けております。



お問合せなど

Symposium、Workshop 事務局

〒226-8503 横浜市緑区長津田町 4259 SE-1

東京工業大学元素戦略研究センター 藤津悟

電話と FAX 045-924-5128

mail fuji@lucid.msl.titech.ac.jp



Tokodai Institute for Element Strategy



Materials research Center for Element Strategy



ACCEL: Hosono Electride Project