

The 2nd (5+2) International Joint Symposium - Program at a glance

Time	Sunday, Nov 3	Monday, Nov 4
9:30-9:50		Opening Atsushi Muramatsu Chain-Shu Hsu
9:50-11:30		<i>Chair: Toru Hisabori</i> Shangjr Gwo Shigeto Okada Eric Wei-Guang Diao Takahiro Yamada Yen-Ju Cheng
11:30-11:50		1-min Oral Presentation of Posters
11:50-12:00		Group Photo
12:00-12:50		Finger Snack Lunch (Sakura Hall 1F)
12:50-13:50		Poster Session (Sakura Hall 1F)
13:50-15:30		<i>Chair: Junichiro Hayashi</i> Michito Yoshizawa Chih Wei Chu Yoshimitsu Sagara Yaw-Kuen Li Takehiko Wada
15:30-15:50		Coffee Break
15:50-17:10	Registration at IMRAM (16:30-18:00)	<i>Chair: Toshiyuki Nakagaki</i> Chih-Wei Luo Taku J Sato Min-Hsiung Shih Katsuaki Suganuma
17:10-17:20		Closing Shangir Gwo Katsuaki Suganuma
17:20-18:00		
18:00-20:00	Welcome Reception at IMRAM <i>Toast: Toshiyuki Nakagaki</i>	Symposium Banquet (IMRAM) & Tohoku Univ. - NCTU Joint Banquet (Westin Hotel)

2nd International Symposium of CEFMS-NCTU, RCAS-AS (Taiwan) and 5-star Alliance (Japan)

9:30-9:50 **Opening**

9:30-9:40 **Atsushi Muramatsu** (Director of IMRAM, Tohoku Univ.)

9:40-9:50 **Chain-Shu Hsu** (Director of CEFMS, NCTU)

9:50-11:30 **Chair: Toru Hisabori** (Director of CLS, Tokyo Tech.)

9:50-10:10 **Shangjr Gwo** (RCAS, Academia Sinica)

Plasmonic Metasurface-Enhanced Linear and Nonlinear Processes in Two-Dimensional Semiconductors

10:10-10:30 **Shigeto Okada** (IMCE, Kyushu Univ.)

Na/K Ion Batteries with Concentrated Aqueous Electrolyte as Post Li Ion Battery

10:30-10:50 **Eric Wei-Guang Diau** (CEFMS, NCTU)

Lead-free Perovskites for Applications of Photovoltaics and Photocatalysis

10:50-11:10 **Takahiro Yamada** (IMRAM, Tohoku Univ.)

Thermoelectric Zintl Compounds having Rattling Na Atoms in the Tunnel Frameworks

11:10-11:30 **Yen-Ju Cheng** (Dept. Appl. Chem., NCTU)

Design and Synthesis of Ladder-type Organic Conjugated Materials for Organic Photovoltaics

11:30-11:50 **1-min Oral Presentation of Posters**

11:50-12:00 **Group Photo**

12:00-12:50 **Lunch**

Katahira Sakura Hall 1F

12:50-13:50 **Poster Session**

Katahira Sakura Hall 1F

- 13:50-15:30 Chair: Junichiro Hayashi** (Director of IMCE, Kyushu Univ.)
- 13:50-14:10 **Michito Yoshizawa** (CLS, Tokyo Tech.)
Polyaromatic Nanocapsules as Synthetic Bioreceptors
- 14:10-14:30 **Chih Wei Chu** (RCAS, Academia Sinica)
Control of Swelling/De-swelling Behavior to Tune the Surface Energy of PDMS for Realizing Bilayer Polymer Solar Cells and Perovskite Solar Cells
- 14:30-14:50 **Yoshimitsu Sagara** (RIES, Hokkaido Univ.)
Rotaxane-Based Mechanophores Enable Polymers with Mechanically Switchable White Photoluminescence
- 14:50-15:10 **Yaw-Kuen Li** (CEFMS, NCTU)
Construction of an Antifouling Peptide-based Biosensor for the Detection in Serum
- 15:10-15:30 **Takehiko Wada** (IMRAM, Tohoku Univ.)
Supramolecular Asymmetric Photochirogenesis (SMAP) of Anthracene Carboxylate Derivatives Mediated by Serum Albumin as Chiral Reaction Nanoreactor
- 15:30-15:50 Coffee Break**
- 15:50-17:10 Chair: Toshiyuki Nakagaki** (Director of RIES, Hokkaido Univ.)
- 15:50-16:10 **Chih-Wei Luo** (Dep. Electrophys., NCTU)
THz Emission Spectroscopy of Topological Insulators
- 16:10-16:30 **Taku J Sato** (IMRAM, Tohoku Univ.)
Nonreciprocal and Topological Magnetic Excitations
- 16:30-16:50 **Min-Hsiung Shih** (RCAS, Academia Sinica)
Small Light Sources with Two-Dimensional Atomic Layers
- 16:50-17:10 **Katsuaki Suganuma** (ISIR, Osaka Univ.)
Nanomaterial Interconnection for Printed Electronics
- 17:10-17:20 Closing**
- 17:10-17:15 **Shangir Gwo** (Director of RCAS, Academia Sinica)
- 17:15-17:20 **Katsuaki Suganuma** (Director of ISIR, Osaka Univ.)

Poster Presenters

*Candidates for the Best Poster Awards

- P01 Kiyonori Takahashi** (RIES, Hokkaido Univ.)
Melting Behavior of Semiconducting Anion Radical Salts with Supramolecular Cations
- P02 Shinichi Sato** (CLS, Tokyo Tech.)
Site-Selective Antibody Chemical Modification using Photocatalyst-Proximity Labeling Reaction
- P03 Atsushi Inoishi** (IMCE, Kyushu Univ.)
Solid-state Battery with NASICON-type Oxide
- P04 Luting Zhu*** (ISIR, Osaka Univ.)
Carbonized Bionanofiber Paper for Electronic Applications
- P05 Tsung-Wei Chen*** (Dep. Applied Chem., NCTU)
Single-Junction Organic Solar Cell Containing Fluorinated Heptacyclic Carbazole-Based Ladder-Type Acceptor Affords over 13% Efficiency with Solution-processed Cross-linkable Fullerene as Interfacial Layer
- P06 Toru Sekiya*** (IMRAM, Tohoku Univ.)
Synthesis of Fine-Grained TiN Crystals from TiO₂ Powder
- P07 Yi-Jia Su*** (Dep. Appl. Chem., NCTU)
Novel Heptacyclic Carbazole Non-Fullerene Acceptors Containing Si-Bridges Affords over 14% PCE without Additives
- P08 Keita Takahashi*** (IMRAM, Tohoku Univ.)
Vibrational Effects on the Electron Momentum Distributions of Dimethyl Ether at High Temperatures
- P09 Chien-Ju Lee*** (Dep. Electrophys., NCTU)
Two-Dimensional Routing of Valley Polaritons in Monolayer WS₂ by Plasmonic Nanostructures through Optical Spin-Orbit Coupling

- P10 Yuichi Tachibana*** (IMRAM, Tohoku Univ.)
Direct Observation of Intramolecular Atomic Motion by Electron-Atom Compton Scattering
- P11 Sumanta Kumar Sahoo*** (CEFMS, NCTU)
Electrochemical Cathodic Plasma Exfoliated Two-Dimensional Nanosheets
- P12 Seno Aji*** (IMRAM, Tohoku Univ.)
Magnetic Properties in the Itinerant Chiral Magnet $\text{MnSi}_{1-x}\text{Ge}_x$
- P13 Chiao-Yun Chang*** (RCAS, Academia Sinica)
The Low Strain of Monolayer MoS_2 on a Three Dimensional Substrate
- P14 Pharit Piyawongwatthana*** (IMRAM, Tohoku Univ.)
Formation of Single Polar Domain in $\alpha\text{-Cu}_2\text{V}_2\text{O}_7$
- P15 Pei-Huan Chiang*** (IBE, NCTU)
Design an Advanced Spiral Microfluidic Device for Clinical Tumor Cell Isolation
- P16 Wijak Yospanya*** (IMRAM, Tohoku Univ.)
Supramolecular Asymmetric Photochirogenesis of 2-Anthracenecarboxylate Dimers in Chiral Medias: from Synthetic Antibodies to Silica Hybrid Nanofibers
- P17 Chang-Ching Weng*** (Dep. Appl. Chem., NCTU)
ScFv Phage Selections & Applications
- P18 Seiya Ishizawa*** (IMRAM, Tohoku Univ.)
Creating of Hypoxia-Specific Oligonucleotide Therapeutics System with Intracellular Condition-Responsible Peptide Ribonucleic Acids (PRNA)-Phenyl Boronic Acid (PBA) Unit