6th Research Symposium, New Technology and New Material Division, the Japanese Association for Crystal Growth (JACG)

~International conference on functional crystalline & sustainable materials~

Co-hosted by:

- Institute for Aqua Regeneration (ARG), Shinshu University
- Department of Materials Science, Chulalongkorn University (CU)
- The Petroleum and Petrochemical College (PPC), CU

Sponsorship: JEOL ASIA (THAILAND) Co., Ltd., Nippon Shokubai Co., Ltd., Rigaku Corporation, Shimadzu Corporation, Toray Engineering Co., Ltd., TOMOEGAWA CORPORATION, Rojana Industrials, Verne Crystal Inc., The Hub of Talents: Sustainable Materials for Circular Economy, Petromat and Faculty of Science, CU

Date & Time:

- **Registration:**
  - ✧ Sunday, 17:00-18:00 (Location to be announced later), October 5, 2025
  - ✧ Monday, 8:30-15:00, October 6, 2025

  Participants who wish to register on the day before the event should contact the following address (acg_ntnm_su-ml@shinshu-u.ac.jp) by October 3, 2025. Then, the secretariat will inform you of the location.
- **Symposium:** Monday, October 6, 2025, 9:00–17:00
- **Lab Tour:** Tuesday, October 7, 2025, 2 hour

Venue: Banyen Auditorium, MHVH building in Faculty of Science CU

Networking Reception: Sci Co-Studying Space, Tab Nilanidhi Building at CU (banquet)

* the welcome party has been canceled, due to various circumstances.

Registration Fee:

Participant Category	From Research Institutions Outside Thailand	From Research Institutions in Thailand
General Member in JACG	Changed to Free	Free
Non-member		
Student		

We are pleased to announce that, thanks to the generous support of our sponsors, the participation fee for this event has been waived.

Representative Organizer:

Katsuya Teshima (Shinshu University)

Duangdao Aht-Ong (Chulalongkorn University)

Committee

Akira Yoshikawa (Tohoku University)

Takeshi Hagio (Shinshu University)

Rojana Pornprasertsuk (Chulalongkorn University)

Thanyalak Chaisuwan (Chulalongkorn University)

Yuui Yokota (Tohoku University)

Chayanaphat Chokradjaroen (Shinshu University)

Tetsuya Yamada (Shinshu University)

Contact Information

Takeshi Hagio, Tetsuya Yamada (Shinshu University)

Email: jacg_ntnm_su-ml@shinshu-u.ac.jp

Oct-7 Materials Science and PPC Lab Tour Sign-Up Form

https://tinyurl.com/2f2cjaja

09.30-10.30 Materials Science Lab Tour
11.00-12.00 Petroleum & Petrochemical College Lab Tour

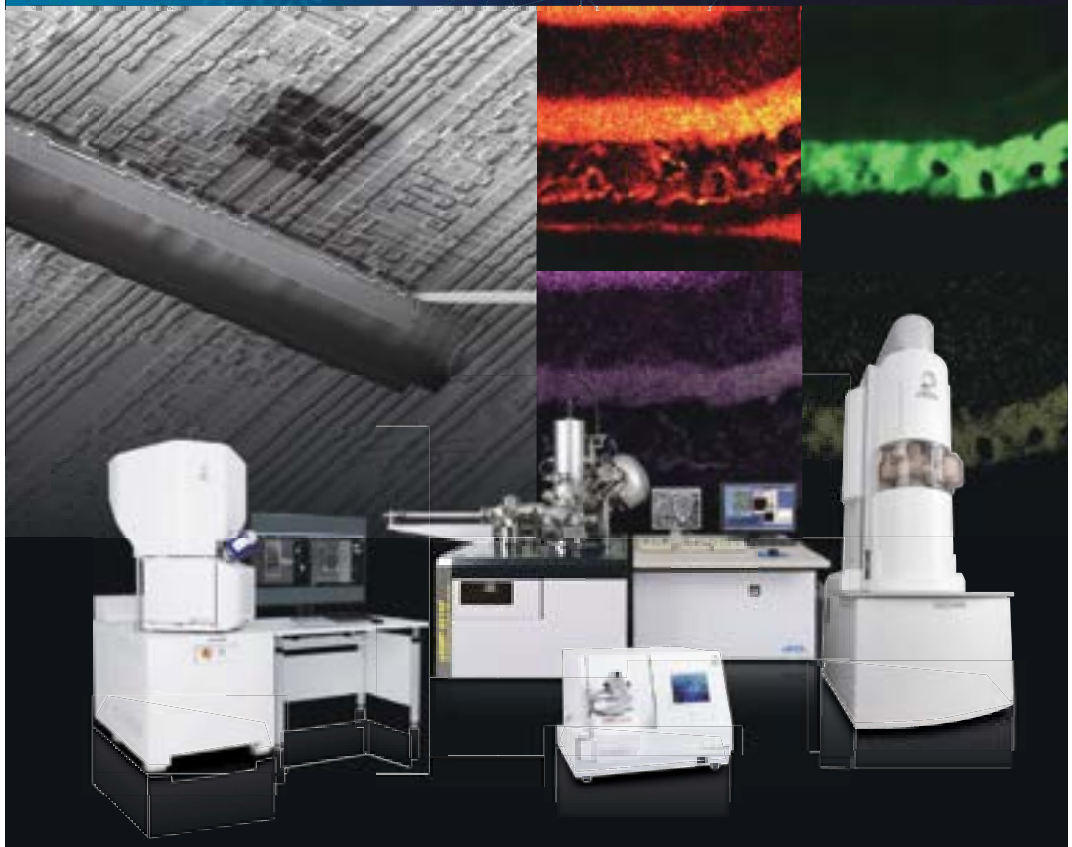
Meeting Location:
9.30 am @ Ground Floor, Science Co-studying Space, Tab Nilanidhi Bld.
https://maps.app.goo.gl/FEzhTfPmRdN4aDFv8

Sponsoring companies

Supporting Tools for the Semiconductor Process Line

Specimen Preparation, Observation
FIB

Surface Analysis
FE Auger Microprobe



JEOL's equipment contribute to design rule shrinkage,
process and device development,
and yield improvement in semiconductor industry.

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Observation, X-ray Analysis
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The business domains of the JEOL Group are classified into "Scientific / Metrology Instruments", "Industrial Equipment" and "Medical Equipment".
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Thin Film Formation Equipment / Material Processing Equipment "Medical Equipment Business" Medical Equipment

▼ Local office

Rigaku

The Key to Unravel the Micro World

XtaLAB Synergy-ED

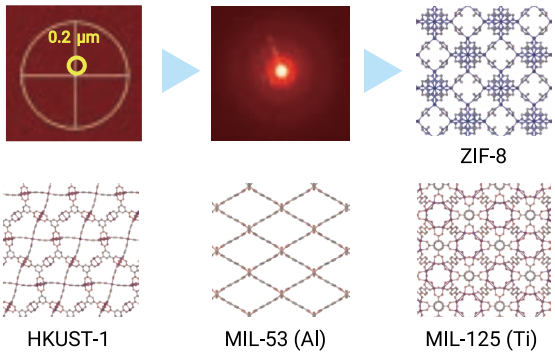
Have you given up on structure analysis of too small crystals?

Our integrated microcrystal electron diffraction platform XtaLAB Synergy-ED provides a seamless workflow from data collection to 3D structure determination. (Collaborated with JEOL Ltd.)

Learn more

Metal-organic frameworks (MOFs)

- Even sub-micrometer-sized crystals are available!
- Also suitable for COFs and HOFs!



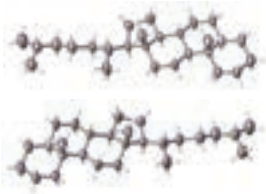
Absolute structure determination

- Dynamical refinement reveals the absolute structure!
- Go beyond X-ray: even for light-element compounds!

CrysAlis^{Pro} ED — Data Reduction

OlexSys | Olex2 — Dynamical Refinement

Cholestane ($C_{27}H_{48}$)

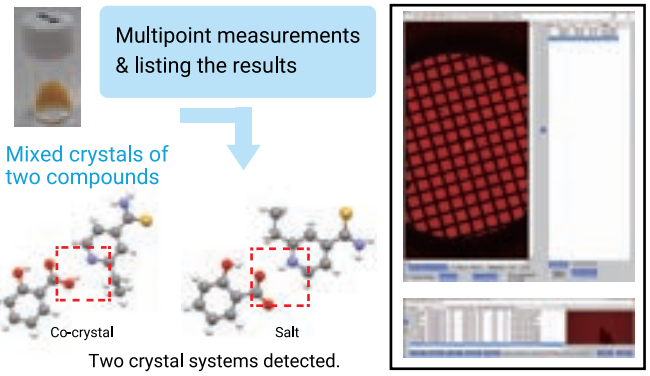


Right configuration
R_1 = 11.49%
wR_2 = 35.13%

Opposite configuration
R_1 = 14.12%
wR_2 = 41.45%

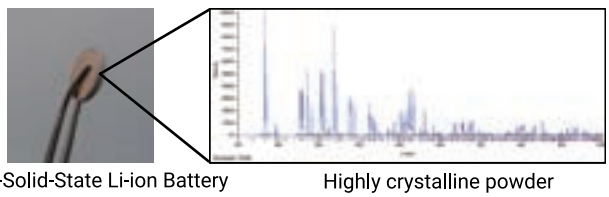
Multi-point measurement

- Automatic measurement and analysis of multi-crystals!
- Useful for crystal screening and polymorph analysis!

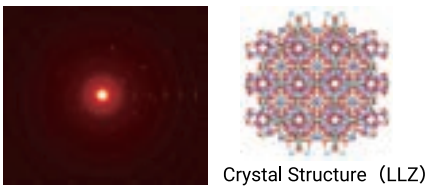


Inorganics (Battery materials)

- Measurement is possible even in powder!
- Structural analysis is possible even with small sample quantities!



All-Solid-State Li-ion Battery — Highly crystalline powder



Crystal Structure (LLZ)

SHIMADZU
Excellence in Science

From Characterization to Evaluation of Catalytic Reactions

Shimadzu's Total Solutions for Catalyst Research

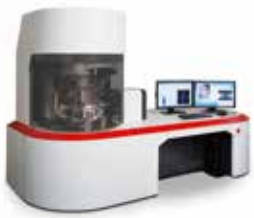
Surface Analysis

Electron Probe Microanalyzer
EPMA-8050G

Scanning Probe Microscope
SPM-9700HT Plus

X-Ray Photoelectron Spectrometer (XPS)
AXIS Supra


EPMA-8050G


AXIS Supra


EDX-7200/EDX-8100

Elemental Analysis

Energy Dispersive X-Ray
Fluorescence Spectrometer
EDX-7200/EDX-8100

Evaluation of catalytic reactions

Characterization

Catalyst Evaluation

Gas Chromatograph
Brevis GC-2050


Brevis GC-2050

Gas Chromatograph
Mass Spectrometer
GCMS-QP2050


GCMS-QP2050

Ultra High Performance
Liquid Chromatograph
Nexera Series

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Nexera Series


i-Series

TIR Spectrophotometer
IRSpirit-X

UV-VIS Spectrophotometer
UV-1900i Plus


IRSpirit-X


UV-1900i Plus

Transportable Gas Analyzer
CGT-7100/NOA-7100

Analytical & Measuring Instruments Division, Shimadzu Corporation

https://www.shimadzu.com.sg/

Sheet that maximizes the properties of powder

Functional Powder Holding Sheet

Sheeting without impairing the functions of powder

High-density retention of functional powder between fibers

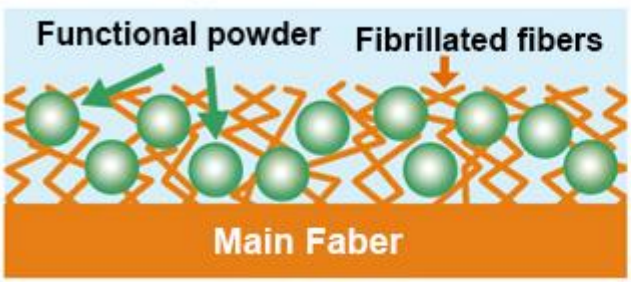
Features

90% or more power can be retained (weight ratio) since the powder surface is uncovered

Data

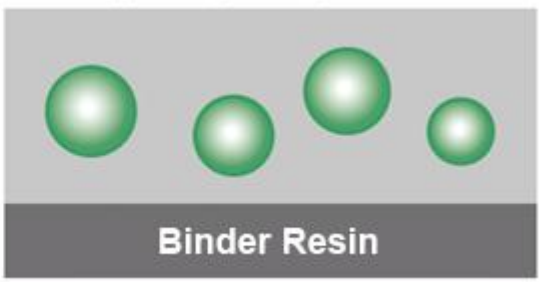
Papermaking method

Possible to retain 90 % or more (weight ratio) without covering the powder surface



General method

The binder covers the powder's surface and suppresses the powder's performance.



Application

- Sheeting customer-supplied and designated powder
- Moisture absorption, Flame retardance, Adsorption (gas, etc.), Purification (water, soil, etc.) , Deodorization, Odor control, Antibacterial, Antiviral, etc.

[Inquiry]
TOMOEGAWA CORPORATION
Fiber Materials Div., iCas Company
E-mail：eisui_info@tomoegawa.co.jp

Committed to creating new value

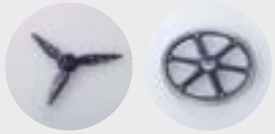
with Sustainable Engineering.

To achieve solutions to global issues through Sustainable Engineering, we promote five initiatives through the plants and manufacturing equipment we provide to customers.
They are reducing energy consumption (CN), reducing resource consumption (CE), preserving the natural environment (NP), maintaining and improving health and safety (LI), and enhancing convenience and productivity by leveraging digital technology (DI).
Of the five initiatives, reducing energy consumption (CN), maintaining and improving health and safety (LI), and enhancing convenience and productivity by leveraging digital technology (DI) are our key themes in development.
Through active collaboration with universities, research institutes, companies, business ventures, and startups, we create new business that exceeds what currently exists from a flexibility perspective, bringing us closer to sustainability and contributing to the future of society as a whole.

Next-generation battery manufacturing technologies

In the production of solid-state batteries, a type of next-generation battery, we are committed to establishing new manufacturing technologies to reduce environmental impact and cost and improve battery performance.

Composite material 3D printers



We use our independently developed core shell method for the 3D printer manufacturing process to create lightweight parts, reducing energy consumption.

Composite material attachment machine

We developed a machine that can stably attach tape-shaped CFRP (prepreg) impregnated with thermosetting/thermoplastic resin to parts with complex shapes. This technology reduces the weight of parts to cut energy consumption.

Advanced semiconductor packaging technologies

We are committed to developing high-speed, high-accuracy device packaging technologies that will help to achieve better power savings in the post-5G era.

Surgical assist robot manufacturing technologies

We contribute to the provision of advanced medical technologies by manufacturing Saroa, a jointly developed surgical assist robot, and support patient-positive surgical procedures.
*Saroa is a product of RIVERFIELD Inc.

Development of AI application technologies

We provide new added value and services by integrating AI-powered prediction, identification, and execution functions into our various equipment and systems.

Low temperature CVD technologies

We are working to miniaturize the cutting-edge semiconductors by expanding our core low-temperature CVD technologies into the semiconductor field.

Ion channel drug discovery support system

By developing a support system for the discovery of drugs that act on ion channels, we contribute to pharmaceutical development and strive toward advances in medical technology and promotion of human health.

Nucleic acid medicine manufacturing equipment

We developed the Molecutideser® as a high-precision, high-efficiency nucleic acid synthesizer to increase the quality of nucleic acid medicine.

Schedule (October 6, 2025, 8:30–17:00)

Registration

8:30-9:00 Registration

Opening Session

【Banyen Auditorium (Room A)】

Chair: Patrapee Kungsadalpipob (Chulalongkorn Univ.)

9:00-9:10 Welcome Remarks

Prof. Palanee Ammaranond (Vice President, Chulalongkorn Univ.)

Prof. Pranut Potiyaraj (Dean, Faculty of Science, Chulalongkorn Univ.)

Prof. Pramoch Rangsunvigit (Dean, PPC, Chulalongkorn Univ.)

9:10-9:20 Opening Remarks

Prof. Shinichi Yonekura (Vice President, Shinshu Univ.)

9:20-9:50 Plenary talk PL1

Control Over Optical Properties of Conjugated Polymers via Self-assembly

Prof. Rakchart Traiphol (Mahidol Univ.)

9:50-10:20 Plenary talk PL2

Material Unicorn Based on Flux-grown Crystals for Water Purification

Prof. Norifumi Isu (Shinshu Univ.)

10:20-11:05 Coffee Break & Poster session 1 (Banyen Auditorium (Room A))

For Poster Presenters with **Odd Numbers**

Session A1

【Crystal growth, Banyen Auditorium (Room A)】

Chair: Yuui Yokota (Tohoku Univ.)

11:05-11:20 Invited talk A1

Single-crystal Growth of β-Ga_2O_3 using OCCC Method and Establishment of a Deep-Tech Startup for Social Implementation Based on The Results

Prof. Akira Yoshikawa (Tohoku Univ.)

11:20-11:35 Invited talk A2

Hydrogen-Free Direct-Liquid-Injection CVD of Monolayer Graphene with Cyclohexane Precursor

Assoc. Prof. Sakuntam Sanorpim (Chulalongkorn Univ.)

11:35-11:50 Invited talk A3

Synthesis of Semiconductor Silicon Clathrate Crystal

Assoc. Prof. Haruhiko Morito (Tohoku Univ.)

11:50-12:05 Invited talk A4

Crystallization and Crystallography of Rare-Earth Metal-Organic Frameworks

Assoc. Prof. Kittipong Chainok (Thammasat Univ.)

12:05-12:20 Invited talk A5

A Data-Driven Platform for High-Throughput Flux-Grown Crystalline Materials Discovery by Orchestration between AI and Robotics

Assoc. Prof. Tetsuya Yamada (Shinshu Univ.)

Session B1

【Energy, Banchao Meeting Room (Room B)】

Chair: Rojana Pornprasertsuk (Chulalongkorn Univ.)

11:05-11:20 Invited talk B1

Surface and Interface Engineering for Stable Zn Anode

Dr. Jiaqian Qin (Chulalongkorn Univ.)

11:20-11:35 Invited talk B2

A single-crystal approach to elucidating ionic transport mechanisms

Assoc. Prof. Takeshi Yajima (Nagoya Univ.)

11:35-11:50 Invited talk B3

Bridging Structure and Function: Tailored Polybenzoxazine-Derived Carbons for High-Performance Supercapacitor Electrodes

Assoc. Prof. Thanyalak Chaisuwan (PPC, Chulalongkorn Univ.)

11:50-12:05 Invited talk B4 **(cancelled)**

Development of Inorganic Microporous Membranes for Energy Applications

Prof. Takeshi Hagio (Shinshu Univ.)

12:05-12:20 Invited talk B5

Cutting-Edge Bifunctional Oxygen-Reduction and Oxygen-Evolution Electrocatalysts: Advancements for Optimizing Zinc-Air Battery Performance

Asst. Prof. Prasit Pattananuwat (Chulalongkorn Univ.)

12:30-13:30 Lunch (Room 111, Chemistry 2 Bld.)

Session A2

【Catalysts, Banyen Auditorium (Room A)】

Chair: Takahiko Horiai (AIST)

13:30-13:45 Invited talk A6
Synthesis of functional materials by in-liquid plasma processing
Prof. Chiaki Terashima (Tokyo Univ. of Sci.)

13:45-14:00 Invited talk A7
Waste-Derived Photocatalysts for Sustainable Technologies
Dr. Chitiphon Chuaicham (Chulalongkorn Univ.)

14:00-14:15 Invited talk A8
Flux Growth of Molybdenum Chalcogenide Single Crystals from Chloride and Iodide-Based Fluxes
Assoc. Prof. Fumitaka Hayashi (Shinshu Univ.)

14:15-14:30 General talk A9
Synthesis, Characterization and Photocatalytic Degradation of Tetracycline Antibiotic of A New Three-Dimensional Interpenetrating Copper(II) Coordination Polymer
Dr. Sirinan Thanma (Thammasat Univ.)

Session B2
【Bio-based materials, Room 101, General Science Bld. (Room C)】
Chair: Thanyalak Chaisuwan (PPC, Chulalongkorn Univ.)

13:30-3:45 Invited talk B6
"From Nature to Nanotech: Unlocking the Potential of Bacterial Cellulose"
Prof. Hathaikarn Manuspiya (PPC, Chulalongkorn Univ.)

13:45-14:00 Invited talk B7
Influence of Raw Biomass Characteristics on their Carbon Structures and Adsorption of Organofluorine Compounds
Assoc. Prof. Chayanaphat Chokradjaroen (Shinshu Univ.)

14:00-14:15 Invited talk B8
Molecular Design Strategies for Thermoresponsive Chitosan-Based Injectable Hydrogels: From Phosphorylated Chitosan-Pluronic to Biomedical Applications
Assoc. Prof. Wanpen Tachaboonyakiat (Chulalongkorn Univ.)

14:15-14:30 Preparation

14:30-15:15 Coffee Break & Poster session 2 (Banyen Auditorium (Room A))
For Poster Presenters with **Even Numbers**

Session A3

【Sensors, Banyen Auditorium (Room A)】
Chair: Tetsuya Yamada (Shinshu Univ.)

15:15-15:30 Invited talk A10
Crystal growth technology using tungsten crucible for oxide single crystals with high melting point

Assoc. Prof. Yuui Yokota (Tohoku Univ.)

15:30-15:45 Invited talk A11
Conjugated Polymer-Based Platforms for Cold Chain, Corrosion, Sterilization, and Fuel Authentication

Prof. Sumrit Wacharasindhu (Chulalongkorn Univ.)

15:45-16:00 Invited talk A12
Investigation of rare-earth sesquioxide solid solutions for optical thermometry

Dr. Takahiko Horiai (AIST)

16:00-16:15 Invited talk A13
Polydiacetylene-zinc oxide-zinc(II)-cationic surfactant nanocomposites as colorimetric sensors of various polymers

Prof. Nisanart Traiphol (Chulalongkorn Univ.)

16:15-16:30 General talk A14
Electrochemical Nitrite Sensing with Au/Carbon Nanocomposites Synthesized by Solution Plasma Sputtering: Sensitivity, Selectivity, and Real-Sample Validation

Dr. Jidapa Chantaramethakul (Kasetsart Univ.)

Session B3
【Aichi Priority Research Project, Project Room 101, General Science Bld. (Room C)】
Chair: Norifumi Isu (Shinshu Univ.)

15:15-15:20 Project overview B9
Overview of Aichi Priority Research Project V “Development of Supercritical Plasma Production System for Nanopore Material Catalysts”

Assoc. Prof. Chayanaphat Chokradjaroen (Shinshu Univ.)

15:20-15:30 Invited talk B10
Embedding Pt Nanoparticles Inside Single-Walled Carbon Nanotubes by Solution Plasma Processing for Enhanced ORR Catalysts

Dr. Garbis Atam Akceoglu (Nagoya Univ.)*

15:30-15:40 Invited talk B11
Carbon Nanotube-Carbon Dot Hybrids for High-Performance Oxygen Reduction

Assoc. Prof. Anyarat Watthanaphanit (Mahidol Univ.)

15:40-15:50 Invited talk B12
Role of Carbon Nanotube Type on the Oxygen Reduction Reaction Activity of Carbon Nanotube/Nitrogen-Doped Carbon Composites
Assoc. Prof. Gasidit Panomsuwan (Kasetsart Univ.)

* Presented on web

Session B4
【Biomass conversion (e-ASIA joint), Room 101, General Science Bld. (Room C)】
Chair: Norifumi Isu (Shinshu Univ.)

15:50-16:00 Invited talk B13
Hybrid electrochemical technologies for green fuels and chemical production
Dr. Chanon Pornrungroj (Chulalongkorn Univ.)

16:00-16:10 Invited talk B14
Operando X-ray absorption technique (XAS) and applications for materials research at SLRI
Dr. Wanwisa Limphirat (SLRI)

16:10-16:20 Invited talk B15
Inorganic Catalyst Crystals via Flux Growth for Sustainable Biomass Electroconversion
Asst. Prof. Mongkol Tipplook (Shinshu Univ.)

16:20-16:30 General talk B16
Experience Life in Thailand as e-Asia Exchange Students at Chulalongkorn University
Mr. Kanato Hazama, Mr. Aito Uemura (Shinshu Univ.)

Closing Session
Chair: Haruhiko Morito (Tohoku Univ.)
16:40-16:50 Closing Remarks (Banyen Auditorium (Room A))
Prof. Katsuya Teshima (Shinshu Univ.)

17.00- banquet & Onward Networking Reception (Sci Co-studying Space, Tab Bld.)

The schedule may be subject to change.

Poster session (Banyen Auditorium (Room A))

Please note that all students and researchers who are not included in the oral presentation schedule are automatically assigned to a poster presentation.

P1	A Machine Learning Framework for Reconstructing Crystal Structural Information from XRD Patterns K. Ohnishi[1], T. Yamada[2,3], T. Mongkol[3], C. Chokradjaroen[3], F. Hayashi[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P2	Machine Learning-Assisted Flux Growth of P2-Type Layered Oxide Crystals for High-Power Sodium-Ion Batteries R. Maruyama[1], T. Yamada[2,3,] K. Yubuta[3], H. Miyagawa[2], M. Tipplook[3,] C. Chokradjaroen[3], F. Hayashi[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P3	Composition–Crystal Property Correlations in Flux-Grown P2-Type Na-Layered Oxides M. Kitagawa[1], T. Yamada[2,3], R. Maruyama[1], M. Tipplook[3], C. Chokradjaroen[3], F. Hayashi[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P4	Flux Growth and Evaluation of Solid Electrolytes Proposed by Computer-Aided Design and Machine Learning T. Ito[1], R. Jalem[2], T. Hagio[3,4*], T. Yamada[3,4], F. Hayashi[3,4], K. Teshima[3,4*] [1]Graduate School of Science and Technology, Shinshu University, [2]Research Center for Energy and Environmental Materials, National Institute for Materials Science, [3]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [4]Institute for Aqua Regeneration, Shinshu University
P5	Synthesis and Conduction Mechanism of Strontium- and Potassium-Substituted Fluoride Crystals by the Melt-Solidification Method S. Ikeda[1], T. Yamada[2,3], M. Tipplook[3], C. Chokradjaroen[3], F. Hayashi[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P6	Flux growth of Visible-Light-Responsive Metal-Doped $SrTiO_3$ Crystals with Faceted Features H. Karube[1], F. Hayashi[2,3], T. Yamada[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P7	Flux Growth of Multicomponent $Gd_2Ti_2O_5S_2$-Based Single Crystals for Photocatalytic Applications H. Sugiyama[1], Y. Yokotsuka[1], F. Hayashi[2,3], K. Yubuta[2,3], T. Yamada[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P8	Adsorption and Photodegradation of Organic Pollutants in Aqueous Systems by Flux-grown Potassium Titanate Crystals A. Shintaku[1], F. Hayashi[2,3,] C. Chokradjaroen[3], T. Mongkol[3], T. Yamada[2,3,] T. Hagio[2,3], K. Teshima[2,3,*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P9	One-Dimensional Growth of Hexagonal Boron Nitride Crystal for Enhanced Thermal Conduction H. Hayakawa[1], T. Yamada[2,3], J. Arashima[4], K. Yubuta[3], M. Tipplook[3], C. Chokradjaroen[3], F. Hayashi[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University, 4Graduate School of Medicine, Science and Technology, Shinshu University
P10	Fabrication of Two-Dimensional Layered Membranes for Ion-Selective Separation. R. Kudo[1], Y. Yokotsuka1, M. Moriwaki[1], A. Tanaka[3], F. Hayashi[2,3,] T. Yamada[2,3], T. Hagio[2,3], K. Teshima[2,3*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P11	Flux Growth of Ti_2AlC MAX Phase and Its Gold Recovery Rate S. Mitsui[1], T. Hagio[2,3,*], C. Chokradjaroen[3], M. Tipplook[3], T. Yamada[2,3], F. Hayashi[2,3], K. Teshima[2,3,*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P12	Preparation of Layered Double Hydroxide/Zeolite Composites and Their Ability to Remove Anions and Cations Y. Kobayashi[1], T. Hagio[2,3,*], M. Tipplook[3], T. Yamada[2,3], F. Hayashi[2,3], K. Teshima[2,3,*] [1]Graduate School of Science and Technology, Shinshu University, [2]Department of Materials Chemistry, Faculty of Engineering, Shinshu University, [3]Institute for Aqua Regeneration, Shinshu University
P13	Single crystal growth of layered oxypnictides by utilizing their melting properties and physical property evaluation Chihiro Yamaki[1,2*], Takahiro Kato[1,2], Taichiro Nishio[1], Hiraku Ogino[1,2] [1]Tokyo University of Science, [2]National Institute of Advanced Industrial Science and Technology
P14	Single crystal growth of layered oxychalcogenide by simple melt-solidification [1,2*]Takahiro Kato, [1]Yuki Iwasa, [3]Yuui Yokota, [1,2]Chihiro Yamaki, [1]Shigeyuki Ishida, [3]Akira Yoshikawa, [2]Taichiro Nishio, [1]Hiroshi Eisaki, [1,2]Hiraku Ogino [1]AIST, [2]Tokyo Univ. Sci., [3]Tohoku Univ.

P15	Structure-Selective Crystal Growth of Na–Si Clathrates Kaori Yoshida[1], Yoko Tachibana[1], Kozo Fujiwara[1], Haruhiko Morito[1*] [1]Tohoku University
P16	Synthesis and Ionic Conducting Properties of Halogen-Substituted $LiMOCl_4$ Shinsuke Matsuura[1] · Takeshi Yajima[1*] · Randy JALEM[2] · Yasutoshi Iriyama[1] [1]Nagoya University, [2]National Institute for Materials Science
P17	Single Crystal Study on Ionic Conducting Properties of Superionic Conductors $Li_{1+x}Al_xTi_{2-x}(PO_4)_3$ Taisuke Sato[1], Takeshi Yajima[1*], Yasuyuki Fujiwara[2], Yasutoshi Iriyama[1] [1]Nagoya University, [2]Shinshu University
P18	Fabrication of Metal Organic Frameworks (MOF) modified MXene cathode for Aluminum-ion battery Yuna Fujiwara[1], Akihito Shio[1], Taketo Imamura[1], Takahiro Ishizaki[2*] [1]Materials Science and Engineering, Graduate School of Engineering and Science, Shibaura Institute of Technology, [2]College of Engineering, Shibaura Institute of Technology
P19	Preliminary Study on Cocrystallization of Quercetin for Improved Dissolution and Bioactivity P. Thavornnart[1,2], C. Chokradjaroen[3], S. Theeramunkong [1,2*] [1]Thammasat University Research Unit in Drug, Health Product Development and Application (DHP-DA), Department of Pharmaceutical Sciences, Faculty of Pharmacy, Thammasat University, [2]Department of Pharmaceutical Sciences, Faculty of Pharmacy, Thammasat University, [3]Institute for Aqua Regeneration, Shinshu University
P20	DEVELOPMENT OF BiVO4 BASED MATERIALS FOR PHOTO SUPERCAPACITOR ELECTRODE Muhammad Asim Abbas Khan[1], Prasit Pattananuwat[1,2,*] [1]Departments of Materials Science, Faculty of Science, Chulalongkorn University, [2]Center of Excellence on Advanced Materials for Energy Storage, Chulalongkorn University
P21	Photocatalytic Hydrogen Production of Aluminium-Doped Strontium Titanate/Graphitic Carbon Nitride Composites under Visible Light Natruja Towiratkit[1], Pornapa Sujaridworakun[1, 2, 3*] [1]Department of Materials Science, Faculty of Science, Chulalongkorn University, [2]Photocatalysts for Clean Environment and Energy Research Unit, Faculty of Science, Chulalongkorn University, [3]Center of Excellence on Petrochemical and Materials Technology, Chulalongkorn University
P22	Additive Manufacturing of Hybrid Materials for Medical Technology Kittinon Sakunphokesup[1*], Chuanchom Aumnate[2,] Nutthita Chuankrerkkul[2], Nithiwach Nawaukkaratharnant[2], Pranut Potiyaraj[1,2] [1]Department of Materials Science, Faculty of Science, Chulalongkorn University, [2]Metallurgy and Materials Science Research Institute, Chulalongkorn University
P23	Synergistic MXene Reinforcement in a Bio-Derived Pectin/PVA-based Hydrogel for Self-Healing and Durable Wearable Strain Sensors Nichakan Nichakornpong[1], Manunya Okhawilai[2*], Pranut Potiyaraj[1*] [1]Department of Materials Science, Faculty of Science, Chulalongkorn University, [2]Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University
P24	Development of Porous Geopolymer Insulation Bricks from Fly Ash and Bagasse Ash Chayanit Sripradita[*], Nithiwach Nawaukkaratharnant[a,b], Sitthisak Prasanphan[c] and Sirithan Jiemsirilers[a] [a]Upcycled Materials from Industrial and Agricultural Wastes Research Unit, Department of Materials Science, Faculty of Science, Chulalongkorn University, [b]Metallurgy and Materials Science Research Institute, Chulalongkorn University, [c]National Metal and Materials Technology Center
P25	Evaluating the properties, performance and microstructural characterization of calcium-rich Mae Moh coal bottom ash-based lightweight foamed geopolymer as building thermal insulation material Paing Set Soe[1], Watcharee Sornlar[2], Anucha Wannagon[2], Duangrudee Chaysuwan[3*] [1]Research Unit of Upcycled Materials from Industrial and Agricultural wastes, Department of Materials Science, Faculty of Science, Chulalongkorn University, [2]National Metal and Materials Technology Center, National Science and Technology Development Agency, [3]Department of Materials Engineering, Faculty of Engineering, Kasetsart University
P26	Colorimetric Sensors of Ultraviolet-C Light using Diacetylene-Zinc(II)-Zinc Oxide Nanocomposites with Tunable Sensitivity Punpom Sukjuntra[1], Jintana Siriboon[2], Rakchart Traiphol[2], Nisanart Traiphol[1*] [1]Laboratory of Advanced Chromic Materials, Department of Materials Science, Faculty of Science, Chulalongkorn University, [2]Laboratory of Advanced Polymers and Nanomaterials, School of Materials Science and Innovation, Faculty of Science, Mahidol University
P27	Polydiacetylene/Zinc (II)/Zinc Oxide-Cationic Surfactant Nanocomposites as Colorimetric Sensors for Anionic Surfactants Warisara Suwandecha[1], Nisanart Traiphol[1*], Rakchart Traiphol[2] [1]Laboratory of Advanced Chromic Materials, Department of Materials Science, Faculty of Science, Chulalongkorn University, [2]Laboratory of Advanced Polymer and nanomaterials, School of Materials Science and Innovation, Faculty of Science, Mahidol University
P28	Monitoring the Synthesis of Non-Phosgene Polycarbonates via GC-MS: Reaction Pathways and By-Product Analysis Thammanoon Khamsarn[1], and Wanpen Tachaboonyakiat[1*] [1]Department of Materials Science, Faculty of Science, Chulalongkorn University
P29	DEVELOPMENT OF HIGH-LOADING CBD IN PVA HYDROGEL USING PEG400-ASSISTED SOLUBILIZATION FOR WOUND DRESSING APPLICATIONS Voratida Chuensukum[1*] and Pranut Potiyaraj[1] [1]Department of Materials Science, Faculty of Science, Chulalongkorn University

P30	Mg^{2+} co-doping effects on scintillation properties of YAGG:Ce single crystals H. Suezumi[*1,2], M. Yoshino[2,3], G. Liudmila[3], K. Kamada[3,4], K.J. Kim[3], R. Murakami[2,3], S. Ishizawa[2,3], Y. Yokota[2,4], H. Sato[2,4], T. Hanada[2], A. Yoshikawa[2,3,4] [1]Grad. Sch. of Eng., Tohoku Univ., [2]Inst. for Mat. Res. (IMR), Tohoku University, [3]C&A corp., [4]New Industry Creation Hatchery Center (NICHe)
P31	Development and scintillation properties of K-doped $BaCl_2$: Eu scintillators [*]R. Kawabata[1), 2)], M. Yoshino[2), 4)], K. Kamada[2), 3), 4)], K. J. KIM[2), 3), 4)], N. Kutsuzawa[4)], R. Murakami[2), 4)], A. Yamaji[2), 3)], S. Ishizawa[2), 4)], T. Hanada[2)], Y. Yokota[2), 3)], S. Kurosawa[2), 3), 5)], H. Sato[2), 3)], A. Yoshikawa[2), 3), 4)] [1]Tohoku Univ., Grad. Sch. Eng., [2]IMR, Tohoku Univ., [3]NICHe,Tohoku Univ., [4]C&A corp., [5]Osaka Univ., Inst. Laser Eng.
P32	Fabrication and Characterization of Ce-doped CaF_2 / LiF Eutectic Scintillator for Thermal Neutron Detection T. Matsuyama[* 1,2], K. Kamada[3,4], M. Yoshino[2,3], R. Murakami[2,3], A. Yamaji[2,4], H. Sato[2,4], K.J. Kim[3], S. Ishizawa[2,3], S. Kurosawa[4], T. Hanada[2], Y. Yokota[2,4], A. Yoshikawa[2,3,4] [1]Tohoku University, Graduation School of Engineering, [2]Tohoku University, Institute for Materials Research, [3]C&A corporation, [4]Tohoku University, New Industry Creation Hatchery Center
P33	Corrosion Resistance of Ru-M [M=Mo,Fe,Cr,Ni] Binary System [*]Naveenkarthik Murugesan[1,2], Rikito Murakami[2], Shiika Itoi[3], Kei Kamada[3,4], Takashi Hanada[2], Akihiro Yamaji[4], Satoshi Ishizawa[2], Masao Yoshino[2], Hiroki Sato[2], Shunsuke Kurosawa[4], Yuui Yokota[2], Akira Yoshikawa[2,3,4] [1]Grad. Sch. Eng., Tohoku Univ., [2]IMR, Tohoku Univ., [3]C&A Corp., [4]NICHe, Tohoku Univ.
P34	Study of the effect of core miniaturization on the spatial resolution in optical-guiding crystal scintillator Y. Nakata[1,2], K. Kamada[2,3,4], T. Kudo[5], M. Yoshino[2], Y. Usuki[4], K. Kim[3], Y. Yokota[2], S. Kurosawa[3,] H. Sato[3], T. Hanada[2], R. Murakami[2], A. Yamaji[3], S. Ishizawa[2], A. Yoshikawa[2,3,4] [1]Tohoku Univ., Grad. Sch. Eng., [2]Tohoku Univ., IMR., [3]Tohoku Univ., NICHe., [4]C&A corp, [5]Mirai-Imaging corp.

Access Map

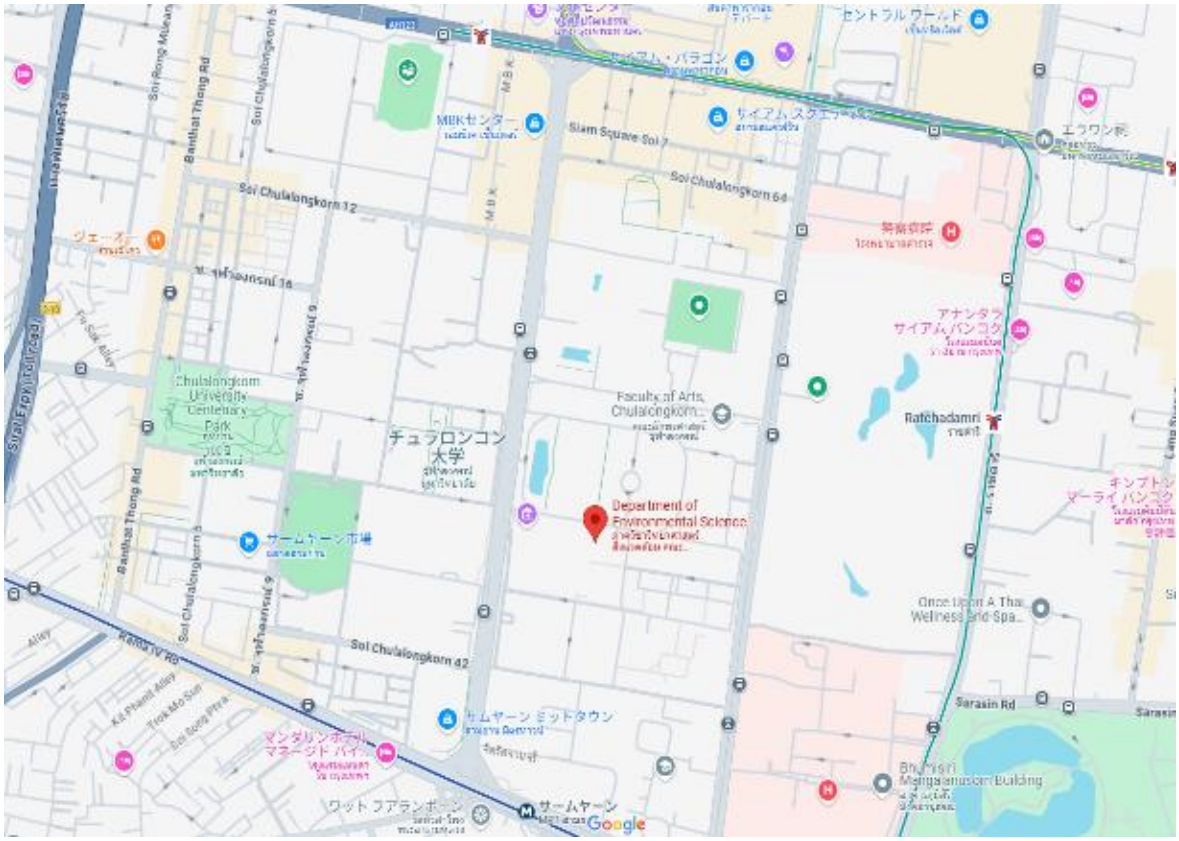
Venue Location:

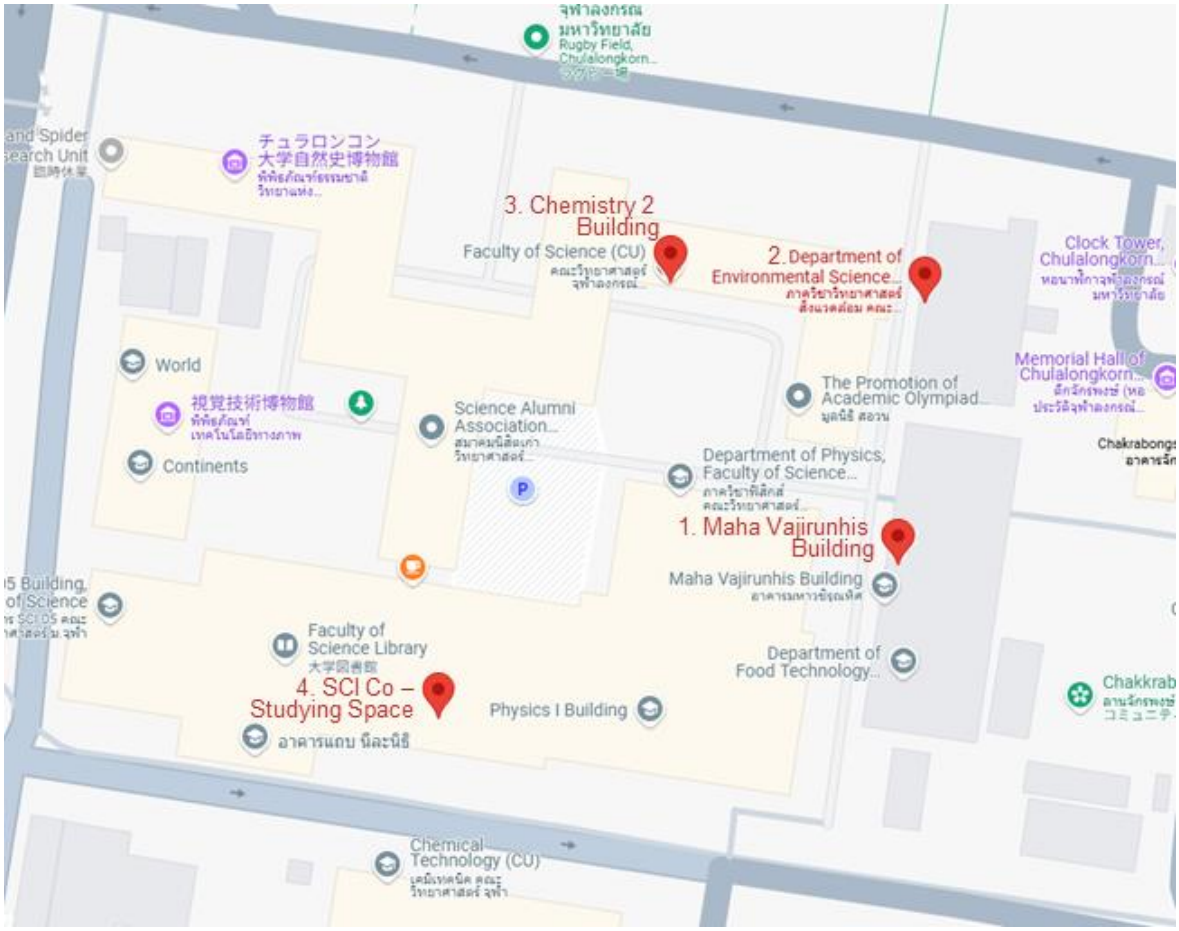
1. Room A and B: Banyen Auditorium and Bangchao Meeting Room, 15 Floor, Maha Vajirunhis Bld. (MHVH),
Faculty of Science, Chulalongkorn University,
Phayathai Rd., Patumwan, Bangkok, 10330 Thailand
Google Map: https://maps.app.goo.gl/RvzRK9QbJ4CJY1bH9

2. Room C: Room 101, General Science Bld.
Google Map: https://maps.app.goo.gl/cHC7eQD4MLo8quc39

3. Lunch location: Room 111, Chemistry 2 Bld.
Google Map: https://maps.app.goo.gl/tVPacbhy6S8BcJDn6

4. banquet location: Sci Co-studying Space, Tab Bld.
Google Map: https://maps.app.goo.gl/EnxjdZwqHgBp4qvi9





Public Transportation to Faculty of Science, Chulalongkorn University

By MRT (Most Convenient):

- Take the MRT (Metro) to Sam Yan Station Exit through Exit 2 below Chamchuri Square
- Take internal CU Shuttle Bus Line No. 2, which stops at Faculty of Sciences
- Alternatively, walk approximately 10-15 minutes from Chamchuri Square to the Faculty of Science

By BTS Skytrain:

- Take BTS to National Stadium Station
- Walk approximately 15-20 minutes to Faculty of Science, or transfer to campus shuttle bus

By Bus:

- Multiple bus routes serve the university area, including Bus No. 11, 25, 54, 73, 73ก on Rama 1 Road
- Bus stops are located on all sides of the campus

Tip: Sam Yan MRT station is located directly next to Chulalongkorn University, making it the most convenient option for reaching the Faculty of Science.