

General Information

- ◆ Approved in FY 2018
- ◆ Established in August 2018
- ◆ Established by the Institute for Integrated Cell-Material Sciences (iCeMS) and Kyoto University Institute for Advanced Study (KUIAS)
- ◆ Partner institution: Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand
- ◆ Purposes: Development of basic research in chemistry and materials science in both countries, and training of researchers with expertise in these fields
- ◆ Location: Vidyasirimedhi Institute of Science and Technology (VISTEC), Rayong, Thailand (outbound)
- ◆ Functions: Creation of new materials and development of technologies that contribute to solving energy and environmental issues / Training of young researchers and human resource circulationinternational academia

Positive ripple effects to the university's activities

- Development of international joint research including research with local companies
- Student recruitment
- Provision of education for local students and summer schools
- Development into international joint program (JD/DD)
- Establishment of venture companies
- Recruitment of talented undergraduate students from top universities throughout Thailand through in-person visits or online recruitment activities.
- Utilize VISTEC's one- and two-year study abroad programs for PhD students, and strengthen collaboration and develop joint research with relevant top laboratories around the world through using VISTEC as a hub.
- Continue to develop the research using the Thai research grants, and establish a new research consortium consisting of multiple research organizations.

Activity Overview



- Instructing PhD students and cultivating human resources for industry, government, and academia
- Establishment and management of a sustainable laboratory
- Launching projects and obtaining external funding



Main Activities in FY 2024

① Promoting materials science and chemistry research through collaboration between local lab members and others

- A total of 10 reports (including 5 reports in Nature index) were published during the period 2024/1/1-2024/12/31.
- Teerat Watcharatpong, who is currently studying abroad at Harvard University, was evaluated for his abilities and it was decided that he would continue to work at Harvard University as a postdoctoral researcher after receiving his doctorate. In addition, we sent all of our students to participate in and present at overseas academic conferences.
- Dr. Nattapol Ma (Ph.D. @ Kyoto University in 2022) and Dr. Soracha Kosasang (postdoctoral researcher until 2024), who were active in the on-site laboratory, were both promoted to NIMS ICYS Research Fellows and will each head their own laboratories. Dr. Ma was awarded the Inoue Research Award for Young Scientists in 2024, and was successful in developing human resources and strengthening research capabilities in Japan.

② Efforts to establish sustainable laboratory/launching new projects and acquiring external funding

- Dr Horike participated in the admissions process and was involved in the placement of students to establish an annual student intake system, and is on track to receive one new PhD student in FY2025.
- JST-PMU: In the Japan-ASEAN Science and Technology Innovation Collaborative Program, the application for the Japan-Thailand joint research project “Development of Intermediate Temperature Water Electrolysis Technology Using Proton Conductive Metal-Organic Frameworks” was accepted. This project is being conducted with Dr. Kanokwan Kongpatpanich of the VISTEC MSE Department, and it will support the strengthening and promotion of research for the entire VISTEC laboratory.