

General Information

- ◆ Approved in FY 2019, established in September 2019
- ◆ Established by the Institute for Chemical Research
- ◆ Partner institution: Fudan University, China
- ◆ Purposes: Cutting-edge collaborative research and promotion of personnel exchange in the field of chemistry
- ◆ Location: Fudan University, Shanghai, China (outbound)
- ◆ Functions: Promotion of cutting-edge chemical research, expansion of international collaboration and equipment sharing, and exchange of human resources with partner institutions



Positive ripple effects to the university's activities

- Promotion of activities as an international joint-usage/research center.
- Efficient research through sharing research resources and equipment.
- Recruitment of talented students through using the lab as a contact point.

[During FY 2023]

- Successfully matched talented Chinese students with faculty members through holding online and face-to-face lectures and interview sessions. Significant relaxation of restrictions in China will be expected in FY 2024. After travel restrictions are lifted, face-to-face interview sessions will be resumed in Beijing and Shanghai.
- Negotiations have begun to conduct graduate school admissions in Shanghai as a future strategy.

Overview of activities

- ◆ Research collaboration in advanced chemistry (porous materials and other new materials, energy conversion, chemical biology, etc.)
- ◆ Shared use of state-of-art research equipment available at Fudan University, Shanghai Jiao Tong University, ShanghaiTech University, and Kyoto University
- ◆ Shared use of the National Compound Library of the Chinese Academy of Sciences (two million compounds)
- ◆ Utilize Kyoto University's online courses and short-term study abroad programs to attract talented students from top Chinese universities
- ◆ Obtain research funds by inviting visiting professors, and promote early-career researcher exchange

*Proactive applications for external funding
*Collaborative research with companies

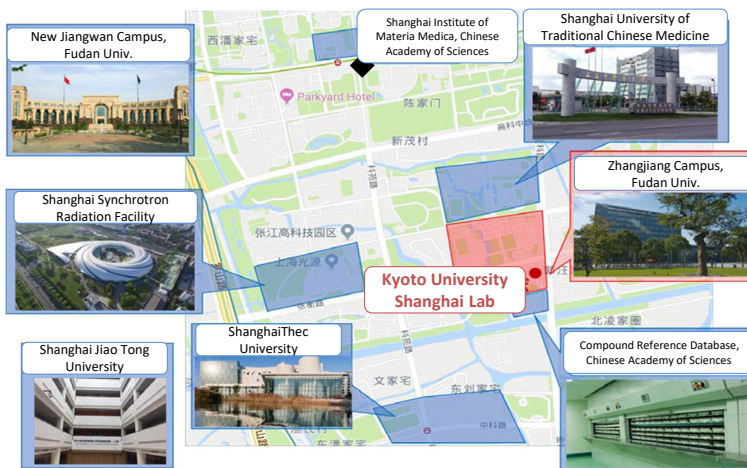
Secure funding for self-sufficient management

Office of the Institute for Chemical Research (ICR)

Fudan University
Zhangjiang Campus



(Rear) Assoc. Prof. Lu, School of Pharmacy, (Fudan University concurrent post)
(Left) Secretary



Shanghai-Kyoto Chemistry Forum, October 2019 (Shanghai)

Kyoto University Shanghai Lab

Main Activities in FY 2023

1 Activities under travel restrictions in China

- Fudan University counterparts changed their administration drastically during the Corona pandemic, and it was necessary to reestablish relations with Fudan University. As a result, the Dean of the School of Pharmacy at Fudan University visited Japan in March 2024.
- The relationship with the Department of Chemistry at Peking University was established by utilizing the On-site Laboratory. As a result, Professor Xiaoguang Lei of Peking University is scheduled to be a visiting professor at the Institute of Chemical Research in FY2024. Additionally, the relationship was also established with Shanghai Jiao Tong University, and three selected undergraduate students in advanced course were accepted at iCeMS in FY 2023 for a one-month internship. The program will continue in the future.
- In August 2023, Prof. Uesugi visited Fudan University to discuss an international joint research project on self-assembling compounds that selectively inhibit protein phase separation with Prof. Lu Zhou of Fudan University.

2 Dissemination of collaborative research results

Despite the severe restrictions, research collaboration in advanced chemistry was promoted remotely through online meetings and sample delivery. In particular, the collaboration with Fudan University reported the design and utility of a tyrosine target compound consisting of 67 million compounds. The research results were published as "ABPP-CoDEL: Activity-Based Proteome Profiling-Guided Discovery of Tyrosine-Targeting Covalent Inhibitors from DNA-Encoded Libraries" in J. Am. Chem. Soc. These international collaborative research results have been proactively disseminated through the ICR website and Twitter, including the Twitter accounts of the individual laboratories and professors.