

Report of KU-UNIVIE Joint Grant Program

Section 1

Project title:		Joint research and workshop on catalytic nanoparticles in MOFs
Project coordinator (KU) Name Position Faculty, department		Hiroyasu TABE Junior Associate Professor Institute for Integrated Cell-Materials Sciences, Institute for Advanced Study
Project coordinator (UNIVIE) Name Position Faculty, department		Michael REITHOFER Assoz. Prof. Institute of Inorganic Chemistry, Faculty of Chemistry
Period of project		From: July 2023 To: March 2024
Project location		KU: <input checked="" type="checkbox"/> UNIVIE: <input type="checkbox"/> Other:
Approx. number of participants	For events*¹ (e.g. workshops, seminars, symposia)	[KU] Faculty members:11 Students: 22 Others:10 [UNIVIE] Faculty members: 2 Students: Others: Other institutions: Faculty members:2 *Please attach a participant list if possible. (the list will NOT be publicized)
	For other exchange activities (such as researcher visits and online meetings)* ²	[KU] Faculty members:1 Students: Others: [UNIVIE] Faculty members:2 Students: Others: Other institutions: Faculty members:4 Students:20 Others:
If applicable: URL at which project outcomes can be viewed (e.g. workshop notifications/programs/reports, evidence of academic papers published or otherwise made available, etc.)		https://www.icems.kyoto-u.ac.jp/en/news/9166/ (in English) https://www.icems.kyoto-u.ac.jp/news/9165/ (in Japanese)
If available: Photographs with captions		Group photo in the workshop at iCeMS, KU

*¹ Please enter the number of participants for each event.

*² Please count each individual participant once only, even if they participate multiple times.

Section 2

Summary of the project (approx. 200 words)

The collaboration research field lies in the inorganic chemistry of metal-organic frameworks (MOFs)/coordination polymers (CPs) and metal nanoparticles available for environmental catalysis. The project coordinators, Prof. Tabe and Prof. Reithofer and related faculties (Prof. Furukawa from Kyoto and Prof. Chin from UNIVIE) frequently discussed via the online system by sharing experimental results on each side.

On February 7th, 2024, Prof. Reithofer and Prof. Chin visited Kyoto to have “Kyoto-Vienna Joint Workshop 2024 on Functional Coordination Compounds” at KUIAS-iCeMS to which Drs. Tabe and Furukawa belong. The workshop included seven speakers from Kyoto University, the University of Vienna, and Taiwan. Three sessions addressed: Coordination compounds for biological applications, CP/MOFs for environmental applications, and Structuralization/structure analysis of CP/MOFs. UNIVIE researchers stayed in Kyoto for one week to have discussions with students and postdocs from Tabe, Furukawa, and related research groups. UNIVIE researchers and Dr. Tabe also visited the Research Center for Artificial Photocatalysis, Osaka Metropolitan University, one of the top institutes for environmental catalysis, to have invited lectures and discussions.

Prof. Reithofer and Prof. Chin brought new MOFs/CPs and catalysts synthesized in Kyoto to UNIVIE to evaluate their catalytic functions. The researchers plan to continue the collaboration in FY2024 based on results obtained from the preliminary evaluation.