

Unit Name

Coordination Chemistry and Catalysis Unit

Students Supervised:

- Tatiana Gridneva
- Dinh Minh Hoan
- Oshiro Mitsuyuki
- Sherstiukova Daria
- Sorvanov Aleksandr
- Hasiweder Thomas Johannes

Scholarly Contributions and Creative Productions (by Faculty)

Journal Article

1. Pandey, D.; Khusnutdinova, J.
Fast Co-Catalyzed Semihydrogenation of Alkynes with Controlled E/Z Selectivity Using Same Catalyst. ChemCatChem 2025, e202500041.
2. Gridneva, T.; Khusnutdinova, J.
Functional Coordination Compounds for Mechanoresponsive Polymers. Chemical Communications 2025, 441–454.
3. Moradi, H.; Govindarajan, R.; Nguyen, H. G.; Deolka, S.; Dinh, H. M.; Khaskin, E.; Fayzullin, R. R.; Vasylevskyi, S.; Khusnutdinova, J. R.
Synthesis and Aerobic Oxidation of Perfluoroalkyl d10 Metal Complexes Supported by 2,7-Dimethyl-1,8-Naphthyridine. European Journal of Inorganic Chemistry 2025, 27, e202400257.
4. Govindarajan, R.; Vardhanapu, P. K.; Fayzullin, R. R.; Khaskin, E.; Khusnutdinova, J.
Facile Methyl Group Transfer from Pt^{II} to Gallium and Indium. Chemical Communications 2024, 7216–7219.
5. Gridneva, T.; Karimata, A.; Bansal, R.; Fayzullin, R. R.; Vasylevskyi, S.; Bruhacs, A.; Khusnutdinova, J.
Deep-Red Photoluminescent Mechanoresponsive Polymers with Dynamic CuI-Arylamide Mechanophores. Chemical Communications 2024.
6. Govindarajan, R.; Fayzullin, R. R.; Deolka, S.; Khaskin, E.; Vasylevskyi, S.; Vardhanapu, P. K.; Pal, S.; Khusnutdinova, J.
Facile Access to Cationic Methylstannylenes and Silylenes Stabilized by E–Pt Bonding and Their Methyl Group Transfer Reactivity. Chemistry - A European Journal 2024, 30.

Patent and Intellectual Property

1. Khusnutdinova, J.
Amorphous Triboluminescent Material, Method for Producing the Same Method for Generating Light Emission in Amorphous Triboluminescent Layer and Mechanoresponsive Sensor. WO2023032921, international application number PCT/JP2022/032429, 2024.

Presentation at Conference

1. Khusnutdinova, J.
Perfluoroalkyl Complexes with First-Row Transition Metals in Photocatalysis and C-F Bond Activation.
Asian International Symposium -Coordination Chemistry, Organo-metallic Chemistry, 105th CSJ Annual Meeting 2025.

Scholarly Contributions (by Unit Members)

Name of Unit Member	Type	Title	Outlet	Publisher	Year Pub
Shubham Deolka	Journal Article	2-Pyridinyl-quinolyl-phenylamino-quinoline Complexes With CF ₃ and C ₂ F ₅ Ligated Ni	Eur. J. Inorg. Chem.	Wiley	2024
Shubham Deolka	Patent and Intellectual Property	Catalyst, modified compound, and method of preparing modified compound	Patent	WO2025013806; international application number PCT-JP2024-024514	2025

Honors, Awards & Fellowships

2024-08-19 Organometallics Distinguished Author Award, Organometallics Distinguished Author Award, 2024, American Chemical Society

External Service

2024 - Ongoing Advisory Board member of the European Journal of Inorganic Chemistry, European Journal of Inorganic Chemistry, Wiley, Advisory Board member of the European Journal of Inorganic Chemistry

2024 - Ongoing Advisory Boards member of the ACS Catalysis, American Chemistry Society, Advisory Boards member of the ACS Catalysis

2024 Guest co-editor of ChemCatChem special issue, ChemCatChem, Wiley, Guest co-editor of ChemCatChem special issue "Non-innocent ligands in sustainable catalysis"