MOHAMMAD AMESKAL

Lyon, France

+33 6 41 19 67 53

Mohammad.ameskal@gmail.com

@Mohammad Ameskal

TECHNICAL SKILLS

- Manipulations under inert atmosphere
- Catalytic tests in high pressure batch reactors
- DFT modelling (Gaussian 9 and 16)
- Analytical techniques: NMR, GC, MS, Karl Fisher.

SOFT SKILLS

- Teamwork (master students' supervision and collaboration with technicians)
- Scientific writing (article and patents)

LANGUAGES

- Arabic (native)
- French (fluent)
- English (fluent)
- Spanish (intermediate)

HOBBIES AND INTERESTS

Reading · Traveling · Drawing · Video Editing · Volunteering.

REFERENCES

Dr. ASENSIO REVERT Juan Manuel
juan-manuel.asensio-revert@ifpen.fr
Dr. RAYBAUD Pascal
raybaud@ifpen.fr
Dr. MAGNA Lionel
lionel.magna@ifpen.fr
Dr. CANAC Yves
yves.canac@lcc-toulouse.fr

PROFESSIONAL OVERVIEW

PhD in homogeneous catalysis | Interested on acquiring new skills in the field of catalysis and applied chemistry, I am currently seeking postdoctoral position in heterogeneous catalysis.

PROFESSIONAL EXPERIENCE

PhD IN HOMOGENEOUS CATALYSIS-IFP ENERGIES Nouvelles (IFPEN)-NOV 2022–Present
Solaize, France

Pd-catalyzed butadiene alkoxycarbonylation: mechanistic insights and reaction improvement.

- Mechanistic studies by experiments and theory
- Improvement of the catalytic performance
- Study of the implementation of the reaction in non-conventional solvents.
- Supervision of a Master-level engineering student on catalysis and organic synthesis.

Publications: Unravelling the mechanism for the mono-alkoxycarbonylation of butadiene: what is the role of the base? -
(https://doi.org/10.1016/j.jcat.2025.116235).

2 other publications in preparation.

Patent: (submitted)-Related to Pd-catalyzed butadiene alkoxycarbonylation.

Conferences :

- Groupe d'étude de chimie organométallique et de la concertation en chimie de coordination **GECOM-CONCOORD**, Ax-les-Thermes, France (May 19–24, 2024) -Oral presentation.
- International Congress on Catalysis (**ICC**)– Lyon, France (July 14–19, 2024)-Poster presentation and volunteer staff.
- European Conference on Organometallic Chemistry (**EuCOMC**), Bern, Switzerland (July 6–10, 2025)-Poster presentation.

M2 internship-Laboratoire de Chimie de Coordination (LCC)- MARCH 2022-JULY 2022
Toulouse, France

- Multi-step organic synthesis of hybrid NHC-phosphine-phosphonium ylide pincer ligands.
- Study of their complexation to a Palladium (II) center.
- Study of the unusual coordination mode of phosphonium ylide ligands.

Publications:

- A Pd(II) Complex Exhibiting Tetradentate NHC-Phosphine Ligand: on Route to Unconventional Phosphonium Ylide Derivatives-
(https://doi.org/10.1002/ejic.202400489).
- Phosphine-NHC-Phosphonium Ylide Pincer Ligand: Complexation with Pd(II) and Unconventional P-Coordination of the Ylide Moiety-
(https://doi.org/10.1021/acs.inorgchem.3c03025).