

Experience

- 05/2020 – present **Postdoctoral researcher – Ecole Polytechnique Fédérale de Lausanne**
Laboratory of Advanced Separations (LAS) – Prof. Kumar Varoon Agrawal
- 11/2019 – 04/2020 **Postdoctoral researcher – Research Foundation Flanders, KU Leuven**
Centre for Membrane separation, Adsorption, Catalysis and Spectroscopy for Sustainable Solutions (cMACS), Membrane Technology Group – Prof. Ivo Vankelecom
Project: ‘Intrinsically microporous membranes for molecular separations’
The project is funded by a Junior Postdoctoral fellowship from Research Foundation Flanders (FWO).
- 01/2019 – 10/2019 **Postdoctoral Researcher – KU Leuven**
Centre for Membrane separation, Adsorption, Catalysis and Spectroscopy for Sustainable Solutions (cMACS), Membrane Technology Group – Prof. Ivo Vankelecom
Project: ‘Composite Metal-Organic Framework membrane development through spray-coating and simultaneous transmission and secondary electron imaging’
The project was funded by a postdoctoral mandate (PDM) fellowship from KU Leuven.
- 09/2014 – 12/2018 **PhD Researcher – KU Leuven**
Centre for Surface Chemistry and Catalysis (COK), Membrane Technology Group – Prof. Ivo Vankelecom
Project: ‘Preparation and characterization of novel thin-film nanocomposite and asymmetric nanofiltration membranes’
The project was funded by a Strategic Basic Research PhD-fellowship from the Flemish Agency for Innovation through Science and Technology (IWT).
- 2009 – 2014 **Lab Technician (student job) – Metallo Chimique**

Education

- 2014 – 2018 **PhD in Bio-Science Engineering, KU Leuven**
Thesis: ‘Preparation and characterization of novel thin-film nanocomposite and asymmetric nanofiltration membranes’
- 2012 – 2014 **M.Sc. in Bio-Science Engineering, KU Leuven (magna cum laude)**

Major: Surface Chemistry and Catalysis

Minor: Environmental Technology

Thesis: 'Fabrication of nano-structured isoporous MF/UF membranes using MOFs as template leaching component'

As part of my thesis research I spent 3 months at the Zuckerberg Institute for Water Research (ZIWR), Ben-Gurion University of the Negev, Israel under supervision of Prof. Roy Bernstein.

2009 – 2012

B.Sc. in Bio-Science Engineering, KU Leuven (cum laude)

Major: Surface Chemistry and Catalysis

Skills

Languages

Dutch, English, French

Scientific

Membrane, polymer and inorganic material synthesis; SEM, TEM, STEM, EDX, XRD, DSC, TGA, FTIR, UV-vis, ICP, GC, HPLC, DMA, DLS, XRF, N₂ sorption, zeta potential; project writing

Software

MS Office, Matlab, Graphical analysis, Adobe Lightroom

Leadership

Guidance of PhD researchers (5), M.Sc. students (6), B.Sc. students (4)

Awards

PhD scholarship from the Flemish Agency for Innovation through Science and Technology (IWT, 2014).

Best poster presentation award from the European Membrane Society at the Organic Solvent Nanofiltration conference 2015, Antwerp.

Travel grant from the European Membrane Society to attend the Organic Solvent Nanofiltration conference 2017, St-Petersburg, Russia for an oral presentation.

Postdoctoral Mandate (PDM) from KU Leuven (2018).

Junior Postdoctoral fellowship from the Research Foundation Flanders (2019).

Teaching experience

2019 – 2020

Practical: Characterization of Catalysts (B-KUL-I0W68A)

- Design and coordination of membrane characterization part

2014 – 2019

Membrane technology: exercises (B-KUL-I0P97a)

- Teaching exercise sessions to groups of +/- 75 students
- Coordination of exercise sessions
- Coordination of laboratory sessions

Publications

[Link to Google Scholar profile](#)