

Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/gs-2023005/>

PhD/Master (MSc) Positions in Advanced Membrane Technology (GS-2023005) – Group of Assoc. Prof. Xuezhong He

Description

The Chemical Engineering Program (group of Xuezhong He) is looking for 2 PhD/Master candidates to conduct research projects in advanced membrane materials for gas or liquid separations. Contract duration: 2 years for Master Program and 3-4 years for PhD.

Project Details

Gas separation membranes require no or very little chemicals compared to standard unit operations and attract increased interest for environmentally friendly energy processes. To make competitive membranes with other separation technologies, further improvement of membrane performance related to both gas permeance and selectivity is highly required. We are looking for scientists to lead exciting experiment and simulation of flat-sheet and/or hollow fiber membranes for gas or liquid separations. We work in a collaborative international environment. For further details of the research projects, please contact Prof. He.

Keywords

Membrane, energy-efficient separation processing, gas separation, mixed matrix membranes, facilitated transport, hollow fibers, MOFs, graphene, flat-sheet films, spinning, CO₂ capture, process simulation, mathematical modelling, gas sorption, X-ray diffraction, XPS, SEM.

Selection Criteria

For PhD position:

- Master degree (or equivalent) in Chemical Engineering, Chemistry, Environmental Engineering or Material Science (essential)
- Strong background in membrane materials (preferable)
- Strong interest in flat-sheet and/or hollow fiber membrane preparation and characterization (essential)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in a team environment (essential)
- Ability to author/co-author high-quality scientific publications (essential)

For Master position:

- BSc degree (or equivalent) in Chemical Engineering, Chemistry, Environmental Engineering, or Material Science (essential)
- Strong interest in flat-sheet and/or hollow fiber membrane preparation and characterization (essential)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in a team environment (essential)
- Ability to author/co-author scientific publications (desired)

The PhD/Master candidate must fulfill the requirements for admission to the Technion Graduate School and needs to comply with its regulations leading to the PhD/Master degree: <https://graduate.technion.ac.il/en/prospective-students/>

Position

PhD/Master

Program

Chemical Engineering

Contact

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[Web Page Link](#)

Application Deadline

Open till filled

Date posted

September 25, 2023

Location

Guangdong Technion – Israel Institute of Technology (GTIIT), China & Technion-Israel Institute of Technology, Israel.

[Fees & Finance](#)

How to Apply

