

The School of Chemistry, Chemical Engineering and Biotechnology at Nanyang Technological University (NTU), Singapore has 1-2 Postdoc Fellow positions for a project on carbon capture for reduction in GHG emissions from ships.

Job responsibilities:

- Carbon capture process modeling and simulations (using Python/Aspen HYSYS)
- Experimental planning and set up for laboratory test involving the development of CO<sub>2</sub> capture technology
- Publishing papers in journals and conferences
- Project updates to principal investigator and project stake holders
- Report writing/presentation

Qualifications

- Ph.D. in Chemical Engineering, Environmental Engineering, Process Control or related engineering fields
- Experience in Aspen HYSYS, Python
- Knowledge of carbon capture technologies
- Experience in application of advanced control, state estimation, soft sensor, machine learning, optimization, and/or fault detection and isolation solutions to oil production plants and/or chemical processes
- Good publication record
- Good written and spoken English

Candidates with suitable background and publications in relevant areas are encouraged to apply. Interested candidates may send a CV to Prof. Xunyuan Yin at [xunyuan.yin@ntu.edu.sg](mailto:xunyuan.yin@ntu.edu.sg). Please include "Postdoc Fellow in Carbon Capture" in the email subject line.

The School of Chemical and Biomedical Engineering is seeking for a full-time Research Fellow to join a 2.5-year research project on carbon capture technology for GHG emission reduction from ships.

### **Job Responsibilities**

The Research Fellow will work together with R&D team to conduct the following tasks:

- Data collection and literature survey
- Process simulation using Aspen HYSYS (or equivalent)
- Experimental planning and set up for laboratory test involving the development of CO<sub>2</sub> capture technology
- Provide regular project updates to principal investigator and project stake holders
- Report writing/presentation

### **Job Requirements**

- PhD in Chemical Engineering, Material Science, Chemistry, Environmental Engineering or related field

Experience & Skill:

- Capable of using Aspen HYSYS software and developing models
- Having basic knowledge in carbon capture, utilisation and storage (preferable)

Communication:

- Good command of English, both oral and written with ability to communicate effectively with a wide range of individual and professional groups

The Research Fellow will work on a research project on carbon capture technology for GHG emission reduction from ships. The Research Associate will work together with R&D team to conduct the following tasks:

- Data collection and literature survey
- Process simulation using Aspen HYSYS (or equivalent)
- Experimental planning and set up for laboratory test involving the development of CO<sub>2</sub> capture technology
- Provide regular project updates to principal investigator and project stake holders

Report writing/presentation

- PhD in Chemical Engineering, Material Science, Chemistry, Environmental Engineering or related field

Experience & Skill:

- Capable of using Aspen HYSYS software and developing models
- Having basic knowledge in carbon capture, utilisation and storage (preferable)

Communication:

Good command of English, both oral and written with ability to communicate effectively with a wide range of individual and professional groups