

# Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/rf-2018013/>

## Research Fellow Position in Group of Prof. Ziyi Zhong Under Chemical Engineering Programme (RF-2018013)

### Description

The Chemical Engineering Program (group of Prof. Zhong) is looking for 1 Research Fellow to conduct research in heterogeneous catalysis/wastewater treatment.

### Project Details

Zhong group's research activities cover three categories: (1) heterogeneous catalysis, (2) waste water treatment and solid waste utilization, and (3) nanosized materials or materials chemistry.

We aim to address the fundamental problems in catalysis and develop related leading-edge technologies using multidisciplinary approaches. For example, we will design and develop various heterogeneous catalysts with good control at nanometer or even atomic scale, and try to gain deep insights into the structure-catalytic property relationships for some catalysts/reactions by employing state-of-the-art characterization techniques. In particular, this includes in situ analytic techniques such as in situ TEM, XPS and FTIR (DRIFTS), which can reveal catalyst structures at molecular and atomic level and capture essential reaction intermediates. Considering severe environmental problems around the world, particularly in China, environmental remediation will be of our top concern. Novel approaches for wastewater treatment and solid waste utilization will also be explored.

Potential research topics and areas for the near future include catalytic conversion of greenhouse gases such as carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>) into value-added products; removal/degradation of organic volatile compounds in air, and of refractory and toxic organic pollutants in industrial wastewaters, e-waste recovery and utilization of plastic and rubbers, etc.

Some details can be found at <https://www.gtiit.edu.cn/en/viewStaff.aspx?staffNo=50>

### Keywords

Heterogeneous catalysis, catalyst by design, kinetics, interfaces, nanostructure, wastewater treatment, oxidation, TOC

### Selection Criteria

- PhD degree in Chemical Engineering, Chemistry, Material Science and Environmental Science and Engineering
- Good knowledge in catalysis, material science and environmental science
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in a team environment (essential)

### Position

Research Fellow/Postdoc

### Program

Chemical Engineering

### Research Area

Heterogeneous  
Catalysis/Wastewater Treatment

### Contacts

Prof. Ziyi Zhong

Email: [ziyi.zhong@gtiit.edu.cn](mailto:ziyi.zhong@gtiit.edu.cn)

[Web Page Link](#)

### Application Deadline

Open till filled

### Date Posted

Oct. 12, 2018

- Ability to write scientific papers (essential)

### **Benefits**

- Salary range: up to \$49,000 / year (depending on qualifications of the candidate)
- Subsidized housing at GTIIT, China
- Health insurance: regular cover for Chinese citizens or private health insurance for foreigners
- Professional conference travel allowance

### **Application**

- Application deadline: **open till filled**
- Send below required documents electronically to: [ziyi.zhong@gtiit.edu.cn](mailto:ziyi.zhong@gtiit.edu.cn)
  1. Curriculum vitae and personal statements
  2. A publication list
  3. Three letters of recommendation (one from the mentor for PhD and/or Master's studies)
  4. A short research plan outline (up to one page in length)
  5. Degree certificates with certified English translation for both the PhD and Master's degrees