

Research, Innovation and Graduate Studies

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Research Fellow/ PhD Positions in Organic Chemistry- Group of Prof. Sehoon Park (RF-2019002)

Description

The Chemistry Program (group of Prof. Sehoon Park) is looking for 2 scientist(s) to lead experimental research projects in organic chemistry related to C-H functionalizations and organocatalytic reduction. Contract duration: 3 years.

Project Details

The Park group will drive a research direction toward discovery of *new reactivity* to molecules in catalysis, which will be guided on the basis of synthetic and mechanistic organometallic chemistry. With this direction in mind, the Park group's research goal is to develop homogeneous catalytic systems for selective transformations of naturally abundant, but inert molecules including simple (hetero)aromatics, alkanes, alkenes, and CO₂ to provide valuable synthetic feedstocks. Our first research target is to enable the metal-free or non-precious metal-catalyzed dehydrogenative C-H functionalizations of alkanes and (hetero)arenes with inexpensive coupling reagents such as organosilicon and boron. The second project is to synthesize finely-tuned and distinctive olefin polymers by applying new polymerization catalysts or unique olefin monomers. The Park group will also play on the interface between homo- and heterogeneous catalysis in close collaboration with experts of materials science.

Keywords

C-H Functionalizations of hydrocarbons, Asymmetric catalysis, Metal-free organocatalytic reduction, Single-site olefin polymerization, Heterogeneous catalysis.

Selection Criteria

- PhD degree in organic chemistry or materials science (essential)
- Strong interest in organic synthesis, organometallic catalysis, reaction mechanism, DFT calculations (preferred), olefin polymerization (preferred), biomass conversion (preferred)
- Good communication skills, good command of English (essential)
- Ability to author scientific reports and scientific publications (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

Application

- Send below required documents electronically to: sehoon.park@gtiit.edu.cn

1. Curriculum vitae and personal statements

Position

Research Fellow/PhD

Program

Chemistry

Research Area

Organic Chemistry

Contacts

Sehoon Park

Email: sehoon.park@gtiit.edu.cn

[Web Page Link](#)

Application Deadline

Open till filled

Date Posted

Feb. 18, 2019

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