

[Scholarship for master, Ph.D or integrated students KIER]

2 master or Ph.D/integrated student

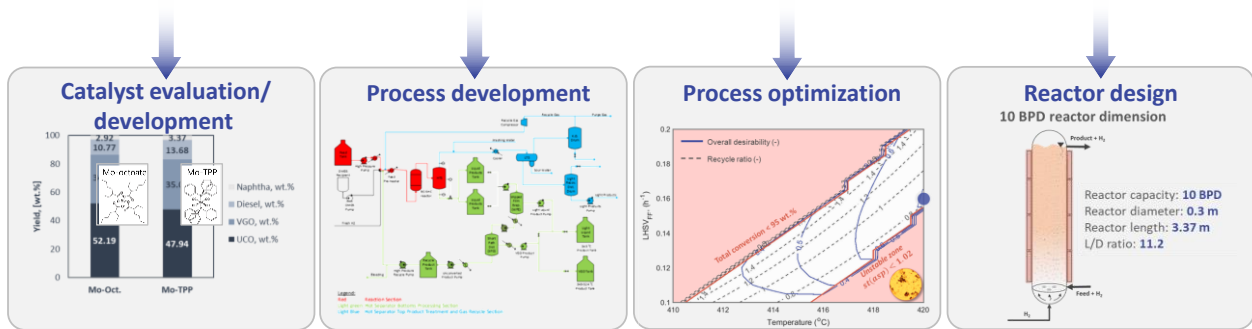
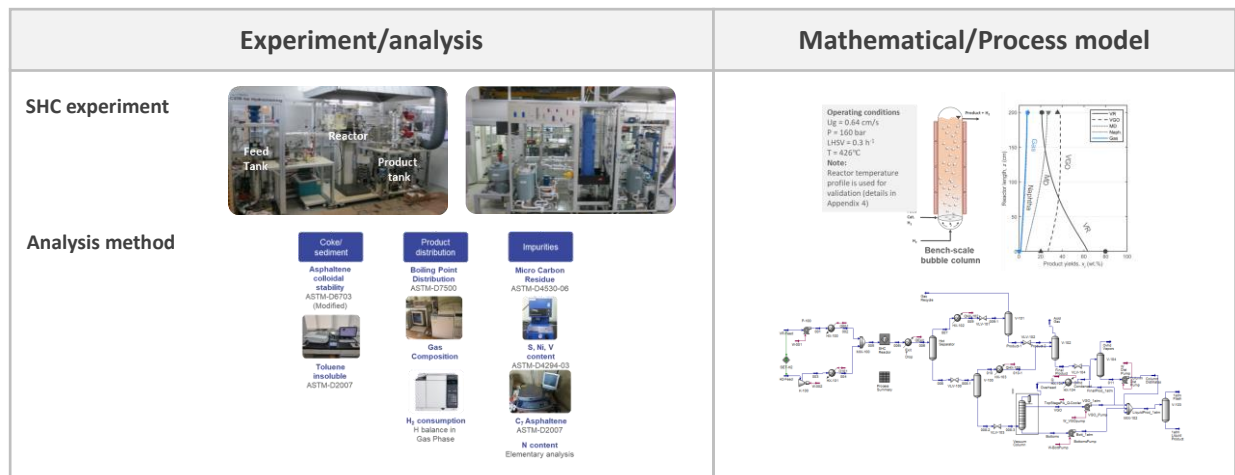
1. Lab: Energy Resources Upcycling Research - KIER (Korea Institute of Energy Research)

Currently, there are 2 Postdoc (1VN, 1KR) and 1 Ph.D. Student (VN).

2. Research fields

Main topic: Process development for upgrading and recycling technology of unconventional oil and waste plastic.

- Hydrodynamic experimental study for bubble column reactor, fixed bed reactor and fluidized bed reactor.
- Reaction characteristics and catalyst performance evaluation experiment (Experiment apparatus: batch and bench-scale unit)
- Reaction kinetic, reactor and process model and simulation for reactor design process development purpose (Tool: Matlab, or Aspen)
- Catalyst development and evaluation for process development.
- Process design (conceptual design, basic design w/ engineering company)
- Analysis (physical properties, chemical properties, oil stability, etc.)



Lab facilities:

Reactor system: Batch reactors (50cc & 250 cc), CSTR (1000cc), Bench-scale bubble column reactor (4000cc)

Analysis apparatus: SIMDIST, Gas chromatography (GC), TNS, XRF, Viscosity & density meters.

3. Requirements

- Major: Chemical engineering and Material Engineering (Catalyst)
- Skills:
 - Experience to perform experiment.
 - Chemical engineering and engineering calculation
 - English reading, writing, and speaking for research work and report (Encourage to learn Korean and speak Korean)
- Language: IELTS 6.0, TOEFL iBT 79 & PBT 59, TEPS 277 (In case of UST)

4. Scholarship

a. UST

- PhD: up to 2,500,000 KRW
- Combined: 2 years initial at 2,000,000 KRW and up to 2,500,000 KRW
- Free Korean language classes at UST
- 13-month salary
- Project-based incentives

b. Other University (Ex. Chungnam National University, Yonsei University)

- PhD: up to 2,000,000 KRW (to be updating)
- Combined: 2 years initial at 1,200,000 KRW and up to 2,000,000 KRW (to be updating)
- Project-based incentives

c. Other

- Annual leave: 12 days
- Opportunities to attend domestic and international conferences.
- Opportunities to participate a big process development projects and patents.
- Opportunities to work at Korean companies after graduation.

5. Apply method

- The lab will recruit until a student is found
- Interested candidates can send their CV and transcript to haihungpham93@gmail.com

Note:

- *Interested candidates are encouraged to prepare their CV well.*
- *Internship opportunities are available for gaining experience in the lab and preparing for university enrollment.*

