Fuqiong Lei

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Education

Ph.D., Chemical Engineering
Oregon State University, US
Expected 2020

Master, Chemical Engineering
Hunan University, China
2014

Bachelor, Chemical Engineering
Hunan University, China
2011

Experiences

2016 to present
Research Assistant, OR, US
"Utilization of solar thermal energy for chemical processing."

- Solar simulator operation.
- Reactor design.
- Materials synthesis and characterization: thin film, porous structured materials, and powder metal oxides.

Good at organizing, designing and conducting experiments.

2013 to 2014
Research Assistant, Hunan, China
"Process modeling and optimization for oxidation of cyclohexanone to adipic acid."

- Process simulation and design.
- Heat integration (Heat exchanger network design).
- Thermodynamic database development.

Good at process design and simulation.

2011 to 2013
Process Engineer, Intern
Zhejiang Shuyang Chemical Co., Ltd. (Startup), China

- Process control design.
- Troubleshoot process and equipment problems.
- Product quality control.

Good at control system design and having experience in troubleshooting process and equipment problems.

Skills

Materials characterization:

TGA-DSC	●●●●●
XRD	●●●●○
SEM-EDX	●●●●○
XPS	●●○○○

Process design and control:

Aspen plus	●●●●●
HYSYS	●●●●○
Aspen energy analyzer	●●●●○
Auto CAD	●●●●●
Solidwork	●●●●○
Yokogawa Centrum CS3000	●●●●○

Chemical product analysis:

RGA(MS)	●●●●●
HPLC	●●●●○
GC	●●●●○

Publications

1. **Fuqiong Lei**, Lucas Freiberg, Yige Wang, Ian Reddick, Goran Jovanovic, Alexandre F.T. Yokochi, and Nick AuYeung*. Non-catalytic ethane cracking using concentrated solar power. Submitted to Chemical Engineering Journal, *Under review.*
2. Yige Wang, Fuqiong Lei, Lucas Freiberg, Piyanut Inbamrung, Saowaluk Intarasir, Elham Bagherisereshki, Goran Jovanovic, Alexandre F.T. Yokochi, Líney Árnadóttir, and Nick AuYeung*. Solar-driven Dry Reforming Reaction in a Milli-scale Reactor. *Submitted to ChemEngieering.*
3. Elham Bagherisereshki, Justin Tran, **Fuqiong Lei**, and Nick AuYeung*. Investigation into SrO/SrCO3 for high temperature thermochemical energy storage. ***Solar Energy***, 2018, 160, 85-93.
4. **Fuqiong Lei**, Qinbo Wang*, Xing Gong, Binwei Shen, Bingyan Mao, Xiang Ye. Liquid-Liquid Equilibrium for Ternary System Water + Cyclohexane + Acetic Acid at (303.2 to 333.2) K. ***Journal of Chemical and Engineering Data***, 2013, *58*(12), 3489-3493.
5. **Fuqiong Lei**, Qinbo Wang*, Xing Gong, Binwei Shen, Wenming Zhang, Qing Han. Solubilities of Succinic Acid in Acetic Acid + Water Mixtures and Acetic Acid + Cyclohexane Mixtures. ***Journal of Chemical and Engineering Data***, 2014, *59*(5), 1714-1718.
6. **Fuqiong Lei**, Qinbo Wang*, Xing Gong, Ling Li, Quanbing Wu, Wenming Zhang. Liquid-Liquid Equilibrium for Ternary System Water + Cyclohexanone + Acetic Acid at (303.2 to 333.2) K. ***Fluid Phase Equilibria***, 2014, *382*, 65-69.