NAME Kim, Jiyong
Position Associate Professor
Phone +82+32-835-8875
Office 8-569
E-mail jykim77@inu.ac.kr
Homepage http://sites.google.com/site/pseatinu/

Degree

- 2001 Yonsei University (BS in Chemical Engineering)
- 2003 Yonsei University (MS in Chemical Engineering)
- 2008 Yonsei University (Ph.D in Chemical Engineering)

Experience

- 2017~present Associate professor, Incheon National University
- 2013 ~ 2017 Assistant professor, Incheon National University
- 2009 ~ 2013 Post-doc., University of Wisconsin-Madison
- 2008 ~ 2008 Post-doc., Yonsei University

Major

- Process systems Engineering, Optimization, Process synthesis, Sustainable design

Teaching

- Thermodynamics, Process Design, Reaction Engineering, Energy and Economy

Representative Research

- Design of the optimal hydrogen infrastructure considering cost and safety: Applications for Korea hydrogen economy
- Fuel production from CO2 using solar-thermal energy: System level analysis

Researches

- Integration of CCS and renewable resource technologies for sustainable energy supply in the transportation sector, Energ. Conv. Manag., 143, 227-240, 2017.
- A comprehensive model for design and analysis of bioethanol production and supply strategies from lignocellulosic biomass, Renew. Energ., 112, 247-259, 2017.
- An optimization model to design and analysis of renewable energy supply strategies for residential sector, Renew. Energ., 112, 222-234, 2017.
- Scenario-based approach for design and comparatively analysis of conventional and renewable energy systems, Energy, 129, 86-100, 2017.
- Design and operation of a renewable energy sources based hydrogen supply system: Technology integration and optimization, Renew. Energ., 103, 226-238, 2017.
- An integrated decision support model for design and operation of a wind-based hydrogen supply system," IJHE 42, 3899-3915, 2017.
- Bi-level optimizing operation of natural gas liquefaction process, Com. & Chem, 96, 87-102, 2017.

Current Research

- Renewable energy resource (RES)-based energy production.
- Reutilization of carbon source for energy production
- Multiscale modeling of energy-economic system.