

Asst. Prof. Dr. Supachita Krerkkaiwan

ผศ. ดร. สุภชิตา เกริกไกวัด

EDUCATIONAL BACKGROUND

- Year A.D. 2012 Ph.D. (Chemical Technology), Chulalongkorn University, Thailand
(ปร.ด. (เทคโนโลยีเคมี), จุฬาลงกรณ์มหาวิทยาลัย, ประเทศไทย, 2555)
- Year A.D. 2009 M.Sc. (Chemical Technology), Chulalongkorn University, Thailand
(วท.ม. (เทคโนโลยีเคมี), จุฬาลงกรณ์มหาวิทยาลัย, ประเทศไทย, 2552)
- Year A.D. 2007 B.Eng. (Petrochemical and Polymeric materials), Silpakorn University, Thailand
(วศ.บ. (ปิโตรเคมีและวัสดุพอลิเมอร์), มหาวิทยาลัยศิลปากร, ประเทศไทย, 2550)

RESEARCH INTEREST

Thermochemical conversion process of biomass and coal, gasification process, and catalytic steam reforming which related to the research topics of this course / with the ability to advise on research works under the program.

PUBLICATIONS

International Journal

- Krerkkaiwan, S. and Boonbumrung, D. (2020). “Production of high quality empty fruit bunch pellet by water washing and torrefaction”. *IOP Conf. Ser.: Earth Environ. Sci.* 463 012130.
- Mueangta, S., Kuchonthara, P. and Krerkkaiwan, S. (2019) Catalytic Steam Reforming of Biomass-Derived Tar over the Coal/Biomass Blended Char: Effect of Devolatilization Temperature and Biomass Type. *Energy & Fuels*. 33(4): pp. 3290-3298. Apr 2019
- Krerkkaiwan, S. and Fukuda, S. (2019) Catalytic effect of rice straw-derived chars on the decomposition of naphthalene: The influence of steam activation and solvent treatment during char preparation. *Asia-Pacific Journal of Chemical Engineering*. 14(3), e2303, <https://doi.org/10.1002/apj.2303>
- Krerkkaiwan, S., Mueangta, S., Thammarat, P., Jaisat, L. and Kuchonthara, P. (2015) Catalytic Biomass-Derived Tar Decomposition Using Char from the Co-pyrolysis of Coal and Giant Leucaena Wood Biomass. *Energy & Fuels*. 29(5): pp. 3119-3126. May 2015

International Conference

- Thu, K., Krerkkaiwan, S. and Fukuda, S. (2022). Simulation of biomass fast pyrolysis process by using global kinetics model: Effect of reaction temperature on product yields. *Proceeding of 8th International Conference on Sustainable Energy and Environment (SEE 2022): The Road to Net-Zero: Energy Transition Challenges and Solutions* (pp.1-7) 7-9 November 2022.
- Krerkkaiwan, S., Miura, K. and Fukuda, S. (2018) Kinetic study on CO₂ and steam gasification of the fast pyrolysis coal char using the temperature-programmed reaction (TPR) technique. In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November 2018

- Krerkkaiwan, S., Miura, K. and Fukuda, S. (2018) Investigating combustion characteristics of coal and coal residue using a high-temperature drop tube furnace (HT-DTF). In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November 2018
- Krerkkaiwan, S., Buranatrevedhya, S., Sanduang, J., Fukuda, S. and Miura, K. (2016) Characteristics of fast pyrolysis and char product of a low-rank (sub-bituminous) coal in high temperature drop tube furnace (HT-DTF). In *6th International Conference on Sustainable Energy and Environment (SEE2016)*. Bangkok, Thailand. 28-30 November 2016