

Naruemon Setthaya

+66 054 466664 ext 1711

naruemon.se@up.ac.th



Workplace

Department of Chemistry, School of Science, University of Phayao

Address:

19 Moo 2, Maeka, Muang, Phayao, 56000, Thailand

Research Experience

2009-present **Lecturer**

University of Phayao,
School of Science, Department of Chemistry
Phayao, Thailand

2012–2017 **PhD Candidates**

- Department of Industrial Chemistry
Chiang Mai University, Chiang Mai, Thailand
- Institute of Multidisciplinary Research for
Advanced Materials, Tohoku University,
Sendai, Japan

2019 **Researcher**

School of Mining and Metallurgical
National Technical University of Athens,
Athens, Greece

Education

Ph.D.(Industrial Chemistry)

Chiang Mai University, Chiang Mai,
Thailand, 2017.

M.S.(Industrial Chemistry)

Chiang Mai University, Chiang Mai,
Thailand, 2007.

B.S.(Chemistry)

Maejo University, Chiang Mai,
Thailand, 2004.

Research Field

Inorganic materials: Zeolite, TiO₂-
photocatalyst , Geopolymer.

Scholarships

- 2019-2020 Research Grant for New Scholar from the University of Phayao

Partnership for research In Geopolymer Concretes Grant (PriGeoc) from the European Commission REA via Marie Skłodowska-Curie Research and Innovation Staff Exchange programme
- 2020-2022 Research Grant from the University of Phayao

Unit of Excellence for Innovation in Infrastructures and Advanced Construction Management, University of Phayao

Program Management Unit for Human Resources & Institutional Development, Office of National Higher Education Science Research and Innovation Policy Council (NXPO)

Journal Publications

- K Pimraksa, P. Chindapasirt, **N. Setthaya**, Synthesis of zeolite phases from coal combustion by-products, *Waste Management & Research*, 28, 1122-1132, (2010).
- N. Setthaya**, C. Pindi, K. Pimraksa, P. Chindapasirt, Synthesis of faujasite and analcime using of rice husk ash and metakaolin, *Advanced Materials Research*, 770, 209-212, (2013).
- N. Setthaya**, P. Chindapasirt, K. Pimraksa, Preparation of zeolite nanocrystals via hydrothermal and solvothermal synthesis using of rice husk ash and metakaolin, *Materials Science Forum*, 872, 242-247, (2016).
- N. Setthaya**, P. Chindapasirt, S. Yin, K. Pimraksa, TiO₂-zeolite photocatalysts made of metakaolin and rice husk ash for removal of methylene blue dye, *Powder Technology*, 313, 417-426, (2017).
- K. Pimraksa, **N. Setthaya**, M. Thala, P. Chindapasirt, M. Murayama, Geopolymer/Zeolite composite materials with adsorptive and photocatalytic properties for dye removal, *PLoS one*, 15(10): e0241603, (2020).
- C. Chindawong, N. Damrongwiriyanupap, P. Dimitrios, K. Pimraksa, **N. Setthaya**, Water absorption and compressive strength of various coal fly ash-based geopolymer pastes, *Advances in Cement Research*, 34 (3), 120-129, (2022).
- P. Mekrattanachai, L. Zhu, **N. Setthaya**, C. Chindawong, W.G. Song, The highly effective cobalt based metal-organic frameworks catalyst for one pot oxidative esterification under mild conditions, *Catalysis Letters*, 152 (6), 1639-1650, (2022).

Journal Publications

- C. Chindawong, **N. Setthaya**, P. Mekrattanachai, N.Damrongwiriyanupap, K. Pimraksa, D. Johannsmann, Effect of adding carboxymethyl cellulose, zeolite and microcrystalline cellulose on the optical and mechanical properties of latex composite films, *Journal of Physics: Conference Series*, 2175 (1), 012011, (2022).
- N. Setthaya**, K. Pimraksa, N.Damrongwiriyanupap, D.Panias, P. Mekrattanachai, C. Chindawong, Modified zeolite from metakaolin and fly ash as efficient adsorbent for cationic methylene blue dye removal, *Chemical Engineering Communications*, (2022)
doi: 10.1080/00986445.2022.2067748.

Conference Proceedings

- N. Setthaya**, C. Pindi, K. Pimraksa, P. Chindaprasirt, Synthesis of faujasite and analcime using of rice husk ash and metakaolin, *Proceeding of International Conference Applied Physics and Material Applications*, Golden Beach Cha-Am Hotel, Petchaburi, Thailand, 2013.
- N. Setthaya**, P. Chindaprasirt, K. Pimraksa, Synthesis of zeolite from rice husk ash and metakaolin by hydrothermal method, *Abstract book of International Symposium on Environmental Harmony Materials*, Sendai, Japan, 2016.
- N. Setthaya**, P. Chindaprasirt, K. Pimraksa, Preparation of zeolite nanocrystals via hydrothermal and solvothermal synthesis using of rice husk ash and metakaolin, *7th International Conference on Material and Manufacturing Technology*, Chiang mai, 2016.
- K. Pimraksa, **N. Setthaya**, K. Juengsuwattananon, Low temperature synthesis of zeolitic and cementitious materials for environmental cleanup, *Abstract book of Goldschmidt Annual Conference*, Boston, America. 2018.
- T. Insaeng, **N. Setthaya**, Synthesis of chabazite and liottite from fly ash for adsorption of methylene blue dye, *Proceedings of the 11th Science Research Conference*, Srinakharinwirot University, Thailand, May 2019.
- S. Sribantao, P. Kongpon, **N. Setthaya**, Characterization and water absorption of fly ash-based geopolymer paste, *Proceedings of the 10th Phayao Research Conference*, University of Phayao, Thailand, January 2021.
- N. Damrongwiriyanupap, S. Limkatanyu, W. Sae-Long, C. Chindawong, **N. Setthaya**, T. Phoo-Ngernkham, S. Hanjitsuwan, P. Chindaprasirt, L.Li, Effects of fine aggregates replacement by recycled glass on properties of high calcium fly ash geopolymer mortar, *Abstract book of the 21st International Union of Materials Research Societies- International Conference in Asia (IUMRS-ICA 2020)*, Chiang Mai University, Thailand, February 2021.

Conference Proceedings

- C. Chindawong, **N. Setthaya**, P. Mekkattanachai, N.Damrongwiriyanupap, K. Pimraksa, D. Johannsmann, Effect of adding carboxymethyl cellulose, zeolite and microcrystalline cellulose on the optical and mechanical properties of latex composite films, Abstract book of the 21st International Union of Materials Research Societies- International Conference in Asia (IUMRS-ICA 2020), Chiang Mai University, Thailand, February 2021.
- P.Mekkattanachai, **N.Setthaya**, C.Chindawong, B.Yotnoi, W.Song, C.Manaspon, Synthesis of Fe₃O₄@ ZIF-8 Hydrogel as a bio-nanocomposite carrier for drug delivery system, Abstract book of the Pure and Applied Chemistry International Conference 2022 (PACCON 2022), Bangkok International Trade & Exhibition Centre: BITEC, Bangkok, Thailand, May 2022.