

BIOGRAPHY

Prakaipetch Muangkhiew received the B.Eng. degree in Electrical Engineering from Suranaree University of Technology (SUT), Thailand, in 2019, graduating with First Class Honors. She completed the M.Eng. degree in Electrical Engineering at SUT in 2021, where her thesis focused on probabilistic fuzzy multi-objective optimal power flow using particle swarm optimisation. She has completed the Ph.D. degree in Electrical Engineering at SUT, supported by the Royal Golden Jubilee Ph.D. Program Scholarship.

Her research interests encompass electricity market design, carbon pricing mechanisms, ancillary service procurement, renewable energy certificates, and optimisation-based market-clearing methodologies. She has been recognised with several academic distinctions, including the Best Paper Award at the 2024 IEEE IAS Industrial and Commercial Power System Asia and the 2021 International Electrical Engineering Congress.

In addition, she completed a visiting research placement at Lancaster University, United Kingdom, from August 2025 to January 2026, during which she collaborated on research on carbon accounting and integrated electricity market optimisation. Her work contributed to advancing efficient, reliable, and environmentally responsible market frameworks for future power systems.