

## RESEARCHER PROFILE

**Name** Dr. Natacha .....

**Last name** Phetyim.....

**Academic Position** Assist.Prof.....

**Faculty** Engineering.....

**Major** Chemical Engineering.....

**Research interest** Pyrolysis, Adsorption, Biogas, Separation  
Technology.....

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Education	From ... To ...	University name	Country
Doctor	2015-2019	Rajamangala University of Technology Thanyaburi	Thailand
Master	1998-2002	King Mongkut's University of Technology Thonburi	Thailand
Bachelor	1994-1996	Rajamangala University of Technology	Thailand

### International Publications

(Only published within the last five (5) years in international journals or book chapters)

[1] Thonglueng, N., Sirisangawang, R., Sukpancharoen, S., & Phetyim, N. (2022).

Optimization of iodine number of carbon black obtained from waste tire pyrolysis plant via response surface methodology. Heliyon, e11971.

[2] Sukpancharoen, S., & Phetyim, N. (2021). Green hydrogen and electrical power production through the integration of CO<sub>2</sub> capturing from biogas: Process optimization and dynamic control. Energy Reports, 7, 293-307.

[3] Jantasee, S., Phetyim, N., Thanupongmanee, T., & Sripirom, N. (2019). Pyrolysis oil production from polypropylene plastic waste using molybdenum modified alumina-silica catalysts. In E3S Web of Conferences (Vol. 122, p. 01005). EDP Sciences.

### **Book/ Textbooks (Both Thai and International publications)**

[1] ณัฐชา เพ็ชรยิ้ม. คีนซีพีให้น้ำมันเครื่องกันเถอะ. เอกสารเผยแพร่ความรู้ สาขาวิศวกรรมศาสตร์และ  
อุตสาหกรรมวิจัย สถาบันวิจัยและพัฒนา มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี, 2557.ISBN:978-974-625-  
622-3

### **Research funds (Within the last five (5) years)**

2022 Machine learning for prediction of higher heating value of biochar in torrefaction processes from biomass combined with process optimization. (NRCT, Head of project)

2022 Upgrading of recycled carbon black from tires pyrolysis process for filler in rubber compounds. (RRI, Head of project)

2022 Extraction of coffee pulp and spent coffee grounds using water-high pressure carbon dioxide extraction. (NRCT, Head of project)

2019 Process development of co-pyrolysis between used engine oil and plastic wastes for evolving into green university of Rajamangala University of Technology Thanyaburi(NRCT, Head of project)

2017 The design and Development of Semi-Batch Reactor for Co-Pyrolysis between Used Lubricant oil and Plastic Waste from Landfills. (NRCT, Head of project)