



Acting Sub Lt. Dr. Prempreeya Montienthong

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WORKPLACE:

- 3rd floor Department of Sustainable Development Technology, Faculty of Science and Technology, Thammasat University Rangsit Campus

EDUCATION

Year	Degree/ Certificate	Institution
2007-2011	BACHELOR DEGREE, CHEMICAL ENGINEERING	THAMMASAT UNIVERSITY
2011-2014	MASTER DEGREE, MECHANICAL ENGINEERING	THAMMASAT UNIVERSITY
2014-2019	DOCTORAL DEGREE, MECHANICAL ENGINEERING	THAMMASAT UNIVERSITY

WORK EXPERIENCE

Year	Administrative Position
2021-Present	Assistant head of Sustainable Development Technology

Year	Work Position
2021-Now	Lecturer
2011-Now	Researcher in Center of Excellence in Electromagnetic Energy Utilization in Engineering (CEEE)

RESEARCH AREA

Electromagnetic Wave, Ultrasonic, Porous media

Scopus Author ID 55781283700

ORCID ID 0000-0003-1221-7584

WEB of Science Researcher ID

Awards/Scholarships:

Year	Scholarship/ Award Name	Awarding Institution
2024		
2022		
2021	Outstanding Thesis award	National Research Council of Thailand
2017	Gold Medal Invention Award and Special Prize from China	45th International Exhibition of Inventions – Geneva
2016	Gold Medal Invention Award and Special Prize from Ministry of Education and Science of The Russian Federation	Seoul International Invention Fair (SIIF)
2014	The Royal Golden Jubilee Scholarship	National Research Council of Thailand
2013	Outstanding Thesis award	Thammasat University (Rangsit Campus)

Research Grants:

Topic	Research Grants	Year
Developing a Technique for the Use of Ultrasound to Stimulate Neuromodulation for the Treatment of Parkinsons Disease (Mathematical Model: Study the Effect of Ultrasound Frequency and Brain Tissue Size)	ทุนพัฒนาศักยภาพในการทำงานวิจัยของอาจารย์รุ่นใหม่	2024

Publication:

International publication:

Wessapan, T., Rattanadecho, P., Somsuk, N., Yamfang, M., Guptasa, M. and **Montienthong, P.** "Thermal Effects of Electromagnetic Energy on Skin in Contact with Metal: A Numerical Analysis ". Energies, Vol 16, p. 5925, 2023.

<https://doi.org/10.3390/en16165925>

Prempreeya Montienthong, Phadungsak Rattanadecho, Andy Gibson. The Contaminate Infiltration Model for Heat and Concentration Transport within Porous Media Under Electromagnetic Fields. ASME Journal of Heat Transfer. vol145 , 2023, 032701-10. <https://doi.org/10.1115/1.4055762>

Prempreeya Montienthong, Phadungsak Rattanadecho. Focused Ultrasound Ablation for the Treatment of Patients with Localized Deformed Breast Cancer: Computer Simulation. ASME J. Heat Transfer. Oct 2019, 141(10): 101101 (16 pages) <https://doi.org/10.1115/1.4044393>

Prempreeya Montienthong, Phadungsak Rattanadecho, Waraporn Klinbun. Effect of Electromagnetic Field on Distribution of Temperature, Velocity and Concentration during Saturated Flow in Porous Media Based on Local Thermal Non-Equilibrium Models (Influent of Input Power and Input Velocity). International Journal of Heat and Mass Transfer. Volume 106, March 2017, Pages 720-730. <https://doi.org/10.1016/j.ijheatmasstransfer.2016.09.059>

Seksan Suttisong, Phadungsak Rattanadecho, **Prempreeya Montienthong**. Comparison of Stefan model with Single-phase model of water infiltration process in unsaturated porous media (theory and experiment). Journal of Hydrology 497 (2013) 145–151. <https://doi.org/10.1016/j.jhydrol.2013.05.048>

National publication:

ศาสตราจารย์ ดร.ผดุงศักดิ์ รัตนเดโช และ **ว่าที่ร้อยตรีหญิง ดร.เปรมปรีญา มณเฑียรทอง** “การใช้เทคนิคคลื่นอัลตราซาวด์สำหรับการรักษาก้อนมะเร็งเต้านมในผู้หญิง: การจำลองด้วยคอมพิวเตอร์” Thai Society of Mechanical Engineers, Issue 1, January 2021.

Montienthong P., Cha-um W., Rattanadecho, P., “Effect of Electromagnetic Field on Convective Heat Transfer and Concentration of Fluid Flow in Porous Media: Case Study Local Thermal Non-Equilibrium Models”, Thammasat Engineering Journal, Vol. 1 No. 2, July - December 2013

Conference:

Monthienthong P., Rattanadecho P. “Convective Flow and Distribution of Concentration in Porous Media Subjected to Electromagnetic Field (Computation Based On Local Thermal Non Equilibrium Models)”, The 7 Th Thai Society Of Mechanical Engineers - International Conference On Mechanical Engineering, Chiang Mai, Thailand, 13 -16 December, 2016.

Montienthong P., Rattanadecho P., Klinbun W. “Effect of Electromagnetic Field on Distribution of Temperature, Velocity and Concentration of Fluid in Porous Media: Case Study Local Thermal Non- Equilibrium Models”, The 27 ME-Nett Conference of Mechanical Engineering Network Of Thailand, Cst-2033, Pattaya, Thailand, 16 - 18 October, 2013.

Patent/อนุสิทธิบัตร

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