

อ.ดร.กมลวัฒน์ นาคะสรรค์

Kamonwat Nakason, Ph.D.



Position: Lect. Dr.

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Education

Ph.D. (Environmental Technology), Mahidol University, Thailand (2017)

B.Sc. (Occupational Health and Safety), Sukhothai Thammathirat Open University, Thailand (2017)

B.Sc. (Environmental Health Science), 2nd Class honors, Mahidol University, Thailand (2013)

Expertise

Hydrothermal process

Biomass utilization

Research Interests

Waste to energy

Thermochemical conversion process

Solid Waste management

Research Projects

- 2020: Project leader of “Production of sugar alcohol from bagasse using bi-functional catalyst” (Fund by: Thai Roong Ruang Industry Co., Ltd., THAILAND)

- 2019-2020: Researcher of “Production of levulinic acid and N-riched carbon material for supercapacitor electrode from cassava rhizome” (Fund by: Mahidol University)
- 2018: Project Leader of “Feasibility of the use of torrefied gas as carrier gas in torrefaction process” (Fund by: Mahidol University)
- 2018: Researcher of “Development of research projects for industry” (Fund by: The Thailand Research Fund (TRF))
- 2017: Researcher of “Feasibility of Bio-products production from agricultural waste” (Fund by: PTT Public Company Limited, THAILAND)
- 2017: Researcher of “โครงการติดตามความก้าวหน้าทุนพัฒนานักวิจัยภายใต้โครงการพัฒนานักวิจัยและงานวิจัยเพื่ออุตสาหกรรม (U Forum)” (Fund by: The Thailand Research Fund (TRF))
- 2016-2017: Research assistance of “Hydrothermal carbonization of biomass as renewable energy” (Fund by: Mahidol University)

Publications

1. Pathomrotsakun, J., **Nakason, K.**, Kraithong, W., Khemthong, P., Panyapinyopol, B., Pavasant, P. 2020. Fuel properties of biochar from torrefaction of ground coffee residue: effect of process temperature, time, and sweeping gas. *Biomass Conversion and Biorefinery*.
2. **Nakason, K.**, Pathomrotsakun, J., Kraithong, W., Khemthong, P., Panyapinyopol, B. 2019. Torrefaction of agricultural wastes: Influence of lignocellulosic types and treatment temperature on fuel properties of biochar. *International Energy Journal*. 19(4), 253-266
3. **Nakason, K.**, Panyapinyopol, B., Kanokkantapong, V., Viriya-empikul, N., Kraithong, W., Pavasant, P. 2018. Hydrothermal carbonization of unwanted biomass materials: Effect of process temperature and retention time on hydrochar and liquid fraction. *Journal of the Energy Institute*. (Impact Factor: 3.204)
4. **Nakason, K.**, Panyapinyopol, B., Kanokkantapong, V., Viriya-empikul, N., Kraithong, W., Pavasant, P. 2018. Characteristics of hydrochar and hydrothermal liquid products from hydrothermal carbonization of corncob. *Biomass Conversion and Biorefinery*. 8(1), 199-210 (Impact Factor: 0.334)

5. **Nakason, K.**, Panyapinyopol, B., Kanokkantapong, V., Viriya-empikul, N., Kraithong, W., Pavasant, P. 2018. Characteristics of hydrochar and liquid fraction from hydrothermal carbonization of cassava rhizome. *Journal of the Energy Institute*. 19(2), 184-193 (Impact Factor: 3.204)
6. **Nakason, K.**, Panyapinyopol, B., Kanokkantapong, V., Viriya-empikul, N., Kraithong, W., Pavasant, P. 2017. Hydrothermal carbonization of oil palm pressed fiber: effect of reaction parameters on product characteristics. *International Energy Journal*. 17(2), 47-56
7. Reangchim, P., **Nakason, K.**, V., Viriya-empikul, N., Eiad-ua, A. 2017. The Effect of Calcium-Based Salt on Hydrothermal Carbonization of Corncob. *Key Engineering Materials*. 751, (477-482)
8. **Nakason K.**, Itthibenchapong, V., Pavasant, P. 2016. VOCs adsorption by biomass treated via hydrothermal carbonization. *Huachiew Chalermprakiet Science and Technology Journal*. 21(2), (7-19)

Patent

วรรณช อธิธิเบญจพงศ์, วสวัตต์ ไกรทอง, เอี่ยมพร บั้วรอด, **กมลวัฒน์ นาคะสรรค์**, “กระบวนการแปรรูปชีวมวลให้เป็นวัสดุคาร์บอนที่มีค่าพลังงานความร้อนสูง”, เลขที่ประกาศ169268 , วันที่ประกาศ 19 ตุลาคม2560 .

Certification

- 1) Water Pollution Control Supervisor (Department of Industrial Works)
- 2) Industrial Waste Management Supervisor (Department of Industrial Works)
- 3) Safety Officer Supervisory level (Department of Labour Protection and Welfare)