Curriculum Vitae

Name: Kong Sieng Huat

List of Research:

Internal Grant

1. Production of Biochar from Oil Palm Waste through Vacuum Carbonizer for Mushroom Cultivation (UCTS/RESEARCH/4/2018/01)

2. Pyrolysis of Biomass in a Self-Sustained Auger Reactor for Continous Biochar Production (UCTS/RESEARCH/4/2018/06)

3. Optimization of Porous Biochar Production from Palm Biomass in Continuous Reactor for Drinking Water Chlorine Removal (UCTS/RESEARCH/2/2021/06)

List of Publications:

1. Peter Nai Yuh Yek, Yoke Wang Cheng, Rock Keey Liew, Wan Adibah Wan Mahari, Hwai Chyuan Ong, Wei-Hsin Chen, Wanxi Peng, Young-Kwon Park, Christian Sonne, **Sieng Huat Kong**, Meisam Tabatabaei, Mortaza Aghbashlo and Su Shiung Lam. Progress in the torrefaction technology for upgrading oil palm wastes to energy-dense biochar: A review. *Renewable & Sustainable Energy Reviews* 151(111645): 1-19 (2021).

2. Peter Nai Yuh Yek, Mohd Shahril Osman, Chee Chung Wong, Chee Swee Wong, **Sieng Huat Kong**, Teck Sung Sie, Shin Ying Foong, Su Shiung Lam and Rock Keey Liew. Microwave wet torrefaction: A catalytic process to

convert waste palm shell into porous biochar. *Materials Science for Energy Technologies* 3: 742-747 (2020).

3. **S.H. Kong,** P. N. Y. Yek, M. S. Osman, C. C. Wong, K.Y. Cheong, C.Y.J. Chin and S.S Lam. *Performance of palm kernel shell activated carbon on Cd(II) and Pb(II) ions removal in landfill leachate*. International Symposium on Carbon and Functional Materials for Energy and Environment. 16-18 January 2020, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia.

4. **Sieng-Huat Kong**, Soh Kheang Loh, Robert Thomas Bachmann, Haryati Zainal and Kah Yein Cheong. Palm kernel shell biochar production, characteristics and carbon sequestration potential. *Journal of Oil Palm Research* 31(3): 508-520 (2019).
5. Cheong Kah Yein, **Kong Sieng Huat** and Mohd. Ambar Yarmo. Synthesis and characterization of magnetite nanoparticles by chemical co-precipitation. *Borneo Journal of Sciences and Technology* 1(2): 27-31 (2019).

6. Peter Nai Yuh Yek, Mohd Shahril Osman, **Sieng Huat Kong**, Ming Chiat Law, Rock Keey Liew and Su Shiung Lam. Numerical simulation and experimental validation of microwave torrefaction for empty fruit bunches pellet. *e-Bangi Journal of Social Sciences and Humanities* 16(3): 1-12 (2019).

7. **Sieng-Huat Kong**, Su Shiung Lam, Peter Nai Yuh Yek, Rock Keey Liew, Nyuk Ling Ma, Mohammad Shahril Osman and Chee Chung Wong. Self-purging microwave pyrolysis: an innovative approach to convert oil palm shell into carbon-rich biochar for methylene blue adsorption. *Journal of Chemical Technology and Biotechnology* 94(5): 1-9 (2018).

8. Uttran, A., Loh, S. K., **Kong, S. H.** and Bachmann, R. T. Adsorption of NPK fertiliser and humic acid on palm kernel shell biochar. *Journal of Oil Palm Research* 30(3): 472-484 (2018).

9. Zainal Haryati, Soh Kheang Loh, **Sieng-Huat Kong** and Robert Thomas Bachmann. Pilot scale biochar production from palm kernel shell (PKS) in a fixed bed allothermal reactor. *Journal of Oil Palm Research* 30(3): 485-494 (2018).

10. Cheong Kah Yein, **Kong Sieng Huat** and Hii Siew Ling. 2018. *Effects of phosphoric acid and bleaching clay on monochloropropanediol ester (MCPD) and glycidol esters (GE) content in palm oil*. Books of Abstracts National Seminar on Palm Oil Milling, Refining, Environment and Quality. 27-28 November 2018, The Royale Chulan Hotel, Kuala Lumpur, Malaysia.

11. Zainal Haryati, Soh Kheang Loh, **Sieng-Huat Kong** and Robert Thomas Bachmann. 2018. *Biochar from palm kernel shell for soil application*. Books of Abstracts National Seminar on Palm Oil Milling, Refining, Environment and Quality. 27-28 November 2018, The Royale Chulan Hotel, Kuala Lumpur, Malaysia.

12. **Kong, S. H.**, Yek, P. N. Y., Liew, R. K., Osman, M. S., Wong, C. C. & Lam, S. S. *Self-purging microwave pyrolysis (SPMP): an innovative approach to convert palm biomass into high carbon biochar as potential activated carbon precursor*. 1-2 August 2018, Proceedings of 4th International Conference of Chemical Engineering & Industrial Biotechnology, Kuala Lumpur, Malaysia.

List of Awards:

1. Publication Award (Gold) (Malaysia Palm Oil Board) - 2018.
2. Publication Award (Gold) (Malaysia Palm Oil Board) - 2018.