

Conversion of Waste to Energy and Resource

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About the Talk

This talk will review some case studies regarding the conversion of waste to resource in Singapore. For instance, one example to be communicated is the development of modular gasifier integration packages for processing the mixed feedstock of biomass and sewage sludge to produce energy. The resulting gasification solid residues (fly ash and bottom ash) can be further processed in the forms of catalyst, biochar, and active carbon for a variety of renewable energy and environmental applications.

Proposed Date/Time for the Talk

1 Nov 2021 Monday 12:00 pm – 1:00 pm (50 min talk + 10 min Q&A)

About the Speaker

Dr Chi-Hwa Wang is a Professor of Chemical and Biomolecular Engineering at the National University of Singapore (NUS). He received his B.S. degree (Chemical Engineering) from the National Taiwan University, M.S. degree (Biomedical Engineering) from Johns Hopkins University, M.A. and PhD degrees (both in Chemical Engineering) from Princeton University, respectively. His current research interests include particle technology, biomass gasification, and waste to energy and resource.

He is an Executive Editor for Chemical Engineering Science (Elsevier, 2013 - present). He serves in the editorial board/international advisory board of the following four Elsevier journals: Applied Energy, Journal of Controlled Release, Powder Technology, and Advanced Powder Technology (also Executive Editor 2009-2013). Chi-Hwa is the recipient of a few recent awards such as AIChE Shining Star Award 2016, Teaching Commendation List, Faculty of Engineering, National University of Singapore, 2017. WSSET (World Society of Sustainable Energy Technologies) Award 2017, Bologna, Italy, 2017, AIChE Shell Thomas Baron Award, Pittsburgh, USA, 2018, AIChE Fellow 2019, WSSET Fellow 2020.