
Editorial

Suzana Yusup*

Biomass Processing Laboratory,
Center of Biofuel and Biochemical,
Mission Oriented Research-Green Technology,
Chemical Engineering Department,
Universiti Teknologi Petronas,
31750, Bandar Seri Iskandar, Perak, Malaysia
E-mail: drsuzana_yusuf@petronas.com.my
*Corresponding author

Lim MookTzeng

Mission Oriented Research-Green Technology,
Chemical Engineering Department,
Universiti Teknologi Petronas,
31750, Bandar Seri Iskandar, Perak, Malaysia
E-mail: mooktzeng@gmail.com

Biographical notes: Suzana Yusup is an Associate Professor in Chemical Engineering Department Universiti Teknologi Petronas (UTP). She is the Founder of Biomass Processing Laboratory and research under Green Technology Research. She graduated in 1992 for her first degree from University of Leeds, UK in the field of Chemical Engineering with (Hons.), MSc in Chemical Engineering (Adsorption) from University of Wales Swansea in 1995 and PhD in Chemical Engineering (Powder Technology) in 1998 from University of Bradford. She has published in numerous journals, articles and conferences both national and international and lead several research grants at national and international levels. Her research interest is in the area of biomass utilisation and conversion to fuel and biochemicals, material development (adsorbents) for gas storage and adsorption processes.

Lim MookTzeng obtained his BEng (Hons.) from Universiti Tenaga Nasional in 2003. He then obtained his MSc from Universiti Sains Malaysia in 2007, pursuing his interest in bioenergy, and worked on a bubbling fluidised bed biomass gasifier. He then obtained his PhD from the University of Canterbury, New Zealand in 2012, this time, investigating the hydrodynamics of a dual fluidised bed gasifier. Following those years, he was a Postdoctoral Researcher with the same institution, before joining Universiti Teknologi Petronas in a similar position. He is now with Newcastle University, UK, working on biomass combustion and gasification as part of the SUPERGEN Bioenergy Hub projects. Interspersed with his bioenergy research during the MSc and PhD periods, he was also a Mechanical Engineer in the industry for a few years.

This special issue of *International Journal of Nano and Biomaterials* consists of extension of evaluated and reviewed papers presented during International Conference on Process Engineering and Advance Materials (ICPEAM) 2012. The conference is a part of several conferences held during the biennial congress of The World Engineering Science and Technology Congress (ESTCON) 2012, organised by UNIVERSITI TEKNOLOGI PETRONAS. With the theme of ‘Sustainable development through innovative process, materials and technology’, the aim of ICPEAM is to promote interaction between academia and industrialist by presenting and discussing their research and development work related to both fundamental and applications. There are wide range of interdisciplinary domains which include material science and engineering, nanotechnology, environmental technologies, process systems engineering, separation technology and reaction engineering. The conference provides opportunities to the participants to exchange new ideas and experiences, to establish research and business relations with global partners for future collaboration.

The selected papers that been published in this special issue described research on gasification, synthesis and modification of nano-particles, effect of nanoclay on structure, influence of reaction condition on nano-composites, comparison of experimental design techniques, fabrication of ceramic membrane and numerical studies on fluid flow.