

EDITORIAL

Special issue on Challenges in Environmental Science and Engineering - CESE-2015
28 Sep. – 2 Oct. 2015, Sydney, Australia

This special issue carries selected peer-reviewed manuscripts based on presentations made at CESE-2015, the 8th Annual International Conference on “Challenges in Environmental Science & Engineering” - CESE Conference Series, which was held from the 28th of September to the 2nd of October 2015 at Sydney, Australia.

This special issue has been dedicated to the following themes: *Membrane technology, adsorption, oxidation processes* and a general theme covering other relevant topics. The *Membrane Technology* theme covers research on forward osmosis to (i) understand scaling and fouling risk using hollow forward osmosis membrane, (ii) identify pH variations with CaCl₂ as draw solution and (iii) reduce high organic concentration with a membrane hybrid system. The *Adsorption* theme includes removals of Pb (II), cephalixin and CO₂ using polymer-based graphene oxide magnetic nanosorbent, activated carbon from alligator weed and amine-modified biochar, respectively.

The *oxidation processes* theme consists of preparation of zinc oxide and titanium oxide photocatalysts to remove Congo red. Several different themes include evaluation of different contaminants in LCD wastewater, leachate and discolored wastewater. Wetland was investigated to remove nitrogen by aeration and intermittent circulation; seasonal population changes of ammonia-oxidizing bacterial community in Songhua Lake, China was also examined.

The Guest Editors are thankful to the Editors in Chief of Process Safety and Environmental Protection for providing an opportunity to publish this special issue. They are also thankful to Ms. Catherine Cliffe and her staff members at the Process Safety and Environmental Protection editorial office for their dedication in providing great assistance from the beginning to the end of review and publication processes. Our sincere appreciation to all the reviewers for their rigorous review of manuscripts submitted to the special issue. We look forward to another special issue in Process Safety and Environmental Protection for CESE-2016 which will be held from the 6th to 10th November 2016 in Kaohsiung, Taiwan.

Guest Editors

Ho Kyong Shon

Center for Technology in Water and Wastewater, School of Civil and Environmental Engineering, University of Technology, Sydney, Australia

Sherub Phuntsho

Center for Technology in Water and Wastewater, School of Civil and Environmental Engineering, University of Technology, Sydney, Australia

Veeriah Jegatheesan

School of Engineering, RMIT University, Melbourne, Australia