ANNOUNCEMENT

FESE's Best Papers of 2016

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Frontiers of Environmental Science & Engineering is pleased to announce the best paper awards for 2016. In 2016, we published 111 research and review papers in Volume 10 of *FESE*. In order to acknowledge the past contributions and encourage more submissions, the *FESE* editorial board selected two distinguished papers for their profound insights into current serious environmental issues or contributions to practical treatment technology. We hope these papers will inspire and promote innovation in the environmental science and engineering research field.

Following are the titles and abstracts of the two best papers of 2016:

Sanne Skov NIELSEN, Peter KJELDSEN, Rasmus JAKOBSEN. Full scale amendment of a contaminated wood impregnation site with iron water treatment residues. *Front. Environ. Sci. Eng.* 2016, 10(4): 3. DOI: 10.1007/s11783-016-0842-1

Field scale studies are crucial to examine engineering applicability of remediation technologies for contaminated soils. Nielsen et al. presented a full scale soil remediation study and demonstrated that they could immobilize heavy metals at a wood impregnation site. They immobilized the heavy metals using iron water treatment sludge (Fe-WTR). Significant stabilization effects of As, Cr and Cu were achieved in 14 months by using only 0.22% Fe-WTR. This work provides a promising, simple and cost-effective method to decrease the leaching of heavy metals from contaminated soils using waste sludge.

Cesunica E. IVEY, Heather A. HOLMES, Yongtao HU, James A. MULHOLLAND, Armistead G. RUSSELL. A method for quantifying bias in modeled concentrations and source impacts for secondary particulate matter. *Front. Environ. Sci. Eng.* 2016, 10(5): 14. DOI: 10.1007/s11783-016-0866-6

The Community Multi-Scale Air Quality estimates of sulfates, nitrates, ammonium, and organic carbon are highly influenced by uncertainties in modeled secondary formation processes, which constitute the majority of PM_{2.5} mass. Therefore, it is essential for policy making to reduce the modeling bias and improve the modeling accuracy. In this study, a method to estimate bias in quantification of concentration and potential impact of the secondary particulate matter in the atmosphere is developed. After estimating the bias, the authors also revised the reported PM_{2.5} concentration of the US and re-modelled the PM_{2.5} distribution in the air over the US. The advantages of the study lie in its novel method to deal with uncertainties, which will improve simulated concentrations and source impacts of secondary particulate matter through data assimilation.

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Editors-in-Chief
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