Editorial

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Biographical notes: Desheng Dash Wu is tenured Assistant Professor at Reykjavik University, Iceland and affiliate Professor at RiskLab, University of Toronto. He is Director of RiskChina Research Center and elected member of the Professional Risk Managers' International Association Academic Advisory Committee. He serves as the Editor in Chief of *Int. J. Environment* and Sustainable Development, Int. J. Innovation and Sustainable Development, Int. J. Financial Services Management and Int. J. Services Sciences and guest editors, board members of various journals such as Annals of OR, Computers and Operations Research etc. He has more than 30 refereed journal publications at journals such as EJOR, JORS, IJPR, IEEE Transactions on Knowledge and Data Engineering and two books in the area of Enterprise Risk Management and decision analysis.

Environment and pollution issues have always been important to human society. Today's environment issues of pollution can take various forms. Seeking the best way to manage performance assessment in environment issues of pollution in areas such as air, water, the ground and the food we eat is very important because all contribute to the quality of life and sustainable development of eco-economic systems.

For enterprises, pollution prevention and environmental management provides an alternative way of doing business. Environmental performance can be improved by using various performance assessment tools and establishing environmental management systems (Wu, 2009).

Managing risks in the energy market is essential to maintain sustainable development. Risks are inherent in business. It is believed that without risk there would be no motivation to conduct business. A key principle for optimising risk management is that organisations should accept those risks that they are competent to deal with, and 'outsource' other risks to those more competent to deal with them (Wu and Olson, 2009a, 2009b; Olson and Wu, 2008). Quantitative tools are important to assess risk, enabling better informed managerial decision making. This special issue is intended to present state-of-the-art work that demonstrates tools to teat energy, risk and uncertainty. Both theoretical and applied work is welcome.

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We are very pleased at seeing the special issue of *International Journal of Environmental Technology and Management (IJETM)*. This special issue is intended to present state-of-the-art work that demonstrates tools to assess environmental performance.

Our call for papers seeks new contributions addressing the use of various management tools in assessment of environmental performance and related topics. This special issue includes the broad coverage we were seeking, with both theoretical and empirical studies addressing environmental performance and related topics using resistivity imaging, patent analysis, collaborative web model and sensitive analysis.

It was believed that there are increasing interests of using geophysical methods for evaluating subsurface contamination of sites. The geophysical investigations provide site images which helps tremendously to plan site development. The first paper titled 'Assessment of geo-hazard potential and site investigations using Resistivity Imaging' (by Hossain et al.) presents the assessment of geo-hazard potential of a site in the City of Duncanville, Texas using Resistivity Imaging (RI). Authors have used Resistivity Imaging to identify areas of environmental concern and to develop a detailed image of subsurface conditions. A geotechnical site investigations program, which included three test soil borings, was conducted, to confirm the finding from Resistivity Imaging.

Oltra et al. examines the function of patent analysis in measuring eco-innovation. Authors conclude that patents are a useful means for measuring environmentally motivated innovations, such as pollution control technologies and green energy technologies, and for general purpose technologies with environmental benefits. Authors also identify five aspects for using patent analysis in eco-innovation:

- 1 eco-inventive activities in specific technology fields
- 2 international technological diffusion
- 3 research and technical capabilities of companies
- 4 institutional knowledge sources of eco-innovation
- 5 technological spillovers and knowledge flows.

Ha et al. perform experiments with combination using emulsion oil and an electrostatic water spraying scrubber to evaluate effectiveness for simultaneous removal of NOx and Particulate Matter (PM) emissions in marine exhaust gas. Their results suggest that the electrostatic water spraying scrubber appears to be a promising alternative method for control of mass-based as well as number-based PM emissions.

Unnisa et al. conduct a preliminary investigation on combined treatment with the coagulative ability of Moringa oleifera seeds to reduce turbidity and to determine the effectiveness of solar disinfection for the inactivation of E.coli and coli forms on various turbid waters. Authors demonstrate that combined treatment to purify turbid waters with natural coagulants and solar disinfection showed a measurable reduction in the turbidity and inactivation of bacterial species, demonstrating that natural coagulants and solar disinfection showed the natural coagulants and solar disinfection showed a measurable reduction in the turbidity and inactivation of bacterial species, demonstrating that natural coagulants and solar disinfection can enable such households to widen their sources of treated drinking water.

The special issue concludes with a discussion by Khajuria et al. on municipal solid waste management as one of the most serious environmental hazards confronting municipalities in India. Authors have conducted qualitative analysis of municipal solid waste and identified barriers or incentives for recycling, which resulted in the development of factors, influencing recycling treatment technology of municipal solid

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waste in India. Authors also discussed necessary and beneficial relationship drawn among these factors and studied the collaborative web model for sustainable municipal solid waste management.

References

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