# Editorial

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**Biographical notes:** Michel Roddy Lollchund holds a BSc (Hons) and PhD in Physics from the University of Mauritius and a PostDoc from the Indian Institute of Science. He is currently a Senior Lecturer at the Department of Physics of the University of Mauritius. Since 2012 he is working on wind energy assessment as well as wind turbine modelling and design for site specific wind conditions.

Roshan T. Ramessur holds a BSc (Hons.) in Marine Biology-Chemistry from University of Wales (1988), MSc in Marine Environmental Protection from University of Wales (1991) and PhD from University of Mauritius in 2001. Presently, he is working as an Associate Professor in Coastal Sciences at the University of Mauritius. He was chairman of the Staff Committee of the Mauritius Oceanography Institute during 2005–2015 and has a number of publications in international journals, received several awards for his excellent

contribution towards the field, professional and committee memberships. He has been presenting his research work in various international conferences and workshops organised. He was chairman of the Scientific Committee for the International Conference on Renewable Energy and Sustainability, RESUS15.

Ticiano Costa Jordão is a civil and environmental engineer, lecturer, coach and consultant for universities and companies in environmental policy, economics and management, corporate governance, corporate social responsibility and corporate sustainability. He is the co-founder and CEO of CRUSUS (www.crusus.org), an international network of consulting experts, research and education in sustainability. He is also co-founder of the international network of sustainability in civil aviation (SUSAV – www.susav.crusus.org). He has several publications on governance for climate change adaptation and strategic management of renewable energy sources at regional level, and corporate sustainability related to the civil aviation sector, the agro-food industry, the hospitality sector and the energy sector.

In 1994, Tyagaraja S. Modelly Cunden took up the post of trainer at the '*Lycée Polytechnique Sir Guy Forget*' in Flacq, Mauritius, where he taught Industrial Design and Applied Mechanics during the period 1994 to 2002. From 2002 to 2004 he worked as Project Engineer at Geosaf Inc. in Montreal, Quebec, Canada. There he had the responsibility to design, build and install automated packaging lines for leading companies in the agro-alimentary sector. From the year 2004 onwards he has been lecturing at the Université des Mascareignes (UdM), and his field of research is wind resource assessment.

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As the Earth's climate warms up, weather-related natural disasters are becoming more intense and frequent and sea levels are rising with significant impacts on coastal populations, economies, and natural resources, including inland water resources. The marine and coastal environment and the goods and services it provides are under threat in many regions of the world, including Mauritius. Besides the possibility of actual drowning of some low-lying islands and atolls, the increasing reach of storm waves result in coastal erosion and saltwater intrusion of freshwater reservoirs. Sustainable development provides more enduring goals than those of economic growth or economic development as our existing paradigm of development not only contributes to the depletion and degradation of the natural resources but also accentuates the problems of inequality, unemployment and poverty. A holistic and proactive approach towards prevention, capacity building, mitigation and preparedness is therefore necessary.

The main objective of the RESUS 2015 Conference was to explore the potential role of renewable energy in the mitigation of climate change for policymakers, the private sector, academic researchers and the civil society. It helped develop ocean governance tools for sustainable use of the ocean resources and assess the ocean vulnerability to climate change and energy security. Disaster management, sustainable and vulnerability issues were addressed to help coastal communities prepare for and adapt to a changing climate in line with the green economy. The Small Island Developing States (SIDS) have been in the centre of debate related to climate change due to their usual high vulnerability. The vulnerability of SIDS to climate change is evidenced mainly by increase in temperature of seawater, higher incidence of floods, saltwater intrusion in coastal freshwater, damage to infrastructure, utilities and properties resulting from severe weather events and by loss of biodiversity (fauna and flora). There are 52 States and Territories within SIDS that are spread over the Pacific, Indian and Atlantic Oceans and

Caribbean Sea. These islands are constantly under threat due to tourism and fishing activities and depend on fragile ecosystems such as coral reefs. Therefore, it was of utmost importance to develop a governance framework in these States to face climate change by enhancing resilience to climate change with appropriate financial and human resources.

About 60 participants, comprising academics, scientists, engineers, researchers and other stakeholders from various countries attended the RESUS 2015 Conference which featured 11 oral sessions and six plenary talks which were delivered by internationally recognised scientists from 3 to 5 March 2015. It is with great pleasure that some selected high-quality papers are now published in a special edition of the *International Journal of Global Energy Issues* (*IJGEI*).

Finally, we would like to thank the authors of this special issue for sharing their latest research and all the reviewers for their valuable comments and suggestions which greatly helped to enhance the quality of the papers. Special thanks go to Dr. Mohammed Dorgham, Chief Editor of *International Journal of Global Energy Issues*, and Janet Marr, Journal Manager of Inderscience Publishers, for their support and guidance throughout the publication process.