Special issue editorial

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There is a growing understanding that environmental challenges which the mankind is facing cannot be solved only by means of technological or societal sciences. A complex approach is needed, an approach that combines the strengths of novel developments in clean technologies and political implementation of the societal demands for sustainable development and clean environment. Considerable efforts are being made both in technical and political fields to pursue this goal and it is important for the scientific community and decision makers to be aware of those efforts. With this aim in mind the organisers of the 14th International Conference on *Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction—PRES'11*- and the publishers of the *Clean Technologies and Environmental Policy* are joining their efforts and publishing this Special Issue.

PRES'11 was held in 2011 in the uniquely historical Italian city Florence known for its fine architecture and arts. PRES is an annual venue and ranks as one of the world leading conferences of its kind. Being initially envisaged as a conference dedicated to process integration topics; it is nowadays a comprehensive and established platform for researchers, industry people and policy makers. It provided excellent opportunity for its participants to exchange novel ideas, processes, procedures and energy saving policies and establish close links among academia,

industry and policy makers. What also distinguishes this conference from its counterparts is its strong and elaborate publishing strategy. All conference papers are now published as refereed type papers in *Chemical Engineering Transactions*, which testifies for the quality of the contributions. Besides that, the selected conference contributions are published as considerably extended versions in special issues of various internationally recognised journals, including *Clean Technologies and Environmental Policy*.

Twelve papers were invited for the publication and accepted after a thorough peer-review following *Clean Technologies and Environmental Policy* reviewing procedure. They have been authored by researchers from 15 institutions in 11 countries worldwide—from Austria, Brazil, Croatia, France, Hungary, Iran, Italy, Japan, Malaysia, Slovenia and the United Kingdom.

This selection of papers starts with exergy analysis and process integration, followed by integration of membranes, fibrous separation and advanced environmental protection methodologies. They are specific renewables related issues included in those themes: biorefineries, bioethanol, biogas, biodiesel, biowaste treatment, tradeoffs between carbon and nitrogen footprints, decarbonised coal energy systems, solar energy integration and CO₂ capture. The contributions have been selected to provide insight into various fields related to environmental policies and pollution reduction technologies.

Publication of Special Issues of *Clean Technologies and Environmental Policy* following yet another PRES conference has become a good tradition based on high quality of the presentations delivered by the conference participants. We are convinced that providing broader access to the research and information contained in those presentations will be beneficial for a wide range of the audience in industry, academy and local and central authorities.

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We are confident that the papers in this Special issue of *Clean Technologies and Environmental Policy* will be of interest and relevance to a broad range of the scientific community and hope it will also bring to their attention the PRES Conference series. The 15th PRES 2012 conference is again a joint conference with CHISA 2012. It will be held in Prague from 25 to 29th August 2012. PRES 2012 received nearly 400 abstracts to choose from.

The 16th PRES 2013 will occur on the beautiful Greek island of Rhodes, which will offer another opportunity for us to showcase further progress in cleaner and sustainable technologies.

As guest editors of this Special issue of the *Clean Technologies and Environmental Policy*, we offer our gratitude to the more than 56 reviewers for their invaluable help and contributions. Many of them reviewed multiple papers and served as members of the PRES International Scientific Committee. Their dedicated effort made it possible to review/revise and to publish this Special issue in a comparatively short time after the conference. Their contribution has been most appreciated by PRES and this Journal.