
Editorial

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Biographical notes: Süreyya Meric holds a BSc in Environmental Engineering from the Istanbul Technical University (ITU), Turkey and MSc in 1990 and PhD in 1997 from the ITU Institute of Sciences. She was affiliated at the ITU (1988–2004) and was awarded from the Italian Ministry of Foreign Affairs for a stay (1999–2000) at the University of Naples Federico II. She collaborated with University of Salerno, Italy from 2004 to 2010. She has developed expertise in advanced (waste) water treatment technologies, recycling and reuse and ecotoxicology. She has been committed in many national and international projects, an invited speaker at international symposiums.

Nüket Sivri received her PhD in 1999 in the Faculty of Marine Sciences from Karadeniz Technical University (KTU), Turkey. She served as a Lecturer and Research Assistant at the KTU from 1991 to 2003. She has developed expertise in microbial ecology, ecological foot print and nutrient dynamics. Her research focuses mainly on understanding the role of microorganisms in the coastal area using genomic approaches. She has been awarded two grants by The Turkish Scientific and Technological Research Council at the Plymouth Marine Laboratory, UK. She has been involved in national and international projects, published 34 SCI indexed papers.

Serdar Aydın received his BSc in Environmental Engineering from the Istanbul University (IU) in 1995 and MSc in Environmental Sciences from the IU in 1998. He served as a Teacher and Research Assistant at the Department of Environmental Engineering, IU between 1997 to 2007. He received his PhD in 2004 in Institute of Sciences from IU. His scientific interests involve waste minimisation, sludge management and wastewater treatment. He has been involved in several national projects. He has published 14 SCI indexed papers,

submitted oral/poster presentations to national and international scientific organisations and served as a referee for SCI journals.

Ülkü Alver Şahin received her PhD in 2005 in the Faculty of Engineering, Department of Environmental Engineering from Istanbul University (IU). She has been working at IU since 1998. Her scientific area of interest involves air pollution, air quality modelling, emission control, indoor air quality and greenhouse gasses emissions management. She has been awarded research grants by the IU at the Carleton University and Environmental Canada in Ottawa, Canada. She has published 20 SCI indexed papers, submitted oral/poster presentations to national and international scientific organisations and served as a referee for more than 20 SCI journals.

H. Kurtuluş Özcan received his PhD in 2008 in the Faculty of Engineering, Department of Environmental Engineering from Istanbul University (IU). He served as a Research Assistant at the IU from 2000 to 2011. His scientific area of interest involves solid waste management, environmental monitoring, pollution control and waste-to-energy. He has been involved in several national projects. He has published 24 SCI indexed papers, submitted more than 45 oral/poster presentations in national and international scientific organisations.

This special issue of *International Journal of Global Warming* is dedicated to the 2nd International Conference on Recycling and Reuse, held on 4–6 June 2014 in Istanbul, Turkey. This international conference was jointly organised by Bogazici University, Environmental Sciences Institute and Istanbul University, Environmental Engineering Department, Turkey. The purpose of the conference is to provide an excellent platform for researchers and practitioners, to exchange emerging ideas and investigate key issues such as: recycling and reuse concerns, advanced wastewater treatment, membrane technologies for recycling and reuse, advanced oxidation technologies, waste reduction, water and wastewater management, solid waste treatment and management, hazardous waste management, resource use, renewable energy technologies, current and future recycling markets, public health issues, legislations and policies of recycling and reuse.

At the conference, a total of 90 oral and 155 posters presentations were included in the program. Eight key-speakers enlightened the program with their utmost contributions in their fields of expertise. Following an essential peer-review process, ten papers were accepted to publish in this special issue, specifically named ‘Application of sustainable technologies for water and waste recycling and reuse’. The authors and guest editors expect that this issue should provide an overview of recent works performed in ‘recycling and reuse’ fields to fulfil scientific gaps and to provide important contribution to science and technology as well as to the practitioners.

The special issue includes a large spectrum of scientific contributions performed in different countries on solid waste recycling, energy recovery, carbon footprint (CFP), wastewater and sludge treatment. One of those papers from Turkey presents a recycling case study of using waste glass in concrete plant as aggregate and pozzolan replacement. The paper on solid waste collection route optimisation gives an example of using geographical information system in Istanbul, Turkey. Another paper on solid waste recycling focuses on optimisation of physical activation process for activated carbon production from tire wastes performed in Iran.

Regarding wastewater and sludge treatment papers, alkaline hydrolysis under 'mild' conditions was applied for the treatment of waste activated sludge in one of the papers, performed in Italy. The second paper on sludge handling is to optimise the release of nutrients and metals from municipal sewage sludge by chemical extraction using Box-Behnken design. One paper performed in Algeria was also included to separate and recover the metals from brass pickling wastewater using diffusion dialysis with precipitation-cementation.

There are two papers on energy recovery and production in this special issue. The first one is concerning synthetic gas derivation from industrial sludge while the second one presents biodiesel production from the compounds of brewed tea waste.

There is also a paper regarding CFP analysis in Turkey. In this paper, the relationship between income level and CFP level of the provinces in Turkey is assessed. Main outline of this work is to draw attention to understand the development and mechanisms of CFP originated from human activities. This approach can also reduce the CFP of water.

Silicon carbide is widely used in semiconductor electronics devices that operate at high temperatures or high voltages, or both. Thus, oxidation prevention is important to provide its long life use and lesser natural resource consumption and electronic waste production in parallel. A paper included from Turkey in this special issue gives also an advanced method in this sense.

The guest editors would like to thank all colleagues for their valuable contributions to this special issue and express their appreciation to Professor Dr. İbrahim Dincer, Editor-in-chief of *IJGW* journal and Prof. Dr. Miray Bekbölet and Prof. Dr. Hüseyin Selcuk, co-chairs of the conference for providing this opportunity.