Sustainable environmental chemistry and technology with focus on the Mediterranean area

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This special issue intends to give a brief overview of current scientific topics for sustainable environmental chemistry and technology. This issue includes eight articles accepted for publication after the normal peer review process. These articles were presented at the 22nd Panhellenic Chemistry Conference held in Thessaloniki, Greece, 1–4 December 2016. The conference was organized by the Association of Greek Chemists under the auspices of the Department of Chemistry of Aristotle University of Thessaloniki.

The published articles cover scientific areas of environmental chemistry and environmental technology. The articles present the occurrence, temporal variation, and distribution of polar organic compounds in PM₁₀ and PM_{2.5} in the coastal urban area of Thessaloniki City (Balla et al. 2017), the levels and chemical characterization of PM₁₀ and their possible sources in the surrounding of lignite mine area (Samara et al. 2017), the occurrence and variation of natural radionuclides and minor and trace elements in water and lake sediments of a lignite mine area (Noli and Tsamos 2017), and the occurrence of various elements in deposited dust and human hair (Eqani et al. 2017). In the field of environmental technology, the articles present the effects of ozonation treatment on the organic matter (Stylianou et al. 2017a), the use of novel adsorbents for removal of heavy metals (Kokkinos et al. 2017), the use of reductive precipitation and membrane separation for chromate removal from groundwaters (Stylianou et al. 2017b), and the treatment of landfill leachate by membrane bioreactors (Gkotsis et al. 2017).

In summary, this issue attempts to present various environmental issues regarding the presence and possible sources of

organic pollutants, toxic elements, ionic constituents, and radionuclides in atmosphere and aquatic environment, as well as technological approaches for treatment of water and wastewater. We hope that these articles offer important insight in environmental problems and besides the scientific interest; they can also promote awareness to authorities regarding the intensification of research and possible solutions to these problems.

This special issue was edited by the Assistant Professor, Dr. Ioannis A. Katsoyiannis, and the Full Professor, Dr. Dimitra Voutsas, both from the Department of Chemistry of Aristotle University of Thessaloniki.

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Prof. Katsoyiannis has received his PhD from Aristotle University of Thessaloniki in 2003, and following, he conducted a post-doctoral research firstly at the Technical University of Berlin as an Alexander von Humboldt research fellow and later at the Swiss Federal Institute of Aquatic Science and Technology (Eawag) as a recipient of a Marie Curie Individual Fellowship. Afterwards, he worked for 4 years as an environmental chemical engineer in the industrial sector of

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Dr. Dimitra Voutsas is a full professor of Environmental Chemistry at the Chemistry Department of Aristotle University, Thessaloniki, Greece. She is currently a director of Environmental Pollution Control Laboratory. Her research activities include as follows: (a) drinking water quality, water treatment, and regulated and emerging disinfection by-products; (b) occurrence, fate, and effects of organic pollutants in aquatic environment, atmosphere, and technical sys-

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