
Editorial

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Biographical notes: Dr. Despo Fatta has been a Lecturer in the Department of Civil and Environmental Engineering at the University of Cyprus and responsible for the Laboratory of Environmental Engineering since 2003. Prior to this appointment, she worked as a researcher at the National Technical University of Athens, School of Chemical Engineering. From 2000 to 2004 she was also an inner circle expert of the European Topic Center of Waste and Material Flows of the European Environment Agency. She received her first degree from the National Technical University of Athens in 1993 (Diploma in Chemical Engineering), her MSc in Environmental Management from the European Association for Environmental Management and Education in 1995 (University of Athens, JRC Ispra) and her PhD from the National Technical University of Athens in 1999. Her principal research interests are in the field of environmental pollution monitoring techniques (water quality, xenobiotics in wastewater), wastewater treatment (e.g. anaerobic digestion, chemical oxidation), environmental hazard analysis and risk assessment and life cycle analysis of products and processes.

1 Introduction

In May 2003, the MEDAWARE project was approved to be funded by the Euro-Mediterranean partnership with the aim to develop activities focused on the development of technical specifications for urban wastewater treatment technologies and systems and for urban wastewater utilisation. MEDAWARE aims at increasing the safe reuse of wastewater in agriculture with the overall objective of water saving, safe effluent disposal and the protection of environment and public health from the uncontrolled reuse of raw or low quality effluent. This project also aims at supporting the competent authorities and all actors involved in the field of urban wastewater treatment and reuse by providing them with tools and methods for the promotion of best practices (tailored to local needs and constraints) in respect to wastewater treatment and reuse.

Within the framework of the project activities, in September 2005, an international conference was held in Nicosia – Cyprus, under the title '*First International Conference on Sustainable Urban Wastewater Treatment and Reuse*', SUWTR 2005.

About 70 papers were presented during the conference. Authors and attendees from more than 15 countries had fruitful discussions within the following main topics:

- integration of wastewater reuse in the overall water resources management
- technologies for the sustainable treatment of wastewaters

- quality standards
- wastewater reuse systems
- risk assessment and management related to wastewater reuse issues
- socio-economic issues related to wastewater reuse
- training and capacity building and
- case studies in the Mediterranean countries.

In addition to the above-mentioned topics, a special session, which included the presentation of papers on water and industrial wastewaters treatment technologies, was organised.

About eight papers from the conference have been selected and are presented in this issue of the *International Journal of Environmental Technology and Management*. The objective of this special issue is to present technologies and innovative systems for the treatment of urban, industrial wastewaters and water that have been developed by various researchers in countries located in the Mediterranean region. It includes papers that discuss country-specific wastewater reuse quality criteria and treatment specifications, papers that present the results from studies carried out for the evaluation of various treatment technologies such as aerobic submerged fixed film and anoxic/aerobic submerged fixed film, various low-cost techniques for the removal of phosphates from water and treated wastewaters such as seawater flocculation and coagulation/flocculation using bittern, adsorption on fluidised raw dolomite bed, filtration through iron and aluminium-coated filter media, adsorption of boron on alumina (Al_2O_3) and magnesia (MgO), an electrolytic pilot scale unit that has been manufactured for the tertiary treatment of biologically processed wastewater aiming at its reuse for groundwater recharge or for agricultural purposes, nitrification in toxic industrial wastewater by using stress-tolerant nitrifying enrichment cultures harvested from desert soils, the application of microorganisms for the take-up of heavy metal ions, static adsorption experiments of pesticides (alachlor, trifluralin and prometryn) on amberlite XAD-4, etc.

On behalf of the organising committee of SUWTR 2005 and of the consortium of the MEDAWARE project (<http://www.uest.gr/medaware/>), I would like to express our gratitude to the European Commission and most specifically to the Euro-Mediterranean Programme for Local Water Management for funding the project and providing us with the opportunity to contribute to this very interesting scientific field.