



„Gheorghe Asachi” Technical University of Iasi, Romania



EDITORIAL

A SPECIAL ISSUE DEDICATED TO **ENVIRONMENTAL RESEARCH AND TECHNOLOGY ECOIMPULS 2012 INTERNATIONAL CONFERENCE, October 25-26, Timisoara, Romania**

The first edition of the International Conference „**ECOIMPULS 2012- Environmental Research and Technology**” plans to open a conference series dedicated exclusively environmental issues. The scientific topics are devoted to the on-going research on environmental topics regarding: „**Environment – a political, economic and social responsibility**”, „**Water in a changing world**”, „**ZERO – waste cities**” and „**Energy – beyond the conventional**”.

This scientific event aims to bring together professionals, academics, scientists, specialists in technology and management as well as students from the environmental research and technology area, providing a forum for sharing experiences and new ideas, to support the promotion and dissemination of the new scientific results at international and national level in the environmental field. At the same time, this event encouraged practitioners and specialists in the field of water research and technology to add a more practical-oriented approach to the conference sessions.

The event was initiated by the AQUADEMICA Romanian-German Foundation and AQUATIM SA- the regional water and wastewater operator and organized together with “*Politehnica*” University of Timisoara and “*Gheorghe Asachi*” Technical University of Iasi.

This first edition of the conference marked the celebration of 100 years of operation for the wastewater treatment plant from Timisoara, which was designed and built by Stan Vidrighin, and was the first facility of this kind in Romania. The construction works commenced in 1909 and the plant was commissioned in 1912, with a nominal flow of 570 l/s. At that time, the plant was provided only with mechanical treatment facilities.

For that period and but also with the modernisation brought by the last decaded this plant is an outstanding engineering achievement which benefited of a remarkable project management. With this conference occasion a series of informational and cultural events were organized on the premises of the AQUATIM Wastewater Treatment Plant. This special event at its first edition highlighted the water topic within the framework of conference aim and topics, through plenary, oral and poster presentations.

ECOIMPULS 2012 Environmental Research and Technology International Conference brought at the Regional Business Center Timisoara about 400 participants from universities, research institutes, policy makers, governmental and non-governmental organizations and exhibitors from 5 countries (Romania, Germany, The Netherlands, Italy and Republic of Moldova). With the great experience and reputation of the plenary, key note and oral presentation speakers, a high scientific level of **ECOIMPULS 2012** conference was assured, which offers a very good start for further editions.

The Chair persons of **ECOIMPULS 2012** international conference were: Dr. eng. Ilie VLAICU (Romania), eng. Peter KÖSTNER (Germany) and Drd.eng. Monica ISACU (Romania).

Three Plenary speakers brought their contribution in relation with water issue to this event. Thus, Prof. Dr. eng. Anton ANTON, Technical University of Civil Engineering Bucharest, Romania talked about „*Innovation and research in water industry*” Georg RIEDL, Major of Pfarrkirchen, Germany highlighted „*Importance of sustainable water economy for communities*”.



Prof. Dr. Eng. Carmen TEODOSIU, from The “Gheorghe Asachi” Technical University of Iasi, Romania presented the keynote lecture „Water use cycle and instruments for environmental and human impacts and risk assessment”.

The well-known specialists who are representative for each topic gave a great contribution to the conference scientific quality in their quality of invited speakers. Eng. Stefan Girod from German Water Partnership, Germany presented water innovative solutions „Made in Germany” and eng. Robert Schmidt from Wastewater Department within the City Hall of München, Germany highlighted the need for qualified environmental specialists in the field of wastewater management. Prof. dr. Winfried Schmidt from Westfälische/University of Applied Science, Gelsenkirchen, German Membrane Society, Münster reported about new findings for waste water

treatment with membrane bioreactors and Dr. eng. Ioana Popescu from UNESCO-IHE Delft, The Netherlands presented „XBeach sediment transport software for fluvial environments”.

The most important tools for drinking water management were discussed by Prof. dr. Wolfgang Günthert from University of the Federal Army Forces and eng. Heino Jahn from Waste Management Department of the München city who shared the German experience in relation to the conversion of a plan dedicated to the separate capture of valuable materials in München. The oral presentations and poster sessions within ECOIMPULS 2012 conference comprise the recent research and technological results in the fields of: *Environment—a political, economic and social responsibility; Water – from vision to challenge; Drinking water management; Wastewater management; Water – a social responsibility; Waste*

– from vision to challenge; Waste management; waste – a recoverable source; Energy – from vision to challenge; Energy efficiency; Water and waste as energy sources.

Thus, at this first ECOIMPULS international conference edition, 106 papers were presented, and the abstracts were published in the *ECOIMPULS 2012 Book of Abstracts*. 52 full manuscripts were submitted for publication in the *Environmental Engineering and Management Journal, EEMJ* (<http://omicron.ch.tuiasi.ro/EEMJ/>), an international ISI *Web of Science* ranked journal with an impact

factor IF of 1.117, and after a peer review process 26 manuscripts were accepted for publication.

We consider that ECOIMPULS 2012 was a successful conference and we would like to continue it as an annual conference so as to reach a tradition. Thus, we are looking forward to scientists' and professionals' new contributions for the second Edition of the International Conference „ECOIMPULS- Environmental Research and Technology”, which will be held in 2013 in Timisoara, Romania.

Guest editors:

Dr. eng. Ilie Vlaicu, SC AQUATIM SA Timisoara, Romania
Prof. Dr. eng. Carmen Teodosiu, “Gheorghe Asachi” Technical University of Iasi, Romania
Assoc. Prof. Dr. eng. Florica Manea, „Politehnica” University of Timisoara
Assoc. Prof. Dr. eng. Ioana Popescu, UNESCO-IHE Delft, The Netherlands



Dr. **Ilie Vlaicu** is the General Manager of Aquatim, coordinating and managing the water and sewage services. He is also an associate professor at the Faculty of Hydrotechnical, "Politehnica" University of Timisoara, Romania (UPT). He obtained his chemical engineering degree (1986) and his PhD in Waste Water Treatment (2002) at UPT. Dr. Vlaicu's research and teaching experience is in the fields of Water and Waste Water Treatment Processes, Water and Environmental Management, Environmental Protection. Mr. Vlaicu is a Master degree supervisor in the field of Hydraulics, Sanitary Engineering and Water Management Department. He has authored 120 articles and books, 1 patent.



Carmen Teodosiu is professor in the Department of Environmental Engineering and Management, Faculty of Chemical Engineering and Environmental Protection of the „Gheorghe Asachi” Technical University of Iasi, Romania (TUIasi). She obtained her chemical engineering degree at TUIasi (1981), post-graduate Diploma with distinction (1995) and Master of Science with distinction in Environmental Science&Technology (1996), at the International Institute of Hydraulics and Environmental Engineering, UNESCO-IHE Delft, The Netherlands, and her PhD in Chemistry at TUIasi (1998). Prof. Teodosiu's research and teaching experience is in the fields of Water and Wastewater Treatment Processes, Integrated Water Resources Management, Environmental Management/Sustainable Consumption. Prof. Teodosiu is PhD supervisor in the fields of Chemical and Environmental Engineering. She has authored more than 221 articles and books, 5 patents, being also involved as director/researcher in 23 international grants and 35 national grants.



Florica Manea is Associate Professor in the Department of Applied Chemistry and Engineering of Inorganic Compounds and Environment, „Politehnica” University of Timisoara, Romania. She obtained her chemical engineering degree at „Politehnica” University of Timisoara, Master of Science in Unpolluted Process Technologies (1996), and PhD in Chemistry at West University of Timisoara (2005). Her teaching and research area are Environmental Monitoring, Water and Wastewater Treatment Technologies, Applied Electrochemical and Photocatalytic Processes for Environmental Protection and Electrochemical Sensors. She has authored more than 150 articles and books, and she has been involved as director/research in 20 international and national research projects.



Ioana Popescu is Associate Professor of Hydroinformatics at UNESCO-IHE Institute for Water Education in Delft, The Netherlands. Her research focuses on computational methods, aspects of flood modeling and vulnerability related to floods, lake and reservoir modeling and water supply systems modeling and optimisation. Her foundation in areas of mathematical modelling and ICT led to current research interest and expertise in the development and application of modelling systems for water related areas, hydroinformatics in the area of numerical methods (theory and application), river system modelling and use of water related tools for modelling, in particular in integrating mathematical models into decision support systems. She has been involved in 22 research projects, in the last ten years, is a member of several Engineering associations and research schools, like the International Association for Hydro-Environment Engineering and Research (IAHR), the European Geophysical Union (EGU) and the SENSE research school. Currently she is the Chair of the IAHR Committee on Education and Professional Development.

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