

ESTROM—a Romanian–Swiss research programme

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In 1990, the Swiss National Science Foundation (SNSF) and the Swiss Agency for Development and Cooperation (SDC) started a programme of scientific collaboration with Eastern European countries. Since 2000, the programme has been known as SCOPES—Scientific Co-operation between Eastern Europe and Switzerland.

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SCOPES projects were principally based on bottom–up proposals by research teams from Eastern European countries and Switzerland. In 2003, SNSF and SDC initiated together with the Romanian Ministry for Education and Research a Romanian–Swiss collaborative programme in environmental sciences with the aim of providing scientific evidence as a basis for policy decisions enhancing Romania’s transition process in the field of environmental pollution reduction and thus directly benefitting the Romanian population. This special issue of *ESPR* is devoted to this programme carrying the acronym ESTROM—Environmental Science and Technology in Romania, which was finished at the end of 2008. Summary articles of the nine ESTROM projects are presented together with a programme overview and a report on the ESTROM International Conference held in September 2008 in Bucharest.

In addition, this special issue contains seven articles that are related to and broadening the frame of ESTROM in terms of contents (chemical pollution

and ecotoxicology) and a European wide scale. The paper by Walter Giger describes the transboundary Rhine River case study of a disastrous water pollution spill in 1986 after a catastrophic fire of a chemical warehouse at Schweizerhalle in Switzerland documenting the impact on and the remediation of the biota. The lessons learned from this immense accident can be applied to other river systems such as for example the Danube River basin. The article by Frajo Wirtz presenting the “Danube, Meuse and Rhine MEMORANDUM 2008” shows that there is a Europe-wide concern of the waterworks associations. Five revisions of the Rhine MEMORANDUM were published since 1973 aiming at improving the water quality of the Rhine. In 2008, for the first time, the Danube is also included. Thus, the knowledge gained in the Rhine catchment is now being transferred to the Danube basin. A European and even global scope is discussed by Maria Fürhacker in her paper entitled: “EU Water Framework Directive and Stockholm Convention—can we reach the targets for priority substances and persistent organic pollutants?” This author concludes that international mitigation activities provide a valuable frame to approach the targets, but there is still a long way to go to reach the targets on an EU level and on a global scale. Valeria Dulio and Jaroslav Slobodnik present the network NORMAN that is composed of reference laboratories, research centres and related organisations for chemical and biological monitoring of emerging substances. NORMAN was a network project within the 6th EU Framework Programme and has now been converted into a permanent network operated through a non-profit association. Jürg Bloesch portrays the International Association for Danube Research (IAD), which is a transboundary scientific nongovernmental organisation presently consisting of

12 member countries and 12 expert groups and covering all water-relevant scientific disciplines. IAD fosters transdisciplinary and transboundary projects to support an integrative Danube protection. Recent outputs of IAD encompass, e.g., a water quality map of the Danube and its major tributaries, the Sturgeon Action Plan adopted by the Bern Convention, hydro-morphological mapping of the Drava, a basin-wide macrophyte inventory and a Mures River study. Radmila Kovacevic, Ivana Teodorović and colleagues report on the first REP-LECOTOX Workshop under the title: “Ecotoxicogenomics: The challenge of integrating genomics/proteomics/metabolomics into aquatic and terrestrial ecotoxicology”. This workshop was held in June 2008 in Novi Sad, Serbia, providing a comprehensive overview on the application of genomics-based tools in ecotoxicology; it contributed to the popularisation of ecotoxicogenomic and ecotoxicological research in Serbia as well as in the region. Ivana Teodorović describes the current state of ecotoxicological research and related legislation in Serbia and indicates that unresolved ecotoxicological problems mostly remain beyond the reach of research currently conducted in Serbia. However, it can be expected that on-going projects and institutional capacity development should increase the competence of the Serbian scientists.

The guest editors very much hope that this special issue of ESPR contributes to inform a broad readership on environmental research activities going on in Romania and in the Lower Danube region, which have contributed and will contribute further to political decision making. Consequently, we are confident that the ESTROM projects have shown more than just findings of purely academic interest and make a genuine contribution towards solving water problems occurring in other countries.