

EWRA news

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Responsible: Prof. G. Tsakiris, President of EWRA
Editor: Prof. A. Cancelliere, Secretary General of EWRA
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Publishing Editors: D. Tigkas & Dr H. Vangelis
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EWRA – 9th World Congress:

'Water Resources Management in a Changing World: Challenges and Opportunities'

(Istanbul, Turkey, 24 – 27 June 2015)

Deadline for abstract submission:

31 October 2014

see the 2nd Announcement and the Call for Papers at
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Invitation by the President of EWRA

The General Assembly (GA) of the European Water Resources Association during the Conference in Porto (June 2013), decided unanimously to organise the next **EWRA World Congress on water resources in Istanbul in 2015**.

There are few items, which deserve attention in this decision:

- a) The selection of the city which is the bridge between Europe and Asia reflects the willingness for expansion of EWRA towards Asia and other continents. As known according to the decisions taken in the GA in Catania 2011, EWRA has become a truly International Association with members from all countries of the world. From Istanbul EWRA can also address other non-european audiences establishing its international character.
- b) This selection also shows the firm determination of the European scientists to spread the European principles and approaches in Water Resources Management to other countries of the world. Recently EU has introduced, and its member states implement, a new innovative paradigm of water resources management through the Water Framework Directive and other directives. New criteria, new objectives and cutting edge methodologies are currently used in Europe. It is for the benefit of scientists from other countries to share their experiences and exchange ideas with European scientists for mutual benefit.
- c) Instead of another conference, the scientific event in Istanbul is upgraded to a World Congress, incorporating a number of conferences covering a variety of subjects related to Global issues in water resources and the environment. This will facilitate more scientists to participate in EWRA activities, and lead to a more fruitful interaction between scientists from various disciplines from many countries of the world.

In short, we plan a global scientific multidisciplinary event in a magnificent city. We are sure that it will be a benchmark scientific Congress which will address new

challenges, produce new knowledge and will pave new roads for more effective governance of water resources and the environment for the years to come.

We cordially invite you to this great Congress!

Prof. George Tsakiris
President of EWRA

EWRA – 9th World Congress 2nd Announcement & Call for Papers

INTRODUCTION

Up to now, the European Water Resources Association (EWRA) has organized 8 international conferences and a large number of regional symposia, focusing particularly on water resources management in a globally changing context of emerging risks, challenges and opportunities. The major theme of the 9th EWRA event will similarly be **“Water Resources Management in a Changing World: Challenges and Opportunities”** but with some distinct perspectives that will differentiate the event/Congress from past conferences.

First, the Congress will be held in June 2015, the year which marks an important deadline in terms of EU Water Framework Directive (WFD) implementation. The planning cycle within WFD foresaw development of River Basin Management Plans by EU Member States between 2009 and 2015 so that 2015 is the year when a European overview and Member State specific assessments will be available. Thus, the 9th EWRA Congress will provide a timely platform to assess the adoption of basin management plans at European level and to share these experiences between scientists and professionals both from the Member States and from other regions around the world facing similar challenges related to water resources management.

Second, the Congress will be held in the transcontinental global city of Istanbul which constitutes a bridge between Europe and Asia through the famous Bosphorus, one of the world's busiest waterways. Istanbul is the largest city in Turkey, constituting the country's economic, cultural, and historical heart. With a population of 14.1 million, the city forms one of the largest urban agglomerations in Europe, second largest in the Middle East and the third-largest city in the world by population within city limits. Istanbul, the former capital of the Roman, Byzantine and Ottoman empires, is a fascinating mixture of the past and present, old and new, modern and traditional. The museums, churches, palaces, mosques and bazaars, and the sights of natural beauty seem inexhaustible. In 2010, the city was named European Capital of Culture, making it the world's fifth-most-popular tourist destination. The city's biggest draw remains its historic center, partially listed as a UNESCO World Heritage Site. Istanbul is a superb site for meetings, conferences and conventions and has hosted big “water” events like the 5th World Water Forum in 2009 and International Istanbul Water Forums in 2009, 2011 and 2014. Thus, the nature of the selected location has facilitated EWRA to expand the structure of its

biannual events from an “International Conference” to a “World Congress”. We expect that the Istanbul Congress will attract high participation from the Asian countries and other continents in addition to European countries so that water problems and solutions will be discussed at a global scale.

Third, the 9th World Congress will encompass 6 different conferences, instead of a single conference, to cover a wide range of topics relevant to water resources and the environment. This will significantly contribute to the multidisciplinary and global context of the Congress, and thereby the multidisciplinary and global nature of water problems, so that scientists from various disciplines and countries will interact for more fruitful solutions. The conferences are as follows:

- I. Hydrological Processes and Evolving Hazards
- II. Geo-information and Water Resources
- III. Technological Advances in Water Distribution, Purification and Desalination
- IV. Water Pollution and Eco-systems Conservancy
- V. Multicriteria Sustainability of Water Systems
- VI. Social, Political, Institutional and Legislative Aspects

Each conference will be run in two parallel sessions, and the participants may choose to attend that conference which directly relates to their area of expertise and experiences. This will ensure the realization of more focused sessions, ending up in more effective discussions and solutions.

Apart from the conferences, we will certainly create opportunities for participants to enjoy the magnificent city of Istanbul through alternative social, cultural and technical tours and a dinner along the famous Bosphorus. Thus, it is my pleasure to invite you all to take part in this prominent activity by bringing your experience, sharing your know-how and contributing to the international water community while enjoying the wonderful setting of Istanbul.

Prof. Dr. Nilgun B. Harmancioglu,
President, 9th World Congress, Istanbul

CO-ORGANISERS

Dokuz Eylul University (DEU)
National Technical University of Athens (NTUA)
Istanbul Technical University (ITU)

ORGANISING COMMITTEE

Nilgun B. HARMANCIOGLU Turkey (President)	DEU SUMER,
Hafzullah AKSOY	ITU, Turkey
George TSAKIRIS Greece	NTUA, CANAH,
Beyhan YEGEN	ITU, Turkey
Bihrat ONOZ	ITU, Turkey

Ali GUL
Turkey

Cem P. CETINKAYA
Turkey

DEU SUMER,
DEU SUMER,

II. Geo-information and Water Resources

Conveners: Athanasios LOUKAS (Univ. of Thessaly, Greece)
Beyhan YEGEN (ITU, Turkey)

VENUE AND ACCOMMODATION

Istanbul, Turkey
Details regarding the exact venue and accommodation proposals will be included in the next announcement.

III. Technological Advances in Water Distribution, Purification and Desalination

Conveners: Tiku TANYMBOH (Univ. of Strathclyde, UK)
Alper ELCI (DEU, Turkey)

SCIENTIFIC COMMITTEE

Ali GUL (Turkey)
Andreas SCHUMANN (Germany)
Antonino CANCELLIERE (Italy)
Athanasios LOUKAS (Greece)
Atıl BULU (Turkey)
Aysegul KIBAROGLU (Turkey)
Babel MUKAND (Thailand)
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Bihrat ONOZ (Turkey)
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Davar KHALILI (Iran)
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İbrahim GURER (Turkey)
İlhan AVCI (Turkey)
İsmail DURANYILDIZ (Turkey)
Janusz KINDLER (Poland)
Jens Christian REFSGAARD (Denmark & Greenland)
Jerry KNOX (UK)
Luis GARROTE (Spain)
Mahmut CETIN (Turkey)
Mario MAZZOLA (Palermo, Italy)
Melih YANMAZ (Turkey)
Mohammad KARAMOUZ (Iran)
Muhammad SHATANAWI (Jordan)
Okan FISTIKOGLU (Turkey)
Orhan BAYKAN (Turkey)
Orhan GUNDUZ (Turkey)
Pierre-Olivier MALATERRE (France)
Rodrigo MAIA (Portugal)
Selçuk TOPRAK (Turkey)
Sharad K JAIN (India)
Siegfried DEMUTH (UNESCO)
Slobodan P. SIMONVIĆ (Canada)
Tefaruk HAKTANIR (Turkey)
Vasillios TSIHRINTZIS (Greece)
Yalcin ARISOY (Turkey)
Zhang QI (China)

IV. Water Pollution and Eco-systems Conservancy

Conveners: Vassilios TSIHRINTZIS (NTUA, Greece)
Isik KABDAŞLI (ITU, Turkey)

V. Multicriteria Sustainability of Water Systems

Conveners: Luis GARROTE (Tech. Univ. of Madrid, Spain)
Gokmen TAYFUR (IYTE, Turkey)

VI. Social, Political, Institutional and Legislative Aspects

Conveners: Rodrigo MAIA (Univ. of Porto, Portugal)
Hafzullah AKSOY (ITU, Turkey)

TOPICS OF THE CONFERENCES

CONFERENCE I: Hydrological Processes and Evolving Hazards

- Hydrological impacts of environmental change
- Hydromorphological pressure and impact issues in river basin management
- Hydrologic risk and uncertainty
- Ecological effects of land use changes
- Flood control, management and risk assessment
- Urban flood modelling, forecasting and warning
- Impact of climate change and adaptation
- Vulnerability and resilience of water resources systems in the face of climatic variabilities
- Climate proofing
- Climate mainstreaming
- Drought management
- Hydroinformatics - modelling and simulation of integrated water systems
- Soft computing optimization methods
- Numerical simulation of water systems
- Rainfall-runoff processes
- Upland erosion and sediment transport
- Rural water supply network
- Urban water systems
- Hydrologic monitoring and data management
- Advances in hydrologic modelling

CONFERENCES

I. Hydrological Processes and Evolving Hazards

Conveners: Antonino CANCELLIERE (Univ. of Catania, Italy)
Bihrat ONOZ (ITU, Turkey)

CONFERENCE II: Geo-information and Water Resources

- The use of earth observation techniques in water resources assessment and management
- Geo-information for disaster and risk management
- Application of Satellite Based Geo-information Technology Integrated with GIS for Monitoring and Understanding Water Problems
- Handling large volumes of geo-data and fusion of data from multiple geo-data sources
- Drought mapping via geo-information technology
- Irrigation and crop management using earth observation tools
- Use of spatial information for water research: migrating from basin-scale assessments toward effective water management of EU WFD
- Remotely-sensed spatial information for trend acquisition in hydrology
- Geo-information for making probable fully-distributed hydrologic modelling
- Deriving spatially-distributed hydrometeorologic input from radar imaging
- Advanced applications of multi-dimensional digital terrain modelling

CONFERENCE III: Technological Advances in Water Distribution, Purification and Desalination

- Occurrence and mitigation of emerging contaminants in drinking water
- Seawater desalination and disposal of desalination brine
- State-of-the-art in optimization and modelling of water distribution systems
- New directions in efficiency of water distribution systems
- Nano-technology applications in water treatment
- Water recycling opportunities and challenges
- Water re-use quality standards for public health and environmental protection
- In-situ removal of contaminants from groundwater resources
- Response of water utilities to an increased frequency of extreme events
- Identification of challenges in the use alternative water sources
- Rainwater harvesting
- Data management, model building and calibration for water distribution
- Leakage and demand management
- Demand forecasting
- Asset management and rehabilitation
- Sensors, control and decision support including GIS
- Risk, uncertainty and infrastructure resilience
- Process modelling, control and optimization in water purification and desalination
- Experience of different financing schemes- public, private, public-private projects, etc.- in Desalination

CONFERENCE IV: Water Pollution and Ecosystems Conservancy

- Point and Non-point Source Pollution - Urbanization, Agriculture, Best Management Practices
- Protection of ecosystems
- Water Quality and Health of Aquatic Systems - Fate and Transport of Pollutants, Modelling, Geographic Information Systems
- Management and Treatment of Solid, Liquid and Gaseous Wastes - Municipal, Industrial, Hazardous
- Eco-efficient water use and reuse
- Ecotoxicity and environmental risk assessment
- Ecological Engineering - Natural Wastewater and Sludge Treatment Systems, Constructed Wetlands, Stabilization Ponds
- Ecosystem Services, Life Cycle Assessment, Water Footprint, Environmental/Ecological Economics
- Assessment of water quality conditions by fuzzy logic and genetic algorithms
- Global changes and water quality
- Regulations, management, emerging issues

CONFERENCE V: Multicriteria Sustainability of Water Systems

- Sustainability criteria for water resource systems
- Sustainability issues, challenges, risks and uncertainties
- Sustainability and modelling technology (Decision Support Systems)
- Institutional and social aspects of sustainability
- Securing sustainable water for all (water security)
- Multicriteria decision making methods in water systems analysis
- Irrigation systems and food security
- Sustainable water allocation
- Water supply and demand management
- Conflict management
- Management alternatives and sustainability assessment
- Sustainability of water services
- Implementation of Integrated River Basin Management
- Implementation of international and European level regulations and guidelines for sustainable management (WFD and related directives, Agenda 21, Millenium Goals, Sustainable Development Goals, post-2015 Development Agenda)

CONFERENCE VI: Social, Political, Institutional and Legislative Aspects

- Water Governance
- Water Framework Directive implementation
- Transboundary river basin water policy and agreements
- Public involvement and participation
- Socio-economic water relevance and policy
- Participatory decision making in water resources management
- Public involvement in water management
- Water resources projects and society

- Societal response to changing hydrologic conditions

KEYNOTE SPEAKERS

Slobodan Simonovic, Professor, University of Western Ontario, Department of Civil and Environmental Engineering, London, ON, Canada.

Presentation: "Managing water resources under global change: Methods and tools for a systems approach"

Kindler Janusz, Emeritus Professor, Politechnika Warszawska, Institute of Environmental Engineering Systems, Warsaw, Poland.

Presentation: "Quantifying system sustainability in water resources management vs. qualitative definition of that term"

Mehmetcik Bayazit, Emeritus Professor, Istanbul Technical University, Turkey.

Presentation: "Recent trends in trend analysis"

OPENING ADDRESS

Unal Ozis, Emeritus Professor, Dokuz Eylul University, Turkey.

Presentation: "Waterworks through Four Millenia in Turkey"

CALL FOR PAPERS

The acceptance of the papers will follow a two round process; one for the abstract and one for the full paper. Two types of presentations will be accepted: oral and poster. All papers will pass through a peer-review for being accepted.

A detailed call for papers will be publicised in June 2014. All accepted papers (oral or poster) will be included in the volume of Proceedings.

Selected papers will be included in special issues of the journals of EWRA:

- o Water Resources Management
- o European Water
- o Water Utility Journal
- o Environmental Processes

IMPORTANT DEADLINES

Abstract submission	: 31 October 2014
Abstract acceptance	: 30 November 2014
Paper submission	: 31 January 2015
Paper acceptance	: 31 March 2015

CONFERENCE FEES

	Early registration fees (until 15 April 2015)	Registration fees
EWRA members	250 €	300 €
Non EWRA members	300 €	350 €
Students	150 €	180 €

Registration fees include coffee breaks, a CD of proceedings and a book of abstracts.

A Gala Dinner and a lunch every day (total 3 lunches) are also included.

ADDITIONAL EVENTS

- An Exhibition of products, equipment and materials will take place in the premises of the Congress venue
- Technical and touristic excursions will be organised during and after the Congress

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UPDATED INFORMATION WILL BE AVAILABLE AT:

www.ewra.net

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Environmental Processes - An International Journal

V.A. Tsihrintzis

On June 26, 2013, the General Assembly of the European Water Resources Association (EWRA), held in Porto, Portugal, recognizing the need to further support research and expand the scope of this Society to address water quality issues dictated by the EU Water Framework Directive and global environmental issues, unanimously decided to launch and scientifically support the new journal Environmental Processes. Springer kindly accepted to publish this journal.

The aim of Environmental Processes is the presentation of original and timely research results by both academic researchers and professionals outside universities and research centers, including those in consulting firms, government agencies and public interest groups, on topics concerning the various processes taking place in the natural and the anthropogenic environment. The objective is to contribute towards the improvement of the understanding of environmental processes, aiming to provide solutions to environmental problems.

Among others, specific objectives of the journal are the presentation of:

- original monitoring data, experimental data, theoretical investigations and mathematical modeling of processes in environmental systems;
- processes related to the interactions of the water, air-atmosphere, and soil-sediment environments with the humans and the biosphere;
- environmental flow processes, hydrodynamics and hydrology;
- pollutant physical, chemical and biological processes, including pollutant sources and origin, fate, dispersion and degradation, transport, deposition and accumulation, and impacts on human health and environmental quality;
- interaction processes between the social, cultural, economic and natural environments;
- evaluation of currently applied and new proposed technologies for protection of the environment;
- testing of currently used and new proposed monitoring, instrumentation and analysis techniques related to the environmental processes;
- educational, regulatory, and research needs on environmental processes and protection.

Main subjects areas of the journal include:

- Environmental Fluid Mechanics, Hydrodynamics
- Water Resources Engineering and Management, Hydrology, Surface Water, Erosion and Sediment Transport, Groundwater
- Non-point Source Pollution, Urbanization, Agriculture, Best Management Practices
- Water Quality and Health of Aquatic Systems, Fate and Transport of Pollutants
- Ecosystem Management, Protection and Restoration - Ecohydraulics, Ecohydrology
- Protection and Restoration of the Coastal Environment
- Waste Minimization and Pollution Prevention, Process Modification for Pollution Prevention and Energy Efficiency, Recycling and Reuse of Wastes and Wastewater
- Management and Treatment of Solid, Liquid and Gaseous Wastes - Municipal, Industrial
- Ecological Engineering - Natural Wastewater and Sludge Treatment Systems, Constructed Wetlands, Stabilization Ponds, Land Treatment Systems
- Environmental Geotechnology, Remediation of Contaminated Sites, Bioremediation
- Management of Toxic and Hazardous Substances
- Atmospheric Pollution and Control Technology
- Impacts of Global Climatic Changes – Mitigation, Adaption
- Energy, Buildings and the Environment
- Analysis and Forecasting of Natural Hazards - Environmental Risk Management
- Sustainable Development - Environmental/Ecological Economics
- Environmental Impact Assessment and Risk Analysis
- Ecosystem Services, Ecological Footprint, Water Footprint, Life Cycle Assessment
- Public/Environmental Health - Industrial/Occupational Hygiene - Indoor Air Pollution
- Remote Sensing - Photogrammetric and Satellite Systems - Earth Observation Systems

- Geographical Information Systems - Environmental Applications
- Mathematical and Numerical Modeling, Systems Analysis, Operations Research, Decision Making – Environmental Applications
- Environmental Legislation and Policy, Environmental Regulation
- Environmental Education

The readership of the journal may include: Environmental engineers, environmental scientists, civil engineers, water engineers, hydraulic engineers, hydrologists, chemical engineers, mechanical engineers, agricultural engineers, rural and surveying engineers, geoinformatic engineers, geographers, geologists, biogeochemists, geophysicists, earth scientists, geomorphologists, analytical chemists, environmental chemists, climatologists, soil scientists, oceanographers, limnologists, landscape ecologists, ecologists, biologists, fishery scientists, forest scientists, epidemiologists, toxicologists, pharmacologists, environmental economists, social scientists, environmental lawyers, and computer and information scientists, holding positions as academic professors and researchers, practicing engineers and environmental professionals, managers, decision makers, public regulatory agency officials, water company officials, public health officials and policy makers, infrastructure owners/operators, risk managers, public interest groups, NGOs.



To assure the quality of the new journal, its international character and the coverage of its subjects, a group of experts holding academic positions in various universities throughout the world were initially called to serve as associate editors and members of the editorial board of the journal. Countries include the USA, France, Italy, Spain, Greece, Serbia, Turkey, China and Thailand.

The publication of Environmental Processes will be initially quarterly. This will assure that there is enough material of excellent quality to be published in the initial years until the journal establishes itself. Then, the number of issues and the number of papers per issue will be increased. The journal will be published both in print and electronic format. There will also be an open-access option.

The submission process will be as follows: Papers will be submitted in electronic form through the Editorial Manager, will be assigned a number, and will be sent to the Editor-in-Chief and then to the appropriate Associate Editor. To assure a proper and fair review, each paper will be sent initially to three or four reviewers for evaluation. The Associate Editors and the Editor-in-Chief will make the final decision based on reviews. Additional reviews may also be solicited. An effort will be made to keep the review time to a minimum. For this, the Editor-in-Chief and/or the Associate Editors will quickly look at submitted papers first (within 2-3 days) and provide an

initial decision based on the following questions:

- Does the paper fall in the scope of the journal?
- Is it original?
- Is it of interest to the international audience?
- Is it of good technical quality? and
- Is it written in good English?

If the answer in any of these five questions is negative, then the paper is returned to the authors as unfit. This saves effort and time to the reviewers from unnecessary reviews, and also does not delay the authors from submitting the paper to another journal. Papers passing this step are sent to reviewers who are asked to express an opinion within 3 to 4 weeks. Based on reviews and editors' opinion, papers may be accepted, returned with comments for major or minor revision, or rejected.

Before concluding, I would like to thank the EWRA officials, and particularly the EWRA president Professor G. Tsakiris, for taking this initiative to launch this new journal, and for trusting me with the position of Editor-in-Chief. I would also like to thank all the involved Springer personnel for the help, the excellent collaboration and their professionalism.

We are delighted about the publication of this new journal; considering the number, magnitude and importance of today's environmental problems, and counting on Springer's experience in publishing quality journals, we are certain that the journal will be a big success. We welcome then your original quality papers, and thank you in advance for considering and supporting Environmental Processes.



*Prof. Vassilios A. Tsihrintzis
Editor-in-Chief of Environmental Processes
journal*

Foreword for the first issue of Environmental Processes

G. Tsakiris

This is the first issue of the new journal ENVIRONMENTAL PROCESSES. Understandably there are many questions related to "*why a new journal on the environment?*", "*which is the link of European Water Resources Association (EWRA) with the environment?*", "*why this timing was selected?*", and many others. In this short foreword, I will try to answer briefly these questions so that the reader will have a clear view for this initiative of EWRA.

The decision to launch this new journal was taken during the EWRA Conference in Porto last June, by a representative percentage of EWRA members after a long debate which lasted for more than one year. It was considered as a "mature" initiative with great potential, embracing a wider audience from the core audience of EWRA, which is mostly associated to water resources

and their planning and management.

The main reasoning behind this "expansion" of EWRA activity space is the fact that the environment is one of the three pillars of the Integrated Water Resources Management, with the other two being the *water availability centres* and the *consumption centres*. This means that without an in-depth knowledge of the environmental conditions and processes Water Resources Management cannot be integrated and scientifically sound. Needless to say, that the environment with its constraints and limitations is the starting point for any management of both natural and socioeconomic systems.

The concept of Environmental Processes, obviously, covers an even wider scientific area than that of water related processes. Therefore, the journal is called to cover also aspects and processes which are not totally related to water, such as biodiversity, ecosystem services, atmospheric pollution, environmental legislation etc.

The scientific field of Environmental Processes is really vast and complicated. Human induced interventions and natural changes and variability affect significantly these processes. Lately, the current and anticipated climate change and its influence on the environmental processes has been recognised as a topic of high priority in the agenda of most international organisations and governments.

Now, coming back to the management issues (mainly to water related management) it should be clearly stated that for any effective management strategy, action or project, the environmental processes should be known, so that the response of the system, including both the physical and socio-economic sub-systems, will be realistically accounted for.

It is striking that most policies of the European Union, USA and other countries, follow paradigms in which environmental criteria are the most important in a multicriteria, multilevel decision making. For this reason, conventionally, algorithms, models and software packages are used. It can be supported that although several models are currently available to analyse environmental and quality issues, there is still a need for a new generation of quality models to address the current and future requirements.

After the success of EWRA's first journal WATER RESOURCES MANAGEMENT, which has been established as the leader in the field, EWRA took the initiative to launch other journals, such as the EUROPEAN WATER for interesting applications in the water sector, and the WATER UTILITY JOURNAL directed mostly to the professionals of the water sector. Today, together with the international expansion of EWRA, we launch, with the assistance of Springer, the new journal ENVIRONMENTAL PROCESSES, having high expectations and a firm belief that it will be soon a central scientific outlet for high quality papers which will advance our

knowledge in this wide field. We also believe that ultimately the journal will help decision makers and stakeholders to improve their abilities for more comprehensive decisions, which will contribute to a sustainable environment, useful for the people and their activities.

I sincerely thank all those who helped in launching this new journal. Good luck in this promising initiative!



*Prof. George Tsakiris
President of EWRA*

Invitation to submit papers for a Special Issue of Water Utility Journal

EWRA is setting up a Special Issue on **"Urban water pipe networks sustainable management: Acknowledging the value, defining the cost, setting the price of water"**, to be published in the Water Utility Journal, (ISSN 1792-748X), published twice a year by the E.W. Publications. Water Utility Journal aims at covering more practical aspects of the water sector. The Journal publishes interesting solutions and practices to water utility problems, technological innovations and practical guidelines for enhancing the efficiency of water systems as well as good practices and success stories in the water utility sector. Related topics such as "energy" and "water quality" in water conveyance and distribution systems are also being presented. The Themes and Topics of the specific Special Issue are as follows:

Theme A: "Urban water systems management"

- Simulation and optimization techniques of water pipe networks
- Day-to-Day Management & Performance evaluation
- Confronting the "Repair or replace" dilemma
- Demand prediction and management
- Water pricing: Implementing the WFD - evaluation & progress
- Privatization of Water
- Climate change and its impacts
- Raw & waste water treatment plants
- Water and Energy towards a low carbon economy
- Case studies & Experimental Results

Theme B: "Water losses"

- Water loss management

- Apparent Losses management
- NRW reduction techniques
- Water metering
- Acoustics: new challenges
- Bench-marking vs. re-inventing the wheel
- Decision Support Systems
- Technical vs. financial aspects
- Performance Based Service Contracts
- Case studies and lessons learnt

On behalf of EWRA's President, Prof. G. Tsakiris and the Guest Editor Assist. Prof. V. Kanakoudis, we cordially invite you, as being one of the international top experts on water distribution networks management, to publish your work in the above mentioned Special Issue.

The papers should be written strictly following the "Guidelines for Authors" of the Water Utility Journal attached and should not exceed 16 journal pages.

The papers should be electronically submitted as word documents, directly to the Guest Editor Assist. Prof. V. Kanakoudis to the following mail: bkanakoud@civ.uth.gr

The deadline set for the submission of the papers to be included in the special issue is: 28/7/2014.

For any further information you are kindly requested to directly contact the Guest Editor Assist. Prof. V. Kanakoudis (bkanakoud@civ.uth.gr).

Contents of the first issue of Environmental Processes

Editorial Notes

- Foreword
by *G. Tsakiris*
- Editorial New Journal: Environmental Processes – An International Journal
by *V.A. Tsihrintzis*

Original Articles

- Mainstreaming Sustainable Decision-making for Ecosystems: Integrating Ecological and Socio-economic Targets within a Decision Support System
Rute Pinto, Maria da Conceição Cunha, Catarina Roseta-Palma and João Carlos Marques
- Detection of Saline Groundwater Bodies between the Dead Sea and the Mediterranean Sea, Israel, Using the TDEM Method and Hydrochemical Parameters
Uri Kafri, Mark Goldman, Eldad Levi, Stuart Wollman
- Combined Use of Electrical Resistivity Tomography and Hydrochemical Data to Assess Anthropogenic Impacts on Water Quality of a Karstic Region: A Case Study from Querença-Silves, South Portugal
Teresa E. Leitão, Rogério Mota, Maria Emília Novo and João Paulo Lobo-Ferreira

- Impacts of Vegetation Cover on Surface-Groundwater Flows and Solute Interactions in a Semi-Arid Saline Floodplain: A Case Study of the Lower Murray River, Australia
Sina Alaghmand, Simon Beecham, Ali Hassanli
- Potential Effects of Forest Fires on Streamflow in the Enipeas River Basin, Thessaly, Greece
Stamatios-Christos Batelis, Ioannis Nalbantis
- Effective Removal of Estrogens from Drinking Water and Wastewater by Adsorption Technology
Jens Hartmann, Reinhard Beyer, Stephan Harm

The Earth's Hydrological Cycle

Space Science Series of ISSI

Bengtsson L., Bonnet R.-M., Calisto M., Destouni G., Gurney R., Johannessen J., Kerr Y., Lahoz W.A., Rast M. (Eds.)

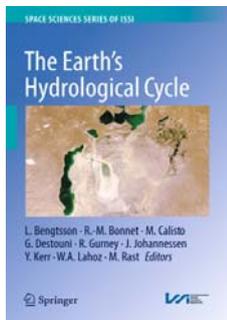
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On a global basis, hydrological cycle is a complex issue mainly of atmospheric circulation, ocean circulation, evapotranspiration from vegetated land, surface run-off and groundwater flow. This title includes a presentation of many of the modern environmental and controversial problems related to the

hydrological cycle. It brings together multiple disciplines to help understand problems, consequences and impacts related to this topic from a global perspective. Superbly illustrated throughout, this title discusses all components of the earth's hydrological cycle, including, Challenges and Opportunities in Water Cycle Research, Physically Consistent Responses of the Global Atmospheric Hydrological Cycle in Models and Observations, Quantifying and Reducing Uncertainty in the Large-Scale Response of the Water Cycle, Initialisation of Land Surface Variables for Numerical Weather Prediction, Perspectives in Modelling Climate-Hydrology Interactions, Downscaling Satellite Precipitation with Emphasis on Extremes, Observing Global Surface Water Flood Dynamics, Irrigation Effects on Hydroclimatic Change: Basin-Wise Water Balance-Constrained Quantification and Cross-Regional Comparison.

Over 70 scientists from various countries have contributed in both large and small ways in this comprehensive primer to Earth's Hydrological Cycle. This book will be of a vital reference for environmental scientists, ecologists, hydrologists, researchers and professionals worldwide.

Data-Driven Modeling: Using MATLAB® in Water Resources and Environmental Engineering

Series: Water Science and Technology Library, Vol. 67
Araghinejad S.

Publication Year : 2014

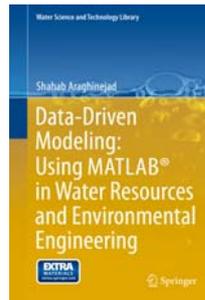
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Pages : 292

This issue presents models which are useful for various applications, including, water quality simulation and prediction, estimating censored data, extreme value prediction with emphasis on droughts and floods,



modelling water balance concerning different components of a hydrological system, extending the length of hydro-climatological data from the historical ones. The 8 chapters of this book treats key modelling issues such as statistical-based models, regression-based models, time series modelling,

artificial neural networks, support vector machines, fuzzy models, hybrid models and multi-model data fusion. This title provides a comprehensive approach on the practical and theoretical aspects for using MATLAB in water resources and environmental engineering. It includes both theoretical background of the models and various illustrative examples and workshops. The electronic files and programs which have been developed using the MATLAB® are available on extras.springer.com. The programs and their input data (as presented in the book) are organized by the chapters of the book by the name of workshops and examples. This book is particularly useful for graduate and postgraduate students as well as for professionals, practitioners and scientists in the fields of natural resources engineering, water resources engineering, environmental engineering and agricultural engineering.



Book presentations by:

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