

Conference Program

Venue: IONIAN BLUE HOTEL, Nikiana, Lefkada Island, Greece

27-30 JUNE 2018



“Insights on the **W**ater-**E**nergy-**F**ood Nexus”

REGISTRATION DESK IS OPEN:

Wednesday, June 27th: 09:30 – 13:00 & 16:00 – 20:00
Thursday, June 28th: 08:30 – 14:00 & 16:00 – 20:00
Friday, June 29th: 16:00 – 20:00
Saturday, June 30th: 10:00 – 13:00

WEDNESDAY, JUNE 27TH, 2018

09:30-13:00

Welcome of Participants

ROOM A

ROOM B

10:00-13:00

«WATenERgy CYCLE - Urban water full cycle: from its source to its end-users and back to the environment»

Workshop “Urban water - energy cycle efficiency: impacts on pricing policy”



10:00-13:00

FREEWAT Short Course



13:00-13:30

COFFEE BREAK

13:30-16:30

«WATenERgy CYCLE - Urban water full cycle: from its source to its end-users and back to the environment»

Workshop “Urban water - energy cycle efficiency: impacts on pricing policy”



13:30-16:30

FREEWAT Short Course



16:30-17:00

COFFEE BREAK

17:00

EWaS3 Conference Opening Session – ROOM A

17:00-17:15

Opening Speech from Regional Sector of Lefkada - Region of Ionian Islands

Theodoros Chalikias (Deputy Governor of Lefkada Regional Unit)

17:15-17:30

Opening Speech from Organizing Committee

Vasilis Kanakoudis (Chairman), Evangelos Keramaris (Vice Chairman)

ROOM A**17:30-20:00****SESSION A1 - HYDRAULICS****Chairs: P. Papanikolaou, T. Karakasidis**

- 17:30-17:45 EWaS3 031 **HYDRAULIC AND HYDROLOGIC ANALYSIS OF UNSTEADY FLOW IN PRISMATIC OPEN CHANNEL**
Eugene Retsinis, Erna Daskalaki, Panayiotis Papanicolaou
- 17:45-18:00 EWaS3 115 **THE VALUE AND SERVICES OF URBAN STREAM POLYGNOTOU, THESSALONIKI**
Eleni Athanasiadou, Maria Tratsela, Eleni Gkrimpa
- 18:00-18:15 EWaS3 119 **STOCHASTIC GENERATION OF LOW STREAM FLOW DATA OF IOKASTIS STREAM, KAVALA CITY, NE GREECE**
Thomas Papalaskaris, Theologos Panagiotidis
- 18:15-18:30 EWaS3 033 **POSITIVELY AND NEGATIVELY ROUND TURBULENT BUOYANT JETS INTO HOMOGENEOUS CALM AMBIENT**
Anastasia Fragkou, Panayiotis Papanicolaou
- 18:30-18:45 EWaS3 121 **FORECASTING LOW STREAM FLOW RATE USING MONTE-CARLO SIMULATION OF PERIGIALI STREAM, KAVALA CITY, NE GREECE**
Thomas Papalaskaris, Theologos Panagiotidis
- 18:45-19:00 EWaS3 116 **MIXING OF PARTICLES IN MICROMIXERS UNDER DIFFERENT ANGLES AND VELOCITIES OF THE INCOMING WATER**
Evangelos Karvelas, Christos Liosis, Theodoros Karakasidis, Ioannis Sarris
- 19:00-19:15 EWaS3 048 **WAVE-CURRENT INTERACTIONS AND INFRAGRAVITY WAVE PROPAGATION AT A MICROTIDAL INLET**
Lorenzo Melito, Matteo Postacchini, Alex Sheremet, Joseph Calantoni, Gianluca Zitti, Giovanna Darvini, Maurizio Brocchini
- 19:15-19:30 EWaS3 118 **ARTIFICIAL NEURAL NETWORK FOR DAILY LOW STREAM FLOW RATE PREDICTION OF PERIGIALI STREAM, KAVALA CITY, NE GREECE**
Thomas Papalaskaris, Theologos Panagiotidis

ROOM B**SESSION B1 - HYDROLOGY****Chairs: C. Evangelides, M. Spiliotis**

- EWaS3 100 **THE COMPLEMENTARY USE OF OPTICAL AND SAR DATA IN MONITORING FLOOD EVENTS AND THEIR EFFECTS**
Melpomeni Zoka, Emmanouil Psomiadis, Nicholas Dercas
- EWaS3 051 **FUZZY LINEAR REGRESSION OF RAINFALL-ALTITUDE RELATIONSHIP**
Christos Tzimopoulos, Chris Evangelides, Christos Vrekos, Nikiforos Samarinas
- EWaS3 091 **PRELIMINARY RESULTS FROM UNSATURATED ZONE STUDIES IN UNCONFINED UNCONSOLIDATED COASTAL AQUIFERS**
Efthymia Zavridou, Konstantinos Markantonis, Ioannis Argyrokastritis, Konstantinos Voudouris, Andreas Kallioras
- EWaS3 088 **SIMULATION OF LOW IMPACT DEVELOPMENT (LID) PRACTICES AND COMPARISON WITH CONVENTIONAL DRAINAGE SOLUTIONS**
Ioannis Kourtis, Vassilios Tsihrintzis, Evangelos Baltas
- EWaS3 090 **REGRESSION ANALYSIS AND RISK ASSESSMENT OF GROUNDWATER LEVELS**
Panagiota Theodoridou, Emmanouil Varouchakis, George Karatzas
- EWaS3 052 **MULTI-CRITERIA DECISION MAKING USING TOPSIS METHOD UNDER FUZZY ENVIRONMENT. APPLICATION IN SPILLWAY SELECTION**
Vasiliki Balioti, Christos Tzimopoulos, Christos Evangelides
- EWaS3 025 **SEVERE WEATHER: THE NEW CHALLENGE FOR THE PLANNING OF GREEK ISLANDS**
Minas Gavalas
- EWaS3 094 **HYBRID FUZZY-PROBABILISTIC ANALYSIS AND CLASSIFICATION OF THE HYDROLOGICAL DROUGHT**
Mike Spiliotis, Chistoforos Papadopoulos, Panagiotis Angelidis, Basil Papadopoulos

19:30-19:45

EWaS3 034

REMOVAL OF ANTIBIOTICS, ANTIBIOTIC RESISTANCE AND TOXICITY FROM SECONDARY-TREATED WASTEWATER EFFLUENTS BY ONOZATION

Iakovos C.Iakovides, Lida Ioannou-Ttofa, Irene Michael-Kordatou, Despo Fatta-Kassinou

EWaS3 024

BIVARIATE FLOOD FREQUENCY ANALYSIS USING COPULAS

Nikoletta Stamatatou, Lampros Vasiliades, Athanasios Loukas

19:45-20:00

DISCUSSION

DISCUSSION

20:15-21:00

Invited Speech -ROOM A

MULTIVARIATE PROBABILISTIC MODELLING OF COMPLEX HYDROMETEOROLOGICAL PHENOMENA

Prof. George Tsakiris
National Technical University of Athens

21:00-22:30

Welcome Reception (Ionian Blue Hotel)

THURSDAY, JUNE 28TH, 2018

ROOM A		ROOM B	
09:00-11:00	SESSION A2 (SS1) - WATER DISTRIBUTION SYSTEM MODELING, SIMULATION AND MANAGEMENT Chair: M. Franchini	09:00-09:15	SESSION B2 (SS2a) - SMALL-SCALE HYDROPOWER GENERATION IN URBAN AND RURAL AREAS: THE HYDRAULIC AND MECHANICAL ANALYSIS OF ENERGY RECOVERY IN WATER SYSTEMS Chair: M. Giugni
	EWaS3 067 FROM WATER CONSUMPTION SMART METERING TO LEAKAGE CHARACTERIZATION AT DISTRICT AND USER LEVEL:THE GST4WATER PROJECT Chiara Luciani, Francesco Casellato, Stefano Alvisi, Marco Franchini		EWaS3 113 INTEGRATION OF WATER SUPPLY, CONDUIT HYDROPOWER GENERATION AND ELECTRICITY DEMAND Marco van Dijk, Giovanna Cavazzini, Gideon Johannes Bonthuys, Alberto Santolin, Jacques van Delft
09:15-09:30	EWaS3 026 SUSTAINABILITY ASSESSMENT OF URBAN WATER USE FROM BUILDING TO URBAN SCALE IN THE GST4WATER PROJECT Emanuela Di Fusco, Alessandro Lenci, Tonino Liserra, Valentina Ciriello, Vittorio Di Federico	09:15-09:30	EWaS3 017 THE DEVELOPMENT OF A DECISION SUPPORT SOFTWARE FOR THE DESIGN OF MICRO-HYDROPOWER SCHEMES UTILIZING A PUMP AS TURBINE Daniele Novara, Aonghus McNabola
09:30-09:45	EWaS3 054 DECENTRALIZED WATER MENAGEMENT: RAINWATER HARVESTING, GREYWATER REUSE AND GREEN ROOFS WITHIN THE GST4WATER PROJECT Sara Simona Cipolla, Margherita Altobelli, Marco Maglionico	09:30-09:45	EWaS3 085 DEVELOPMENT OF A 1-D PERFORMANCE PREDICTION MODEL FOR PUMPS AS TURBINES Michele Stefanizzi, Tommaso Capurso, Marco Torresi, Giuseppe Pascazio, Sergio Ranaldo, Sergio Mario Camporeale, Bernardo Fortunato, Rosario Monteriso
09:45-10:00	EWaS3 022 OPTIMAL SENSOR PLACEMENT IN A PARTITIONED WATER DISTRIBUTION NETWORK FOR THE WATER PROTECTION FROM CONTAMINATION Carlo Ciaponi, Enrico Creaco, Armando Di Nardo, Michele Di Natale, Carlo Giudicianni, Dino Musmarra, Giovanni Francesco Santonastaso	09:45-10:00	EWaS3 087 HOW TO IMPROVE THE PERFORMANCE PREDICTION OF A PUMP AS TURBINE BY CONSIDERING THE SLIP PHENOMENON Tommaso Capurso, Michele Stefanizzi, Marco Torresi, Giuseppe Pascazio, Giovanni Caramia, Sergio Mario Camporeale, Bernardo Fortunato, Lorenzo Bergamini
10:00-10:15	EWaS3 130 OPTIMIZING THE FORMATION OF DMAs IN A WATER DISTRIBUTION NETWORK APPLYING GEOMETRIC PARTIONING (GP) AND GAUSSIAN MIXTURE MODELS (GMMs) Stavroula Chatzivasili, Katerina Papadimitriou, Vasilis Kanakoudis, Menelaos Patelis	10:00-10:15	EWaS3 106 A LABORATORY INVESTIGATION OF A DOMESTIC HYDROPOWER MODEL Giacomo Viccione, Nicola Immediata, Maurizio Cimmino, Stefania Evangelista
10:15-10:30	EWaS3 080 IMPLEMENTATION OF AN AUTOMATED SYSTEM FOR OPTIMAL PUMP CONTROL Matthew Main, Marcus Fowler, Drummond Modley	10:15-10:30	EWaS3 015 POTENTIAL MICRO-HYDROPOWER GENERATION IN COMMUNITY-OWNED RURAL WATER SUPPLY NETWORKS IN IRELAND Irene Fernández García, David Ferras, Aonghus McNabola

10:30-10:45 EWaS3 036 **MANAGEMENT OF WATER DISTRIBUTION SYSTEMS IN PDA CONDITION WITH ISOLATION VALVES**
Attilio Fiorini Morosini, Olga Caruso, Paolo Veltri

EWaS3 107 **A PRELIMINARY LABORATORY INVESTIGATION OF A HYDRAULIC RAM PUMP**
Giacomo Viccione, Nicola Immediata, Roberto Cava, Marco Piantedosi

10:45-11:00 DISCUSSION

DISCUSSION

11:15-12:00

Invited Speech -ROOM A

AN INTEGRATED GOVERNANCE OF "WATER-ENERGY-FOOD" NEXUS

Prof. Jacques Ganoulis

Special Secretary for Water, Ministry of Environment and Energy

12:00-12:30

COFFEE BREAK

ROOM A

12:30-14:15 **SESSION A3 (SS3) - WATERBORNE DISEASES**

Chair: P. Karanis

12:30-12:45 EWaS3 143 **EPIDEMIOLOGY OF GIARDIA SPP. IN AUSTRIA**
Julia Walochnik, Mellesia Lee, Julia Derx, Regina Sommer, Herbert Auer, Silvia Cervero-Arago

12:45-13:00 EWaS3 069 **FREE-LIVING AMOEBAE AS HUMAN PARASITES AND HOSTS FOR PATHOGENIC MICROORGANISMS**
Patrick Scheid

13:00-13:15 EWaS3 136 **TIME TO CONTROL ECHINOCOCCOSIS IN WATER RESOURCES OF ENDEMIC AREAS: RECENT FINDINGS OF *ECHINOCOCCUS MULTILOCULARIS* IN WATER SAMPLES IN THE TIBETAN PLATEAU AREA IN CHINA AND WARMIA-MASURIA PROVINCE IN POLAND**
Anna Lass, Beata Szostakowska, Zhang Xueyong, Xiuping Li, Ioannis Kontogeorgos, Lining Ma, Panagiotis Karanis

13:15-13:30 EWaS3 042 **CRYPTOSPORIDIUM AND GIARDIA - LEVELS AND DISTRIBUTION IN SURFACE WATER THROUGHOUT EUROPE**
Jerry E. Ongerth, Judit Plutzer, Panagiotis Karanis

ROOM B

SESSION B3 (SS2b) - SMALL-SCALE HYDROPOWER GENERATION IN URBAN AND RURAL AREAS: THE HYDRAULIC AND MECHANICAL ANALYSIS OF ENERGY RECOVERY IN WATER SYSTEMS

Chair: M. Giugni

EWaS3 108 **HYDROPOWER POTENTIAL FROM THE AUSINO DRINKING WATER SYSTEM**
Giacomo Viccione, Rosaria Amato, Massimo Martucciello

EWaS3 063 **PRELIMINARY DEVELOPMENT OF A METHOD FOR IMPACT EROSION PREDICTION IN PUMPS RUNNING AS TURBINES**
Oreste Fecarotta, Gianandrea Vittorio Messa, Francesco Pugliese, Armando Carravetta, Stefano Malavasi, Maurizio Giugni

EWaS3 071 **REDUCING THE ENERGY DEPENDENCY OF WATER NETWORKS IN IRRIGATION, PUBLIC DRINKING WATER, AND PROCESS INDUSTRY: REDAWN PROJECT**
Armando Carravetta, Oreste Fecarotta, Helena M. Ramos, Maria Mello, Juan Antonio Rodriguez-Diaz, Jorge Garcia Morillo, Kemi Adeyeye, Paul Coughlan, John Gallagher, Aonghus McNabola

EWaS3 092 **A DERIVATIVE FREE NON-LINEAR PROGRAMMING METHOD FOR THE OPTIMAL SETTING OF PATS TO BE USED IN A HYBRID GENETIC ALGORITHM: A PRELIMINARY WORK**
Luigi Cimorelli, Andrea D'Aniello, Luca Cozzolino, Domenico Pianese

13:30-13:45	EWaS3 043	CRYPTOSPORIDIUM AND GIARDIA IN WATER - KEY FEATURES AND BASIC PRINCIPLES FOR MONITORING AND DATA ANALYSIS Jerry E. Ongerth, Panagiotis Karanis
13:45-14:00	EWaS3 139	PARASITES IN HUNTABLE ANIMALS IN CENTRAL EUROPE AND THEIR IMPORTANCE FOR THE NATURAL WATER RESOURCES CONTAMINATION Jonas Andermahr, Gerhard Fischer
14:00-14:15	EWaS3 140	SWIMMING POOL OUTBREAKS: HOTEL TOURISM IN DANGER? Panagiotis Karanis
14:15-14:30	EWaS3 141	EXTRA PULMONARY TUBERCULOSIS (epTB) OF THE SHOULDER JOINT-A CASE REPORT. TB IS STILL AMONG THE TOP 10 WORLD'S LEADING CAUSES OF DEATH. Gabriele Karanis, Panagiotis Karanis

EWaS3 099	OPTIMAL SELECTION OF PUMPS AS TURBINES IN WATER DISTRIBUTION NETWORKS Francesco Pugliese, Francesco De Paola, Nicola Fontana, Gustavo Marini and Maurizio Giugni
EWaS3 038	POTENTIAL ENERGY RECOVERY USING MICRO-HYDROPOWER TECHNOLOGY IN IRRIGATION NETWORKS: REAL-WORLD CASE STUDIES IN THE SOUTH OF SPAIN Miguel Crespo Chacón, Juan Antonio Rodríguez Díaz, Jorge García Morillo, John Gallagher, Paul Coughlan, Aonghus McNabola
EWaS3 144	THE IMPACT OF WATER PRESSURE MANAGEMENT TECHNIQUES ON THE WATER AGE IN AN URBAN PIPE NETWORK-THE CASE OF KOS CITY NETWORK Anastasia Kravvari, Vasilis Kanakoudis, Menelaos Patelis

DISCUSSION

14:30-16:15

Lunch (Ionian Blue Hotel)

ROOM A

16:15-18:00	SESSION A4 - RAW/WASTE WATER TREATMENT-WASTE MANAGEMENT I Chairs: B.E. Nalbur, P. Melidis	
16:15-16:30	EWaS3 014	SILVER NANOPARTICLES IMPREGNATED ZEOLITES DERIVED FROM COAL FLY ASH: EFFECT OF THE SILVER LOADING ON ADSORPTION OF MERCURY (II) Zhandos Tauanov, Dhawal Shah, Grigorios Itskos, Vasileios Inglezakis
16:30-16:45	EWaS3 070	REMOVAL OF NONYLPHENOL AND OCTYLPHENOL FROM AQUEOUS SOLUTIONS BY A NOVEL NANO-COMPOSITE (ZVI/FULLERENE) Gül Gülenay Haciosmanoglu, Zeynep Yücesoy-Ozkan, Zehra Semra Can, Seval Genc, Elif Soyer, Elif Pehlivanoglu-Mantas, Esra Erdim
16:45-17:00	EWaS3 049	MODELING DIMETHOATE REMOVAL BY FENTON-LIKE PROCESS USING RESPONSE SURFACE METHODOLOGY Berrak Erol Nalbur, Arzu Teksoy, Seval Kutlu Akal Solmaz, Safiye Hilal Azak

ROOM B

SESSION B4 - GROUNDWATER AND IRRIGATION SYSTEMS Chairs: F. Wendland, B. Karleusa	
EWaS3 104	MODELING FLOW AND NITRATE TRANSPORT IN AN OVER-EXPLOITED AQUIFER OF RURAL BASIN USING AN INTEGRATED SYSTEM: THE CASE OF LAKE KARLA WATERSHED Pantelis Sidiropoulos, Georgios Tziatzios, Lampros Vasiliades, George Papaioannou, Nikitas Mylopoulos, Athanasios Loukas
EWaS3 028	AN INVESTIGATION OF THE RELATIONSHIP BETWEEN THE ELECTRICAL CONDUCTIVITY OF THE SOIL SATURATED PASTE EXTRACT ECe WITH THE RESPECTIVE VALUES OF THE MASS SOIL/WATER RATIOS 1:1 AND 1:5 (EC_{1:1} AND EC_{1:5}) George Kargas, Iakovos Chatzigiakoumis, Athanasios Kollias, Dimitrios Spiliotis, Petros Kerkides
EWaS3 018	IMPACT OF CLIMATE CHANGE ON IRRIGATION NEED AND GROUNDWATER RESOURCES IN PINIOS BASIN Andreas Panagopoulos, Frank Herrmann, Vassilios Pisinaras, Frank Wendland

17:00-17:15	EWaS3 058	ANTIBIOTIC RESISTANCE GENES DYNAMICS AT THE DIFFERENT STAGES OF THE BIOLOGICAL PROCESS IN A FULL-SCALE WASTEWATER TREATMENT PLANT Ioanna Zerva, Ioanna Alexandropoulou, Maria Panopoulou, Paraschos Melidis, Spyridon Ntougias	EWaS3 050	EFFECTS OF DIFFERENT IRRIGATION LEVELS IN CULTIVATION OF "MOUNTAIN TEA" Vasileios Giouvanis, Konstantinos Siafis, Christos Papanikolaou, Dimitrios Dimakas, Maria Sakellariou-Makrantonaki
17:15-17:30	EWaS3 079	PREPARATION OF CALCIUM CARBONATE NANOPARTICLES: ADSORPTION AND DESORPTION BEHAVIOR OF ORGANIC MATTER Payam Zolfagharian, Gulay Arslan, Selda Yiğit-Hunçe , Elif Soyer	EWaS3 062	USE OF MULTICRITERIA-ANALYSIS METHOD DEXI TO DEFINE PRIORITIES IN IMPLEMENTATION OF IRRIGATION PLANS Barbara Karleusa, Andreja Hajdinger, Lidija Tadić
17:30-17:45	EWaS3 002	INNOVATIVE APPROACH ON AEROBIC ACTIVATED SLUDGE PROCESS TOWARDS MORE SUSTAINABLE WASTEWATER TREATMENT Georgios Samiotis, Dimitrios Tzelios, Eleni Trikoilidou, Alexandros Koutelias, Elisavet Amanatidou	EWaS3 110	TOWARDS AGRICULTURAL WATER MANAGEMENT DECISIONS IN THE CONTEXT OF WELF NEXUS Alexandros Psomas, Isaak Vryzidis, Athanasios Spyridakos, Maria Mimikou
17:45-18:00	DISCUSSION		DISCUSSION	

18:00-18:30 **COFFEE BREAK**

ROOM A			ROOM B		
18:30-20:00	SESSION A5 - RAW/WASTE WATER TREATMENT-WASTE MANAGEMENT II Chairs: S. Ntougias, C. Kalkan Aktan		SESSION B5 - GLOBAL CHANGES AND SMART CITIES Chairs: M. Mastrocicco, A. Vassiljev		
18:30-18:45	EWaS3 068	MEMBRANE FOULING MONITORING IN A SUBMERGED MEMBRANE BIOREACTOR Konstantinos Azis, Marianthi Malioka, Spyridon Ntougias, Paraschos Melidis	EWaS3 020	GROUNDWATER TEMPERATURE TREND AS A PROXY FOR CLIMATE VARIABILITY Micòl Mastrocicco, Gianluigi Busico, Nicolo Colombani	
18:45-19:00	EWaS3 084	NUTRIENT CONCENTRATIONS IN SEVEN IRRIGATION RESERVOIRS (LAKE KARLA WATERSHED THESSALY GREECE) Maria Chamoglou, Ioannis Vergos, Pantelis Sidiropoulos, Ifigenia Kagalou	EWaS3 053	SMART IN-LINE STORAGE FACILITIES IN URBAN DRAINAGE NETWORK Nils Kändler, Ivar Annus, Anatoli Vassiljev, Raido Puust, Katrin Kaur	
19:00-19:15	EWaS3 009	SULPHIDE BIOOXIDATION IN ACTIVATED SLUDGE DIFFUSION PROCESS: MICROBIOLOGICAL AND BIOCHEMICAL EFFECTS Massimo Blonda, Angelantonio Calabrese, Raffaele Palumbo, Elvira Giorgio	EWaS3 133	OPTIMAL MISSING VALUE ESTIMATION ALGORITHM FOR GROUNDWATER LEVELS Klemen Kenda, Filip Koprivec, Dunja Mladenici	
19:15-19:30	EWaS3 093	SHORT-TERM AND LONG-TERM INHIBITORY EFFECTS OF COPPER ON ANAMMOX PROCESS Cigdem Kalkan Aktan, Ayse Ekin Uzunhasanoglu, Kozet Yapsakli, Bulent Mertoglu	EWaS3 032	YELLOW WATER TO AID FOOD SECURITY – PERCEPTIONS / ACCEPTANCE OF CONSUMERS TOWARD URINE BASED FERTILIZER Mustafa Nawzad Taher, Ayca Basar, Amr Mustafa Abdelrahman, Bilsen Beler-Baykal	

19:30-19:45 EWaS3 122 **ENGINEERED IRON NANOPARTICLES VIA GREEN ROUTES AND THEIR APPLICATIONS FOR TEXTILE WASTEWATER MANAGEMENT**
Zeynep Yücesoy Özkan, Funda Sağırkaya, Melis Terzi, M. Mohib Rezayee, Esra Erdim

EWaS3 086 **COMPARATIVE ASSESSMENT OF VARIOUS WATER QUALITY INDICES (WQIS) IN POLYPHYTOS RESERVOIR-ALIAKMON RIVER, GREECE**
Ioanna Zotou, Vassilios Tsihrintzis, Georgios Gikas

19:45-20:00 DISCUSSION

DISCUSSION

FRIDAY, JUNE 29TH, 2018

09:00-14:00

Excursion by Boat

14:00-16:00

Free Time

ROOM A

16:00-18:30

SESSION A6 - RIVERINE SYSTEMS

Chairs: I. Kagalou, V. Hrissanthou

16:00-16:15

EwaS3 039

IMPACT ASSESSMENT OF HABITAT AND HYDROMORPHOLOGICAL ALTERATIONS IN TWO HEAVILY MODIFIED LAKES

Dionissis Latinopoulos, Chrysoula Ntislidou, Ifigenia Kagalou

16:15-16:30

EwaS3 035

IMPROVEMENT OF DRAINAGE DENSITY PARAMETER ESTIMATION WITHIN EROSION POTENTIAL METHOD

Nevena Dragičević, Barbara Karleuša, Nevenka Ožanić

16:30-16:45

EwaS3 037

GAP ANALYSIS TARGETING WFD MONITORING AND PRESSURE MAPPING: LESSONS LEARNED FROM "ECOSUSTAIN", INTERREG-MED PROJECT

Dionissis Latinopoulos, Pantelis Sidiropoulos, Ifigenia Kagalou

16:45-17:00

EwaS3 013

MODELLING OF THE EFFECT OF DRAINED PEAT SOILS TO WATER QUALITY USING MACRO AND SOILN MODELS

Anatoli Vassiljev, Ivar Annus, Nils Kändler, Katrin Kaur

17:00-17:15

EwaS3 109

CHARACTERISTICS OF GROUNDWATER – SURFACE WATER INTERACTION IN AREAS WITH SCARCE INPUT DATA – CASE STUDY OF BANJA RIVER CATCHMENT (WESTERN SERBIA)

Andjela Brancic, Anastasija Djordjevic, Dejan Neskovic

17:15-17:30

EwaS3 117

PARAMETER OPTMIZATION OF A BED LOAD TRANSPORT FORMULA FOR NESTOS RIVER GREECE

Epameinondas Sidiropoulos, Thomas Papalaskaris, Vlassios Hrissanthou

ROOM B

SESSION B6 - URBAN WATER MANAGEMENT I

Chairs: K. van Laarhoven, M. van Dijk

EwaS3 044

PREDICTION OF PIPE FAILURE IN DRINKING WATER DISTRIBUTION NETWORKS BY COMSIMA

Bas Wols, Andreas Moerman, Peter Horst, Karel van Laarhoven

EwaS3 083

ALLUVIAL WATER SOURCE CAPACITY UNDER THE CLIMATE CHANGE AND OTHER IMPACTS – CASE STUDY OF THE PEK RIVER IN SERBIA

Dejan Dimkic, Stevan Prohaska, Bojan Stankovic, Predrag Pajic

EwaS3 078

TECHNICAL AND PRACTICAL VALUATION OF HYDROKINETIC TURBINE INTEGRATION INTO EXISTING CANAL INFRASTRUCTURE IN SOUTH AFRICA: A CASE STUDY

Chantel Niebuhr, Marco van Dijk, Jay Bhagwan

EwaS3 072

THE DEPENDENCE OF WATER CONSUMPTION ON THE PRESSURE CONDITIONS AND SENSITIVITY ANALYSIS OF THE INPUT PARAMETERS

Ladislav Tuhovcak, Tomas Suchacek, Jan Rucka

EwaS3 073

ENERGY AND COST SAVINGS THROUGH PUMPING STATIONS REHABILITATION. CASE STUDY IN BUCHAREST

Sorin Perju, Alexandru Aldea

EwaS3 074

FROM LINEAR PROGRAMMING MODEL TO MIXED INTEGERS LINEAR PROGRAMMING MODEL FOR THE SIMULTANEOUS OPTIMIZATION OF WATER ALLOCATION AND RESERVOIR LOCATION IN RIVER SYSTEMS

Jaime Veintimilla-Reyes, Annelies De Meyer, Dirk Cattrysse, Jos Van Orshoven

17:30-17:45 EwaS3 112 **SOIL EROSION, STREAMBED DEPOSITION AND STREAMBED EROSION – ASSESSMENT AT THE MOUNTAINOUS TERRAIN**
Konstantinos Kaffas, Vlassios Hrissanthou

17:45-18:00 EwaS3 105 **A HYBRID MULTICRITERIA 0/1 PROGRAMMING METHODOLOGY FOR PRIORITIZING THE MEASURES OF RIVER BASIN MANAGEMENT PLANS**
Mike Spiliotis, Charalampos Skoulikaris

EwaS3 047 **COMBINING MODELS TO SIMULATE THE CONDITION OF THE PVC DISTRIBUTION NETWORK**
Karel van Laarhoven, Bas Wols

EwaS3 045 **DETERMINATION OF PRESSURE DROP AND FLOW VELOCITY IN OLD ROUGH PIPES**
Katrin Kaur, Ivar Annus, Anatoli Vassiljev, Nils Kändler

18:00-18:15 DISCUSSION

DISCUSSION

18:15-18:45

COFFEE BREAK

18:45-19:30

Invited Speech -ROOM A

SUSTAINABLE INTEGRATED MANAGEMENT FOR THE NEXUS OF WATER-LAND-FOOD-ENERGY-CLIMATE FOR A RESOURCE-EFFICIENT EUROPE—THE SIM4NEXUS PROJECT

Assoc. Prof. Chrysi Laspidou
University of Thessaly

21:00- Conference Gala Dinner (Ionian Blue Hotel)

Saturday, JUNE 30TH, 2018

ROOM A

10:00-12:00 **SESSION A7 - URBAN WATER MANAGEMENT II**

Chairs: V. di Federico, S. Tsitsifli

- 10:00-10:15 EwaS3 027 **METABOLIC MODELLING: A STRATEGIC PLANNING TOOL FOR WATER SUPPLY SYSTEMS MANAGEMENT**
Giada Felisa, Ilaria Lauriola, Valentina Ciriello, Vittorio Di Federico
- 10:15-10:30 EwaS3 016 **DECENTRALIZED DRAIN WATER HEAT RECOVERY: INTERACTION BETWEEN WASTEWATER AND HEATING FLOWS ON A SINGLE RESIDENCE SCALE**
Jan Spriet, Aonghus McNabola
- 10:30-10:45 EwaS3 021 **OPTIMAL DESIGN OF AND TRANSITION TOWARDS WATER DISTRIBUTION NETWORK BLUEPRINTS**
Ina Vertommen, Karel van Laarhoven, Peter van Thienen, Claudia Agudelo-Vera, Tjakko Haaijer, Roel Diemel
- 10:45-11:00 EwaS3 142 **INTRODUCING NOVEL BIDIRECTIONAL TELEMETRY TECHNOLOGIES IN ADVANCED PRESSURE MANAGEMENT: THE CASE OF ATHENS, EYDAP SA GREECE**
Eirini Bougoulia, Dimitris Foufeas, Nicholas Petroulias
- 11:00-11:15 EwaS3 138 **DISINFECTION IMPACTS TO DRINKING WATER SAFETY – A REVIEW**
Stavroula Tsitsifli, Vasilis Kanakoudis
- 11:15-11:30 EwaS3 098 **OPTIMIZATION OF BRANCHED WATER DISTRIBUTION SYSTEMS BY MEANS OF A PHYSARUM – INSPIRED ALGORITHM**
Elias Koritsas, Epameinondas Sidiropoulos, Chris Evangelides
- 11:30-11:45 EwaS3 134 **WATER USE EFFICIENCY CURRENT STATUS ASSESSMENT IN THE CONTEXT OF WATenERgy CYCLE PROJECT**
Stavroula Tsitsifli, Anastasia Papadopoulou, Vasilis Kanakoudis, Konstantinos Gonelas

11:45-12:00

DISCUSSION

ROOM B

SESSION B7 (SS4) - Water4Cities- HOLISTIC SURFACE WATER AND GROUNDWATER MANAGEMENT FOR SUSTAINABLE CITIES

Chairs: C. Laspidou



- EwaS3 131 **IOT MIDDLEWARE FOR WATER MANAGEMENT**
Matej Senožetnik, Zala Herga, Tine Šubic, Luka Bradeško, Klemen Kenda, Kristina Klemen, Petra Pergar, Dunja Mladenčić
- EwaS3 127 **MODELLING THE WATER-ENERGY-FOOD-LAND USE-CLIMATE NEXUS: THE NEXUS TREE APPROACH**
Chrysi Laspidou, Dimitrios Kofinas, Nikolaos Mellios and Maria Witmer
- EwaS3 128 **Water4Cities: AN ICT PLATFORM ENABLING HOLISTIC SURFACE WATER AND GROUNDWATER MANAGEMENT FOR SUSTAINABLE CITIES**
Stamatia Rizou, Klemen Kenda, Dimitris Kofinas, Nikos Mellios, Petra Pergar, Panagiotis Ritsos, John Vardakas, Kostas Kalaboukas, Chrysi Laspidou, Matej Senožetnik, Alexandra Spyropoulou
- EwaS3 132 **GROUNDWATER MODELING WITH MACHINE LEARNING TECHNIQUES: LJUBLJANA POLJE AQUIFER**
Klemen Kenda, Matej Čerin, Mark Bogataj, Matej Senozetnik, Kristina Klemen, Petra Pergar, Chrysi Laspidou, Dunja Mladenčić
- EwaS3 125 **THE WATER-ENERGY NEXUS AT CITY LEVEL: THE CASE STUDY OF SKIATHOS**
Alexandra Ioannou, Chrysi Laspidou
- EwaS3 055 **PROMOTING THE USE OF PUBLIC AREAS FOR SUSTAINABLE STORMWATER MANAGEMENT IN CITIES WITH MEDITERRANEAN CLIMATE**
Georgia Priari
- EwaS3 041 **HYDROLOGICAL RESPONSE OF A PERMEABLE PAVEMENT LABORATORY RIG FOR STORMWATER MANAGEMENT**
Vasiliki Ioannidou, Scott Arthur

DISCUSSION

12:00-12:30

COFFEE BREAK

ROOM A

ROOM B

12:30-14:00 **SESSION A8 - URBAN WATER MANAGEMENT III**

Chairs: L. Tuhovcak, E. Sidiropoulos

12:30-12:45 EwaS3 096 **COMPARATIVE ANALYSIS AND BENCHMARKING OF WATER SUPPLY SYSTEMS AND SERVICES IN CENTRAL AND EASTERN EUROPE**

Tomas Suchacek, Alexandru Aldea, Jędrzej Bylka, Ivana Marko, Ladislav Tuhovcak

12:45-13:00 EwaS3 030 **IDENTIFICATION OF ANNUAL WATER DEMAND PATTERNS IN THE CITY OF NAPLES**

Roberta Padulano, Giuseppe Del Giudice, Maurizio Giugni, Nicola Fontana, Gianluca Sorgenti Degli Uberti

13:00-13:15 EwaS3 124 **DEFINING ECONOMIC LEVEL OF LOSSES IN SHADOW: IDENTIFICATION OF PARAMETERS AND OPTIMIZATION FRAMEWORK**

Primož Banovec, Polona Domadenik

13:15-13:30 EwaS3 126 **A CRITICAL EVALUATION OF WATER SAFETY PLANS (WSPs) AND HACCP IMPLEMENTATION IN WATER UTILITIES**

Dionysios Tsoukalas, Stavroula Tsitsifli

13:30-13:45 EwaS3 029 **WATER RESOURCES AND DESALINATION IN LIBYA: A REVIEW**

Bashir Brika

13:45-14:00

DISCUSSION

12:30-14:00 **SESSION B8 - WATER-ENERGY-FOOD NEXUS**

Chairs: V. Ioannidou, A. Trabucco

EwaS3 114 **LIFE VERTICALIM: METHODOLOGIES FOR THE INTEGRATED MANAGEMENT OF HIGH POLLUTED EFFLUENTS FROM FOOD SMES TO URBAN SANITATION SYSTEMS**

Monica Gutierrez, Susana Etxebarria, Alberto Ciriza, Luis Sancho, Jaime Zufia

EwaS3 129 **MERCURY SPECIATION IN THE WATER DISTRIBUTION SYSTEM OF SKIATHOS ISLAND, GREECE**

Alexandra Spyropoulou, Yannis Lazarou, Chrysi Laspidou

EwaS3 059 **EPANET MODELLING OF A HIGH HEAD PUMPED - STORAGE HYDROPOWER FACILITY**

Georgiana Dunca, Diana Maria Bucur, Alexandru Aldea, Andrei-Mugur Georgescu, Sanda-Carmen Georgescu

EwaS3 064 **WATER-FOOD-ENERGY NEXUS UNDER CLIMATE CHANGE IN SARDINIA**

Antonio Trabucco, Janez Sušnik, Lydia Vamvakeridou-Lyroudia, Barry Evans, Sara Masia, Maria Blanco, Roberto Roson, Martina Sartori, Eva Alexandri, Floor Brower, Donatella Spano, Alfonso Damiano, Andrea Virdis, Giovanni Sistu, Daniele Pulino, Vania Statzu, Fabio Madau, Elisabetta Strazzera, Simone Mereu

EwaS3 123 **OBSERVED CLIMATE AND HYDROLOGIC CHANGES IN SERBIA-WHAT HAS CHANGED IN THE LAST TEN YEARS**

Dejan Dimkic

DISCUSSION

14:00 -14:15 BEST STUDENT PAPER AWARD (by Prof. Athanasios Loukas)

14:15 -14:30 DRAW FOR FREE THREE DAYS (TWO NIGHTS) ACCOMODATION IN IONIAN BLUE HOTEL

14:30 -15:00 ROUND TABLE, CONFERENCE CLOSURE



Last updated: 17/06/2018

POSTER PRESENTATIONS

POSTER GROUP A THURSDAY, JUNE 28th (Presentation Period: 10:00-14:00)		POSTER GROUP B THURSDAY, JUNE 28th (Presentation Period: 16:00-20:00)	
EwaS3 081	TURBULENT SIMULATION OF THE FLOW AROUND DIFFERENT POSITIONS OF MUSSEL SHOCKS George Pechlivanidis, Evangelos Keramaris, Yiannis Savvidis	EwaS3 046	TREATMENT OF LANDFILL LEACHATE USING ULTRASOUND ASSISTED SBR REACTOR Anna Grosser, Ewa Neczaj, Magdalena Madela, Piotr Celary
EwaS3 082	MODELLING OF ENVIRONMENTAL PARAMETERS OF A HARBOR BASIN IN A COASTAL ZONE WITH A SEAWALL Yiannis Savvidis, Evangelos Keramaris, George Pechlivanidis, Christopher Koutitas	EwaS3 010	NUMERICAL MODELLING OF SOIL EROSION ON CEPHALONIA ISLAND, GREECE USING GEOGRAPHICAL INFORMATION SYSTEMS AND THE REVISED SOIL LOSS EQUATION (RUSLE) Michail Xanthakis, Panagiotis Minetos, Georgia Lisitsa, Georgia Kamari
EwaS3 012	PERFORMANCE ANALYSIS OF BIOGAS FUELED SOFC/MGT HYBRID POWER SYSTEM IN BUSAN, REPUBLIC OF KOREA Sunhee Kim, Kyung Chun Kim	EwaS3 065	ZERO-COST AGRICULTURAL WASTES AS SOURCES FOR ACTIVATED CARBONS SYNTHESIS: LEAD IONS REMOVAL FROM WASTEWATERS George Kyzas, Athanasios Mitropoulos
EwaS3 095	OPTIMUM SELECTION OF RENEWABLE ENERGY POWERED DESALINATION SYSTEMS Ahmad Al-Jabr, Rached Ben-Mansour	EwaS3 061	OPTIMIZING SLUDGE MANAGEMENT AT THE MUNICIPAL SOLID WASTE INCINERATOR-A CASE STUDY Jakub Raček, Natalia Anferová, Petr Hlušík, Petr Hlavínek
EwaS3 023	INVESTIGATION OF THE RELATIONSHIP BETWEEN THREE- AND ONE-DIMENSIONAL INFILTRATION USING A MINI DISC INFILTRMETER George Kargas, Paraskevi Londra, Konstantinos Anastasiou	EwaS3 077	CLOSE RANGE PHOTOGRAMMETRY AND THERMAL IMAGERY IN MONITORING OF SOIL MOISTURE IN DAM STRUCTURES OF HISTORICAL FISHPONDS Josef Krása, Vaclav David
EwaS3 076	GEOPHYSICAL EVALUATION OF THE INNER STRUCTURE OF A HISTORICAL EARTH-FILLED DAM David Zumr, Vaclav David, Josef Krasa, Jiří Nedvěď	EwaS3 056	IMPACT OF INFILTRATION PROCESS MODELING ON RUNOFF SIMULATIONS: THE BONIS RIVER BASIN Giovanni Ravazzani, Tommaso Caloiero, Mouna Feki and Gaetano Pellicone
EwaS3 101	THE TESTING OF A SPRAYED BENTONITE SEALING LAYER Jiří Štástka, Vaclav David	EwaS3 075	ANALYSIS OF FLOOD HYDROGRAPHS IN ORDER TO PREDICT THE SHAPE OF THEIR FALLING LIMBS Vaclav David, Tereza Davidová
EwaS3 111	CIRCULAR ECONOMY IN WASTEWATER TREATMENT PLANT- CHALLENGES AND BARRIERS Ewa Neczaj, Anna Grosser	EwaS3 060	INVESTIGATION OF PEAK WATER CONSUMPTION VARIABILITY AT LOCAL SCALE IN PUGLIA (SOUTHERN ITALY) Gabriella Balacco, Antonio Carbonara, Andrea Gioia, Vito Iacobellis, Alberto Ferruccio Piccinni

<p>EwaS3 089 INTEGRATED SUBSURFACE WATER SOLUTIONS FOR COASTAL WETLAND RESTORATION THROUGH INTEGRATED PUMP&TREAT AND AQUIFER STORAGE AND RECOVERY (ASR) Martha Perdikaki, Andreas Kallioras, Klio Monokrousou, Christophoros Christophoridis, Dimitris Iossifidis, Eri Bizani, Anastasios Zafeiropoulos, Klisthenis Dimitriadis, Klaasjan Raat, Gerard van den Berg, Christos Makropoulos</p>	<p>EwaS3 103 SPREAD OF ANTIBIOTIC RESISTANCE IN AQUATIC ENVIRONMENTS: <i>E. COLI</i> AS A CASE STUDY Maria - Adamantia Efstratiou, Marina Bountouni, Efthimios Kefalas</p>
<p>EwaS3 011 ANALYSIS OF MONTHLY RAINFALL TREND IN CALABRIA (SOUTHERN ITALY) THROUGH THE APPLICATION OF STATISTICAL AND GRAPHICAL TECHNIQUES Tommaso Caloiero, Roberto Coscarelli, Ennio Ferrari</p>	<p>EwaS3 040 PRE-LOCALIZATION APPROACH OF LEAKS ON A WATER DISTRIBUTION NETWORK BY OPTIMIZATION OF THE HYDRAULIC MODEL USING AN EVOLUTIONARY ALGORITHM Karima Sebbagh, Abdelhamid Safri, Moula Zobot</p>
<p>EwaS3 097 COMPARING AIR TEMPERATURE AND HUMIDITY IN A VESTIBULE WITHOUT AND WITH GREEN WALL Zuzana Poorova, Mohammed Salem Alhosni, Peter Kapalo, Zuzana Vranayova</p>	<p>EwaS3 008 MULTIPLE DISCRETE BLOCKAGE DETECTION FUNCTION FOR SINGLE PIPELINES Sanghyun Kim</p>
<p>EwaS3 135 EXPERIMENTS AND NUMERICAL ANALYSIS OF FLOW IN AN OPEN CHANNEL WITH GRAVEL BED Nikolaos Michalolias, Evangelos Keramaris, Dorothea Kasiteropoulou, Antonios Liakopoulos, George Pechlivanidis</p>	<p>EwaS3 066 WATER HYGIENE AUDIT AND LEGIONELLA CONTROL IN HOSPITALS Daniela Kaposztasova, Zuzana Vranayova</p>
<p>EwaS3 120 THE USE OF STOCHASTIC MODELS FOR SHORT-TERM PREDICTION OF WATER PARAMETERS OF THE THESAURUS DAM, RIVER NESTOS, GREECE Antonis Sentas, Lina Karamoutsou, Nikos Charizopoulos, Thomas Psilovikos, Aris Psilovikos, Athanasios Loukas</p>	<p>EwaS3 137 DETECTION OF THE GIARDIA INTESTINALIS DNA IN ENVIRONMENTAL WATER AND SOIL SAMPLES COLLECTED FROM THE POMERANIA PROVINCE AND THE WARMIA-MASURIA PROVINCE, POLAND USING MOLECULAR DETECTION METHODS Anna Lass, Beata Szostakowska</p>