



PROTECTION  
AND  
RESTORATION  
OF THE  
ENVIRONMENT  
**XIV**

INTERNATIONAL CONFERENCE  
**PROTECTION AND RESTORATION  
OF THE ENVIRONMENT XIV**

CONFERENCE PROGRAM

**EDITORS:**

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THESSALONIKI, JULY 2018

<b>3/7/2018</b>	Plenary session		
18:00-19:30	Welcome speeches		
19:30-20:00	Honorary ceremony for prof. Th. Lekkas		
20:00-20:30	Young Scientists Awards		
20:30-22:00	Welcome Reception		
<b>4/7/2018</b>	Room A	Room B	Room C
09:00-11:00	Session 1A1 Water resources management and contamination control (1/2)	Session 1B1 Sustainable architecture, planning and development-Built environment	Session 1C1 Environmental education
11:00-11:30	Coffee break - Poster session P 1.1		
11:30-12:00	Plenary session: Keynote speech by prof. G. Korfiatis		
12:00-14:00	Session 1A2 Water resources management and contamination control (2/2)	Session 1B2 Sustainable architecture, planning and development-Urban environment	Session 1C2 Cultural and social issues
14:00-16:30	Lunch break		
16:30-17:00	Coffee break - Poster session P 1.2		
17:00-19:00	Session 1A3 Solid waste management (1/2)	Session 1B3 Protection and restoration of coastal zone and open sea waters	Session 1C3 Environmental hydrology
<b>5/7/2018</b>	Room A	Room B	Room C
09:00-11:00	Session 2A1 Ground water resources management	Session 2B1 Climate change impacts and adaptation measures	Session 2C1 Protection and restoration of ecosystems (1/2)
11:00-11:30	Coffee break - Poster session P 2.1		
11:30-12:00	Plenary session: Keynote speech by prof. Ch. Christodoulatos		
12:00-14:00	Session 2A2 Solid waste management (2/2)	Session 2B2 Soft and renewable energy sources (1/2)	Session 2C2 Protection and restoration of ecosystems (2/2)
14:00-16:30	Lunch break		
16:30-17:00	Coffee break - Poster session P 2.2		
17:00-19:00	Session 2A3 River and open channel hydraulics	Session 2B3 Environmental law and economics	Session 2C3 Water and wastewater treatment and management (1/2)
21:00-23:00	Gala Dinner		
<b>6/7/2018</b>	Room A	Room B	Room C
09:00-11:00	SDSN session SDGs implementation using research	Session 3B1 Soft and renewable energy sources (2/2)	Session 3C1 Water and wastewater treatment and management (2/2)
11:00-11:30	Coffee break		
11:30-12:00	Plenary session: Keynote speech by prof. C. Sioutas		
12:00-14:00	Round Table Discussion		
14:00-16:30	Lunch break		
	END		

## **Tuesday, July 3<sup>rd</sup>, 2018**

### **18:00-20:30 Room A - Plenary session**

*Chair: G. Korfiatis, C. Christodoulatos, A. Koutsospyros, K.L.Katsifarakis, N. Theodossiou*

18:00-19:30	Welcome speeches
19:30-20:00	Honorary ceremony for prof. Th. Lekkas
20:00-20:30	Young Scientists Awards
20:30-22:00	Welcome Reception

## **Wednesday, July 4<sup>th</sup>, 2018**

### **09:00-11:00 Room A - Session 1A1 Water resources management and contamination control (1/2)**

*Chair: P. Latinopoulos, A. Loukas*

A. Alamanos, N. Mylopoulos, L. Vasiliades and A. Loukas	CLIMATE CHANGE EFFECTS ON THE AVAILABILITY OF WATER RESOURCES OF LAKE KARLA WATERSHED FOR IRRIGATION AND VOLOS CITY URBAN WATER USE
I. Siarkos, S. Sevastas, D. Botsis and N. Theodossiou	DEVELOPING AN INTEGRATED SURFACE WATER-GROUNDWATER MODELING SYSTEM FOR UPPER ANTHEMOUNTAS BASIN, GREECE
D. Botsis, P. Latinopoulos and K. Diamantaras	COMPARISON OF STOCHASTIC AND MACHINE LEARNING MODELS IN STREAMFLOW FORECASTING
D. Karakatsanis and N. Theodossiou	MODIFICATION OF METAHEURISTIC METHODS TO IDENTIFY CRITICAL AREAS IN WATER SUPPLY NETWORKS
V.C. Papaioannou and P.E. Prinos	HORIZONTAL CONVECTION INDUCED BY ABSORPTION OF SOLAR RADIATION

### **09:00-11:00 Room B - Session 1B1 Sustainable architecture, planning and development-Built environment**

*Chair: L. Boccia, M. Stefanidou*

A. Liapis, A. Karozou, A. Batsios and M. Stefanidou	LIFE CYCLE ASSESSMENT OF MODERN AND TRADITIONAL MASONRY MORTARS FOR SUSTAINABLE CONSTRUCTION
L. Boccia, A. Capolupo, M. Rigillo and V. Russo	HAZARD ASSESSMENT AND VULNERABILITY REDUCTION IN THE MEDITERRANEAN LANDSCAPE: THE CASE OF CRAPOLLA ARCHEOLOGICAL SITE IN THE SORRENTO-AMALFI PENINSULA, ITALY
A. Capolupo and L. Boccia	TERRACED LANDSCAPES LOCATED IN AREAS OF GREAT VALUE FOR TOURISTIC PURPOSES AS AN IRREVERSIBLE PRACTICE
M.K. Stefanidou, E.S. Bekri and P.C. Yannopoulos	PRELIMINARY INVESTIGATION OF THERMAL EFFECT IN STREET CANYONS
V. Kyriakou and V. Panoskaltsis	IMPACT OF THE TUMULUS ON THE STABILITY OF MICROCLIMATE IN UNDERGROUND HERITAGE STRUCTURES

### **09:00-11:00 Room C - Session 1C1 Environmental education**

*Chair: C. Skanavis, Z. Mallios*

L. Topaltsis, V. Plaka and C. Skanavis	RAISING AWARENESS ON CLIMATE CHANGE THROUGH HUMOUR
G. Koresi, V. Plaka and C. Skanavis	EARLY CHILDHOOD ENVIRONMENTAL CAMP IN A GREEK PORT
M. Ganiaris, F. Zouridaki, V. Plaka, C. Skanavis, K. Antonopoulos and M. Avgerinos	IN SEARCH FOR AN ISLAND TO HOST AN ECOVILLAGE
P. Theodorou, P. Kydonakis, M. Botzori and C. Skanavis	AUGMENTED REALITY PROVES TO BE A BREAKTHROUGH IN ENVIRONMENTAL EDUCATION
P. Theodorou, K.C. Vratsanou, E. Moriki, M. Botzori, M. Karamperis and C. Skanavis	RECYCLING AND EDUCATION THROUGH DIGITAL STORYTELLING IN THE AGE GROUP "8-12" IN GREECE

11:00-11:30 Coffee break - Poster session P 1.1	
A. Dikšaitytė, G. Juozapaitienė, G. Kacienė, I. Januškaitienė, D. Miškelytė, and J. Žaltauskaitė	PHYSIOLOGICAL RESPONSE OF BARLEY AND BARNYARD GRASS TO INTERACTIVE EFFECT OF HEAT WAVE AND DROUGHT
A. Dikšaitytė and G. Juozapaitienė	SOIL CARBON ACCUMULATION IN BARNYARD GRASS UNDER Elevated CO <sub>2</sub> AND SHORT-TERM HEAT WAVES AND DROUGHTS CONDITIONS
P. Yazici Karacal, C. Aliyazicioglu Ozdemir, E. Erdim and F. Germirli Babuna	REUSE POTENTIAL OF CATAPHORESIS WASTEWATERS IN AUTOMOTIVE INDUSTRY
Merve Mermertas, Koray Ozsoy, Thomas P. Gloria, Fatos Germirli Babuna	COMPARING ENVIRONMENTAL IMPACTS OF TWO OFFICE SEATING UNITS VIA LIFE CYCLE ASSESSMENT
A. Schizodimou, I. Kotoulas and G. Kyriacou	A TWO STEP PROCESS FOR THE ELECTROCHEMICAL CONVERSION OF CO <sub>2</sub> TO METHANOL
G. Juozapaitienė, A. Dikšaitytė, J. Aleinikovienė	SHORT-TERM EFFECTS OF Elevated AIR TEMPERATURE AND ATMOSPHERIC CO <sub>2</sub> ON BELOW-GROUND CARBON ACCUMULATION IN HORDEUM VULGARE AND PISUM SATIVUM

## 11:30-12:00 Room A - Plenary session: Keynote speech by prof. G. Korfiatis

Chair: C. Christodoulatos, D. Karpouzos

## 12:00-14:00 Room A - Session 1A2 Water resources management and contamination control (2/2)

Chair: S. Yannopoulos, N. Theodosiou	
C. Doulgeris and A. Argyroudi	SUPPORTING INTEGRATED WATER RESOURCES MANAGEMENT ON THE ESTABLISHMENT OF THE MAXIMUM WATER LEVEL IN LAKE VEGORITIDA
S. Yannopoulos, I. Giannopoulou and M. Kaiafa-Saropoulou	RAINWATER HARVESTING AS AN ALTERNATIVE SOURCE TO CONFRONT WATER SCARCITY WORLDWIDE – CURRENT SITUATION AND PERSPECTIVES
D. Karakatsanis and K. Basdeki	MULTIOBJECTIVE OPTIMIZATION RAIN GARDENS USING HARMONY SEARCH ALGORITHM
A.E. Chatzi and N. Theodosiou	ESTIMATION OF WATER FOOTPRINT FOR A HOTEL UNIT
S.M. Bagiour, K.C. Anagnopoulos, S.S. Bagiour, A.E. Agiou and A.S. Bagiour	SEDIMENT TRANSPORT CASE STUDY: NESTOS RIVER

## 12:00-14:00 Room B - Session 1B2 Sustainable architecture, planning and development-Urban environment

Chair: P.C. Yannopoulos, K. Karatzas

E.K. Oikonomou and K. Kalkopoulou	SUSTAINABLE URBAN PLANNING AND ENVIRONMENTAL IMPACTS: FROM THEORY TO PRACTICE THROUGH INTERNATIONAL CASE STUDIES
E.K. Oikonomou and K. Kalkopoulou	A NOVEL METHOD FOR STRATEGIC ENVIRONMENTAL ASSESSMENT OF PLANNING PROJECTS: THE CASE STUDY OF THE GENERAL LOCAL PLAN OF GJIROKASTRA MUNICIPALITY, ALBANIA
Th. Kassandros, A. Tsiamis, A. Damialis, D. Vokou, N. Katsifarakis and K. Karatzas	ANALYSIS AND MODELLING OF BIOLOGICAL WEATHER DATA IN THESSALONIKI, GREECE
A.A. Bloutsos and P.C. Yannopoulos	PM10 LEVELS OF THE CITY AND SUBURB OF PATRAS, GREECE, DURING THE PERIOD 2013-2015
F. Recanatesi, C. Giuliani, B. Cucca and M.N. Ripa	SATELLITE DATA AS INDICATOR OF FOREST DIEBACK: THE STUDY CASE OF THE PINWOOD FOREST OF CASTELPORZIANO (CENTRAL ITALY)

**12:00-14:00 Room C - Session 1C2 Cultural and social issues***Chair: D. Latinopoulos, E. Raptou*

<i>A. Kounani and C. Skanavis</i>	REFUGEE CRISIS: GREEK RESIDENTS' ATTITUDES TOWARDS WASTE MANAGEMENT IN THEIR REGION
<i>D. Arampatzis, K. Kostopoulou and A. Efthymiou</i>	DEVELOPMENT AND EVALUATION OF A SMART APPLICATION FOR SUSTAINABLE CROP PRODUCTION - CASE STUDY: COTTON (GOSSYPIUM SPP)
<i>K. Bithas, D. Latinopoulos, A. Kolimenakis, C. Richardson, K. Lagouvardos and A. Michaelakis</i>	EXPLORING PUBLIC PREFERENCES AND PRIORITIES FOR CONTROLLING INVASIVE MOSQUITO SPECIES: THE IMPLEMENTATION OF A WEB SURVEY IN GREEK HOUSEHOLDS FOR THE CASE OF THE ASIAN TIGER MOSQUITO
<i>M.E Chatzi and E. Kolokytha</i>	ENVIRONMENTAL CHALLENGES TO ACHIEVE THE SDG (11) FOR SUSTAINABLE CITIES - CASE STUDY: TRIKALA, GREECE
<i>Z.I. Konstantinou and D.P. Latinopoulos</i>	INVESTIGATING STAKEHOLDERS PRIORITIES FOR TRANSDISCIPLINARY COASTAL & MARINE MANAGEMENT: THE CASE OF THERMAIKOS GULF

**14:00-16:30 Lunch break****16:30-17:00 Coffee break - Poster session P 1.2**

<i>S.M. Bagiok, S.S. Bagiok, A.E. Agiou and A.S. Bagiok</i>	SOCIAL EXPERIMENT IN THE ENVIRONMENTAL FIELD OF EDUCATION
<i>A.S. Bagiok, Th.V. Karambas and S.S. Bagiok</i>	EFFECTS OF CLIMATE CHANGE IN THE PORT OF TRELLEBORG AND PROTECTIVE MEASURES
<i>S.M. Bagiok, E. Sofianou, A.S. Bagiok, S.S. Bagiok</i>	REGENERATION AND PLACE-MAKING THROUGH HERITAGE: A CASE STUDY FROM A HISTORIC BUILDING IN NORTHERN GREECE
<i>P. Kosmopoulos, A. Kantzioura, K. Michalopoulou</i>	SURFACE TEMPERATURES AND THERMAL COMFORT CONDITIONS IN NORTHERN GREECE
<i>P. Kosmopoulos, A. Kantzioura and A. Moumtzakis</i>	INVESTIGATION OF THERMAL COMFORT CONDITIONS IN URBAN CENTERS OF NORTHERN GREECE
<i>V. Pavlidis</i>	EVALUATION OF IMPACTS OF TORRENT CORRECTION WORKS AT FOURKA-HALKIDIKI IN THE COASTAL ZONE OF FOURKA BEACH

**17:00-19:00 Room A - Session 1A3 Solid waste management (1/2)***Chair: D. Dermatas, K. Poulios*

<i>M. Batsioula, G. Banias, Ch. Achillas, M. Lampridi and D. Bochtis</i>	LIFE CYCLE ASSESSMENT OF MUNICIPAL SOLID WASTE MANAGEMENT PRACTICES IN CENTRAL MACEDONIA
<i>K.R. Reddy, D.G. Grubb and G. Kumar</i>	INNOVATIVE BIOGEOCHEMICAL SOIL COVER TO MITIGATE LANDFILL GAS EMISSIONS
<i>K.R. Reddy, D.G. Grubb, G. Kumar, A. Gopakumar and R.K. Rai</i>	CO <sub>2</sub> SEQUESTRATION USING BOF SLAG: APPLICATION IN LANDFILL COVER
<i>G. Perkoulidis and N. Moussiopoulos</i>	RECYCLING OF CRT FUNNEL GLASS: A REVIEW OF ITS UTILIZATION IN INTERLOCKING CONCRETE BLOCKS
<i>A. Kemal Konyalioğlu and İ. Bereketli Zafeirakopoulos</i>	A SYSTEM DYNAMICS MODEL FOR SMALL HOUSEHOLD APPLIANCES' WASTE MANAGEMENT: A CASE OF TURKEY

**17:00-19:00 Room B - Session 1B3 Protection and restoration of coastal zone and open sea waters**

Chair: E.K. Oikonomou, A.G. Samaras	
<i>E. Yiannakopoulou and E.K. Oikonomou</i>	SUSTAINABLE COASTAL ZONE MANAGEMENT OF STRYMONIKOS GULF – IMPLEMENTATION OF THE D.P.S. FRAMEWORK FOR COASTAL ACTIVITIES PRESSURES ANALYSIS
<i>E. Yiannakopoulou and E.K. Oikonomou</i>	IMPLEMENTATION OF THE MULTICRITERIA METHOD AHP FOR THE EVALUATION OF STRYMONIKOS GULF MANAGEMENT SCENARIOS WITHIN THE CONTEXT OF INTEGRATED COASTAL ZONE MANAGEMENT
<i>A.G. Samaras and Th.V. Karambas</i>	MODELLING THE IMPACT OF CLIMATE CHANGE ON COASTAL FLOODING WITH THE USE OF A 2DH BOUSSINESQ MODEL
<i>A.G. Samaras, Th.V. Karambas and C.G. Koutitas</i>	ON THE INTEGRATED MODELLING OF WATERSHED-COAST SYSTEMS: CONSIDERATIONS FOR MORPHOLOGICAL MODELLING UNDER A CHANGING CLIMATE
<i>K. Kombiadou, A. Matias, R. Carrasco, S. Costas, O. Ferreira, T. Plomaritis and G. Vieira</i>	ASSESSING THE RESILIENCE OF THE RIA FORMOSA BARRIER ISLAND SYSTEM: PRELIMINARY FINDINGS

**17:00-19:00 Room C - Session 1C3 Environmental hydrology**

Chair: M. Vafeiadis, E. Sidiropoulos	
<i>T. Karampatakis, L. Vasiliades and A. Loukas</i>	COMPARISON OF METEOROLOGICAL DROUGHT INDICES IN THESSALY WATER DEPARTMENT, GREECE
<i>K. Vantas, E. Sidiropoulos and M. Vafeiadis</i>	RAINFALL TEMPORAL DISTRIBUTION IN THRACE BY MEANS OF AN UNSUPERVISED MACHINE LEARNING METHOD
<i>P. P. Giannopoulos and K. Moustakas</i>	DEVELOPMENT AND QUANTIFICATION OF VISUAL ANALYTICS ALGORITHMS FOR INVESTIGATING EXTREME WEATHER EVENTS IN TIME-VARYING GEOGRAPHIC DATA
<i>V. Pisinaras, G. Arampatzis and A. Panagopoulos</i>	DEVELOPING FLOOD ACTION PLANS ON THE ADMINISTRATIVE LEVEL OF FARMERS' ORGANIZATION
<i>I. Tsolakidis and M. Vafiadis</i>	MODERN MAPPING TECHNOLOGIES FOR MORPHOMETRY DYNAMICS OF KERKINI RESERVOIR

## Thursday, July 5<sup>th</sup>, 2018

### 09:00-11:00 Room A - Session 2A1 Ground water resources management

Chair: E. Hatzigiannakis, D. Karpouzos	
L. Kapetas, N. Kazakis, T. Spachos and K. Voudouris	BUILDING GROUNDWATER CONCEPTUAL MODELS UNDER LIMITED INFORMATION SUPPLY: A CASE STUDY ON AXIOS DELTA, NORTH GREECE
I. Siarkos, M. Katirtzidou, D. Latinopoulos and P. Latinopoulos	INVESTIGATING GROUNDWATER FLOW AND SEAWATER INTRUSION IN NEA MOUDANIA AQUIFER UNDER VARIOUS MANAGEMENT SCENARIOS
E.A. Varouchakis, G.P. Theodoridou and G.P. Karatzas	SPATIOTEMPORAL GEOSTATISTICAL MODELING OF AQUIFER LEVELS USING PHYSICALLY BASED TOOLS
I.A. Nikoletos	COST MINIMIZATION OF INTERMITTENT TRANSIENT GROUNDWATER PUMPING
A. Terzopoulos	STUDY ON GROUNDWATER NITRATES IN THE NORTHWEST OF THE THESSALONIKI REGIONAL UNIT (GREECE)
V. Radulescu	OPTIMAL POLICY OF IRRIGATION AND DRAINAGE WELLS SYSTEMS IN Affected Agricultural Lands

### 09:00-11:00 Room B - Session 2B1 Climate change impacts and adaptation measures

Chair: P. Prinos, P. Georgiou	
V. Jurevičienė and R. Dagiliūtė	LAND-USE CHANGE ROLE IN CLIMATE CHANGE MITIGATION GOALS ACHIEVEMENT
E.D. Thoidou and D.N. Foutakis	CLIMATE CHANGE ADAPTATION STRATEGIES IN GREECE: RECENT DEVELOPMENTS AND TRENDS
E.A. Stamatopoulou, G. Ovakoglou, T.K. Alexandridis and I.A. Tsaklidis	SPATIAL ANALYSIS FOR VULNERABILITY ASSESSMENT OF URBAN COASTAL AREAS TO SEA LEVEL RISE
P. Koukouli, P. Georgiou and D. Karpouzos	REFERENCE EVAPOTRANSPIRATION ASSESSMENT IN CHALKIDIKI REGION UNDER CLIMATE CHANGE USING FOUR EARTH SYSTEM MODEL
I. Sofiadis, E. Katragkou, V. Pavlidis, S. Kartsios, K. Tsigaridis, M. Karypidou and D. Melas	ASSESSING THE TEMPERATURE CHANGES OVER EUROPE FOR THE 21st CENTURY USING A REGIONAL CLIMATE MODEL
C. Makris, P. Galatsatou, Y. Androulidakis, K. Kombiadou, V. Baltikas, Y. Krestenitis and P. Prinos	CLIMATE CHANGE IMPACTS ON THE COASTAL SEA LEVEL EXTREMES OF THE EAST-CENTRAL MEDITERRANEAN SEA

### 09:00-11:00 Room C - Session 2C1 Protection and restoration of ecosystems (1/2)

Chair: M. Moustaka-Gouni, M.N. Ripa	
E. Tsagkari and W. T. Sloan	BIOFILM GROWTH IN DRINKING WATER SYSTEMS UNDER STAGNANT CONDITIONS
M. Moustaka-Gouni, M. Katsiapi, N. Stefanidou, E. Vardaka, S. Genitsaris, K.A. Kormas and F. Georgoulis	RESTORATION OF TWO GREEK LAKES (KASTORIA AND KORONIA): SUCCESS STORIES?
G. Tziatzios, P. Sidiropoulos, L. Vasiliades, J. Tzabiras, G. Pappaioanou, N. Mylopoulos and A. Loukas	EFFECTS OF CLIMATE CHANGE ON GROUNDWATER NITRATE MODELLING
D. Charchousi, K. Spanoudaki, A. Karali, A. Nanou-Giannarou, C. Giannakopoulos and M.P. Papadopoulou	AN ASSESSMENT APPROACH TO INVESTIGATE CLIMATE CHANGE IMPACTS IN CHANIA GROUNDWATER SYSTEM
G. Kaciene	SALINITY EFFECTS ON DIFFERENT VARIETIES OF AMARANTUS sp.

**11:00-11:30 Coffee break - Poster session P 2.1**

<i>E. Hatzigiannakis, E. Tziritis, A. Ilias, G. Arampatzis, C. Doulgeris, V. Pisinaras and A. Panagopoulos</i>	ASSESSMENT OF IRRIGATION WATER QUALITY IN ANTHEMOUNTAS BASIN, CENTRAL MACEDONIA, GREECE
<i>G. Varras and G. Efthimiou</i>	THE USE OF MODERN TECHNOLOGIES IN RECORDING AND MONITORING OF RIPARIAN FORESTRY SPECIES IN GREECE. THE CASE OF CANKER STAIN DISEASE OF PLATANUS ORIENTALIS L.
<i>G. Kaciene</i>	EFFECT OF SUCCESSIVE SMALL HYDROPOWER PLANTS ON WATER QUALITY
<i>P. Chantzi and K. Almanakis</i>	STABLE ISOTOPE MASS BALANCE TO ASSESS CLIMATE IMPACT IN LAKE SYSTEMS

**11:30-12:00 Room A - Plenary session: Keynote speech by prof. Ch. Christodoulatos**

<i>Chair: A. Koutsospyros, N. Theodossiou</i>
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**12:00-14:00 Room A - Session 2A2 Solid waste management (2/2)**

<i>Chair: K.R. Reddy, S. Mavridou</i>	
<i>G. Kumar and K. R. Reddy</i>	RAPID STABILIZATION OF MUNICIPAL SOLID WASTE IN BIOREACTOR LANDFILLS: PREDICTIVE PERFORMANCE USING COUPLED MODELING
<i>Th. Giantsi, S. Tsiaoupli, K. Flegkas, P. Koufos and J.P. Aggelopoulos</i>	COLLECTION AND HANDLING OF SHIP WASTE AND CARGO RESIDUES IN GREECE: THE PRESENT AND THE FUTURE
<i>T. S. Naidu, L. D. Van Dyk, C. M. Sheridan, and D.G. Grubb</i>	PASSIVE ACID MINE DRAINAGE REMEDIATION USING BOF STEEL SLAG AND SUGARCANE BAGASSE
<i>S. D. Mavridou</i>	USE OF SOLID WASTES IN CEMENT PRODUCTS- A REVIEW
<i>M. Kotsikas and K. Poulios</i>	A WEB-BASED PLATFORM FOR THE LANDFILL LEACHATE ESTIMATION AND MANAGEMENT

**12:00-14:00 Room B - Session 2B2 Soft and renewable energy sources (1/2)**

<i>Chair: D. Vagiona, K.L. Katsifarakis</i>	
<i>N. Mantadakis and E. Loukogeorgaki</i>	A NUMERICAL TOOL FOR THE TIME-DOMAIN ANALYSIS OF FLOATING WAVE ENERGY CONVERTERS
<i>P.I. Bakanos and K.L. Katsifarakis</i>	OPTIMAL OPERATION SCHEDULING OF MULTIPURPOSE PUMPED STORAGE HYDRO POWER PLANT WITH HIGH PENETRATION OF RENEWABLE ENERGY RESOURCES
<i>M. Tsangas and A.A. Zorbas</i>	EVALUATION OF CYPRUS ENERGY RESOURCES IN THE FRAMEWORK OF ENVIRONMENTAL SUSTAINABILITY USING A NOVEL SWOT-PESTEL APPROACH
<i>S.M. Bagiour, S.S. Bagiour, A.E. Agiou and A.S. Bagiour</i>	BIOCLIMATIC HOUSE DESIGN BY APPLYING PASSIVE SYSTEMS AND GREEN ROOF
<i>E.K. Oikonomou, E. Tekidis and A. Guitonas</i>	OPTIMIZATION OF SITE SELECTION OF AN ANAEROBIC DIGESTION PLANT FOR TREATMENT AND VALORIZATION OF LIVESTOCK LIQUID MANURE WITH THE AID OF GIS
<i>S.A. Vlachos, F. Gaitanis and K.L. Katsifarakis</i>	DESIGN OF A GROUND SOURCE HEAT PUMP SYSTEM FOR A SCHOOL AND A HOTEL OPERATING IN DIFFERENT SEASONS

**12:00-14:00 Room C - Session 2C2 Protection and restoration of ecosystems (2/2)**

<b>12:00-14:00 Room C - Session 2C2 Protection and restoration of ecosystems (2/2)</b>	
<i>Chair: E. Darakas, M. Petala</i>	
<i>S. Genitsaris, N. Stefanidou and M. Moustaka-Gouni</i>	"DIRTY" SEA PHENOMENON IN THESSALONIKI BAY: PLANKTON ABETATORS AND PERPETRATORS
<i>M. Petala, V. Tsiridis, I. Androulidakis, Ch. Makris, V. Baltikas, A. Stefanidou, S. Genitsaris, Ch. Antoniadou, D. Rammou, M. Moustaka-Gouni, C.C. Chintiroglou and E. Darakas</i>	MONITORING THE MARINE ENVIRONMENT OF THERMAIKOS GULF
<i>Ž. Jurgeléné, M. Stankevičiūtė, N. Kazlauskienė, D. Montvydienė, J. Baršienė, K. Jokšas and A. Markuckas</i>	INVESTIGATION OF QUANTUM DOTS TOXICITY, GENOTOXICITY, CYTOTOXICITY, AND UPTAKE IN RAINBOW TROUT <i>ONCORHYNCHUS MYKISS</i> LARVAE
<i>M. Stankevičiūtė, G. Sauliutė, A. Markuckas, T. Virbickas and J. Baršienė</i>	ERYTHROCYTIC NUCLEAR ABNORMALITIES, DNA DAMAGE, BIOCONCENTRATION FACTOR AND HEMATOLOGICAL CHANGES INDUCED BY METAL MIXTURE AT ENVIRONMENTALLY RELEVANT CONCENTRATIONS IN <i>RUTILUS RUTILUS</i>
<i>M. Stankevičiūtė, Ž. Jurgeléné, J. Greiciūnaitė, S. Markovskaja, N. Kazlauskienė and J. Baršienė</i>	GENO-, CYTOTOXICITY AND TOXICITY INDUCED BY SAPROLEGNIA PARASITICA AND CADMIUM ALONE AND IN COMBINATION TO <i>ONCORHYNCHUS MYKISS</i>

**14:00-16:30 Lunch break****16:30-17:00 Coffee break - Poster session P 2.2**

<i>E. Theochari, E. Feloni, A. Bournas, D. Karpouzos and E. Baltas</i>	GIS-BASED MULTI-CRITERIA DESIGN OF A HYDROMETRIC SYSTEM IN THE ATTICA REGION
<i>M. Detsika, E. Feloni, D. Karpouzos and E. Baltas</i>	DEVELOPMENT OF A GIS-ASSISTED MULTI-CRITERIA APPROACH FOR THE PROPER LOCATION OF WIND FARMS IN FLORINA REGION
<i>Ch. Doulgeris, D. Voulanas, G. Arampatzis and E. Hatzigiannakis</i>	SIMULATION OF WATER FLOW IN THE UNSATURATED SOIL ZONE TO ASSESS IRRIGATION IN A MAIZE FIELD
<i>V. Drosou, Th.I. Oikonomou, P. Tsekouras and Ch. Malamatenios</i>	EXPERTS' EDUCATIONAL PROFILE FOR CONCENTRATING SOLAR THERMAL SYSTEMS IN GREECE
<i>Th.I. Oikonomou, V. Drosou and K. Abeliotis</i>	SOLAR THERMAL MARKET AND PENETRATION FACTORS' ANALYSIS IN EUROPE
<i>P. Tsagkidou and E. Raptou</i>	INVESTIGATING CONSUMER ATTITUDES TOWARD SUSTAINABLE AGRICULTURAL PRODUCTION AND ENVIRONMENTALLY FRIENDLY FOODS: A QUALITATIVE APPROACH

**17:00-19:00 Room A - Session 2A3 River and open channel hydraulics**

<b>17:00-19:00 Room A - Session 2A3 River and open channel hydraulics</b>	
<i>Chair: E. Baltas, P. Anagnostopoulos</i>	
<i>G. Paschalidis, I. Iordanidis and P. Anagnostopoulos</i>	DISCHARGE AND SEDIMENT TRANSPORT IN THE NESTOS RIVER BASIN, DOWNSTREAM OF THE DAM OF PLATANOVRIKI
<i>S. Tsoumalakos and K.L. Katsifarakis</i>	URBAN STREAMS OF THESSALONIKI, GREECE: SPATIAL AND HYDRAULIC ASPECTS
<i>M. Gymnopoulos, P. Prinos, E. Alves and R.M.L. Ferreira</i>	ON THE USE OF THE INTEGRAL MOMENTUM-BALANCE TO CALCULATE DRAG ON A SQUARE CYLINDER IN A COMPOUND-CHANNEL FLOW
<i>V. Balioti, C. Tzimopoulos and C. Evangelides</i>	A FUZZY MULTICRITERIA DECISION APPROACH TO SELECT THE OPTIMAL TYPE OF SPILLWAY AT A SPECIFIC DAM
<i>A. Liakopoulos, F. Sofos and T. Karakasidis</i>	MODELLING ENVIRONMENTAL FLOWS WITH LAGRANGIAN PARTICLE MESH-FREE METHODS

**17:00-19:00 Room B - Session 2B3 Environmental law and economics**

<i>Chair: Z. Mallios, M Vafeiadis</i>	
<i>S. Anastasiadis, A. S. Partsinevelou and Z. Mallios</i>	SPATIAL MULTI-CRITERIA DECISION MAKING MODEL FOR SUSTAINABLE COASTAL LAND-USE AND DEVELOPMENT. THE CASE STUDY OF KALAMARIA-PILEA SEAFRONT IN THESSALONIKI, GREECE
<i>E.K. Oikonomou and A. Guitonas</i>	APPLYING THE CONTINGENT VALUATION METHOD TO ESTIMATE THE ECONOMIC VALUE OF THE THESSALONIKI SUBURBAN SEICH-SOU FOREST AMENITIES
<i>O.N. Kopsidas</i>	APPLYING A CONTINGENT VALUATION METHOD (CVM) FOR THE PRESERVATION/RESTORATION OF THREE LAKES IN NORTHERN GREECE
<i>E.I.K. Koutsovili, A.D. Kosta, Z. Mallios and T. Karambas</i>	EXAMINATION OF THE PROPOSAL FOR THE CONSTRUCTION OF A PIER AT NEW WATERFRONT OF THESSALONIKI
<i>A.K. Douka</i>	DRONES AND ENVIRONMENTAL PROTECTION LAW IN GERMANY AND GREECE

**17:00-19:00 Room C - Session 2C3 Water and wastewater treatment and management (1/2)**

<i>Chair: W. Braida, I.K. Kalavrouziotis</i>	
<i>A. RoyChowdhury, J. Abraham, T. Abimbola, Y. Lin, C. Christodoulatos, A. Lawal, P. Arienti, B. Smolinski and W. Braida</i>	FROM WASTE TO ENERGY: OPTIMIZING GROWTH OF MICROALGAE SCENEDESMUS OBliquus IN UNTREATED ENERGETIC-LADEN WASTEWATER STREAMS FROM AN AMMUNITION FACILITY FOR BIOENERGY PRODUCTION
<i>A. Caicedo-Ramirez, M.T. Hernandez and D.G. Grubb</i>	ELUTION HISTORY OF BASIC OXYGEN FURNACE SLAG TO PRODUCE AKLALINE WATER FOR REAGENT PURPOSES
<i>D.G. Grubb, A.S. Filshill and D.R.V. Berggren</i>	PHOSPHATE REMOVAL USING A REACTIVE GEOCOMPOSITE MAT PROTOTYPE
<i>M. Zerva and I.K. Kalavrouziotis</i>	UTILIZATION AND DESIGN OF FIRE SAFETY SYSTEMS WITH THE USE OF TREATED WASTEWATER
<i>Th. Mpouras, A. Polydera and D. Dermatas</i>	CARBON NANOTUBES APPLICATION FOR HEXAVALENT CHROMIUM ADSORPTION FROM CONTAMINATED GROUNDWATER
<i>P. Gikas and S. Argyropoulos</i>	TREATMENT OF CHEESE WHEY WASTEWATER BY THE ACTIVE CLAY SEDIMENTS PROCESS

**21:00-23:00 Gala dinner**

## Friday, July 6<sup>th</sup>, 2018

### 09:00-11:00 Room A –Supporting Sustainable Development Goals Implementation using research

Chair: A. Vasilopoulos, E. Akinsete

A. Vasilopoulos	INTRODUCTION TO THE SDGs AND SDSN-GREECE
A. Vassilopoulos	TECHNOLOGICAL BRIDGES BETWEEN RESEARCH AND PRACTICE: OpenAIRE SDSN-GREECE DASHBOARD AND CLIMATE INNOVATION WINDOW PLATFORM
S. Tsani	ENVIRONMENTAL RESOURCE MANAGEMENT FOR SUSTAINABLE GROWTH: ECONOMIC, SOCIAL, FINANCIAL AND TECHNOLOGY CONSIDERATIONS
E. Akinsete	INCLUSIVE RESOURCE MANAGEMENT APPROACHES FOR SUSTAINABLE DEVELOPMENT
E. Papagiannidou	PRESENTATION OF AIESEC IN REGARD TO THE SDGs
M. Lykogianni and A. Bakousi	PRESENTATION OF SDSN-YOUTH AUTH IN REGARD TO THE SDGs
E. Akinsete	INTERACTIVE AUDIENCE SESSION: THE ROLE OF RESEARCH COMMUNITY IN SDG IMPLEMENTATION – THEORY vs PRACTICE

### 09:00-11:00 Room B - Session 3B1 Soft and renewable energy sources (2/2)

Chair: A. Tsikaloudaki, E. Loukogeorgaki

V. Kafritsa and E. Loukogeorgaki	FEASIBILITY STUDY OF A FLOATING OFFSHORE WIND FARM IN GREECE
A. Zamanidou and E. Loukogeorgaki	FLOATING PHOTOVOLTAIC POWER GENERATION SYSTEM DEVELOPMENT IN A LAKE
D.K. Bikas, K.G. Tsikaloudaki, T.G. Theodosiou, D.C. Tsirigoti and S.P. Tsoka	MAXIMIZING THE BUILDING ENERGY PERFORMANCE WITH ADVANCED VENTILATED FAÇADE SYSTEMS ON EXISTING STRUCTURES
A. Kouroumplis and D.G. Vagiona	APPROPRIATE WIND FARM SITTING: THE CASE STUDY OF REGIONAL UNIT OF MAGNESIA
A. Stergiopoulou, V. Stergiopoulos, G. Klironomos, E. Ververis, M. Syrganis, K. Papaioannou and M. Theodoridou	HARNESSING THE BLUE RENEWABLE ENERGY SOURCES OF THE COASTAL CEPHALONIA'S PARADOX AND THE EURIPUS STRAIT
P. Kosmopoulos, A. Kantzioura, I. Kosmopoulos, K. Kleskas and A.M. Kosmopoulos	A PANHELLENIC SURVEY (2017-2018) REGARDING ENERGY NEEDS COMFORT CONDITIONS AND ATTITUDES TOWARDS RENEWABLE ENERGY SOURCES

### 09:00-11:00 Room C - Session 3C1 Water and wastewater treatment and management (2/2)

Chair: T. Karapantsios, A. Koutsospyros

G.P. Korfiatis, X. Meng and Q. Shi	THE USE OF NANOCRYSTALLINE TITANIUM DIOXIDE IN REMOVING HEAVY METALS FROM WATER: A HISTORICAL PERSPECTIVE OF SCIENTIFIC ADVANCEMENTS
A. Mai, P. Karanam, E. Hadnagy, S. Menacherry, W. Braida, C. Christodoulatos, A. Koutsospyros and T.S. Su	DEGRADATION OF 2,4-DINITROANISOLE (DNAN) IN AQUEOUS SOLUTIONS BY Mg-BASED BIMETALS
V. Tsiridis, M. Petala, I. Mintzouli, N. Pliatsikas, S. Sotiropoulos, M. Kostoglou, E. Darakas and T. Karapantsios	POTABLE WATER DISINFECTION WITH SILVER IONS DURING SPACE MISSIONS: THE ROLE OF WATER TANK AND WATER SUPPLY MATERIALS
G. Giakisikli, V. Trikas, Th. Karapantsios, G. Zachariadis and A. Anthemidis	DETERMINATION OF AMMONIUM IN RECYCLED AND POTABLE WATER SAMPLES FOR SPACE APPLICATIONS
R. Mudzielwana, W.M. Gitari and P. Ndungu	PERFORMANCE EVALUATION OF FE-MN BIMETAL MODIFIED KAOLIN CLAY MINERAL IN AS(III) REMOVAL FROM GROUNDWATER
S. Kariotis, E. Giannakopoulos and I.K. Kalavrouziotis	GIS' CONTRIBUTION IN BIOLOGICAL PROCESSING OF WASTE WATERS IN SMALL SETTLEMENTS. CASE STUDY BY USING AN ARTIFICIAL WETLAND SYSTEM

11:00-11:30	<b>Coffee break</b>
11:30-12:00	<b>Room A - Plenary session: Keynote speech by prof. C. Sioutas</b>
<i>Chair: G. Korfiatis, K.L. Katsifarakis</i>	
12:00-14:00	<b>Round Table Discussion</b>
<i>Chair: G. Korfiatis, C. Christodoulatos, A. Koutsospyros, K.L. Katsifarakis, N. Theodossiou</i>	
14:00-16:30	<b>Lunch break</b>
	<b>END</b>

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