

A. Kungolos, K. Aravossis
A. Karagiannidis, P. Samaras

Book of Abstracts
of the 2nd International
Conference on
Environmental
Management,
Engineering, Planning
and Economics (CEMEPE)
& SECOTOX Conference

MYKONOS
JUNE 21-26, 2009



TABLE OF CONTENTS



Ecotoxicology

• A frozen treasure: The Environmental Specimen Bank <i>A. Gies, J. Koschorreck and M. Kolassa</i>	3
• 5-Fluorouracil accumulation in green microalgae and its biogenetic transfer into ciliate protozoan <i>A. Ud-Daula, G. Pfister and K.-W. Schramm</i>	4
• Toxicity of copper oxide nanoparticle suspensions to aquatic biota <i>L. MumadZlanas, R. Grigutyte, R. Karionas, K. Rubekin, R. Vitkus and K. Sadauskas</i>	5
• Differential response of <i>Mytilus galloprovincialis</i> L. tissue DNA to Thiram <i>C. Emmanouil, K. Kasiotis and K. Machera</i>	6
• Acute toxicity of mature landfill leachates treated by recirculation towards <i>Daphnia magna</i> , <i>Artemia franciscana</i> and <i>Vibrio fischeri</i> <i>E. Skotti and P. Bouchagier</i>	7
• Evaluation of Microbial Assay for Risk Assessment (MARA) to assess the toxicity of chemicals in the environment <i>K. Wadhwa and T. Dando</i>	8
• Toxicity of fine and coarse atmospheric particles using <i>Vibrio fischeri</i> <i>V. Evangelopoulos, S. Zoras, P. Samaras, A.G. Triantafyllou, T.A. Albanis and P. Kassomenos</i>	9
• Ecotoxicity of a point source pollution of Lake Como (Northern Italy) <i>R. Bettinetti, S. Quadroni and S. Galassi</i>	10
• Acetylcholinesterase in <i>Anisakis simplex</i> larvae - a parasitic nematode of Baltic herring, <i>Clupea harengus</i> . Implications of pesticide resistance <i>M. Podolska, D. Napiercka, E. Mulkiewicz, A. Wasa and E. Gosz</i>	11
• Ecological and sanitary risk associated with organochlorine compound bioaccumulation in populations of <i>Anguilla anguilla</i> from Mediterranean coastal waters <i>S. Quadroni, S. Galassi, R. Bettinetti, F. Capocioni, E. Ciccotti and G.A. De Leo</i>	12
• Optimization of ultrasonic assisted acid extraction of mercury in muscle tissues of fish using multivariate strategy <i>A.Q. Shah, T.G. Kazi, M.B. Arain, J.A. Baig, H.I. Afridi, M.K. Jamali</i>	13
• Toxicity and QSARs of propargylic alcohols on green alga - <i>Pseudokirchneriella subcapitata</i> C. <i>Y. Chen, K.L. Kuo and J.W. Fan</i>	14
• Short-term toxicity of industrial chemicals on biological sentinels in water and sediment <i>D.F. Ogeleka, L.I.N. Ezenonye and F.E. Oktemen</i>	15
• Evaluation of the genotoxic potential of aquatic zoospore fungi on the erythrocytes of Nile tilapia <i>Oreochromis niloticus niloticus</i> <i>A. Osman, E. Ali, M. Hashem, M. Mostafa and I. Mekky</i>	16
• Meso- and macrofauna of the soil as the bio-indicators of the meadow soil polluted by heavy metals <i>M. Marko-Worlowska, A. Chrzan, T. Laciak and R. Kozik</i>	17

• Content of macroelements in plants after contamination of soil by copper and zinc <i>M. Wyszowski and J. Wyszowska</i>	18
• Effect of petroleum-derived substances on plants after application of compost, bentonite and calcium oxide <i>M. Wyszowski and A. Ziolkowska</i>	19
• Reproduction of a terrestrial isopod exposed to two Endocrine Disruptor Compounds: Bisphenol A and Vinclozolin <i>M.F. Lemos, C.A.M. van Gestel and A.M.V.M. Soares</i>	20
• Growth Inhibition and decrease of photosynthetic activity exhibited by selected <i>Microcystis aeruginosa</i> strains exposed to dodecylethyl-dimethyl-ammonium bromide <i>M.C. Bartolomé, A. D'ors, V. López-Rodas, E. Costas and S. Sánchez-Fortín</i>	21
• Comparison of the effect of heavy metals on the pedofauna of forest and meadow stands <i>A. Chrzan and M. Marko-Worłowska</i>	22
• Evaluation of phytotoxic and genotoxic effects of surface waters using duckweed (<i>Lemna minor</i> L.) <i>S. Radić, D. Stipaničev, P. Cvjetko, M. Marijanović Rajčić, S. Širac, B. Pevalak-Kozlina and M. Pavlica</i>	23
• Protection against Mg^{2+} , Cu^{2+} and Zn^{2+} toxicity through siderophore in <i>Frankia</i> strains nodulating <i>Hippophae salicifolia</i> D. Don <i>A. Singh, S.S. Singh, P.C. Pandey and A.K. Mishra</i>	24
• Histopathology and bioaccumulation of metals, polycyclic aromatic hydrocarbons and linear alkylbenzene compounds in mussels transplanted along São Paulo coast – Brazil <i>C.D.S. Pereira, H.L.N. Silbiger, E.R. Matushima, A. Cesar, E.C.P.M. Sousa, M.G.M. Catharino, E.G. Moreira, M.B.A. Vasconcellos, M.C. Bicego, S.T. Sasaki, S. Taniguchi, A.C.D. Baily, J. Ramos-Gómez and T.A. DelValls</i>	25
• Embryotoxic effect of vibrios collected in Mar Piccolo in Taranto (Italy) on <i>Mytilus Galloprovincialis</i> larvae <i>R.A. Cuvallio, M.I. Acquaviva, F. Biandolino, R. LoNoce, M. Narracci, L. Stabili and E. Prato</i>	26
• Sediment quality in Guadalquivir River (SW, Spain) using four different short term toxicity tests <i>V. Almagro-Pastor, M.J. Salamanca, D. Macías, V. Tornero, M.L. Martín-Díaz, C.B. Carballreira and T.A. DelValls</i>	27
• Ecotoxicity of sea bream (<i>Sparus aurata</i> L. 1758) and sea bass (<i>Dicentrarchus labrax</i> L. 1758) aquaculture spills located in Cádiz Bay (SW of Spain) <i>C.B. Carballreira, L. Martín-Díaz and T.A. DelValls</i>	28
• Comparative dredged material characterization using Sea urchin embryogenesis and fertilization bioassays in Spanish commercial ports <i>A. Rodríguez-Romero, M.J. Salamanca, I. Riba, C.B. Carballreira and T.A. DelValls</i>	29
• Metal bound to sediments bioavailability and sediment toxicity assessment using <i>Arenicola marina</i> in a field survey <i>J. Ramos-Gómez, M.L. Martín-Díaz and T.A. DelValls</i>	30
• Toxicity of Metal Oxide Nanoparticles to Fathead Minnows and African Clawed Frogs <i>C. Theodorakis, G. Chavez, S. Nations and G. Cobb</i>	31
• Preliminary observations of effects of melamine enriched diets on tissutal and enzymatic response in rainbow trout (<i>Oncorhynchus mykiss</i>) <i>M.C. Abete, A.C. Elia, A.J.M. Dörr, N. Pacini, D. Marchis, L. Gasco and M. Prearo</i>	32
• Monthly variability of heavy metal accumulation and detoxifying response of freshwater Copepoda, <i>Cyclops abyssorum</i> <i>A.J.M. Dörr, R. Galarini and A.C. Elia</i>	33

• Growth, accumulation and antioxidant response in juvenile carp (<i>Cyprinus carpio</i>) fed a selenium diet <i>A.J.M. Dörr, M.C. Abete, M. Prearo, N. Pacini, G. La Porta, M. Natali and A.C. Elia</i>	34
• Evaluation of the antioxidant response in liver of carp (<i>Cyprinus carpio</i>) injected intraperitoneally with concentrated drinking water from local aquifers <i>A.C. Elia, A.J.M. Dörr, M.C. Abete and M. Prearo</i>	35
• Soil toxicity evaluation by different ecotoxicological approaches <i>S. Manzo, F. De Luca Picione, A. Rocco and R. Carotenuto</i>	36
• Acute toxicity of selected organophosphorus pesticides to the green unicellular marine alga <i>Tetraselmis suecica</i> <i>A.S. Petsas, M.C. Vagi, M.D. Pavlaki, N.M. Smaragdaki and M.N. Kostopoulou</i>	37
• Genotoxicity studies of photolytically treated 2-chloropyridine aqueous solutions <i>I.T. Theodoridis, C.G. Skoutelis, D.R. Stapleton, D. Vlastos and M.I. Papadaki</i>	38
• Toxicity of Olive Mill Wastewaters on <i>Vibrio fischeri</i> and <i>Artemia franciscana</i> <i>A. Charistou, K. Kyriakopoulou, P. Anastasiadou, N. Fokialakis, A.L. Skaltsounis and K. Machera</i>	39
• Comparative ecological quality assessment of olive oil mill effluents from three-phase and two-phase systems, treated for hydrogen production <i>A. Rouvalis and J. Iliopoulou-Georgiadaki</i>	40
• WER approach to study changes of metal toxicity over the Lambro River (North Italy) <i>M. Mingazzini and M.T. Palumbo</i>	41
• Effects of Aluminum soil content, on earthworm's bioaccumulation on organic fields <i>L. Dellaporta, E. Vavoulidou-Theodorou, D. Bilalis and I.E. Tzortzi</i>	42
• Effects of multiple stressors exposures on plant populations <i>S.A. Geras'kin, E.M. Mozolin, J.S. Vanina, A.A. Oudalova, N.S. Dikareva, E.V. Chernonog, V.G. Dikarev and T.A. Novikova</i>	43

Environmental impact assessment and risk analysis

• Computational fluid mechanics in environmental engineering and risk analysis <i>N.C. Markatos</i>	47
• Fumarolic alteration products at Sousaki (Greece): occurrence and environmental impact <i>W. D'Alessandro, S. Rotolo, K. Kyriakopoulos, S. Bellomo, L. Brusca, S. Calabrese, M. Liotta, C. Bruno and F. Plicanti</i>	48
• Use of environmental quality guidelines for the determination of ecological risk in the sediments of Ganges River (India) <i>R. Antón Martín, I. Riba, C. López-Valle, S.K. Sarkar and T.A. DelValls</i>	49
• Biochemical blood parameters: are they effective biomarkers of monitoring fish condition? <i>C. Fernandes, A. Fontainhas-Fernandes, A. Coimbra, M.J. Saavedra and M.A. Salgado</i>	50
• Land Degradation of Taleghan Drainage Basin, Iran from saline and alkaline marl formations <i>K. Zakikhani, S. Feiznia and S.H. Hoseini</i>	51
• A CFD Simulation Study of VOC and Formaldehyde Indoor Air Pollution Dispersion in an Apartment as Part of an Indoor Pollution Management Plan <i>I. Panagopoulos, A. Karayannis, P. Kassomenos and K. Aravossis</i>	52
• Physiological responses of rosemary (<i>Rosmarinus officinalis</i> L.) to salinity and copper nutrition in a nutrient solution <i>M. Hejazi Mehrizi, H. Sharifmadari, A.H. Khoshgoftarmansh and M.A. Meshkat</i>	53

• Sustainable mobility and transport modeling: the case of the city of Giannitsa <i>S. Banić and E. Mitsis</i>	54
• Evaluation of cytotoxic effects induced on human bronchial cells by exposure to Multi-walled Carbon Nanotubes <i>C. Farnizza, E. Paba, A.M. Marcelloni, A.M. Fresegna, S. Pasquali, S. Iavicoli and D. Cavallo</i>	55
• Green vs. standard roofs: a case study from Athens, Greece <i>K. Abeliotis, A. Foutri and K. Lasaridi</i>	56
• Mercury contamination of breast milk in relation to age and stage of lactation of nursing women from southern Poland <i>R. Stawarz, G. Formicki, Z. Goc and K. Kilian</i>	57
• Personal Protective Equipment to minimize the shipyard production processes health effects on shipyard workers <i>U.B. Celebi, F.T. Akanlar and N. Vardar</i>	58
• Reconsidering uncertainty for air-pollution and health information systems <i>P. Kassomenos, A.N. Skouloudis and T. Nitis</i>	59
• Determination and aquatic risk assessment of pesticides residues in riparian drainage canals of the rivers Ardas and Erythopotamos, northeastern Greece <i>Z. Vrzay, C. Alexoudis, G. Vassiliou and E. Papadopoulou-Mourkidou</i>	60
• Characteristics of intracellular and extracellular organic components of the Microcystic aeruginosa and their byproducts formation potential during chlorination <i>L. Li, N.Y. Gao, K.J. Zhang and H.S. Ou</i>	61
• Life cycle analysis of biofuels' supply chain life with special focus in Greece <i>Chr. Papapostolou, E. Kondili and J.K. Kaldellis</i>	62
• Technological and environmental impacts evaluation of anthracite on power production in Greece <i>D. Zacharias, E. Kondili and J.K. Kaldellis</i>	63
• A methodology of revaluations environmental impact assessment studies on dams. The case study of Ladonas River, Peloponnese, Greece <i>T. Mimides, K. Pylarinou and H. Lazana</i>	64
• Development of an Environmental Management System according to EMAS in a Very Large Industrial Installation: Case Study <i>P. Antonakopoulos, I. Dermizakis, S. Lottas and A. Thanas</i>	66
• Life Cycle costing of a new transportation pavement constructed in the Paphos District area in Cyprus as a pilot study of the 'ECOLANES' project <i>D.G. Hadjimitsis and K. Themistocleous</i>	67
• Environmental aspects of fly ash landfills: A case study of the thermal power plant "Nikola Tesla-B" in Serbia <i>M. Ivetić, N. Jaćimović, D. Dražović and N. Kostović</i>	68
• Fuzzy decision support system for assessing nitrogen fertilization in agricultural land <i>A. Papadopoulos and D. Kalivas</i>	69
• Impact of nuclear energy objects on lake environment: Lake Druksiai case <i>R. Paskauskas, J. Mazeika and J. Kasperovičienė</i>	70
• Potential of selected metals to cause Metal Fume Fever: a comprehensive review <i>C. Emmanouil, M. Gennata, P. Maraboutis and A. Kungolos</i>	71
• Ecological risk assessment of cheese whey effluents along a medium-sized river in southwest Greece <i>C. Karadima, C. Theodoropoulos, A. Rouvalis and J. Iliopoulou-Georgiadaki</i>	72

• Desorption of exogenous contaminants before determination of endogenous trace elements in human hair by flame and electrothermal atomic absorption spectrometry <i>M. Saber-Tehrani, F. Tadayon and A. Ghorbani</i>	73
• Economic aspects of the delineation of well head protection areas under conditions of uncertainty <i>N. Theodossiou and D. Latinopoulos</i>	74
• The risk of red palm weevil <i>Rhynchophorus ferrugineus</i> (Olivier) (Coleoptera: Curculionidae) infestation on the native greek palm tree <i>Phoenix theophrasti</i> Greuter (Arecaceae: Arecaceae) <i>D.C. Kontodimas, N. Thymakis, P. Milonas, A. Michaelakis, A.F. Martinou, E. Potamitis, O.L. Dimitriadou and Y.G. Krezou</i>	75
• The FOOTPRINT software tools: Pesticide risk assessment and management in the EU at different spatial scales <i>I. Dubus, G. Azimonti, M. Bach, E. Barriuso, G. Bidoglio, F. Bouraoui, T. Centofanti, Y. Coquet, B. Feisel, W. Fialkiewicz, H. Fowler, F. Galimberti, B. Grizzetti, A. Hajberg, J. Hollis, N. Jarvis, I. Kajewski, J. Kjær, S. Krasnicki, K. Lewis, F. Lobnik, P. Lolos, J. Moeyes, T. Nolan, P. Rasmussen, B. Réal, S. Reichenberger, M. Šinkovec, F. Stenemo, M. Suhadolc, N. Surdyk, J. Tziliavakis, E. Vaudour, E. Vavoulidou, D. Windhorst and Wurm</i>	76

Ecosystems analysis and protection

• Greek Newspapers coverage of Lake's Koronia environmental problems <i>V. Manakou, T. Tsiakis and A. Kungolos</i>	79
• Analysis of the regional-scale influence of agricultural ecosystem parameters on zinc concentrations of soil and rice grains using regression methods <i>M. Karami, M. Afyuni, A.H. Khoshgoftarmanesh, A. Papritz, M. Pirzadeh and R. Schulz</i>	80
• Wildlife use and conservation in a Forest Management Unit of South Cameroon <i>H.M. Abelli, S. Van Wieren, C. Wanzie and H.H.T. Prins</i>	81
• Environmental Management in Special Protected Areas Pamukkale in Turkey <i>S.E. Torlak</i>	82
• Modelling and the assessment of anthropogenic impacts on marine ecosystems <i>M. Psaltaki, H. Florou, G. Trabidou and N.C. Markatos</i>	83
• Burnt area mapping using Advanced Spaceborne Thermal Emission and Reflection Radiometer data. A case study in Paros, Greece <i>K.K. Karapanou and N. Koutsias</i>	84
• Inferences on the tolerance of some forest woody angiosperms in an urban polluted environment <i>K. Giagli, G. Vasilopoulos and F.A. Aravanopoulos</i>	85
• Preliminary impact assessment of anthropogenic activities on Vourkadi peri-urban lagoon system <i>E. Dimitriou and C. Antoniadou</i>	86
• Democracy, power distribution, and forest conservation. A microeconomic analysis <i>J. Soltanzadeh and O. Khodaveyrdi</i>	87
• Ecosystems and urban planning in Thriassion Plain – Greece: Existing problems and potential threats <i>A. Mavroukis</i>	88
• Environmental forensic investigation of golden rain event in Kaohsiung City, southern Taiwan <i>C. Lin and W.M. Mao</i>	89

• Natural or artificial Christmas tree: a case study from Greece <i>O. Theodoropoulou, F. Zachos, S. Douvalis, A. Kalogeropoulos, C. Pappia, E. Reppa, V. Detsis and K. Abeliotis</i>	90
• An in-depth study on the effects of animal wastes of municipal slaughterhouses in Davao del Sur, Philippines <i>N. Montederamos and J. Abregana</i>	91
• Comparing novel approaches used for prediction of species distribution from presence/absence acoustic data <i>A. Palialexis, S. Georgakarakos, K. Lika and V.D. Valavanis</i>	92

Coastal environment

• Temporal variability of water quality in Platanovrisi Reservoir, related to stratification/mixing conditions <i>G. Sylaios, S. Tsolkas, N. Kamidis, I. Boskidis and V.A. Tsihrintzis</i>	95
• POSEIDON system: Environmental monitoring with new generation optical instruments <i>P. Drakopoulos, G. Petihakis, V. Zervakis and K. Nittis</i>	96
• Development and application of environmental management systems in ports <i>G. Palantzas</i>	97
• The impacts of fish farms on marine ecosystem <i>A. Bobat</i>	98
• Implementation of an integrated environmental management system in the Piraeus port <i>Ch. Kontogiorgi, G. Palantzas, A. Naniopoulos and I. Theocharis</i>	99
• New automated technologies on environmentally sensitive shipyards <i>F.T. Akanlar, U.B. Celebi and N. Vardar</i>	100

Water resources engineering and management

• Construction of small hydropower plants for renewable energy production and the use of storage basins for water reclamation <i>P.S. Kollias, V. Kollias and S. Kollia</i>	105
• Water quality characteristic of the constructed wetland at Goheung bay <i>S.H. Yang, D.H. Kang, S.S. Kim, T.Y. Kim, H.S. Yu and B.H. Kwon</i>	106
• Environmental Irrigation and Drainage Scheme management with WEAP model (Case Study: Moghan Irrigation Scheme) <i>A. Pilpayeh, M. Afshar Asl and H. Almasi</i>	107
• Environmental management of big riverine floods: the case of Evros Prefecture in Greece <i>Z. Nivoliannou and B. Synodinou</i>	108
• Quality of Mykonos water resources – A preliminary assessment <i>N. Skoulidakis and E. Dimitriou</i>	109
• The role of reclaimed water in sustainable water resources management in the Aegean islands <i>P. Gikas and G. Tchobanoglous</i>	110
• Public vs. Private Water Utilities: PBSCs and PPPs used for financial sustainability <i>V. Kanakoudis and S. Tsitsifli</i>	111
• Applying the virtual water concept at regional level- the cases of Xanthi and Rodope <i>N. Kotsovinos, M. Gratziou and M. Tsalkatidou</i>	112

• The necessity of maintenance and operation of modern irrigation and drainage systems at first, second and third step of operation duration <i>G. Sani</i>	113
• Total water management approach in steel industry <i>V. Tryfona-Panagopoulou, S. Panagopoulos, V. Diamanti, G. Lazopoulos, P. Xenou, C. Panagopoulou and A. Kungolos</i>	114
• Rehabilitation or partial restitution of the former lake Karla, Greece: usefulness of the contingent valuation method <i>E. Koutseris</i>	115
• Water resources management in Greece under the effects of the climate change <i>I. Vasvatekis</i>	116
• Designing and evaluation automatic control system for operational water management of Dez Main Canal <i>S. Isapoor, P.J. van Overloop, A. Montazar and M. Banihabib</i>	117
• Uncertainty Analysis of a Municipal Water Distribution System <i>T.N. Shrivadhanand and S. Karmakar</i>	118

Fate and transport of pollutants

• Occurrence of pharmaceuticals of different therapeutic classes in surface waters <i>Ch.I. Kosma, D.A. Lambropoulou and T.A. Albanis</i>	121
• Preliminary studies on the degradation of a range of pesticides in novel biomixtures using different agricultural by-products as straw substitutes <i>E. Karanassios, N.G. Tsiropoulos and D.G. Karpouzas</i>	122
• The variation of hydraulic conductivity with tidal effect for pumping test at the costal rock aquifer around Yong-ho Bay, Busan, KOREA <i>T.Y. Kim, D.H. Kang, S.S. Kim, S.I. Yang and S.Y. Chung</i>	123
• Lead fractionation in soil as affected by organic and inorganic amendments <i>A.H. Baghaie, A.H. Khoshgoftarmansh and M. Afyuni</i>	124
• Soil Carbon sequestration by cultivation of poor pastures in arid areas of Central Iran <i>J. Fallahzade and M.A. Hajabbasi</i>	125
• Prediction of nitrate leaching under different climatic and nitrogen management scenarios <i>K.R. Vègh and G. Füleky</i>	126
• Fate and effect of herbicides in green waste during composting with municipal sewage sludge <i>L. Makridis, E.K. Pironaki, M. Fountoulakis, C. Chroni, K. Lazaridi and T. Manios</i>	127
• Seasonal distribution of caesium – 137 at the eastern part of Saronikos Gulf, Greece <i>N. Evangeliou, H. Florou, Ch. Psomiadou and M. Scoullos</i>	128
• Seasonal particle dynamics using 234Th/238U disequilibrium approach in a shallow embayment of Central Greece <i>N. Evangelion, Ch. Psomiadou, A. Zafiropoulou, M. Scoullos and H. Florou</i>	129
• Application of computer modelling for forecasting of contaminants distribution in soil <i>S.P. Kundas, V.I. Kovalenko and I.A. Gishkeluk</i>	130
• Regional differences in trace element concentrations in <i>Anadara</i> spp. (Mollusca: Bivalva) collected from the coast of Vietnam <i>N.P.C. Tu, N.N. Ha, T. Agusa, B.C. Tuyen, S. Tanabe and I. Takeuchi</i>	131
• The influence of soil to solution ratio on cadmium removal from soils using anionic surfactants <i>Z. Gustiatin, E. Klimiuk, T. Pokój and D. Kulikowska</i>	132

• Composition and distribution of organochlorine pollutants in the sediments and mussels from the Istanbul Strait (Turkey) <i>O.S. Okay, B. Karacık, S. Başak, B. Henkelmann, S. Bernhöft and K.-W. Schramm</i>	133
• The experience of reclamation of degraded soils by means of energy crops production <i>O. Rodzik</i>	134
• Investigation on the behaviour of pesticides in atmosphere <i>P. Avino, G. Cinelli, I. Notaridomato and M.V. Russo</i>	135
• Peroxyacetyl nitrate (PAN) in urban atmosphere: levels and behavior <i>P. Avino and M.V. Russo</i>	136
• Environmental fate and persistence of the organophosphorus pesticide disulfoton in different types of natural water <i>M.C. Vagi, A.S. Petsas, M.N. Kostopoulou and T.D. Lekkas</i>	137
• Environmental economics of advanced regeneration methods of mineral oil using synthetic adsorbents <i>V. Tomašević and V. Jovanović</i>	138
• Macronutrient and heavy metal accumulation in a Greek fir ecosystem of Taygetos mountain in Peloponnese <i>V. Kavvadias, Ch. Paschalidis, D. Velissariou, P. Mavroudis, A. Koriki and D. Petropoulos</i>	139
• The degradation of Terbutylazine and Chlorpyrifos in various bionix substrates based on composted cotton crop residues <i>K. Kravvariti, N. G. Tsiropoulos and D. G. Karpouzas</i>	140
• The influence of soil – plant factors on the uptake of Cs by two plant species <i>F. Giannakopoulou, D. Gasparatos and C. Haldouti</i>	141
• Micronutrients uptake by corn from sewage sludge treated soils <i>A. Abtahi, M. Hoodaji and M. Afyuni</i>	142
• An advanced acoustical technique for measuring bubbles in stagnant and flowing liquids <i>K.A. Zacharias, S.P. Evgenidis and T.D. Karapantsios</i>	143
• Pb and Cd toxic migration from commercial glazes in ceramics <i>D. Kanellopoulou, A. Papandreou, Z. Livadia, C.J. Stournaras and V.N. Stathopoulos</i>	144
• Calcium polysulfide treatment of Cr(VI)-contaminated soil <i>M. Chrysoschoou, D. Ferreira and C.P. Johnston</i>	145
• Chemical fractionation and phytoextraction capacity of maize plant grown on chromated copper arsenate soil <i>G.E. Uwamaringie and F.E. Okieimen</i>	146
• Identification of odorous emissions at a piggery facility in Rethymno-Crete <i>P. Karageorgos, M. Latos, Ch. Mpasiakos, M. Lazaridis and N. Kalogerakis</i>	147

Water pollution

• Monitoring of drinking water quality in the region of Kozani, Greece <i>A. Sfikas, S. Christidis and S. Zoras</i>	151
• Investigating the amount of E-coli and Fecal Streptococci in coastal water of Mazandaran region and comparing it with Microbial standards (case studies 2006) <i>M. Pazoki and A. Takdastan</i>	152
• Development of the complex procedure for the water organic waste monitoring <i>E. Savellieva, N. Koryugina, A. Radilov, N. Khlebnikova, L. Gustyleva and O. Orlova</i>	153

• Pesticide concentration levels and ecological risk assessment in natural surface waters and sediments (rivers, lakes, estuaries and lagoons) of Greece <i>T. Albanis, I. Konstantinou, D. Lambropoulou and D. Hela</i>	154
• Solid phase microextraction hyphenated with gas chromatography-mass-spectrometry as the method of choice for the water pollution control <i>N. Koryagina, E. Savelieva, A. Radilov, N. Khlebnikova, L. Gustyleva and O. Orlova</i>	156
• Monitoring of Carbaryl in water samples with SPE- HPLC method including an uncertainty estimation of the analytical results <i>A. Ghorbani, A. Roozbahani and F. Tadayon</i>	157
• Estimation of measurement uncertainty for the determination of some trace element in natural water samples by SPE-ICP-OES <i>A. Ghorbani, M. Rabbani, M. Mahmoodi Farahani, S. Waqif Hosain and M. Saber Teltrani</i>	158
• The variation of the seawater/freshwater interface at the coastal aquifer in Yongho bay, Busan <i>S.S. Kim, D.H. Kang, T.Y. Kim, S.I. Yang and B.H. Kwon</i>	159
• Biosorption of Mn^{2+} from aqueous solutions with the use of <i>Pseudomonas</i> sp., <i>Staphylococcus xylosus</i> and <i>Blakeslea trispora</i> cells <i>D. Gialamoudis, M. Mitrakas and M. Liakopoulou-Kyriakides</i>	160
• An engineering approach of the sewage-borne bacteria kinetics under laboratory conditions <i>E. Darakas and H. Hadjiangelou</i>	161
• Biological potable water treatment <i>A.G. Tekerlekopoulou and D.V. Vayenas</i>	162
• Potable water denitrification <i>K.A. Karanasios, M.K. Michailidis, I.A. Vasiliadou, S. Pavlou and D.V. Vayenas</i>	163
• Nitrate contamination management in soil profile using LEACHN model <i>P. Rahbari and M. Afsharasl</i>	164
• Adsorption of Cr(III) and Pb(II) from aqueous solutions on a takovite-aluminosilicate nanocomposite <i>A.P. Carnizello, L. Marçal, P.S. Calefi, E.J. Nassar, K.J. Ciuffi, R. Trujillano, M.A. Vicente, S.A. Korili and A. Gil</i>	165
• Molecular analysis on the lipid A (endotoxin) biosynthesis of aerosolized <i>Pseudomonas</i> spp. (γ -Proteobacteria) isolated from different workplaces <i>D. Davolos and B. Pietrangeli</i>	166
• Performance of floating vegetated systems for in-stream water treatment in North-Eastern Italy <i>M. Borin, D. Tocchetto, M. Salvato and G. De Stefani</i>	167
• Formation of THMs during Typical Dissolved Organic Nitrogen Alanine Chlorination in Drinking Water <i>W.H. Chu, N.Y. Gao and S.S. Hu</i>	168
• Effect of biological traits on organochlorine concentrations in the muscle of an edible flatfish from northwest Aegean Sea <i>V. Vassilopoulou, J. Haralabous and E. Georgakopoulos-Gregoriades</i>	169
• Treatability studies for an organized industrial district (OID) effluent in Bursa, Türkiye for agricultural irrigation purposes <i>S.K.A. Solmaz, G.E. Üstün and F. Çiner</i>	170
• Evaluation of the trophic state of Ziros lake, NW Greece <i>I. Kagaliou and E. Chyti</i>	171

• Pesticide concentration levels and ecological risk assessment in natural surface waters and sediments (rivers, lakes, estuaries and lagoons) of Greece <i>T. Albanis, I. Konstantinou, D. Lambropoulou and D. Hela</i>	154
• Solid phase microextraction hyphenated with gas chromatography-mass-spectrometry as the method of choice for the water pollution control <i>N. Koryagina, E. Savelieva, A. Radlov, N. Khlebnikova, L. Gustyleva and O. Orlova</i>	156
• Monitoring of Carbaryl in water samples with SPE- HPLC method including an uncertainty estimation of the analytical results <i>A. Ghorbani, A. Roozbahani and F. Tadayon</i>	157
• Estimation of measurement uncertainty for the determination of some trace element in natural water samples by SPE-ICP-OES <i>A. Ghorbani, M. Rabbani, M. Mahmoodi Farahani, S. Waqif Hosain and M. Saber Tehrani</i>	158
• The variation of the seawater/freshwater interface at the coastal aquifer in Yongho bay, Busan <i>S.S. Kim, D.H. Kang, T.Y. Kim, S.I. Yang and B.H. Kwon</i>	159
• Biosorption of Mn^{2+} from aqueous solutions with the use of <i>Pseudomonas</i> sp., <i>Staphylococcus xylosus</i> and <i>Blakeslea trispora</i> cells <i>D. Gialamoudis, M. Mitrakas and M. Liakopoulou-Kyriakides</i>	160
• An engineering approach of the sewage-borne bacteria kinetics under laboratory conditions <i>E. Darakas and H. Hadjiangelou</i>	161
• Biological potable water treatment <i>A.G. Tekerlekopoulou and D.V. Vayenas</i>	162
• Potable water denitrification <i>K.A. Karanasios, M.K. Michailidis, I.A. Vasiliadou, S. Pavlou and D.V. Vayenas</i>	163
• Nitrate contamination management in soil profile using LEACHN model <i>P. Rahbari and M. Afsharasl</i>	164
• Adsorption of Cr(III) and Pb(II) from aqueous solutions on a takovite-aluminosilicate nanocomposite <i>A.P. Carnizello, L. Marçal, P.S. Calefi, E.J. Nassar, K.J. Cluffi, R. Trujillano, M.A. Vicente, S.A. Korili and A. Gil</i>	165
• Molecular analysis on the lipid A (endotoxin) biosynthesis of aerosolized <i>Pseudomonas</i> spp. (γ -Proteobacteria) isolated from different workplaces <i>D. Davolos and B. Pietrangeli</i>	166
• Performance of floating vegetated systems for in-stream water treatment in North-Eastern Italy <i>M. Borin, D. Tocchetto, M. Salvato and G. De Stefani</i>	167
• Formation of THMs during Typical Dissolved Organic Nitrogen Alanine Chlorination in Drinking Water <i>W.H. Chu, N.Y. Gao and S.S. Hu</i>	168
• Effect of biological traits on organochlorine concentrations in the muscle of an edible flatfish from northwest Aegean Sea <i>V. Vassilopoulou, J. Huralabous and E. Georgakopoulos-Gregoriades</i>	169
• Treatability studies for an organized industrial district (OID) effluent in Bursa, Türkiye for agricultural irrigation purposes <i>S.K.A. Solmaz, G.E. Üstün and F. Çiner</i>	170
• Evaluation of the trophic state of Ziros lake, NW Greece <i>I. Kagalou and E. Chyti</i>	171

• The treatment and control of industrial water polluted with hexavalent chromium <i>M. Cvijovic, P. Djurdjevic, S. Trifunovic and D. Bacotic</i>	172
• Disinfection by-products in chlorinated drinking waters in Volos area, central Greece <i>S. Zieba, N.G. Tsiropoulos and E. Bakeas</i>	173
• An analytical method for determination of haloacetamides in chlorinated water <i>S. Samios, E. Lytras, A. Nikolaou, S. Goulinopoulos and T. Lekkas</i>	174
• Assessment of water quality monitoring data in Lake Kastoria, Western Macedonia, Greece <i>N. Matzafieri, S. Margoni and Ar. Psilovikos</i>	175
• R.E.M.O.S. network in lignite mines in Western Macedonia, Greece. Assessment of the results for the year 2008 <i>Ar. Psilovikos, A. Sentas, C. Sahanidis and T. Loopoulos</i>	176
• Determination of pesticide residues in river water of Aliakmonas in the region of Imathia (N. Greece) by means of solid phase extraction disks and gas chromatography <i>I.V. Ziouris, D.A. Lumbropoulou and T.A. Albanis</i>	177
• Microbial community dynamics in a permeable reactive barrier using real-time PCR technique <i>C.W. Lin, J.F. Yeh, C.H. Wu, Q.K. Dam and S.J. Lu</i>	178
• Groundwater quality and sampling location comparison of assessments in Thessaly region and the application of the Multivariate Statistical Interpretation in Magnesia, Greece <i>E. Koutseris, A. Papaioannou and A. Filintas</i>	179
• Assessment of wastewater effluent quality in Thessaly region, Greece <i>S. Bakopoulou, S. Legos, V. Tsiroidis, C. Emmanouil and A. Kungolos</i>	180
• Determination of organophosphorus flame retardants and plasticizers in surface waters by liquid chromatography - tandem mass spectrometry <i>L. Callipo, C. Cavaliere, E. Corradini, R. Gubbioni, R. Samperi and A. Loganà</i>	181
• The impact of mining activities in the quality of coastal sea waters <i>G. Gaidajis and D. Aktsofoglou</i>	182
• Batch system for study of (Cr) biosorption by dried waste activated sludge <i>M. Farzaadkia, M. Gholami and R.C. Darvishi</i>	183

Industrial waste

• Comparison of the management of the salt cake generated at secondary aluminium melting plants by wet valorisation and disposal in controlled landfill <i>A. Gil and S.A. Korili</i>	187
• Process design and economic evaluation for the recycling of exhaust sands from a magnesium foundry plant <i>B. Ruffino and M.C. Zanetti</i>	188
• Flyash disposal in Delhi and Ncr - A Study <i>A. Gandhi, A. Jain, G. Singh, M. Bhutia, S. Gupta, S. Anand, R. Sarkar</i>	189
• Characterisation and leaching behaviour of olive mill waste in order to obtain the best management options <i>A. Coz, A. Andrés, R. Alonso-Santurde, J.R. Viguri, D. Mantzavinos and N. Xekoukoulotakis</i>	190
• Management of industrial waste on sustainable landfills: Influence of the ageing of stabilised/solidified metallic waste on the leaching characteristics <i>A. Coz, B. Ruiz-Labrador, J.R. Viguri and A. André</i>	191
• Evaluating the relationship between the sorption and the biodegradation of polyaromatic hydrocarbons (PAHs) in surfactant amended continuous fed activated sludge system <i>O. Gök and D.T. Sponza</i>	192

• Effect of temperature and aeration rate on co-composting efficiency of olive mill wastewater with olive stone wooden residues <i>A. Vlyssides, E.M. Barampouti, S. Mai and M. Loizides</i>	193
• Anaerobic treatment of effluent from molasses based distillery industry <i>C. Singh, R.S. Thakur and R. Chaudhary</i>	194
• Biotreatment of oil refinery sludge <i>A. Mountouris, D. Leventos, D. Papadimos, Ch. Antotsios, St. Papadopoulos, Ch. Vatselis, H. Wallner, A. Kiroplastis and N. Karnavos</i>	195
• Dynamics of grape marcs stabilization during composting <i>C. Ktena, A. Kyriacou, K. Abeliotis and K.E. Lasaridi</i>	196
• Valorization of Automobile Shredder Residue (ASR) in Italy <i>B. Ruffino, S. Fiore and M.C. Zanetti</i>	197
• Electrochemical treatment of synthetic milk emulsion <i>K. Bensadok and N. El Hamafi</i>	198
• Effect of material membrane on the treatment of cutting oil emulsion by ultrafiltration <i>K. Bensadok and M. Belkacem</i>	199
• Coupling of anodic oxidation and adsorption by activated carbon for chemical oxygen demand removal from DSD acid wastewater <i>Y. Zhao and L. Wang</i>	200
• Enhancement of an effluent treatment facility for treatment of terephthalic acid wastewater <i>M. Karthik and T. Nandy</i>	201
• Electrolytic decarbonation and recovery of carbonate solution from a contaminated carbonate solution in continuous operation <i>K.-W. Kim, Y.-H. Kim, S.-Y. Lee, J.-K. Lim, E.-H. Lee, I.-T. Kim, G.-H Park and K.-C. Song</i>	202
• Characterization of particulate matter emitted due to production processes of sanitary wares and tiles in ceramic factories <i>C. Sikaliotis, R. Tzimou-Tsitouridou, M. Mitrakas, G. Stergioudis and A. Hatzopoulou</i>	203
• Sewage pumps' recycling possibilities during the refurbishing or upgrade of wastewater management facilities <i>C.S. Psomopoulos, G. Ioannidis and S. Apostolakis</i>	204
• Investigation of Cr(VI) reductive treatment effectiveness in Chromite Ore Processing Residue using micro-XANES, -XRF and -XRD <i>M. Chrysoschoou, D. Dermatas, S. Fakra and M.A. Marcus</i>	205
• Influence of process and operational factors on the process performance of a Compartmentalized Activated Sludge System (CASS) treating a synthetic dairy wastewater <i>A.A.L. Ziantzadeh, F. Bashiri and H. Bonakdari</i>	206
• Differences on the porosity development of carbon dioxide activated carbons from lignocellulosic residues <i>J.F. González, S. Román, J.M. Encinar and G. Martínez</i>	207
• Recycling potential for the low voltage high breaking capacity fuse links used by P.P.C. of Greece <i>C.S. Psomopoulos, Y. Karras, P. Karagiannopoulos, C. Karras and D. Diamadopoulos</i>	208
• Study and proposal treatment for the waste water purification of a drug company <i>T. Chaabane, M. Taleb Ahmed and R. Maachi</i>	209
• Environmental impacts of released polybrominated diphenyl ethers <i>E. Gidarakos and V. Kollarou</i>	210

Hazardous Waste Management

- Felt-H-TAML-Catalyzed Oxidative Destruction of Textile Dyes and Chlorinated Phenols
K.-W. Schramm, N. Chahbane and T. Collins.....213
- Combined chemical-toxicological expertise of former facilities for production of highly toxic chemicals
E. Savellieva, O. Orlova, N. Koryagina, S. Nagorny, N. Goncharov, E. Ermolaeva, A. Radilov, N. Khlebnikova and L. Gustyleva.....214
- Aerobic and anaerobic degradation processes of solid waste in landfill test cells
S. Top, R. Yazici, E. Sekman, G. Varank, E. Akkaya, A. Demir and M.S. Bilgili.....215
- Removal of PAHs and LAS in Three Lab Scale Sequencing Batch Reactors
S. Terzakis, M. Fountoulakis, S. Mamounas, M. Patinioti, N. Kalogerakis and T. Manios.....216
- Production of secondary value-added products from the chemical recycling of PET bottles
A.K. Nikolaidis, D.S. Achilias and G.P. Karayannidis.....217
- Consumption and recycling of plastic packaging materials. A research for the current situation in Thessaloniki
D.S. Achilias, P. Koutra and A. Liarou.....218
- Electrochemical removal of nitrate from wastewaters on a zinc cathode
M. Dortsiou, I. Katsounaros, C. Polatides and G. Kyriacou.....219
- Environmental impacts of unmanaged solid waste at a former base metal mining and ore processing site (Kirki, Thrace, Greece)
A. Liakopoulos, B. Lemiere, I. Drougas, C. Crouzet, V. Laperche, C. Michaels, A. Lassin and I. Romaidis.....220
- Innovative refining technology for spent eutectic LiCl-KCl salt generated from pyroprocessing of oxide nuclear fuel
I.-T. Kim, Y.-Z. Cho, H.-C. Yang, B.-G. Ahn, H.-C. Eun, K.-W. Kim, G.-H. Park and H.-S. Lee.....221
- Plasma gasification for waste treatment and energy production
E. Voutsas, A. Mountouris, M. Politi, A. Karagiannidis and D. Tassios.....222
- A new Threat from Consumer Goods coming from Closing the Loop in a global Scale
B. Bilitewski.....223
- Leaching of Pb and W from a firing range soil treated with Type I/II Portland cement, silica fume cement and cement kiln dust
D.G. Grubb, T. Reilly, D.H. Moon and D. Dermatas.....224

Sustainable Waste Monitoring & Management

- Formulation and comparative evaluation of alternative MSW management plans for Greece
A.P. Economopoulos.....227
- Recycling of engineering plastics deriving from waste electrical and electronic equipment (EEE)
P.A. Tarantili and A.G. Andreopoulos.....228
- A novel decision support tool for the management of mining waste and waste facilities, with emphasis in new EU member states
A. Karagiannidis, T. Kasampalis, S. Groudev, T. Kerestedjan, M. Frincu and L. Fanfani.....229
- Mapping odour nuisance from environmental and industrial installations in Greece
K. Lasaridi, G. Katsabanis, Th. Maggos, Th. Manios, M. Fountoulakis, N. Kalogerakis, E.I. Stentiford and A. Kyriacou.....230
- Study on production patterns and characteristics of non-household, non-hazardous municipal wastes
A. Malamakis, A. Karagiannidis and L. Kouvaritakis.....231

• Household's size affecting Solid-Waste Production in Municipality of Volos <i>N. Georgiadis and A. Kungolos</i>	232
• Environmental Assessment of Municipal Solid Waste Landfill Sites in Kuwait <i>L. Mohamed and S. Mugeem</i>	233
• Alternative uses of lignocellulosic biomass <i>I. Pappas, Z. Koukoura, Ch. Goulas, C. Kyprisides and Ch. Tananaki</i>	234
• Waste reduction methods for shipyards: Dry ice blasting <i>F.T. Akanlar, U.B. Celebi and N. Vardar</i>	235
• Extraction of coal residues from hard coal mining waste dumps as a chance of minimization of their adverse environmental impact <i>S. Stefaniak and I. Twardowska</i>	237
• Study on the factors influencing municipal solids waste generation in China by multiple statistical analysis <i>L. Chen and W. Xin-Wu</i>	238
• Energy and Materials Recovery from Municipal Solid Wastes at the Island of Rhodes <i>N.J. Themelis, A. Bourka and G. Ypsilantis</i>	239
• Influence of recycling aggregates on the environment and its impact on social, engineering and financial sector <i>D. Matsika</i>	240
• ResourceManager: A material flow model for recycling and waste management <i>S. Wolff, H. Albers, M. Wittmaier, S. Langer, H. Lambrecht and T. Brinkmann</i>	241
• Environmental management of fly ash produced from the Incineration of municipal waste with energy recovery <i>C. Varva, E. Voutsas, P. Samaras and D. Tassios</i>	242
• Life Cycle Assessment of the co-incineration of Refuse Derived Fuel (RDF) in a cement plant <i>K. Aravossis and A. Kornpa</i>	243
• A feasibility study on potential energy resources of dried industrial organic sludge <i>J.T. Kim, B.-K. Lee, K.D. Kim and S.H. Byeon</i>	244
• Contaminant transport through alternative landfill liners <i>G. Varank, E. Sekman, A. Demir, E. Akkaya and M.S. Bilgili</i>	245
• Recycling of E-waste in a global environment <i>E. Gidarakos</i>	246
• Evaluation of sewage sludge production patterns in Greece in the frame of integrated material and energy recovery <i>A. Karagiannidis, T. Kasampalis, P. Samaras, G. Perkoulidis and P. Ziogas</i>	247
• Integral evaluation of supply and disposal systems at mountain refuges with focus upon solid waste <i>S. Lebersorger, N. Weissenbacher, E. Mayr and C. Aschauer</i>	248
• Valorization of recycled material into Ni-based composites <i>V. Karayannis and A. Moutsatsou</i>	249
• Motor vehicle recycling as the national energy resource of Serbia <i>A. Pavlovic, S. Arsovski and M. Pavlovic</i>	250
• Utilization of Solid Recovered Fuels (SRF) for energy production <i>M. Agraniotis, P. Grammelis and E. Kakaras</i>	251
• Large scale recycling of dredged material from confined disposal facilities in the US Northeast <i>D.G. Grubb and M. Roscoe</i>	252

• Performance characteristics of lightweight aggregate concrete containing waste-derived synthetic aggregates <i>S. Bethanis</i>	253
• Comparative assessment of collection and transfer schemes of municipal wastes for supplying a new waste-to-energy facility <i>A. Karagiannidis, G. Perkoulidis, A. Papageorgiou and S. Kalogirou</i>	254
• Municipal solid waste thermal treatment: problems and technological improvements <i>G. Genon and D. Panepinto</i>	255
• Investigation on material separation of mixed construction and demolition waste by sorting process <i>A. Montero, Y. Tojo, T. Matsuo, T. Matsuto, M. Yamada, H. Asakura and Y. Ono</i>	256
• The synthesis of polyhydroxyalkanoates by mixed microbial cultures under aerobic dynamic feeding conditions using by-products from biodiesel production <i>T. Pokój, E. Klimiuk, Z. Gusiatin and D. Kulikowska</i>	257
• The efficiency of municipal landfill leachate nitrification in the rotating biological contactor (RBC) <i>D. Kulikowska, T. Józwiak, M. Kuczajowska-Zdrożna, T. Pokój and Z. Gusiatin</i>	258
• DeconRCM: A decision support system tool for renovation and demolition waste management <i>N. Moussiopoulos, D. Anastaselos, D. Aidonis, G. Banias, Ch. Achillas, E. Iakovou and A. Papadopoulos</i>	259
• WEEE management and marginalised social groups in Greece <i>K. Papaioannidou, S. Kipouris, A. Kungolos, L. Somakos, K. Aravossis, I. Antonopoulos and A. Karagiannidis</i>	260
• Potential for energy generation in Greece by mass burning and by pre-processing (RDF/SRF) of solid wastes <i>C.S. Psomopoulos and N.J. Themelis</i>	261
• Bio-based products from urban wastes <i>E. Montaneri, V. Boffa, D.G. Perrone, L. Gurlasco, M. Grezzo and P. Savarino</i>	262
• Waste incineration as a source of fine particles emissions: state of the art and perspectives <i>E. Bemporad</i>	263
• Technical Parameters and Operational Cost of a Pilot MSW Baling-Wrapping in Alexandroupolis, Greece <i>F. Tsagas, I. Markidis, I. Tsakmakis, N. Grigoropoulos and D. Dermatas</i>	264
• Transportation Cost and CO ₂ emissions of the waste transportation network in the region of Eastern Macedonia-Thrace in Greece <i>I. Markidis, F. Tsagas, I. Tsakmakis, N. Grigoropoulos and D. Dermatas</i>	265
• Hospital in-house waste management and environmental impact <i>M. Tsakus, Ch. Vassilakos, T. Maggos and J. Michopoulos</i>	266

Air quality

• Development of a new photochemical mechanism suitable for air pollution simulation in Greece and comparison with four known mechanisms <i>S. Karathanasis, P. Zanis and I. Ziomas</i>	269
• Intra-hourly variations of CO and NO concentrations in Thessaloniki during the rush hours <i>P. Kassomenos, A. Kelessis, M. Petrakakis, N. Zoumakis and A. Mavrommati</i>	270
• Publics' attitude on air pollution in the city of Thessaloniki, Greece <i>E. Voulgaridou</i>	271

• Atmospheric boundary layer characteristics during high ozone concentrations in the Rijeka Bay area <i>M.T. Prtenjak, A. Jeričević, T. Nitš, A.A. Juretić and Z.B. Klaić</i>	272
• Surface exchange of heat and carbon dioxide in a campus area <i>B.H. Kwon, D.H. Kang, D.S. Kim, K.H. Kim and P.S. Kim</i>	273
• Chemical analysis of a large series of PAHs, PAH derivatives and POPs in airborne and sediment samples and their contribution to genotoxic, tumor-promoting and endocrine-disrupting effects <i>M. Machala, M. Ciganek, J. Neca, K. Pencikova, L. Vykopalova, S. Marvanova, P. Krcmar, A. Kocan, Brack, J. Topinka and J. Vondracek</i>	274
• Mapping air pollution: the city of Thessaloniki - Greece case study <i>M. Lazoglou, N. Karanikolas and D. Vagiona</i>	275
• The prediction of toxic fugitive dust dispersion during soil remediation construction works using FDM model <i>I. Panagopoulos, A. Karayannis, P. Kassomenos, G. Gouvalias and E. Gaki</i>	276
• Frequency of occurrence of concentrations of air pollutants and their relationship to the established activities in Thriassion Plain - Greece <i>A. Mavrikis and A. Christides</i>	278
• Seasonal characteristics of particulate matter and heavy metallic elements in a residential area in Ulsan, Korea <i>N.T. Hieu and B.-K. Lee</i>	279
• PM ₁₀ levels in the vicinity of residential street under various traffic density conditions <i>Z.B. Klaić, M. Stojnić, K. Ružman and I. Smiljanić</i>	280
• Air pollution in residential areas from wood-fired heatings <i>M.A. Bari, G. Baumbach, G. Scheffknecht and B. Kuch</i>	281
• Catalytic versus electrochemical promotion: N ₂ O decomposition over K-modified Palladium catalysts/electrodes <i>G. Pekridis, N. Kaklidis, M. Konsolakis, C. Athanasiou, I.V. Yentakakis and G.E. Marnellos</i>	282
• Indoor and outdoor particle number and mass concentrations in three houses in Athens. Sources, sinks and variability of aerosol parameters <i>K. Eleftheriadis, A.A. Karanasiou, S. Vratolis and M. Lazaridis</i>	283
• Influence of temporal variation of traffic volume and composition on air quality in urban areas <i>K. Nikolaou and S. Basbas</i>	284
• Size distribution of metallic elements in particle matter from a busy urban area <i>M.T. Ny, B.-K. Lee, N.T. Hieu and D.T.T. Trang</i>	285

Urban aerosols and health effects

• Statistical analysis of PM ₁₀ data in urban region of Volos, Greece <i>G.T. Proias, I.K. Kaldellis and A.G. Paliatatos</i>	289
• DNA damage in human pulmonary cells exposed to organic extracts of PM _{2.5} collected in two urban sites at different traffic intensity <i>D. Cavallo, C.L. Ursini, R. Cabella, A. Gordiani, R. Maiello, A. Ciervo and S. Iavicoli</i>	290
• Deep investigation of Ultrafine Particles in urban air <i>P. Avino, S. Casciardi, C. Fanizza and M. Manigrasso</i>	291
• Exposure to PM ₁₀ , PM _{2.5} , PM ₁ and carbon monoxide on roads in Lahore, Pakistan <i>I. Colbeck, Z.A. Nasir, S. Ahmad and Z. Ali</i>	292

Renewable energy sources

- Ecological utilization of sewage sludge in production of Virginia fanpetals (*Sida hermaphrodita* Rusby) biomass as the source of renewable energy
Z.B. Romanowska-Duda, M. Grzesik and K. Piotrowski 295
- Utilization of distillery effluent and agriculture waste to generate energy and usable microalgae biomass in a biogas - microalgae sequence
F. Kastanek, P. Kastanek, J. Rahubín, Y. Mašeterová and O. Solcova 296
- Transesterification of rape oil using CaO as a solid basic catalyst
J.M. Encinar, J.F. González, G. Martínez and S. Román 297
- Waste to energy solution for municipal solid waste
E. Kalogirou 298
- From the old Archimedean Screw Pumps to the new Archimedean Screw Turbines for Hydropower Production in Greece
A.V. Stergiopoulou and V.G. Stergiopoulos 299
- The effects of various irrigation systems on biomass production and economic results of sorghum crop
M. Sakellariou-Makrantonaki, C. Papanikolaou, E. Mygdakas and N. Papanikos 300
- Model-based optimal control of hybrid renewable energy systems
P.L. Zervas, H. Sarimveis, J.A. Palyvos and N.C. Markatos 301
- Effects of various electrolyte types on the properties of nanocrystalline TiO₂ dye sensitized solar cells
M. Giannouli, G. Syrokostas and P. Yianoulis 302
- Wind energy resources in future climate change
D. Koracin, R. Vellore, R. Belu and J. Koracin 303
- A critical taxonomy of design and aggregate planning models for biomass supply chains
D. Vlachos, E. Iakovou and A. Toka 304
- Establishment of the first Greek Bio-energy District in Western Thessaloniki
K. Konstantinou and I. Tsalakanidou 305
- Biogas from cattle manure as an alternative energy source
L. Castrillón, Y. Fernández-Nava, E. Marañón, P. Ormaechea, G. Quiroga and S. Valero 306
- Biomass waste as an alternative energy source in Asturias (Spain)
L. Castrillón, E. Marañón, Y. Fernández-Nava, P. Ormaechea and G. Quiroga 307
- Bioethanol production from sweet sorghum by *Saccharomyces cerevisiae*
D. Arapoglou, Th. Varzakas, M. Papadopolou, D. Iconomou, M. Darawsheh, M. Bocari, D. Argyropoulos and C. Israilides 308
- Stances of involved institutions for the special spatial planning and sustainable development framework for Renewable Energy Sources
E. Iosifidis, T. Tsoutsos and E. Maria 309
- The Corporate Strategic Imperative for GHG Management and RES Technologies
D. Manolopoulos, M. Chasiotis, K. Kitsopoulos, M. Koulidakou and M. Sarantos 310
- The evolution of Renewable Energy Sources (RES) projects in Greece. The 2010 and 2020 milestones and the need for a real-time management information system tool
K. Kitsopoulos and D. Manolopoulos 311
- Biomass productivity versus oil content in microalgae for biodiesel production
M. Mingazzini, M.T. Palumbo and R. Pagnotta 312

Pollution control technologies

• Development and effect of the depth of an experimentally simulated sewer biofilm on carbon uptake <i>E. Gavalakis, A. Andreiadakis and A. Stamou</i>	315
• Reduction of SO _x emissions to control air pollution: Sulfur removal from gasoline by pervaporation <i>M. Takhiri, M. Sadrzadeh, A. Pak and T. Mohammadi</i>	317
• Sustainable sludge management for small and decentralized wastewater treatment plants in Greece – A feasibility study <i>D. Pagidis, A. Karteris and M. Karteris</i>	318
• The removal of polycyclic aromatic hydrocarbons from wastewater by ultraviolet rays <i>M. Włodarczyk-Makula</i>	319
• Minimization of biological excess sludge in Sequencing Batch Reactor by using of chlorination <i>A. Takdastan, N. Mehrdadi, A. Azimi, A. Torabian and G. Nabi Bidhendi</i>	320
• Comparison between MM5-CMAQ and WRF/CHEM PM ₁₀ and PM _{2.5} concentrations for an episode in Germany during Winter, 2003 <i>J.L. Pérez, R. San José, J.L. Morant and R.M. González</i>	321
• Sorption kinetics of PAH by using various sorbents <i>S.D. Yakan, B. Karacik, D. Ceylan, S. Dogu, O.S. Okay and O. Okay</i>	322
• A greenhouse experiment investigating the effects of Sewage Sludge on Nickel availability in soil and Maize <i>S. Kabirinejad and M. Hoodaji</i>	323
• Evaluation of lead concentration in soil and plant treated with compost <i>S. Kabirinejad and M. Hoodaji</i>	324
• Zinc release kinetics in a calcareous soil treated with waste tire ash and powder as alternatives to Zn fertilizers <i>S. Taheri, H. Shariatmadari, A.H. Khoshgofarmanesh, H. Ghaziasgar, R.L. Chaney and M. Hejazi Mehrizi</i>	325
• The comparison of PAHs changes content in sewage sludge and supernatants under redox conditions <i>M. Włodarczyk-Makula</i>	326
• Aerobic degradation of nitrobenzene by immobilization of <i>Streptomyces</i> sp. Z2 in polyurethane foam <i>C.L. Zheng, J.T. Zhou and J. Wang</i>	327
• Bioremediation of petroleum-contaminated soil using landfarming technique: Influence on soil biological and chemical properties <i>A.A. Besalatpour, M.A. Hajabbasi, A.H. Khoshgofarmanesh and V. Dorostkar</i>	328
• A combined landfarming-phytoremediation system for remediation of petroleum hydrocarbons and metals from contaminated soils <i>A.A. Besalatpour, M.A. Hajabbasi, V. Dorostkar and G. Torabi</i>	329
• Low cost adsorbents: Growing approach to wastewater treatment <i>V.K. Gupta, P.J.M. Carrott, M.M.L. Ribeiro Carrott and Subas</i>	330
• The adsorption of Cd(II) ions by poplar wood sawdust <i>M. Ščiban, M. Klačnja and B. Škrbić</i>	331
• Bioremediation of wastewater containing azo dyes through two-stage bioreactor and its biodiversity <i>N.A. Dafale and S.R. Wate</i>	332

• Penetration of aerosol nanoparticles in fibrous filters <i>F.O. Arouca, N.R. Feitosa and J.R. Coury</i>	333
• Adsorption of perchloroethylene from aqueous solutions on a Moroccan clay <i>Y. El Mouzdaahir, A. Elmchaouri, R. Mahboub, A. Gil and S.A. Korili</i>	334
• Treatment of the textile effluents in cottonseed batch reactor: Determination of optimum process conditions <i>D. Ucar and B. Armagan</i>	335
• Potential volatile organic compound oxidation catalysts based on metal/pillared clay systems <i>S.A. Korili, R. Trujillano, M.A. Vicente and A. Gil</i>	336
• Phytoextraction potential of <i>Cynara cardunculus</i> L. grown under single and binary cadmium and nickel treatment conditions <i>E.G. Papazoglou and G.K. Papadopoulos</i>	337
• Arsenic contaminated environments: bioremediation perspective from molecular analysis on the bacterial arsenical metabolism <i>D. Davolos and B. Pietrangeli</i>	338
• Parameters influencing Cr(VI) removal from water using Fe(II) <i>M. Mitras, A. Pantazatou, R. Tzimou – Tsitouridou and C. Sikalidis</i>	339
• Treatment of synthetic textile waste water by combined chemical coagulation/ultrafiltration <i>E. Ellouze, D. Ellouze and R. Ben Amar</i>	340
• Degradation of Bisphenol-A by Ultrasonic Irradiation and Combination of Additives <i>K.J. Zhang, N.Y. Gao, C. Li, Y. Ma and L. Lei</i>	341
• Stabilization study of electric arc filters dust derived by steel production <i>A. Papandreou, D. Kanellopoulou, V.N. Stathopoulos and C.J. Stournaras</i>	342
• Decolouration of solutions of reactive dyes by electrochemical oxidation <i>G.P. Gallios, A. Voudgaropoulos and I. Voinovschi</i>	343
• Efficiency and mechanism of O ₃ /H ₂ O ₂ degrading the odor compound 2-methylisoborneol in water <i>X.Y. Li, J.M. Shen and J. Ma</i>	344
• Theoretical study of the deposition of nano-sized aerosol particles in fibers filters <i>J.M. Silva, F.O. Arouca, J.A.S. Gonçalves and J.R. Coury</i>	345
• Anthraquinone compounds as redox mediators for enhanced continuous-flow anaerobic biotransformation of reactive dyes under hypersaline conditions <i>Y.H. Lee and S.G. Pavlostathis</i>	346
• Advances in coagulation/flocculation field: Al- and Fe-based composite coagulation reagents <i>P.A. Moussas, N.D. Tzoupanos and A.I. Zouboulis</i>	347
• Degradation of Drimarene dyes using UVC/H ₂ O ₂ - Effect of stepwise addition of the reactant <i>A. Riga, I. Poullos, V. Karayannis, V. Bontozoglou and G. Papadopolymereou</i>	348
• Removal of dye and heavy metal by using pretreated zeolite <i>M. Sarioglu and C. Deniz</i>	349
• Effects of influent composition on activated sludge protozoa <i>C.A. Papadimitriou, P. Samaras, A.I. Zouboulis, D. Petridis and G.P. Sakellaropoulos</i>	350
• The treatment of phenolic compounds by a three-phase fluidized bed after Fenton process <i>Y. X. Du and L. C. Lei</i>	351
• Potential of sewage sludge application as metal sorbent in permeable barriers <i>I. Twardowska, K. Janta-Koszuta and E. Miszczak</i>	352

- Rapid and efficient removal of boron from simulated deep sea water using synthesized polymer resin
Alka, K.M. Choi, S.M. Lee, J.K. Yang and Diwakar Tiwari..... 353
- CFD study on the performance of a cyclone with tangential air inlet operating at high pressure
J.A.S. Gonçalves, M.V. Ramirez, V.G. Guerra, J.M. Silva and J.R. Coury..... 354

Natural wastewater treatment systems

- Examination of two wastewater step-feeding schemes in enhancing the performance of a horizontal subsurface flow constructed wetland
A. Stefanakis and V.A. Tsihrintzis..... 357
- Colour and TOC reduction using biofilter packed with natural zeolite
A. Ojstršek and D. Fakin..... 358
- The selection of appropriate low-cost natural materials for textile wastewater treatment in constructed wetlands
D. Fakin and A. Ojstršek..... 359
- Biosorption of zinc from industrial wastewater using bacteria resistance
A. Nasr-e-Azadani, A. Tahmourespour, M. Hoodaji and A. Abtahi..... 360
- An approach for sustainable management of the Balıklıgöl lakes, Turkey
B. Armagan and N. Besli..... 361

Environmental restoration

- Restoring soil fertility through the use of alternative organic and natural inputs
J. Abregana, R. Bajenting and N. Montederamos..... 365
- Land degradation due to diapirs in Iran, case study: Hableh-Rood Drainage Basin, East of Tehran
K. Zakikhani and S. Feiznia..... 366
- Accumulation of cadmium and lead in the edible parts of the fodder shrub *Atriplex halimus* L. grown on Cd and Pb contaminated soils
E. Manousaki and N. Kalogerakis..... 367
- Restoration alternatives and attitudes of local population towards Kavala quarry - Northern Greece
N.D. Hasanagas, A. Charalampous and G. Moutson..... 368
- Tracing sediment sources in Amrovan Drainage basin, Iran
S. Feiznia, A. Kousheima, H. Ahmadi and S.A. Hashemi..... 369
- Treatment of ammonia polluted groundwater in North Bohemian brown coal mining region
M. Kubal, K. Cihotny, M. Podhola, P. Beneš and M. Kuraš..... 370

Numerical modeling

- CFD study of a flocculation tank for potable water treatment
T.D. Karapantsios, K. Samaras, M. Kostoglou, M. Petala and A.I. Zouboulis..... 373
- A Wireless Sensor Network simulation framework for environmental management and monitoring
M. Mpasonkos, G. Yovanof, S. Vassilaras and D. Peditidakis..... 374
- Impact assessment of greenhouse gas trading on electricity production industry
A.I. Tolis, A.A. Rentizelas, I.P. Tatsiopoulos, K.T. Avraam, N.S. Varotsis and E.P. Kapetanakis..... 375

• Using topography and vegetation attributes for estimation of saturated hydraulic conductivity in semiarid rangelands of Iran <i>B. Khalilmoghadam, M. Afyuni, K.C. Abbaspour, A. Jalalian and R. Schulin</i>	376
• Optimisation of water resources management for insular and geographically isolated areas <i>P. Gikas, S. Liu and L.G. Papageorgiou</i>	377
• Modeling Nestos River plume dynamics—Validation with field observations <i>N. Kamidis, G. Sylaios and V.A. Tsihrintzis</i>	378
• Interdisciplinary modeling support to the Comprehensive Everglades Restoration Project (CERP) <i>V.H. Kourafalou</i>	379
• Smart structure monitoring using robust control <i>A. Moutsopoulou, A. Pouliezou and G.E. Stavroulakis</i>	380
• Environmentally focused production and distribution supply chain network structures <i>P. Tsiakis, V. Manakou and T. Tsiaklis</i>	381
• Estimation of surface shear strength in Semi-arid rangelands of Iran <i>B. Khalilmoghadam, M. Afyuni, K.C. Abbaspour, A. Jalalian, A.A. Dehghani and R. Schulin</i>	382
• Statistical modeling approaches for urban traffic noise <i>E.K. Manatakis</i>	383
• Road traffic noise level prediction in the city of Thessaloniki: a comparison between the French and British method <i>M. Pitsiva, F. Kehagia and Ch. Vizba</i>	384
• An integrated modeling procedure for thermal discharges into coastal waters <i>A.I. Stamou, Eix. Douka, I. Nikiforakis, P. Dimitriadis, G.H. Jirka and T. Bleninger</i>	385
• Simulation modeling of the fate of nitrogen in the constructed wetland of Carla in Greece <i>C. Laspidou, I. Kakoulidis and A. Loukas</i>	386
• Flow and ventilation within a hypothetical tunnel during different fire scenarios using CFD techniques <i>I. Ossanlis, Ph. Barmpas and N. Moussopoulos</i>	387

GIS and remote sensing

• Established activities and land use classification in Thriassion Plain – Greece with the assistance of satellite images, ground measurements and model results <i>A. Mavraklis, A. Tassopoulos, S. Chiotini-Kyvelou and A. Christides</i>	391
• Remote sensing as an alternative tool for monitoring water consumption over agricultural areas of Cyprus <i>A. Agapiou, G. Papadavid and D.G. Hadjimitsis</i>	392
• Application of Satellite Remote Sensing and Sun-photometers to determine the aerosol optical thickness over Cyprus <i>D.G. Hadjimitsis and K. Themistocleous</i>	393
• Coastal water quality monitoring in Cyprus using Satellite Remote Sensing <i>D.G. Hadjimitsis, M.G. Hadjimitsis, A. Agapiou, G. Papadavid and K. Themistocleous</i>	394
• The geographical dimension of agro-environmental indicators: A preliminary analysis from a Mediterranean case study <i>L. Salvati</i>	395
• Geostatistical analysis for assessing eutrophication trends: a case study in the Strait of Lesvos, Greece <i>D. Kitsiou, M.N. Kostopoulou, Z. Pataki and M. Karydis</i>	396

• Geomorphologic and hydrologic analysis of Torrent Imvrassos in Samos Island, using GIS. Assessment of flooding hazard <i>P. Mourtziou, Ar. Psilovikos and T. Astaras</i>	397
• Localization and delimitation of lineaments of Skopelos island using G.I.S. and Remote Sensing techniques <i>A. Tsigliffissi, K. Perakis and S. Margoni</i>	398
• An integrated analytical methodology for the assessment of traffic-related air pollution in medium sized cities <i>S. Margaritis and Y.N. Photis</i>	399
• Spatio-temporal variation in water quality of Malad creek, Mumbai, India using geospatial tools <i>R. Vijay, D.R. Satapathy, R.A. Sohony, S. Dhage and P.S. Kelkar</i>	400
• Shoreline changes of Lake Koronia during the last seven decades using remote sensing and GIS techniques <i>V. Manakou, I. Faraslis, D. Stathakis, K. Perakis and A. Kungolos</i>	401
• Multicriteria analysis by means of GIS for airport site selection; the case study of Trikala, Greece <i>A. Moysiadis, I. Faraslis and K. Perakis</i>	402
• Use of GIS, remote sensing and regression models for the identification and forecast of small pelagic fish distribution <i>A. Paliolakis, S. Georgakarakas, K. Lika and V.D. Valavanis</i>	403

Energy and environment

• Assessing the sustainability of waste-derived biofuels in Greece <i>A. Karagiannidis, T. Kasanpalis, A. Malamakis, G. Fontaras, K. Tegos and Z. Samaras</i>	407
• Sustainable energy: challenges of implementing new technologies <i>A. Omer</i>	408
• Industrial air pollution and the permitting procedure of three thermal power stations of the Public Power Corporation (P.P.C.) S.A. in Greece <i>C.D. Flatoura</i>	409
• Environmental compatibility of energy production from biomass at global, regional and local scale <i>E. Brizio and G. Genon</i>	410
• Heat energy exchange of reed canopy over Goheung bay <i>G.H. Kim, D.S. Kim, D.H. Kang, K.H. Kim and B.H. Kwon</i>	411
• Enhanced biogas production of primary sludge co-digested with crude glycerol <i>M. Fountoulakis, M. Sfendouraki, S. Terzakis and T. Manios</i>	412
• The effect of age of biological sludge on energy consumption on conventional activated sludge system of urban wastewater <i>A. Vlyssides, E.M. Barampouti, S. Mai and A. Stamatoglou</i>	413
• Plasma aided coal combustion for effective and environmentally friendly fuel utilization <i>E. Karpenko, V. Messerle, P. Rakin and A. Ustimenko</i>	414
• Development of doped LaCrO ₃ interconnect materials in high temperature steam electrolyzer <i>C.-H. Kim, W.-C. Cho, K.-S. Kang, C.-S. Park and K.-K. Bae</i>	415
• A study on the electrolysis of H ₂ O/SO ₂ mixture gas in a SO ₂ -depolarized electrolyzer for the Hybrid Sulfur (HyS) process <i>S.-K. Lee, W.-C. Cho, K.-S. Kang, C.-S. Park, K.-K. Bae and C.-H. Kim</i>	416

• The energy management of olive solid waste <i>K. Konstantinou and I. Tsakiridou</i>	417
• Bio-alcohols based fuels for spark ignition engines <i>D. Bratsky and M. Slezackova</i>	418
• Diesel fuels from renewable sources <i>M. Slezackova and D. Bratsky</i>	419
• Optimum sizing of a PV-battery-diesel hybrid system for remote consumers <i>J.K. Kaldellis, D. Zafirakis, E. Kondili and K. Kavadias</i>	420
• Energy research, environment, applications and sustainable development <i>A.M. Omer</i>	421
• Partners' collaboration on biomass as source of renewable energy towards environ- economic development <i>J. Abregana, R. Bajenting and N. Montederanos</i>	422
• Sustainable energy systems in Greece – Solar energy applications in public buildings <i>V. Lulinos and S. Polyzos</i>	423
• Natural gas industry in Iran <i>H. Omidvar</i>	424
• Capture of carbon dioxide from IGCC power plants through clathrate hydrate crystallization <i>R. Kumar, P. Linga, J.A. Ripmeester and P. Englezos</i>	426
• Feasibility estimation of the biomass pyrolysis – solid oxide fuel cell integrated process <i>C. Athanassiou, G.E. Marnellos, E. Antonakou, I. Fessas and A. Lappas</i>	427
• Surface energy budget over the grass and the concrete surface <i>K.H. Kim and B.H. Kwon</i>	428
• Energy efficient process for separating xylene isomers: The use of nanocomposite MFI- ceramic hollow fibres <i>M.O. Daramola, A.J. Burger, A. Giroir-Fendler and S. Mlachon</i>	429
• Environmental tools in building construction industry – A state of the art review for LCA applications in building sector <i>E. Giama, D. Anastaselos and A.M. Papadopoulos</i>	430
• Environmental assessment tool for building's materials and components: Applications to insulation <i>D. Anastaselos, E. Giama and A.M. Papadopoulos</i>	431

Global climate change

• Mitigation of and adaptation to climate change on local level related to sustainability <i>M. Csete</i>	435
• Regional climate-air quality simulations over Europe: Future climate and sensitivity analysis <i>D. Melas, E. Katragkou, P. Zanis and I. Tegoulas</i>	436
• Self-cleaning data logger measurements of long-term (2002 to 2006) variation in chlorophyll <i>a</i> concentration in the Uwa Sea, southwestern Japan <i>S. Suzuki, K. Furuya and I. Takeuchi</i>	437
• Development of the energy willow (<i>Salix viminalis</i>) plants in the expected climate changed conditions <i>M. Grzesik, Z.B. Romanowska-Duda and K. Piotrowski</i>	438

Environmental economics

• The role of the consulting practice in CSR proliferation during the economic downturn <i>N. Panayiotou, K. Arzoussis and K. Saridakis</i>	441
--	-----

• Assessing the impacts of environmental policy instruments on sustainable irrigated agriculture <i>D. Latinopoulos and D. Pagidis</i>	442
• Tariffs and networks regulation in district heating: an introduction <i>F. Becchis, G. Genon, D. Russolillo and E. Brizio</i>	443
• Environmental cost accounting as a strategy tool within the Greek organizations <i>K.G. Papaspyropoulos, V. Blioumis and A.S. Christodoulou</i>	444
• Willingness to pay for financing electronic waste recycling in Greece <i>D. Damigos</i>	445
• Environmentally benign and cost optimal phosphoric acid production through a systematic process design framework <i>A.I. Papadopoulos and P. Seferlis</i>	446
• Estimating and forecasting on the production values of recycling waste containers in Taiwan <i>E. Hsu and C.-M. Kuo</i>	447
• A fuzzy Multicriteria Mathematical Programming model for planning irrigated agricultural regions <i>B. Manos, T. Bournaris, J. Papathanasiou and C. Moulogianni</i>	448
• The Greek reality of the Photovoltaic market: Future trends and incentives in energy development <i>E. Magerakis, P. Beretoulis, S. Karabagias and N. Gavrilakis</i>	449
• Estimation of the natural resources' value by the use of the contingent valuation method: the case of a Greek peri-urban forest <i>O. Christopoulou, M.N. Duquenne, Ch. Siomouli and K. Kaisari</i>	450
• Production economics of organic agriculture; the case of vines and olives in the district of Cyprus <i>G. Papadavid and D. Hadjimitsis</i>	451
• Economic efficiency and energy consumption: A conditional robust non parametric approach <i>G.E. Halkos and N.G. Tzeremes</i>	452
• Reducing of price uncertainty in a tradable permit system <i>V. Alhanaqah and O. Alhanaqah</i>	453
• The waste water treatment as a viable and dynamic system <i>P. Panagiotakopoulos and T. Yannakopoulou</i>	454
• Possibilities of production and use of wood pellets in Greece from an economic and market aspect <i>M. Trigkas, A. Sideras, G. Ntalos and I. Papadopoulos</i>	455

Sustainable Development and Planning

• Sociopolitical factors in management of accidents from major hazard industrial facilities <i>I. Pappas and A. Kungolos</i>	459
• A comparative study on Material Flow (MF) and Land Use (LU) in cities without increase in population <i>C. Dellmann</i>	460
• Challenges of green management in Iran <i>M. Abbaspour and S. Khadivi</i>	461
• Strategic Environmental Assessment (SEA) in Spatial Planning. The response of Greece <i>E. Antoniou</i>	462

• Sustainable environmental management and accessibility of urban coastal areas: Mediterranean cooperation, policy and pilot actions <i>M. Vongioukas, S. Divane and G. Thymiakou</i>	463
• The Diachronic consequences in the area according to the climate and the vegetation: The location of settlements of mountain Pelion in Magnesia, Greece <i>E. Koutseris</i>	464
• Organization and evaluation of a sustainable islands network <i>K. Hadjithiros, M. Aravantinou and C. Laspidou</i>	465
• New technologies opposing urban sustainability <i>A. Gospodini</i>	466
• Sustainable urban mobility policies and European Initiatives in Volos <i>A. Trampa</i>	467
• Wastewater reuse and public acceptance <i>S. Kipouras, V. Manakou, K. Papaioikonomou, C. Enmanouil, A. Kungolos, A. Kotlos, E. Koutoulakis and G. Petrakos</i>	468
• Impact of green development into cities <i>A. Lalou and V. Eleutheriou</i>	469

Cultural heritage and architectural issues

• The cultural ecology of folk-tales: A statistical analysis of environment influence on the plot structure - Using Australia, USA and Kyklades as an illustration <i>A. Ioannou, V. Pyrpiri, M. Tasiou, S. Mavrikou, M. Lampropoulou and N.D. Hasanagas</i>	473
• The changes in the hydromorphological processes and the impacts in the static stability of the old Bridge of Arta as a result of the works for the hydroelectric exploitation in the Arachthos river (Ipiros-Greece) <i>A. Mertzianis</i>	475
• The importance of focusing on the pertinent scale. The Mygdonia incident <i>C. Kousidonis</i>	476
• Comparative study of the gardens between two settlements with different cultural heritage of Southeastern Rhodope <i>M. Kampa, I. Ispikoudis, M.K. Sioliou and P. Kaparti</i>	477

Environmental legislation and policy

• Development of a framework of indicators for the evaluation of the environment and sustainability in the Greater Thessaloniki area <i>N. Moussiopoulos, Ch. Achillas, Ch. Vlachokostas, D. Spiridi and K. Nikolaou</i>	481
• Corporate Social Responsibility: A comparative analysis among Denmark, Hungary and Greece <i>M. Tsavdaridou and T. Metaxas</i>	482
• Flexible Transport Services for environmental and sustainable urban mobility: the INTERREG IVC FLIPPER project <i>G. Ambrosino, J.D. Nelson, B. Bastogi, D. Ramazzotti and S. Cerri</i>	483
• A cluster-based approach as an effective way to implement the ECAP (Environmental Compliance Action Program): evidence from some good practices <i>T. Daddi, F. Testa and F. Iraldo</i>	484
• Commentation and critical analysis of the European Landscape Treaty of the Florence Convention <i>E. Iosifidis</i>	485

• Drinking water policy <i>D. Koumparou, A. Nikolaou and S. Goufinopoulos</i>	486
• A methodological approach of an improved model for calculating environmental administrative fines <i>K. Aravossis and E. Lazari</i>	487
• Bathing water profile as an European Union legislation within Bathing Water Directive (2006/7/EC) <i>A. Torok</i>	488
• Early warning environmental information for the atmospheric environment: The AIRTHESS system <i>K. Karatzas and K. Nikolaou</i>	489
• Recycling of end of life vehicles <i>D. Vartholomatos, K. Vasdekis and G. Iliadis</i>	490
• Hunting engagement and attitude to hunting management strategies <i>N.D. Hasanagas, P. Birtsas, Ch. Sokos and K.G. Papaspyropoulos</i>	491
• Hunting management and hunting-related values <i>Ch. Sokos, N.D. Hasanagas, K.G. Papaspyropoulos and P. Birtsas</i>	492
• A critical review of current EU and Greek legislation on pedestrian rights and walking environment <i>P. Papaioannou, S. Basbas, C. Konstantinidou and I. Politis</i>	493
• Areas under Protection. The institutional framework for the management of the Areas under Protection in Greece <i>H. Carida and E. Thoulitis</i>	494
• Chemical waste processing facility and landfill in Šabac: Legislative barriers and absence of the local public participation <i>M. Pucar and M. Nenkovic-Riznic</i>	495
• An environmental policy decision making model under direct democracy procedures <i>N. Kyriazis and K. Aravossis</i>	496
• Green Information Technology (IT) Strategy <i>E. Pagourtzi and S. Tsigani</i>	497
• Global microbiological quality criteria for treated wastewater reuse in agricultural irrigation <i>A. Tassoula</i>	498

Environmental education

• Strategies to increase public participation in recycling of solid wastes in Libya: A case study <i>A.O. El-Amrouni, O. Abdelnaser, A.K. Pakir, R. Mahyuddin and A.H. Aziz</i>	501
• Study of Primary and Secondary school Environmental Educators' Perceptions of Sustainable Development and its characteristics <i>A. Papanikolaou, P. Ragkou and A. Karameris</i>	502
• Master and PhD programmes in water and coastal management at the University of Cádiz: an approach to high European educational programmes for managers and researchers. Erasmus Mundus <i>C. Lopez-Valle, E. Garcia-Luque, L. Martin-Diaz, I. Riba and T.A. DelValls</i>	503
• Environmental Technology in the Industrial Engineering Degree Course at the University of Oviedo (Spain) within the framework of the EHEA <i>L. Castrillón, E. Marañón and Y. Fernández-Nava</i>	504
• Automated system for the acquisition, storing and processing of the information about the ecological education in the Republic of Belarus <i>S.P. Kundas and B.A. Tonkonogov</i>	505

• The UNESCO Chair in Environmental Educational in Belarus <i>N. Goncharova</i>	506
--	-----

Tourism and environment

• The “spirit of the place” fragility, Principles for the achievement of the sustainable touristic development in Greek mountainous areas <i>G. Tsilimigkas and A. Gourgjotis</i>	509
• Biometeorological conditions in burned and adjacent unburned areas in Peloponnese, Greece: The case study of Amalias, Prefecture of Ilia <i>A. Kamoutsis, A. Matsoukis, K. Chronopoulos and D. Fotos</i>	510
• Applying Problem Structuring Methodologies to Support Tourism Policies and Planning at the Bahamas <i>A. Rodakopoulos</i>	511
• The effect of wastewater management on the economic development of tourist coastal areas <i>G. Oikonomidis and N. Dermisi</i>	512
• Ecotourism and environment in Greece- A review <i>T. Mimides, K. Pylarinou and K. Mandalaka</i>	513
• Modern technologies and their application in waste elimination in Serbia's urban spa regions <i>M. Nenovic-Riznic and M. Pucar</i>	514
• The role of seafronts in the spatial development and planning of Greek spa towns <i>M. Papageorgiou</i>	515
• The role of ICTs in developing tourism for a sustainable socio economic environment <i>E. Pagourtzi and S. Tsigani</i>	516
• Spa Tourism in the trans-border region of Drama-Kavala-Xanthi-Blagoevgrad-Smolyan: Prospects for common development <i>D. Kourkouridis</i>	517
• Exhibition and Congress Tourism in the Region of Central Macedonia: Prospects for development <i>C. Koloniari and D. Kourkouridis</i>	518
• Developing practical guidelines for an observatory center on a progress of implementing projects on renewables and waste/wastewater <i>S.N. Boemi, S. Kontogianni, A. Karagiannidis and A.M. Papadopoulos</i>	519

Appendix

Authors' index.....	523
Subject index.....	537
Sponsors.....	555