



Project funded by  
EUROPEAN UNION



## Joint Operational Programme Black Sea Basin 2014-2020

Project code BSB27

„Black Sea Basin interdisciplinary cooperation network for sustainable joint monitoring of environmental toxicants migration, improved evaluation of ecological state and human health impact of harmful substances, and public exposure prevention (MONITOX)”

MONITOX International Conference “*Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin*”, Kavala, GREECE, September 8<sup>th</sup>-11<sup>th</sup>, 2020

### CONFERENCE PROGRAM

#### 8<sup>th</sup> September, 2020

17:00-19:00 h International Hellenic University (IHU), Kavala, Greece  
Registration of participants (Part I)

#### 9<sup>th</sup> September, 2020

9:30-10:00 h International Hellenic University (IHU), Kavala, Greece  
Registration of participants (Part II)

10:00-13:00 h

#### SESSION A. IHU, Kavala, Greece

##### PLENARY SESSION AND VIRTUAL PRESENTATIONS

- Convener: Prof. Dr. Chem. Thomas Spanos, Project coordinator, IHU Greece

Opening ceremony -Prof.dr.Thomas Spanos , Project coordinator Partner , IHU, GR  
Prof.dr.habil. Antoaneta Ene, Project Manager, UDJG, RO  
Prof.dr. Petros Samaras, Dean of the School of Geotechnical Science, IHU, GR  
Prof.dr. George Kyzas, Head of Chemistry Department, IHU, GR

##### Invited Lectures

(No) Time	Authors	Title	Code
(1) 10:30- 10:50	Antoaneta Ene, Elena Zubcov, Thomas Spanos, Oleg Bogdevich, Liliana Teodorof	MONITOX international network for monitoring of toxicants in the Black Sea Basin	S1.01
(25) 10:50- 11:10	Thomas Spanos, Nikolaos Mittas, Christina Chatzichristou, Sophia Mitkidou, Konstantinos Dermentzis, Nikolaos Kokkinos, Vilson Topi, Despina Selina Spanou, Antoaneta Ene, Oleg Bogdevich, Elena Zubcov, Liliana Teodorof	Evaluation of groundwater quality through environmetrics. The case of Nestos and Strymon River regions, Northern Greece	S2.01
(47) 11:10- 11:30	Paraskevi Psachoulia, Petros Samaras	Treatment of wastewater and nutrients recovery by microalgae	S3.01

(22) 11:30- 11:45	Sotiria Anastasiou, Georgios Sylaios	Modeling the spatiotemporal distribution of microplastics in Kavala Gulf	S1.22
(29) 11:45- 12:00	George N. Zaimes, Saed Khayat, Fahmi Abu Al-Rub, Ben Sonneveld, Amer Marei, Ahmed Al-Salaymeh, Ioannis Vogiatzakis, Jose Luis Garcia Rodriguez, Walid A. Salameh	Promoting sustainable water management in Palestine and Jordan through innovative education and cooperation between companies and universities	S2.05
(38) 12:00- 12:15	Valasia Iakovoglou, Georgios Giatas <sup>2</sup> , Georgios Pagonis, Anastasia Savvopoulou, Iordanis Kasapidis, Pavlos Kiourtziadis, Christina Chatzichristou, Vilson Topi, Thomas Spanos, George N. Zaimes	Sustainable urban riparian areas - The case study of Drama city	S2.14
(49) 12:15 12:30	Konstantinos Dermentzis, Kokkoni Karakosta, Christina Chatzichristou, Thomas Spanos	Removal of chromium (VI) from galvanic effluents by chemical coagulation and electrocoagulation	S3.03
(44) 12:30- 12:45	Argyrios Sapounidis, Nikolaos Kamidis, Panagiotis Leondarakis, Manos Koutrakis	Dams' impact in hydrology and freshwater ichthyofauna of River Nestos	S2.20
(65) 12:45- 13:00	Stelios Triantafyllidis, Argyrios Sapounidis, Nikolaos Kamidis, Paolo Vezza, Georgios Sylaios, Claudio Comoglio, Emmanouil Koutrakis	Application of a meso-scale approach to estimate ecological flows in Nestos River (N. Greece)	S3.19

13:00-14:30 h Break

14:30-16:00 h

### POSTERS SESSION

No	Authors	Title	Code
23	Anastasia Mirli, Nikolaos Remmas, Spyridon Ntougias, Ifigenia Kagkalou	Identifying anthropogenic pressures exerting Contaminants of Emerging Concern (CECs) in the Nestos Delta lagoons catchment: link to ecosystem services	S1.23
26	Christina Chatzichristou, Thomas Spanos, George Zaimes, Antoaneta Ene, Konstantinos Dermentzis, Vilson Topi, Cristina Despina	Assessment of physical-chemical characteristics of surface water in Nestos river: a review	S2.02
30	Eustratios Kampantais, Nikolaos Mittas, Sophia Mitkidou, Nikolaos Kokkinos, Despoina Babouki, Dafni Ntakaki, Thomas Spanos, Christina Xatzichristou	Chemometric analysis on arsenic contamination of surface water in Kavala Prefecture	S2.06
31	Despina Selina Spanou, Thomas Spanos, Elena Zubcov, Lucia Biletschi	Sampling and analysis of the stock of the <i>Sparus aurata</i> population in the wintering trenches of the Mesolonghi Lagoon, Greece	S2.07
36	George N. Zaimes, Mustafa Tufekcioglu, Daniel C. Diaconu, Ilya Trombitsky, Andranik Ghulijanyan, Mirela Marinescu, Paschalis Koutalakis, Valasia Iakovoglou	Protect-Streams-4-Sea - A new Black Sea programme project	S2.12
37	Dimitros Emmanouloudis, George N. Zaimes*, Olga Papantsiou, Valasia Iakovoglou, Nikolaos G. Zaimes	UNESCO Chair Con-E-Ect: Mapping sustainability for riparian areas and deltas	S2.13
48	Eleni Nanou, Sophia Mitkidou, Nikolaos Kokkinos	Evaluation of chromatographic techniques for the determination of pesticide residues in various products	S3.02
54	Konstantinos Kalaitzis, Valasia Iakovoglou	Climate change and riparian areas - a review	S3.08
55	Pantelis Kalstis, George N. Zaimes, Evangelos Filippidis	Identifying high flood risk areas in Attica Prefecture, Greece, with the use of Geographical Information Systems (GIS) and historical records	S3.09
56	Chysovalantis Kiosses, Alexios Tamparopoulos, Mustafa Tufekcioglu, George N. Zaimes	Using a 7-year timeseries of erosion pin data to evaluate the important factors for stream bank erosion and deposition	S3.10

57	Charisis Kolikopoulos, Nikolaos Tsakiris, Christos Chaitidis, Valasia Iakovoglou	Comparing a lowland, semi-mountainous and mountainous stream of Greece with the use of a Visual Protocol	S3.11
58	Paschalis Koutalakis, Ourania Tzoraki, George N. Zaimis	Keyword analysis of image-based velocimetry methods applied on water resources	S3.12
59	Konstantinos Krikopoulos, Valasia Iakovoglou	Public perception of rural people on riparian areas in Greece	S3.13
60	Daria Lasut-Zmudzka, Stelios-Evaggelos Vlachogeorgos-Nikas, Marinos Nterventlis, George N. Zaimis	Stream discharge measurements to assess the water resources of Agia Barbara Stream of Drama, Greece	S3.14
61	Crhysoula Makridou, Ermioni Patsala, Ioanna Tsiara, Georgios Pagonis, George N. Zaimis	Evaluating the condition of riparian areas of Xanthi Prefecture, Greece, along streams of different orders	S3.15
62	Vasileios D. Pitsinikos, George N. Zaimis, Dimitrios Emmanouloudis	Climate change impacts on the genesis and impacts of flash flood Lowlands, SE Romania	S3.16
63	Michail Neofytidis, Georgios Gkiatas, Anastasia Savvopoulou, George N. Zaimis	Assessing mountainous riparian areas - The case of Kato Nevrokopi, Greece	S3.17
64	Konstantinos Pragkafilis, George N. Zaimis	Using HEC-RAS to evaluate flooding risk of the urban stream of Katerini, Greece	S3.18

## 10<sup>th</sup> September, 2020

10:00-12:30 h

### SESSION B. UDJG, Romania

#### PLENARY SESSION AND VIRTUAL PRESENTATIONS

➤ **Conveners:**

Prof.dr.habil. Antoaneta Ene, Project Manager Leader Partner UDJG, Romania

Dr. chem. Liliana Teodorof, Project coordinator Partner 5 DDNI Tulcea, RO

#### Invited Lectures

No	Authors	Title	Code
16	Antoaneta Ene, Thomas Spanos, Elena Zubcov, Oleg Bogdevich, Liliana Teodorof, Laurentia Ungureanu, Igor Nicoara, Adrian Burada, Cristina Despina, Christina Xatzichristou	Natural radioactivity and risk to population in selected recreational and beach sites from Black and Aegean Seas in Romania and Greece	S1.16
6	Liliana Teodorof, Adrian Burada, Cristina Despina, Daniela Seceleanu-Odor, Cosmin Spiridon, Antoaneta Ene, Elena Zubcov, Thomas Spanos, Oleg Bogdevich	Ecological risk assessment of heavy metal pollution in sediments from Romanian MONITOX network	S1.06
34	Maria Cioroi, Antoaneta Ene	A study on drinking water quality in SE Romania	S2.10
35	Carmen Lidia Chitescu, Antoaneta Ene, Gabriela Bahrim, Elena Enachi	Pharmaceutical residues monitoring in surface water in Romania. Status and concerns	S2.11
19	Ana Pantelica, Constantin Borcia, Maria Cristina Trifu, Andrei Apostol, Larisa Ganea, Doina Stanciu	Radioactivity measurement of Danube River sediments in Romania by gamma-ray spectrometry	S1.19
17	Antoaneta Ene, Liviu Vodarici	Active measurement methods of indoor radon and thoron in selected spaces in Galati town	S1.17
28	Mihaela-Aida Vasile, Antoaneta Ene, Gabriela Bahrim	Microbiological quality and contamination level of water of Black Sea and Northern Aegean Sea	S2.04

16:00-17:30 h

## POSTERS SESSION

No	Authors	Title	Code
7	Cristina Despina, Teodorof Liliana, Daniela Seceleanu-Odor, Adrian Burada, Mihaela Tiganus, Cosmin Spiridon, Marian Tudor, Antoaneta Ene, Christina Chatzichristou	Variations of heavy metals contamination in bottom sediments in the maritime sector of Danube River	S1.07
8	Adrian Burada, Cristina Despina, Daniela Seceleanu-Odor, Mihaela Țigănuș, Cosmin Spiridon, Liliana Teodorof, Antoaneta Ene	Spatial distribution of heavy metal concentrations in the coastal sediments of Romania	S1.08
9	Daniela Seceleanu-Odor, Liliana Teodorof, Adrian Burada, Mihaela Tiganus, Cristina Despina, Cosmin Spiridon, Marian Tudor, Antoaneta Ene	Assessment of longitudinal variation in nutrients load in lower sector of the Danube River to its flow into the Black Sea	S1.09
15	Ira-Adeline Simionov, Dragoș Cristea, Victor Cristea, Antoaneta Ene, Alina Mogodan, Stefan-Mihai Petrea	Prediction of heavy metals in fish from the Black Sea Basin, using machine learning technique	S1.15
18	Antoaneta Ene, Eugenia Pascu, Iulian Racovita, Ionut Marin, Sveta Voda, Alina Apetrei (Tudorache), Oana Istrate, Daniela Dumitrita Padurariu (Sarbu)	Monitoring outdoor radiation doses in areas of the Black Sea and Aegean Sea Basins	S1.18
24	Antoaneta Ene, Sorina-Simona Arbanas (Moraru), Florin Sloata	Review of assessment methodology used for soil and sediments pollution by heavy metals based on single and multiple complex indexes	S1.24
32	Cristiana Radulescu, Claudia Stihi, Ioana Daniela Dulama, Raluca Maria Stirbescu	Occurrence of heavy metals and quality assessment in drinking waters	S2.08
33	Cristiana Radulescu, Claudia Stihi	Spatial analysis of shallow groundwater quality from rural areas	S2.09
45	Florea Luiza	The presence of invasive fish species black bullhead ( <i>Ameiurus melas</i> , Rafinesque 1820) in low Danube River, in ROSCI0012 Măcin branch	S2.21
52	Antoaneta Ene, Florina Cristiana Caprita, Ana Pantelica, Alina Ceoromila	Investigation of major and trace elements in marine algae and filter paper with algae mass additions using SEM-EDX and PIXE	S3.06
53	Steluta Gosav, Antoaneta Ene	ATR-FTIR method applied to identification of plastics	S3.07
66	Luiza Florea, Antoaneta Ene, Victor Cristea, Marian Coadă	Implementation of the water monitoring system at the level of the Prut-Bârlad River Basin, Romania	S3.20
67	Viorel Laurentiu Cartas	A theoretical study of the percolation phenomenon in the ecological framework	S3.21

13:00-15:00 h

## SESSION C. IZ, Chisinau, Moldova

### PLENARY SESSION AND VIRTUAL PRESENTATIONS

➤ **Conveners:**

Prof.dr.hab. Elena Zubcov, Project coordinator Partner 2 IZ-MD

Dr. geol. Oleg Bogdevich, Project coordinator Partner 4 IZ-MD

### INVITED LECTURES

No	Authors	Title	Code
2	Elena Zubcov, Nina Bagrin, Victor Ciornea, Natalia Zubcov, Lucia Biletschi, Nadejda Andreev, Antoaneta Ene, Despina Selina Spanou, Thomas Spanos	The content of metals in fresh and frozen fish imported in Moldova	S1.02
4	Oleg Bogdevich, Antoaneta Ene, Igor Nicoara, Elena Culighin, Oleg Cadocinovic, Elena Nicolau, Marina Grigoras	The analysis of spatial distribution of POPs contaminated sites in Low Danube Region of Republic of Moldova	S1.04

No	Authors	Title	Code
5	Oleg Bogdevich, Antoaneta Ene, Oleg Cadocinico, Victor Jeleapov, Igor Nicoara, Elena Nicolau, Elena Culighin, Marina Grigoraş	The study of modern and obsolete pesticides in groundwater of Republic of Moldova	S1.05
3	Liuba Coretchi, Alexandra Cojocari	Study of drinking water radioactivity in the Republic of Moldova	S1.03

### ORAL PRESENTATIONS

No	Authors	Title	Code
50	Nadejda Andreev, Peter Matuku Mawioo <sup>3</sup> , Elena Zubcov, Gabriela Bahrim, Antoaneta Ene, Aida Mihaela Vasile	An innovative model for sustainable reuse of effluent and sludge of septic tanks via vermifiltration and lactic acid-fermentation	S3.04
43	Nina Bagrin, Lucia Biletschi	Chemical oxygen demand in the Prut river waters at Giurgiulesti port	S2.19
39	Dumitru Bulat, Nina Fulga, Denis Bulat, Elena Zubcov, Lucia Biletschi, Laurentia Ungureanu, Marin Usatii, Oleg Crepis	Pontic shad ( <i>Alosa immaculata</i> Bennett, 1835) from the Dniester River in the current ecological conditions	S2.15
20	Petru Ciorba	Monitoring of oligoelements in water ecosystems	S1.20
41	Lebedenco Liubovi	The response of zooplankton communities to the influence of pollutants	S2.17
40	Maria Negru, Igor Subernetkii, Elena Zubcov	Water quality of the mouth of the Prut and Danube rivers according to microbiological indices in the spring of 2019	S2.16
10	Vladimir Ukrainskiy, Yuriy Denga, Svetlana Kovalyshyna, Anastasia Ivanova, Elena Zubcov, Antoaneta Ene	Organochlorine pesticides in water and bottom sediments of the Dniester River ecosystem	S1.10
21	Anastasia Ivanova	HCH and DDT residues in sediments from rivers in Moldova	S1.21
46	Daria Tumanova, Laurenția Ungureanu, Antoaneta Ene, Liliana Teodorof	Phytoplankton state and water quality in the Lower Prut River	S2.22

15:00-16:00 h

### POSTERS SESSION

No	Authors	Title	Code
27	Elena Zubcov, Dumitru Bulat, Laurentia Ungureanu, Marin Usatii, Denis Bulat, Nadejda Andreev, Lucia Biletschi, Ion Toderas, Antoaneta Ene	Indicator fish species and associations from the river ecosystems of different types	S2.03
42	Olga Jurminskaia, Nina Bagrin, Elena Zubcov	Comparative analysis of acid-neutralizing capacity of rivers in the Republic of Moldova	S2.18
51	Liubovi Lebedenco, Nadejda Andreev, Elena Zubcov	The use of <i>Daphnia magna</i> species in bio-remediation of freshwater ecosystems	S3.05
11	Ana Jeleapov	The dynamics of the Prut river flow (in the limits of the Republic of Moldova)	S1.11
12	Victor Jeleapov	Characteristics of the main aquifer complexes and horizons. Case study - the Republic of Moldova	S1.12
13	Sirodoev Ghennadii	Approaches to creating the information system for the analysis of monitoring results in the framework of the MONITOX program	S1.13
14	Oleg Bogdevich, Antoaneta Ene, Oleg Cadocinico, Elena Culighin	The characteristic of stable isotope composition of the precipitation for the evaluation of water cycle in transboundary region of Romania, Ukraine and Republic of Moldova	S1.14

September, 2020

10:00-11:30 Round table - Project teams

Discussions and conclusions after the international conference