# 8<sup>th</sup> Eastern European **Young Water Professionals** Conference









Organised by:





Wrocław University of Technology

Co-organised by:



Warsaw University of Technology



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Silesian University of Technology

Bialystok University of



Pomeranian University in Slupsk



University Warmia and Mazury



Lodz University of Technology





## WEDNESDAY - 11 MAY 2016

17:00 – 18:00 PRELIMINARY REGISTRATION OF PARTICIPANTS

Main Building, Hevelius Courtyard, Gdansk University of Technology

18:00 – 20:00 WELCOME RECEPTION

Main Building, Hevelius Courtyard, Gdansk University of Technology

#### **WELCOME WORDS**

Chair: Mąkinia J. (POLAND)

Mąkinia J. - Chair Conference Program Committee, Vice-rector for cooperation and innovation, Head of the Department of Sanitary Engineering Gdańsk University of Technology (POLAND)

Kroiss H. - IWA President (AUSTRIA)

Ibrahimllari A. - IWA YWP Steering Committee - Eastern Europe (ALBANIA)

Loderer C. - IWA YWP Steering Committee - Western Europe (AUSTRIA)



#### WELCOME DRINK

Join us for the welcome drink in the Gdanks University of Technology. Here you can meet your friends from the privious conferences or have a chat with new participants. This will be a nice warm up before the conference.

Indicate during the online registration if you want to participate, preliminary reservation is required.

## **THURSDAY - 12 MAY 2016**

7:45 – 8:30 REGISTRATION OF PARTICIPANTS

Main Building, Aula, Gdansk University of Technology (Street G. Narutowicza 11/12, Gdańsk 80-233)

8:30 – 9:00 CONFERENCE OPENING

Chair: Mąkinia J. (POLAND) and Feierabend M. (BELGIUM)

Makinia J. - Chairman Conference Program Committee, Vice-rector for cooperation and innovation, Head of the

Department of Sanitary Engineering Gdańsk University of Technology (POLAND)

Bojanowski A. - Vice-President of Gdansk (POLAND)

Feierabend M. - IWA YWP Program (BELGIUM)

Drewnowski J. - Gdansk University of Technology (POLAND)

9:00 – 9:30 **KEYNOTE SPEECH** 

Kroiss H. - IWA President (AUSTRIA)

9:30 – 10:00 PRESENTATIONS OF SPONSORS

Gold Sponsor - company WTE - presented by Vasyukova E. (GERMANY)
Gold Sponsor - company E&H - presented by Tippe H. (GERMANY)
Sponsor - company Hach - presented by Witkowska E. (POLAND)

10:00 – 10:30 Coffee-break and Posters Session (Courtyard)

ernat ISSOC	tional iation	
	10:30 – 12:00	WASTE WATER (Part 1)
		Chair: Vasyukova E. (GERMANY) and Bakos V. (HUNGARY)
	10:30 - 10:40	EXPERIENCES OF FULL-SCALE DEAMMONIFICATION OF DEWATERING SIDESTREAM FROM THERMOPHILIC ANAEROBIC DIGESTION PROCESS AT BUDAPEST CWWTP Sebestyen E. Budapest Waterworks Ltd., Directorate of Wastewater Treatment, Department of Budapest Central Wastewater Treatment Plant (HUNGARY)
	10:40 - 10:50	PILOT SCALE STUDY ON REJECT WATER TREATMENT IN PARTIAL NITRITATION/ANAMMOX PROCESS AT POZNAN WASTEWATER TREATMENT PLANT Jaroszysnki L., Jaroszynski T. Poznan University of Technology, Department of Civil Engineering (POLAND)
	10:50 - 11:00	SIDE-STREAM DEAMMONIFICATION PROCESS FAILURE – RISK OF WWTP EFFLUENT QUALITY VIOLATION Janiak K., Miodoński M., Muszyński-Huhajło M. Faculty of Environmental Engineering, Wroclaw University of Technology (POLAND)
	11:00 - 11:10	TEMPERATURE AND PH INFLUENCE ON ANAMMOX ACTIVITY: A BATCH TEST STUDY Tomaszewski M., Cema G., Ziembińska-Buczyńska A. The Silesian University of Technology, Environmental Biotechnology Department (POLAND)
	11:10 - 11:20	EFFECT OF SLUDGE AGE ON THE EXERTED CURRENT OF AIR-BREATHING MICROBIAL FUEL CELLS Mateo S., Rodrigo M., Cañizares P., Fernandez-Morales F University of Castilla-La Mancha, ITQUIMA, Chemical Engineering Department (SPAIN)
	11:20 - 11:30	CARBON-DIOXIDE NEUTRAL ELECTRICITY PRODUCTION IN MICROBIAL FUEL CELLS FROM WASTEWATER Loka M., Lóránt B. Budapest University of Technology and Economics, Department of Applied Biotechnology and Food Science (HUNGARY)
	11:30- 11:40	METHODOLOGICAL APPROACH FOR DESIGNING A PILOT PLANT FOR INNOVATIVE WASTEWATER TREATMENT PROCESS BASED ON BIOFILM TECHNOLOGY INVENTION Pelivanoski B., Pirke K., Vasyukova E., Dohmann M., Sekoulov I. WTE Wassertechnik GmbH (GERMANY)
רַ	11:40 - 11:50	POWERSTEP – A REAL PARADIGM SHIFT IN WASTEWATER TREATMENT PROCESSES Loderer C. Kompetenzzentrum Wasser Berlin gGmbH (GERMANY)
Z	11:50 - 12:00	Questions
	12:00 - 13:00	Lunch (Courtyard)
り口	13:00 – 15:00	WATER (Part 1 - DRINKING WATER)
Ę		Chair: Novytska O. (UKRAINE) and Ibrahimllari A. (ALBANIA)
	13:00 – 13:10	PREDICTION OF FAILURE RATE OF WATER PIPES USING K-NEAREST NEIGHBOURS METHOD Kutylowska M. Wroclaw University of Technology Faculty of Environmental Engineering (POLAND)
	13:10 – 13:20	CALCULATION REAL LOSSES FOR THE LARGE RUSSIAN CITY Gromov G. MGSU, MosvodokanalNIIproject (RUSSIA)
	13:20 – 13:30	LONG-TERM HYDRAULIC PERFORMANCE OF LOW TMP DEAD-END ULTRAFILTRATION WITH EXTREMELY SIMPLE OPERATION AND MAINTENANCE Trinh D., Frechen B.  Department of Sanitary and Environmental Engineering of Professor Franz-Bernd Frechen, University of Kassel (GERMANY)
9	13:30 - 13:40	THE EFFECT OF THE MIXING OF WATER FROM DIFFERENT SOURCES IN THE WATER SUPPLY SYSTEM

13:40 – 13:50 AN ANALYSIS OF THE INTENSITY OF GROUND VIBRATIONS CAUSED BY MINING TREMORS IN PLACES WHERE WATER DISTRIBUTION SYSTEMS HAVE FAILED Kilian E.

ON TAP WATER QUALITY - A FULL-SCALE TECHNICAL INVESTIGATION CASE STUDY

Faculty of Civil and Environmental Engineering, Poznan University of Technology (POLAND)

Bylka J., Szuster-Janiaczyk A.

Department of Energy and Environmental Engineering, Institute of Water and Wastewater Engineering Silesian University of Technology (POLAND)

EVALUATING FEASIBILITY OF ULTRAFILTRATION AS A TREATMENT OPTION FOR SURFACE WATERS OF 13:50 - 14:00 MTKVARI AND ARAGVI RIVERS Yatseiko O., Didebulidze K., Giorgadze A., Glurjidze T., Kobaladze A., Lomidze I., Maludze S., Metreveli Z., Patashuri A., Sakevarashvili A., Vakuliuk P., Tarabara V., Agricultural University of Georgia, Tbilisi (GEORGIA) 14:00 - 14:10 COMPARING THE REMOVAL OF NICKEL NI(II) BY ZEOLITE IN AQUEOUS SOLUTIONS WITH ARTIFICIAL NEURAL NETWORK AND MULTIPLE LINEAR REGRESSION Turp S. Bitlis Eren University Faculty of Engineering and Architecture, Environmental Engineering Department (TURKEY) 14:10 - 14:20 THE "PROTECTED COLLOIDS" PHENOMENON AND ITS SIGNIFICANCE FOR WATER TREATMENT Miller P. Politechnika Krakowska (POLAND) LONG TERM DRINKING WATER QUALITY MONITORING IN DRINKING WATER SUPPLY SYSTEMS BY ON-14:20 - 14:30LINE SENSORS Dejus S., Rusenieks R., Nescerecka A., Nazarovs S., Juhna T. Riga Technical University, Dep. Water Engineering and Technology (LATVIA) 14:30 - 14:40 INVESTIGATION AND MODELING OF BULK CHLORINE DECAY KINETIC IN WATER DISTRIBUTION SYSTEM AL Heboos S. Department of Sanitary and Environmental Engineering, Budapest University of Technology and Economics OPTIMAL PRESSURE MEASUREMENT LAYOUT PLANNING IN REAL-LIFE WATER DISTRIBUTION SYSTEMS



16:50 - 17:00 COMPUTER SIMULATION IN PREDICTING BIOCHEMICAL PROCESSES AND ENERGY BALANCE AT

**WWTPS** 

Drewnowski J., Zaborowska E., Hernandez De Vega C.

Gdansk University of Technology, Faculty of Civil and Environmental Engineering (POLAND)

17:00 - 17:10 Questions

#### 17:10 – 18:00 DISCUSSION BETWEEN YOUNG AND SENIOR WATER PROFESSIONALS

Chairs:

Ibrahimllari A. IWA YWP Steering Committee - Eastern Europe (ALBANIA) Loderer C. IWA YWP Steering Committee - Western Europe (AUSTRIA)

#### 18:00 – 18:30 IWA AND POLISH YWP CHAPTER

All Young and Senior water professional from Poland are invited to the discussion about establishment of Polish IWA YWP chapter.

Chair: Drewnowski J. (POLAND)

Mąkinia J. - Chairman Conference Program Committee, Vice-rector for cooperation and innovation, Head of the Department of Sanitary Engineering Gdańsk University of Technology (POLAND)

Drewnowski J. - Gdansk University of Technology (POLAND)

Ibrahimllari A. IWA YWP Steering Committee - Eastern Europe (ALBANIA)

Loderer C. IWA YWP Steering Committee - Western Europe (AUSTRIA)

### 19:00 – 23:00 VISIT AND GALA DINNER IN THE EUROPEAN SOLIDARITY CENTRE (ECS)

The ECS is a state-of-the-art cultural institution that honors our greatest civic success — the victorious Solidarity movement. It is a museum that commemorates the revolution of Solidarity and the fall of communism in Europe, but it is also an educational, research and academic center, an archive, library and multimedia library.

Last but not least, it is a public meeting space for citizens who feel responsible for the development of democracy: a place where solidarity and citizenship are put into practice.

Please register on the website for the Conference Registration. The price 50 Euro includes: bus transfer from Conference Hall to the European Solidarity Centre (the bus will leave at 18:30), visit of the European Solidarity Centre, dinner, drinks, live music and social program.

The address:

Plac Solidarnosci 1, 80-863 Gdansk

+48 58 772 40 00

Please consider that the cost is not included in the registration fee, preliminary registration is required.







# FRIDAY - 13 MAY 2016

8:30 - 10:40	WATER (Part 2 - WATER MANAGEMENT)
	Chair: Bumbac C. (ROMANIA) and Szlachta M. (POLAND)
8:30 - 8:40	THE ASSESSMENT APPROACH FOR THE POTENTIAL OF RIVERS IN THE SOUTH-WEST PART OF LAKE SEVAN AS SPAWNING AREAS FOR SEVAN TROUT Asatryan V., Barseghyan N., Dallakyan M., Vardanyan T. Institute of Hydroecology and Ichthyology of SCZHE of National Academy of Sciences of The Republic of Armenia (ARMENIA)
8:40 - 8:50	MONITORING PESTICIDES IN GROUNDWATER IN SLOVAK REPUBLIC Roško V., Červeňanská P. Water research institute in Bratislava (SLOVAK REPUBLIC)
8:50 – 9:00	DISTRIBUTION OF HEAVY METALS IN THE ENVIRONMENTAL SAMPLES OF THE VOGHJI RIVER BASIN IMPACTED BY MINING ACTIVITIES Gabrielyan A., Shahnazaryan G., Minasyan S. Environmental Impact Monitoring Centre (ARMENIA)
9:00 – 9:10	TAKING INTO ACCOUNT ENERGY LOSSES UNDER CALCULATION THE FREE-SURFACE PROFILE OF UNDULAR JUMP Halych O. Department of Hydropower, Heatpower Engineering and Hydraulic Machines, National University of Water and Environmental Engineering (UKRAINE)
9:10 – 9:20	PROJECTED CHANGES OF DISCHARGE FOR FAR-FUTURE (2071-2100) OVER COASTAL REGION, VIETNAM: A CASE STUDY OF THI VAI CATCHMENT Thanh N., Meon G. Department of Hydrology, Water Management and Water Protection, University of Braunschweig (GERMANY/VIETNAM)
9:20 - 9:30	METAL CONCENTRATION, POLLUTION LOADS AND EFFECTS IN HIGHWAY STORMWATER RUNOFF FOR DRINKING WATER SOURCE Çelebi A., Özdemir S., Canseven N., Uzun H. Department of Environmental Engineering, Sakarya University (TURKEY)
9:30 – 9:40	THE REGIONAL GIS MODELLING FOR GROUNDWATER RESOURCES MONITORING AND MANAGEMENT Davybida L., Tymkiv M. Department of Geotechnogenic Safety and Geoinformatics of Ivano-Frankivsk National Technical University of Oil and Gas (UKRAINE)
9:40 – 9:50	CALCULATION OF INTEGRATED INDICATORS FOR WATER QUALITY ASSESSMENT Stroganova M., Kushnerov A., Ivanova I., Vasyukova E. The Higher School of Technology and Power of St. Petersburg State University of Industrial Technologies and Design (RUSSIA)
9:50 – 10:00	WATER RESOURCES AND HYDROLOGICAL HAZARDS IN NORTH CAUCASUS UNDER THE IMPACT OF RECENT CLIMATE CHANGE Rets E., Kireeva M., Frolova N., Loshakova N. Water Problems Institute, Russian Academy of Sciences (RUSSIA)
10:00 – 10:10	INVESTIGATION OF PHYTOPLANKTON COMMUNITY IN "YEREVANYAN LICH" RESERVOIR AND THE HRAZDAN RIVER IN THE CONDITIONS OF ALGAL BLOOM Mamyan A., Gevorgyan G., Stepanyan L., Hambaryan L. Institute of Hydroecology and Ichthyology of the Scientific Center of Zoology and Hydroecology of NAS RA (ARMENIA)
10:10- 10:30	Questions
10:30 – 11:00	Coffee-break and Posters Session (Courtyard)

11:00 – 12:30	WASTE WATER (Part 3)
	Chair: Wójtowicz P. (POLAND) and Heinrichmeier J. (GERMANY)
11:00 – 11:10	PRODUCT FORMATION DURING MIXED CULTURE FERMENTATION OF DIFFERENT CARBON SOURCES Chwiałkowska J., Jankowska E., Stodolny M., Oleskowicz-Popiel P. Poznan University of Technology (POLAND)
11:10 – 11:20	START-UP STRATEGY FOR NUTRIENT REMOVAL IN MOVING BED SEQUENCING BATCH BIOFILM REACTOR Sytek-Szmeichel K., Podedworna J., Augustyniak P. Faculty of Environmental Engineering, Warsaw University of Technology (POLAND)
11:20 – 11:30	REMOVAL OF Cd(II) AND Zn(II) FROM BINARY AQUEOUS SOLUTIONS ONTO NATURAL ZEOLITE BY THE COLUMN PROCESS Nuić I., Trgo M., Vukojević Medvidović N., Ugrina M. Faculty of Chemistry and Technology, Department of Environmental Engineering, University of Split (CROATIA)
11:30 – 11:40	EVALUATION OF VARIOUS SAMPLES OF ACTIVATED SLUDGE FOR A START-UP OF PHARMACEUTICAL WASTEWATER TREATMENT PLANT Šabić M., Vuković Domanovac M., Meštrović E. Department of Industrial Ecology, Faculty of Chemical Engineering and Technology, University of Zagreb (CROATIA)
11:40 – 11:50	THE ROLE OF BIODEGRADABLE PARTICULATE ORGANIC SUBSTRATES IN ANAEROBIC DIGESTION SYSTEMS Rubio J., Romero L., Garcia Morales J., Drewnowski J., Fernandez-Morales F Department of Environmental Technologies, Faculty of Marine and Environmental Sciences, University of Cadiz (SPAIN)
11:50 – 12:00	ELIMINATION OF SELECTED PHARMACEUTICALS FROM MUNICIPAL WASTEWATER IN VERTICAL FLOW CONSTRUCTED WETLANDS: THE EFFECT OF OPERATION MODE AND VEGETATION Nowrotek M., Sochacki A., Felis E., Miksch K. Silesian University of Technology, Environmental Biotechnology Department (POLAND)
12:00 – 12:10	PERFORMANCE OF PILOT WASTEWATER TREATMENT PLANT BASED ON CONSTRUCTED WETLANDS Lavrnić S., Cristino S., Mancini B., Mancini M. University of Cadiz (SPAIN)
12:10 – 12:20	CAN DNA SEQUENCING SHOW DIFFERENCES BETWEEN MICROBIAL COMMUNITIES IN POLISH AND DANISH WASTEWATER TREATMENT PLANTS? Miłobędzka A., Muszyński A. Faculty of Building Services, Hydro and Environmental Engineering, Department of Biology, Warsaw University of Technology; Department of Molecular Phylogenetics and Evolution, Institute of Botany, University of Warsaw (POLAND)
12:20 – 12:30	Questions
12:30 – 13:30	Lunch (Courtyard)
13:30 – 15:30	WATER (Part 3 - OTHER TOPICS)  Chair: Loderer C. (AUSTRIA) and Lavrnic S. (SERBIA)
13:30 – 13:40	OWNERSHIP AND PERFORMANCE IN WATER SERVICES REVISITED: DOES PRIVATE MANAGEMENT REALLY OUTPERFORM PUBLIC? Suárez-Varela M., De los Ángeles García-Valiñas M., González-Gómez F., Picazo-Tadeo A. Universidad de Valencia (SPAIN)
13:40 – 13:50	30 YEARS OF WATER REUSE IN SPAIN. LOOKING BACK TO TACKLE THE FUTURE Borge Izquierdo A. AEAS (Spanish Association of Water Supply and Sanitation) (SPAIN)
13:50 – 14:00	PHOTOCATALYTIC DEGRADATION OF METHYL ORANGE IN PRESENCE OF TIO2 NANOTUBES SYNTHESIZED BY ANODIC OXIDATION Zaragoza P., Chávez A., Barrera C., Jiménez B. Universidad Nacional Autónoma de México, Instituto de Ingeniería de la UNAM (MEXICO)
14:00 – 14:10	TOXICOLOGICAL APPROACH AND CONTRIBUTIONS TO WATER QUALITY MANAGEMENT

## APPLICATION OF COMMERCIAL ADSORBENTS FOR LANDFILL LEACHATE TREATMENT ON SANITARY 4:10 - 14:20 LANDFILL IN DEVELOPING COUNTRY Djogo M., Mihajlovic I., Brboric M., Pap S., Bezanovic V., Ubavin D. University of Novi Sad, Faculty of Technical Sciences, Department of Environmental Engineering (SERBIA) 14:20 - 14:30SIMULINK BASED MODEL OF THE FLOW CONTROL OF CENTRIFUGAL PUMPS Gevorkov L. Tallinn University of Technology (ESTONIA) Mikhelashvili I. ACT Research (GEORGIA) MINE WATER TREATMENT TECHNOLOGY- APPLICATION OF ELECTRODIALYSIS: LABORATORY AND PILOT 14:30 - 14:40 **EXPERIMENTS** Chromíková J., Thomas J., Malíková P., Heviánkov S. Institute of Clean Technologies for Mining and Utilization of Raw Materials for Energy Use, Faculty of Mining and Geology ,VSB – Technical university of Ostrava (CZECH REPUBLIC) 14:40 - 14:50 REMEDIATION OF URANIUM CONTAMINATED WATER BY ANAEROBIC MICROORGANISMS Kerimbaeva G., Ugurlu A. Department of Environmental Engeneering, University of Hacettepe, Beytepe, Ankara (TURKEY) 14:50 - 15:00ASH FROM GASIFICATION OF POULTRY FEATHERS TO REMOVE CD, CU AND ZN FROM AQUEOUS Kasinski S., Gusiatin Z., Kowal P. Faculty of Environmental Sciences, Department of Environmental Biotechnology, University of Warmia and Mazury in Olsztyn (POLAND) 15:00 - 15:10 EVALUATION OF WATER EFFICIENCY PROGRAMS IN SINGLE FAMILY HOUSEHOLDS IN THE UK- A CASE STUDY Manouseli D., Kayaga S., Kalawsky R. Department of Civil & Building Engineering, Loughborough University (UNITED KINGDOM) MODELLING THE HYDROGEN SULPHIDE REMOVAL IN A NEW ROTATING BED BIOFILM REACTOR 15:10 - 15:20



#### 17:30 – 18:30 GDANSK WATER AND SEWAGE SYSTEM

Chair: Drewnowski J. (POLAND)

Swinarski M. - Gdansk Water and Sewage System (GIWK, POLAND) Gluchowski J. - Saur Neptun Gdansk (SNG, POLAND)

# 18:30 – 19:00 <u>AWARD FOR THE BEST PLATFORM AND POSTER PRESENTATIONS & CLOSING</u> CEREMONY

Chair: Makinia J. (POLAND) and Feierabend M. (BELGIUM)

(The winners can present their papers on 9th Eastern European IWA YWP Conference. The winners will have free registration for the 9th Eastern European IWA YWP Conference)

#### 19:30 – 23:00 **DINNER ON THE OLD SHIP**

Please register on the website for the Conference Registration. The price 35 Euro includes: bus transfer from Conference Hall to the boat (the bus will leave at 19:00), dinner, drinks, live music.

The address: Will be indicated

Please consider that the cost is not included in the registration fee, preliminary registration is required.





# the international

#### **Posters**

10 YEARS OF REAL-TIME CYANOBACTERIA MONITORING IN LAKE LITTOISTENJÄRVI

Laaksonlaita J., Loisa O., Leskinen P.

Turku University of Applied Sciences, Faculty of Technology, Environment and Business Faculty of Technology, Environment and Business (FINLAND)

A NOVEL MODEL APPROACH CONSIDER THE INFLUENCE AND TIME DEPENDENCE OF HIGH NO2 CONCENTRATIONS ON THE N2O ACCUMULATION DURING DENITRIFICATION

Vogel B., Beier M., Rosenwinkel K.

Institute for Sanitary Engineering and Waste Management (ISAH), Leibniz University Hannover (GERMANY)

AERATION IN SIDE STREAM NITRIFICATION - DIFFERENT PROCESS RATE, DIFFERENT AERATION EFFICIENCY Miodoński S., Janiak K., Muszyński-Huhajło M.

Faculty of Environmental Engineering, Wroclaw University of Technology (POLAND)

AEROBIC BIODEGRADATION OF 2,4-DICHLOROPHENOXYACETIC ACID PESTICIDE

Carboneras B., Villaseñor J., Fernandez-Morales F.J.

University of Castilla-La Mancha, ITQUIMA, Chemical Engineering Department (SPAIN)

AEROBIC GRANULAR SLUDGE REACTOR START-UP: FOCUSING ON MICROBIAL DIVERSITY AND GRANULE MORPHOLOGY

Bumbac C., Ionescu I., Tiron O.

Environmental Biotechnologies National Research and Development Institute for Industrial Ecology – ECOIND (ROMANIA)

ALGAE GROWTH CHARACTERISTICS TREATING ANAMMOX EFFLUENT

Jaroszvsnki L.W., Jaroszvnski T.

Poznan University of Technology, Department of Civil Engineerin (POLAND)

ANAMMOX BACTERIA ULTRASTRUCTURE, COMPOSITION, AND BIODIVERSITY CHANGES IN A SBR PILOT – SCALE BIOREACTOR

Banach A., van Niftrik L., Mesman R., Ziembińska-Buczyńska A.

The Silesian University of Technology, Faculty of Power and Environmental Engineering, Environmental Biotechnology Department (POLAND)

APPLICATIONS OF THE WHITE-ROT FUNGAL LACCASES IN DYES DECOLORIZATION PROCESSES

Tiron O., Bumbac C., Cristea I.

National Research and Development Institute for Industrial Ecology - ECOIND (ROMANIA)

ARTIFICIAL FLUCTUATION OF WATER-LEVEL AND ASSOCIATED EFFECT ON WATER QUALITY OF THE HIGH-MOUNTAIN LAKE SEVAN

Hovhannisyan A., Shahnazaryan G.

Environmental Impact Monitoring Center (ARMENIA)

BUFFERING AND MANAGEMENT OF TRAFFIC ORIGIN POLLUTANTS IN THE IMPORTANT LAKES Çelebi A., Özdemir S., Uçku T.

Department of Environmental Engineering, Sakarya University (TURKEY)

COD FRACTIONS AND THE ACTIVITY OF AEROBIC MICROORGANISMS IN THE PROCESS OF HYDRODYNAMIC DISINTEGRATION OF ACTIVATED SLUDGE

Walczak J., Zubrowska-Sudol M., Garlicka A.

Department of Water Supply and Wastewater Treatment, Faculty of Building Services, Hydro and Environmental Engineering, Warsaw University of Technology (POLAND)

CO-DIGESTION OF ANIMAL MANURE AND ALKALINE PRE-TREATED BANANA STALK FOR OPTIMIZED BIOGAS PRODUCTION

Aghayev E., Kendir E., Ugurlu A.

Department of Environmental Engineering, University of Hacettepe, Beytepe, Ankara (TURKEY)

COMMUNITY STRUCTURE OF HYDRAULIC SYSTEMS

Varga R., Hős Cs.

Department of Hydraulic Systems, Budapest University of Technology and Economics, Faculty of Mechanical Engineering (HUNGARY)

COMPARISON OF DESIGNED AND REAL ELECTRIC ENERGY CONSUMPTION BY AN SBR REACTOR Ciepliński J., Rybicki S. M.

Instytut Zaopatrzenia w Wodę i Ochrony Środowiska, Wydział Inżynierii Środowiska, Politechnika Krakowska (POLAND)

CONCEPT OF "RISK MANAGEMENT" AND OPTIMIZATION OF WATER SUPPLY IN TRANSPORT

Strikalenko T., Liapin A., Liapina E.

Odessa National Academy of Food Technology (UKRAINE)



# the international water association

#### **Posters**

COUPLED URBAN AREAS INUNDATION MODEL WITH INTERACTION BETWEEN STORM WATER SYSTEM AND SURFACE FLOW – CASE STUDY OF SEA

LEVEL IMPACT ON SEASIDE AREAS FLOODING

Hakiel J., Szydłowski M., Gąsiorowski D.

Department of Hydraulic Engineering, Faculty of Civil and Environmental Engineering, Gdańsk University of Technology (POLAND)

DECOMPOSITION OF XENOBIOTICS DURING VISIBLE LIGHT IRRADIATION IN THE PRESENCE OF IMMOBILIZED PHOTOSENSITIZERS - KINETICS STUDY

Olak-Kucharczyk M., Foszpańczyk M., Ledakowicz S., Gmurek M.

Lodz University of Technology,

Faculty of Process and Environmental Engineering, Department of Bioprocess Engineering (POLAND)

DEGRADATION OF DEET AND DEP BY OZONATION USING PCBA AS A HYDROXYL RADICALS PROBE COMPOUND Migowska A.

Gdansk University of Technology (POLAND)

DETERMINATION OF COD FRACTIONATION AS A KEY FACTOR FOR APPROPRIATE MODELLING AND MONITORING OF ACTIVATED SLUDGE PROCESSES

Fudala-Książek S., Remiszewska-Skwarek A., Drewnowski J., Luczkiewicz A.

Water and Sewage Management Utility Ltd. in Gdynia (POLAND)

EFFECT OF CURRENT DENSITY ON SUSPENDED SOLID REMOVAL FROM CERAMIC INDUSTRY WASTEWATER FOR ELECTROCOAGULATION WITH IRON ELECTRODES

Emir G., Yavuz Y.

Department of Environmental Engineering, Anadolu University (TURKEY)

EFFECT OF PH ON EFFICIENCY OF SORPTION/DESORPTION OF HEAVY METALS ON NATURAL AND IRON-MODIFIED ZEOLITE

Ugrina M., Vukojević Medvidović N., Trgo M., Nuić I.

University of Split, Faculty of Chemistry and Technology (CROATIA)

EFFECT OF SURFACTANTS ON DENITRIFICATION IN BIOLOGICAL MUNICIPAL WASTEWATER TREATMENT Rossinskyi V., Sablii L.

Department of Ecobiotechnology and Bioenergy, National Technical University of Ukraine «Kyiv Polytechnic Institute» (UKRAINE)

EFFECT OF SOLID RETENTION TIME ON THE EXERTED CURRENT OF AIR-BREATHING MICROBIAL FUEL CELLS Mateo S., Rodrigo M.A., Cañizares P., Fernandez-Morales F.J.

University of Castilla-La Mancha, ITQUIMA, Chemical Engineering Department (SPAIN)

EFFICACY EVALUATION OF BIOSORPTION OF ANTI-EPILEPTIC DRUG – CARBAMAZEPINE ONTO LOW - COST ADSORBENT PREPARED FROM APRICOT STONES

Novaković M., Pap S., Bežanović V., Mihajlović I., Djogo M., Radonić J., Turk-Sekulić M.

Department of Environmental Engineering and Occupational Safety and Health, Faculty of Technical Sciences, University of Novi Sad (SERBIA)

EMISSIVITY OF COMBUSTION OF SEWAGE SLUDGE

Joka M., Poskrobko S.

Department of Civil and Environmental Engineering, Bialystok University of Technology (POLAND)

ESTIMATION OF MAIN ANALYSIS PARAMETERS OF INFILTRATION AREAS

Shevchuk O., Tkachuk O.

National University of Water Management & Nature Resources Use (UKRAINE)

EVALUATION OF INHIBITORY EFFECTS ON NITRITATION PROCESS BY VAPOUR CONDENSATES FROM SEWAGE SLUDGE DRYING

Mikeska M., Beier M., Rosenwinkel K.

Institute for Sanitary Engineering and Waste Management, Leibniz University Hannover (GERMANY)

EVALUATION OF  $\mathrm{NH_4}^+\mathrm{AND}$   $\mathrm{PO_4}^3$  REMOVAL IN WASTEWATER TREATMENT OF A PULP FACTORY CONTAINING CHLOROPHENOLIC CONTAMINANTS WITH OZONATION

Hajiali A., Pirumyan G., Mohd Fadhil Md. Din

Yerevan State University (ARMENIA)

FORMATION OF HUMIC SUBSTANCES - THE CASE STUDY OF THE "PŁASZÓW" WWTP AT KRAKÓW Łomińska D., Anielak A.

Cracow University of Technology, Department of Environmental Engineering (POLAND)

GENOTOXICITY OF SELECTED PHARMACEUTICALS

Zackiewicz J., Kalka J.

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GREYWATER TREATMENT IN A LIVING WALL SYSTEM (LWS)

Aicher A., Burkhardt P., Engel P., Londong J.

Bauhaus Institute for Infrastructure Solutions, chair of Urban Water Management and Sanitation, Bauhaus University Weimar (GERMANY)

IMPACT OF SECTORISATION ON IMPROVEMENT OF EFFICIENCY OF WATER SUPPLY NETWORK

Głuchowski J., Obropta M., Bławat W.

Department Bureau of Studies, Saur Neptun Gdańsk SA (POLAND)

INFLUENCE OF SELECTED CORROSION INHIBITORS ON BIOLOGICAL WASTEWATER TREATMENT

Kowalska K., Felis E.

Environmental Biotechnology Department, Silesian University of Technology (POLAND)

INTERNATIONAL COOPERATION FOR SUSTAINABLE TREATMENT AND MANAGEMENT OF WATERS FROM GOLD MINES Szlachta M., Wójtowicz P., Włodarczyk P., Pasanen A., Backnäs S.

Faculty of Environmental Engineering, Wrocław University of Technology (POLAND)

INTERPLAY OF LABORATORY ANALYSES AND FULL SCALE OPERATION DATA USING THE EXAMPLE OF TROUBLE SHOOTING OF SLUDGE DIGESTION BEHAVIOR

Heinrichmeier J., Shatunova D.

WTE Wassertechnik GmbH (GERMANY)

ISOLATION AND CHARACTERISTICS OF SULFOMETHOXAZOLE RESISTANT BACTERIA ISOLATED FROM CONSTRUCTED WETLAND SYSTEM TREATING PHARMACEUTICAL WASTEWATER

Ziembińska-Buczyńska A., Wyszyńska K., Miksch K.

Environmental Biotechnology Department, The Silesian University of Technology (POLAND)

LEAD (PB) INHIBITION OF ANAMMOX BIOMASS AFTER SHORT-TERM EXPOSURE – BATCH EXPERIMENTS Gutwiński P., Cema G., Surmacz-Górska J.

Silesian University of Technology in Gliwice, Environmental Biotechnology Department (POLAND)

MAGNETIC ACTIVATED CARBON COMPOSITES USED AS FENTON LIKE CATALYST FOR DEGRADING PHARMACEUTICAL AGENTS

Hagiu-Zaleschi L., Secula M., Hagiu-Zaleschi L., Cagnon B., Stan C., Carja G.

Gheorghe Asachi" Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management (ROMANIA)

METHODICAL BASES OF AN ASSESSMENT OF IMPACT OF DREDGING WORKS ON THE WATER AREA Shishkin A., Epifanov A., Epifanova M.

The Higher School of Technology and Power of St. Petersburg State University of Industrial Technologies and Design (RUSSIA)

MODEL BASED EVALUATION OF A FULL-SCALE INDUSTRIAL WASTEWATER TREATMENT PLANT WITH LIMITED MONITORING DATA

Kirim G., Karahan Özgün Ö.

Environmental Solutions R&D Co., ITU Ayazağa Kampüsü (TURKEY)

MODULAR FERTIGATION SYSTEM WITH INTEGRATED AND ADAPTIVE OPERATOR

Ratiu C., Chis I., Ucenic C.

Department of Engineering Design and Industrial Robots, Technical University Cluj-Napoca (ROMANIA)

MONITORING OF BACTERIAL BIOFILM GROWTH BY IMPEDANCE SPECTROSCOPY- PRELIMINARY RESEARCH Wolf M., Traczewska T.

Wroclaw University of Technology, Faculty of Environmental Engineering (POLAND)

NEED TO PROVIDE SAFETY WATER IN RIVER BASIN IN KORCA CITY

Kokojka S.

Korca Join Stock Company (ALBANIA)

ONE VS. TWO-STEP HYDROLYSIS PROCESS OF SLOWLY BIODEGRADABLE ORGANIC COMPOUNDS IN ACTIVATED SLUDGE SYSTEMS – EXPERIMENTAL Investigation and Mathematical Modelling

Drewnowski J.

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OPTIMIZATION OF REACTIVE BLACK 5 DYE REMOVAL BY ELECTROCOAGULATION PROCESS USING RESPONSE SURFACE METHODOLOGY

Mook W., Aroua M., Szlachta M.

Department of Chemical Engineering, University of Malaya / Department of Environmental Engineering, Wrocław University of Technology (POLAND/MALAYSIA)

OXIDATION AND MINERALIZATION BY OZONE BASED AOPS OF SIMULATED TEXTILE WASTEWATER CONTAINING REACTIVE YELLOW145, REACTIVE RED 195 and Reactive Blue 221

Bilińska L., Gmurek M., Ledakowicz S.

Textile Company Biliński (POLAND)



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PILOT INVESTIGATION AS A CASE OF SCIENCE AND INDUSTRY COOPERATION AREA

Szerzyna S., Mołczan M., Wolska M., Adamski W., Wiśniewski J.

Faculty of Environmental Engineering, Worcław University of Technology (POLAND)

PILOT STUDIES OF PHOSPHOROUS RECOVERY FROM WASTEWATER AS AN EXAMPLE OF COLLABORATION BETWEEN INDUSTRIAL AND ACADEMY SECTOR

Murawski M., Dereszewska A., Cytawa S.

'Eko-Celkon' (POLAND)

PRELIMINARY EVALUATION OF NEW GREEN ANTISCALANTS FOR REVERSE OSMOSIS WATER DESALINATION Danilycheva M., Pervov A., Andrianov A.

National Research University "Moscow State University of Civil Engineering" (RUSSIA)

QUALITY OF THE WATER RECEIVED FROM AIR BY MEANS OF CONDITIONERS

Kovalenko O., Kormosh K., Vasyliv O.

Odessa National Academy of Food Technologies (UKRAINE)

RECOVERY OF ANAMMOX BIOMASS AT SHORT HYDRAULIC RETENTION TIME IN A MBR REACTOR

Wisniewski K., Makinia J.

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REMOVAL OF LEAD FROM SIMULATED WASTEWATER USING COMBINATION OF ELECTROCOAGULATION AND ADSORPTION TECHNIQUE

Hussin F., Aroua M., Szlachta M.

Department of Chemical Engineering, University of Malaya / Department of Environmental Engineering, Wrocław University of Technology (POLAND/MALAYSIA)

SLUDGE AGE: HOW TO GET MORE PHOSPHORUS IN WWTP EFFLUENT FOR ITS RECOVERY?

Johanidesová I., Fuka T., Růžičková I., Pečenka M., Vejmelková D., Studničková M., Wanner J.

Department of Water Technology and Environmental Engineering, University of Chemistry and Technology Prague (CZECH REPUBLIC)

SPATIAL ANALYSES OF WATER SUPPLY INTERRUPTIONS - WROCLAW'S CASE STUDY

Siekanowicz-Grochowina K.

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STABLE AND EFFICIENT SIDE-STREAM NITRIFIERS PRODUCTION – KEY ELEMENT FOR EFFECTIVE MAINSTREAM BIOAUGMENTATION

Muszyński-Huhajło M., Janiak K., Miodoński M.

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STUDY OF THE FLOW DYNAMICS OF SURFACE WATER MASSES IN THE AREA OF COASTAL GULF OF GDANSK

Leyk-Wesołowska M., Pyrchla J., Kowalewski M., Kijewska M., Kasyk L., Pyrchla K.

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SURFACE MODIFICATION OF POLYMERIC MEMBRANES FOR MINIMIZING (BIO)COLLOIDAL FOULING IN WATER TREATMENT PROCESSES

Kalashnyk A., Vakuliuk P., Furtat I.

Membrane Research Centre, National University of Kiev-Mohyla Academy (UKRAINE)

SUSTAINABILITY RISK CONTROLLING FOR URBAN WATER SYSTEMS: MULTIDIMENSIONAL RISK IDENTIFICATION AND SYSTEM ANALYSIS

Eller M., Hedrich M.

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SUSTAINABLE DECENTRALIZED MEMBRANE-BASED UF DRINKING WATER TREATMENT PLANT FOR RURAL AREAS IN DEVELOPING COUNTRIES

Trinh D., Frechen B.

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THE ABILITY OF ARTHROBACTER VISCOSUS IN THE REMOVAL OF PB(II) FROM AQUEOUS SOLUTIONS

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Gheorghe Asachi" Technical University of Lasi, Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management (ROMANIA)

THE ANALYSIS OF THE NH4 VIRTUALIZATION SENSORS BY COMPUTER SIMULATION IN THE CONTROL OF AERATION SYSTEMS AT WWTP

Drewnowski J., Banaszek P., Zmarzły M.

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THE APPLICATION OF INTELLIGENT ELECTROMAGNETIC FLOW METERS IN THE PUMP - STATIONS OF « ELBASAN VILLAGE »

Bajraktari E.

Water Supply « Elbasan Village » Albania (ALBANIA)



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THE APPLICATION OF MONOD EQUATION TO DESCRIPTION OF DENITRIFICATION KINETICS IN MOVING BED BIOFILM REACTOR

Kopec L.

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THE COMPARISON OF SLUDGE INVESTIGATION METHODS ACCURACY

Sobczyk M., Pajdak-Stós A., Fiałkowska E., Kocerba-Soroka W., Starzycka J., Fyda J.

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THE COMPUTER MODELING OF FLOWS IN THE EXEMPLARY WATER SUPPLY SYSTEM; THE PROBLEM OF THE OVERSIZED WATER-PIPE NETWORK – CASE STUDY

Orłowska-Szostak M., Wróbel A.

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THE IMPACT OF CONSTRUCTION ACTIVITIES ON WATERSHED WATER QUALITY AND TOTAL LOADING Nurminen H., Leskinen P., Loisa O.

Turku University of Applied Sciences (FINLAND)

THE INFLUENCE OF FOOD AND TEMPERATURE ON THE GROWTH RATE OF LECANE INERMIS ORIGINATING FROM TWO GEOGRAPHICALLY DISTANT POPULATIONS

Starzycka J., Fiałkowska E., Walczyńska A., Kocerba-Soroka W., Sobczyk M., Fyda J., Pajdak-Stós A.

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THE INFLUENCE OF SELECTED ANTIBIOTICS ON THE WASTEWATER TREATMENT PROCESS AND THE DEVELOPMENT OF ANTIBIOTIC RESISTANT BACTERIA

Jendrzejewska N., Karwowska E.

Faculty of Building Services, Hydro and Environmental Engineering, Warsaw University of Technology (POLAND)

THE JOINT INFLUENCE OF METEOROLOGICAL FACTORS AND PRESSURE CONTROL ON THE WATER-PIPE NETWORK FAILURE RATE ON THE EXAMPLE OF THE EXPERIENCE OF PWIK O.CZ. S.A. IN CZESTOCHOWA Herczyk T., Mrowiec M., Kuliński E.

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THE SELECTION CRITERIA OF THE PILOT URBAN CATCHMENT FOR RESEARCH OF HYDROGEOLOGICAL PARAMETERS Nowakowska M., Wartalska K., Kaźmierczak B.

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THERMODYNAMIC STUDY OF PHOSPHATE ADSORPTION ONTO IRON OXY-HYDROXIDES

Kalaitzidoy K., Zouboulis A., Mitrakas M.

Department of Chemical Engineering, Aristotle University of Thessaloniki (GREECE)

TREATMENT OF REJECT WATER FROM ANAEROBIC DIGESTION OF SLUDGE BY THE NITRIFICATION-DENITRIFICATION REACTOR SBR.

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ULTRAFILTRATION MEMBRANES FORMED FROM POLYANILINE, IONIC LIQUID AND CELLULOSE - TRANSPORT PROPERTIES AND ENERGY EFFICIENCY

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USING ON-LINE MEASUREMENT BY ELECTRONIC NOSE AND COMPUTER SIMULATIONS FOR REAL-TIME CONTROL AT WAYTE

Guz Ł., Drewnowski J., Łagód G., Piotrowicz A., Suchorab Z., Jaromin-Gleń K.

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WATER NETWORKS' IMPROVEMENT OF SETTLEMENTS IN UKRAINE

Novytska O., Tkachuk O.

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WATER SUPPLY IN THE REPUBLIC OF SERBIA – STATE AND PERSPECTIVES

Langović M.

Faculty of Geography, University of Belgrade (SERBIA)

WILLINGNESS TO PAY FOR IMPROVEMENTS IN WATER SERVICES IN TERENGGANU, MALAYSIA: FROM DOMESTIC CONSUMERS' PERSPECTIVE

Mahirah K., Alias R., Azlina A., Zuraini A.

School of Social and Economic Development, Universiti Malaysia Terengganu (MALAYSIA)

WIND GENERATION POWERED PUMPED-STORAGE HYDROELECTRICITY AS A FULLY DISPATCHABLE POWER UNIT - CASE STUDY POMERANIA AND WEST POMERANIA PROVINCES - POLAND

Jurasz J., . Mikulik J., Piasecki A.

AGH University, Faculty of Management, Department of Engineering Management (POLAND)



## **SATURDAY - 14 MAY 2016**

#### 9:00 - 12:00 **WORKSHOP E&H**

E&H will present their latest know-how in the water/waste water industry, detaild information will follow. Free participation, preliminary registration is needed.



#### 14:00 - 18:00 <u>CULTURAL EXCURSION</u> - Welcome to Gdansk

Gdansk is a city with fascinating past, covered in beautiful buildings and set beside the Baltic Sea. Lets discover Gdanks together!

Guided tour of the Old Town. On the route of the walk: Golden Gate, Town Hall, Neptune fountain, Artus Court, gothic St. Mary's Church. Walk to "Żuraw" on the Motława River – the biggest port crane of medieval Europe. More information will be indicated soon.

Indicate during the online registration if you want to participate, preliminary reservation is required. Costs are not included in the registration fee.



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