

PROGRAMME

Central European Conference ECOpole'16

WEDNESDAY, 5th October 2016

17.00 - RECEPTION

18.00-22.00 SUPPER

19.00 Maria and Witold WACŁAWEK (*University of Opole, Opole, PL*): Welcoming Conference participants

19.05-20.20 Tadeusz Pabisiak guitar recital

THURSDAY, 6th October 2016

7.00-8.50 BREAKFAST

9.00-13.00 SECTION SI

9.00-13.00 Posters of POSTER SESSION P1 are available for examination and discussion

9.00-11.15 PLENARY SESSION S1

9.00-9.05 Maria and Witold WACŁAWEK (*University of Opole, Opole, PL*): Opening of the Conference

9.05-9.50 Miroslav ČERNÍK (*Faculty of Mechatronics, Informatics and Interdisciplinary Studies & the Institute for Nanomaterials, Advanced Technologies and Innovation, Technical University of Liberec, Liberec, CZ*): NANOFIBERS BASED ON NATURAL PRODUCTS AND THEIR APPLICATION FOR REMOVAL OF CONTAMINANTS

9.50-10.35 Manfred SAGER (*Austrian Agency for Health and Food Safety, Vienna, AT*): PLATINUM, PALLADIUM AND OTHER METALS IN URBAN DUST SAMPLES

10.35-10.55 T. OLSZOWSKI¹, Z. ZIEMBIK² (1) *Chair of Thermal Engineering and Industrial Facilities, Opole University of Technology, Opole, PL*; 2) *Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): AN ALTERNATIVE CONCEPTION OF PM₁₀ BELOW-CLOUD SCAVENGING PARAMETERIZATION

10.55-11.15 T. TÕNUTARE¹, M. JÜRGENS¹, L. SZAJDAK², L. SOOBIK³, K. KREBSTEIN¹, T. KAART¹, R. KÕLLI¹ (1) *Estonian University of Life Sciences, Tartu, EE* 2) *Institute for Agricultural and Forest Environment, Polish Academy of Sciences, Poznan, PL*; 3) *University of Tartu, College of Foreign Languages and Cultures, Department of English Studies, Tartu, EE*): ABOUT TESTING AND REGULATION OF ARABLE SOILS' PHOSPHORUS STATUS

11.20 Conference photo

11.30-11.50 COFFEE AND TEA BREAK

11.30-13.00 POSTER SESSION P1

A. Adamiec, L. Przywara, K. Grübel (*Faculty of Materials, Civil and Environmental Engineering, University of Bielsko-Biala, Bielsko-Biala, PL*): COD FRACTIONS CHANGES OF MUNICIPAL SEWAGE DURING ANAEROBIC TREATMENT

M. Černík¹, J. Nosek¹, S. Waclawek¹, D.W. Elliott², J. Filip³, R.Zbořil³ (1) *Centre for Nanomaterials, Advanced Technologies and Innovations, Technical University of Liberec, Liberec, CZ*; 2) *Geosyntec Consultants, Ewing, NJ, USA*; 3) *Regional Centre of Advanced Technologies and Materials, Palacký University in Olomouc, Olomouc, CZ*): ELECTRIC-FIELD ENHANCED MIGRATION AND REACTIVITY OF nZVI: IMPLICATIONS FOR GROUNDWATER TREATMENT TECHNOLOGIES

A. Chrzan, M. Marko-Worłowska, G. Wątor, T. Łaciak, R. Kozik (*Institute of Biology, Pedagogical University of Krakow, Krakow, PL*): SUITABILITY OF PINE BARK AND TOPSOIL FOR EVALUATION OF CHOSEN POLLUTIONS CAUSED BY INDUSTRY AND TRANSPORT

R. Cichowicz¹, G. Wielgoński² (1) *Faculty of Civil and Environmental Engineering and Architecture, Lodz University of Technology, Łódź, PL*; 2) *Faculty of Process and Environmental Engineering, Lodz University of Technology, Łódź, PL*): ANALYSIS OF THE CONCENTRATION LEVELS OF CARBON DIOXIDE ON AN UNIVERSITY CAMPUS

M. Dudziak (*Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL*): INFLUENCE OF THE AQUATIC ENVIRONMENT CONDITIONS ON THE DECOMPOSITION OF BISPHENOL A

L. Dąbrowska, A. Ogrodnik (*Department of Chemistry, Water and Wastewater Technology, Faculty of Infrastructure and Environmental, Czestochowa University of Technology, Czestochowa, PL*): THM PRECURSORS REMOVAL FROM SURFACE WATER IN THE COAGULATION PROCESS

M. Dłużewski¹, R. Kozłowski², A. Szczucińska³ (1) *Department of Geomorphology, Faculty of Geography and Regional Studies, University of Warsaw, Warszawa, PL*; 2) *Department of Environmental Protection and Modelling, Jan Kochanowski University in Kielce, Kielce, PL*; 3) *Department of Hydrometry, Faculty of Geography and Geological Sciences, Adam Mickiewicz University in Poznań, Poznań, PL*): POTENTIAL USE OF ALLUVIAL GROUNDWATER FOR IRRIGATION IN ARID ZONES - THE EXAMPLE OF MHAMID OASIS (S MOROCCO)

S. Hoffman (*Department of Chemistry, Water and Wastewater Technology, Faculty of Infrastructure and Environment, Czestochowa University of Technology, Czestochowa, PL*): CHANGES OF THE LEVEL OF AIR POLLUTANTS CONCENTRATION IN SILESIA VOIVODESHIP

D. Janecki¹, A. Gąszczak², G. Bartelmus² (1) *Department of Process Engineering, University of Opole, Opole, PL*; 2) *Institute of Chemical Engineering, Polish Academy of Sciences, Gliwice, PL*): MODELLING OF THE PROCESS OF PURIFICATION OF AIR FROM VOLATILE ORGANIC COMPOUNDS (VOCs) IN A TRICKLE-BED BIOREACTOR (TBB)

R. Jasiński (*Faculty of Infrastructure and Environment, Czestochowa University of Technology, Czestochowa, PL*): MODELLING OF DAILY PROFILES OF SO₂ CONCENTRATION USING ASSOCIATION RULES

M. A. Józwiak¹, M. Józwiak² (1) *Ist Academic High School in Kielce, PL*, 2) *The Jan Kochanowski University in Kielce, Department of Environment Protection and Modeling, PL*): POSSIBILITIES OF LICHEN USING IN ENVIRONMENT BIOINDICATION

M. Józwiak, R. Kozłowski (*Department of Environment Protection and Modeling, The Jan Kochanowski University in Kielce, PL*): DEPOSITION OF HEAVY METALS IN THE CENTRAL PART OF ŚWIĘTOKRZYSKIE MOUNTAINS

B. Karwowska (*Faculty of Infrastructure and Environment, Czestochowa University of Technology, Czestochowa, PL*): CHANGES IN HEAVY METALS CHEMICAL FORMS IN SEWAGE SLUDGE AFTER CITRIC ACID EXTRACTION

K. Kipigroch (*Faculty of Infrastructure and Environment, Czestochowa University of Technology, Czestochowa, PL*): SORPTION OF NICKEL(II) AND LEAD(II) IONS WITH THE USE OF ALGAE

T. Kuzmina¹, Y. Danko², G. Łagód³, V. Pliashchnik⁴, M. Iwanek³, R. Babko⁵ (1) *Sumy State University, Sumy, UA*; 2) *Sumy Makarenko State Pedagogical University, Sumy, UA*; 3) *Lublin University of Technology, Lublin, PL*; 4) *Uzhhorod National University, Uzhhorod, UA*; 5) *Schmalhausen Institute of Zoology NAS of Ukraine, Kiev, UA*): COMPARATIVE ANALYSIS OF CILIATE ASSEMBLAGES IN ACTIVATED SLUDGE OF BARDENPHO AND CLASSIC AEROTANK TECHNOLOGY

Ż. Kłostowska^{1,2}, G. Kusza³, D. Zarzeczańska¹, A. Bielicka-Giełdoń¹, L. Łęczyński², T. Ossowski¹, W. Dominika⁴ (1) *Department of Analytical Chemistry, University of Gdańsk, Gdańsk, PL*; 2) *Department of Oceanography and Geography, University of Gdańsk, Gdynia, PL*; 3) *Department of Land Protection, University of Opole, Opole, PL*; 4) *National Marine Fisheries Research Institute, Gdynia, PL*): FREQUENCY DEPENDENCE OF MAGNETIC SUSCEPTIBILITY AS A QUALITATIVE PARAMETER IN THE ASSESSMENT OF THE SURFACE MARINE AND HARBOR SEDIMENTS POLLUTION (SOUTHERN BALTIC)

A. Musz-Pomorska, B. Kowalska, M. K. Widomski (*Lublin University of Technology, Lublin, PL*): COMPARATIVE ANALYSIS OF ORGANIC COMPOUNDS MIGRATING FROM HDPE PIPES TO WATER

K. Odrzywolska, L. Przywara, M. Kuglarz, K. Grübel (*Faculty of Materials, Civil and Environmental Engineering, University of Bielsko-Biala, Bielsko-Biala, PL*): IMPACT OF HYBRID DISINTEGRATION ON THERMOPHILIC DIGESTION OF ACTIVATED SLUDGE

T. Olszowski (*Chair of Thermal Engineering and Industrial Facilities, Opole University of Technology, Opole, PL*): THE INFLUENCE OF PRECIPITATION STRUCTURE ON THE PM₁₀ REMOVAL EFFICIENCY

T. Olszowski (*Chair of Thermal Engineering and Industrial Facilities, Opole University of Technology, Opole, PL*): STATISTICAL APPROACH IN THE ASSESSMENT OF PM₁₀ ENRICHMENT OF CLOSE-TO-GROUND ATMOSPHERE

M. Orłowska-Szostak (*Faculty of Civil and Environmental Engineering, Gdansk University of Technology, Gdańsk, PL*): THE USE OF THE COMPUTER MODELLING OF FLOWS IN WATER SUPPLY SYSTEM FOR THE IMPROVEMENT OF WORK OF EXEMPLARY SYSTEM FROM HYDRAULIC AND WATER QUALITY POINT OF VIEW

V. Pliashchnik¹, G. Łagód², M. K. Widomski², T. Kuzmina³ (1) *Uzhhorod National University, Uzhhorod, UA*; 2) *Lublin University of Technology, Lublin, PL*; 3) *Sumy State University, Sumy, UA*): THE DIVERSITY OF CILIATED PROTOZOA IN THE DEVICES OF THE WASTEWATER TREATMENT PLANT IN UZHGOROD

M. Rajfur (*Independent Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): ASSESSMENT OF THE POSSIBILITY TO USE DECIDUOUS TREES BARK AS BIOMONITOR OF HEAVY METALS AIR POLLUTION

A. Rosińska, K. Rakocz (*The Department of Chemistry, Water and Sewage Technology, The Faculty of Engineering and Environment, Czestochowa University of Technology, Czestochowa, PL*): SHARE OF CARBOXYLIC ACIDS IN BIODEGRADABLE AND ASSIMILABLE ORGANIC MATTER DURING DISINFECTION OF WATER

A. Salata, L. Dąbek, Ł. Bąk (*Faculty of Environmental, Geomatic and Energy Engineering, Kielce University of Technology, Kielce, PL*): THE EVALUATION OF HEAVY METAL POLLUTION IN SEDIMENTS OF STORMWATER SYSTEM BY USING GEOACCUMULATION INDEX AND ENRICHMENT FACTOR

A. Salata, R. Stoińska (*Faculty of Environmental, Geomatic and Energy Engineering, Kielce University of Technology, Kielce, PL*): DYNAMICS OF CHANGES IN MICROBIOLOGICAL COMPOSITION OF SEDIMENTS BEING STORAGE

E. Sparczyńska (*Czestochowa University of Technology, Czestochowa, PL*): PHOSPHORUS REMOVAL FROM REJECT WATER WITH COAGULANTS CONTAINING IRON SALTS

E. Słodczyk, D. Suszanowicz (*Chair of Process Engineering, University of Opole, Opole, PL*): OPTIMIZATION OF CARBON DIOXIDE CONCENTRATION IN THE DIDACTIC ROOMS BY THE REGULATION OF VENTILATION SYSTEM

I. Zawieja (*Faculty of Infrastructure and Environment, Czestochowa University of Technology, Czestochowa, PL*): THE IMPACT OF EXCESS SLUDGE DISINTEGRATION ON THE CHANGES OF TOTAL ORGANIC CARBON (TOC) VALUES

13.00-14.30 LUNCH

13.30-19.00 Posters of POSTER SESSION P2 are available for examination and discussion

14.30-19.00 SECTION SII

14.30-16.20 PLENARY SESSION S2

14.30-15.15 **Andrzej G. CHMIELEWSKI** (*Institute of Nuclear Chemistry and Technology, Warszawa, PL*): „ENERGIEWENDE” - AN EXAMPLE FOR THE OTHER COUNTRIES OR WAGNER’S LEGEND OF 21ST CENTURY?

15.15-15.35 **A. ZAREMBA¹, T. RODZIEWICZ², M. WACŁAWEK²** (*1) Czestochowa University of Technology, Czestochowa, PL; 2) University of Opole, Opole, PL*): PHOTOVOLTAICS: SOLAR ENERGY RESOURCES AND THE POSSIBILITY OF THEIR USE

15.35-16.20 **Zbigniew A. SZYDŁO** (*Highgate School, London, UK*): FARADAY (1791-1867) THE EDUCATOR

16.20-16.50 COFFEE AND TEA BREAK

16.30-18.00 POSTER SESSION P2

G. Jarosław, Ł. Bąk, A. Salata (*Kielce University of Technology, Kielce, PL*): CHARACTERISTICS OF PHYSICOCHEMICAL PROPERTIES OF THE BOTTOM SEDIMENTS REJOW RESERVOIR

A. Kalinichenko^{1,2}, V. Havrysh³, V. Perebyinis⁴ (1) *University of Opole, Opole, PL;* 2) *Poltava State Agrarian Academy, Poltava, UA;* 3) *Mykolayiv National Agrarian University, Mykolayiv, UA;* 4) *Poltava University of Economics and Trade, Poltava, UA*): EVALUATION OF BIOGAS PRODUCTION AND USAGE POTENTIAL

B. Kaźmierczak¹, K. Wartalska¹, M. Wdowikowski², O. Ledvinka³ (1) *Wroclaw University of Science and Technology, Wroclaw, PL;* 2) *Institute of Meteorology and Water Management National Research Institute, Wroclaw, PL;* 3) *Czech Hydrometeorological Institute, Praha, CZ*): THE EFFECT OF CLIMATE CHANGE ON URBAN DRAINAGE SYSTEMS

S. Kordana, K. Pochwat, D. Słyś (*Department of Infrastructure and Sustainable Development, Faculty of Civil and Environmental Engineering and Architecture, Rzeszow University of Technology, Rzeszów, PL*): RATIONALITY ASSESSMENT OF DRAIN WATER HEAT RECOVERY SYSTEM APPLICATION USING SWOT ANALYSIS

G. Kosior¹, A. Dolhańczuk-Śródka², Z. Ziembik² (1) *Wroclaw University, PL,* 2) *University of Opole, PL*): THE USE OF MOSSES PLEUROZIUM SCHREBERI (BRID.) MITT. AS BIOINDICATORS OF RADIONUCLIDE CONTAMINATION IN INDUSTRIAL AREAS OF UPPER SILESIA

Ł. Kręcidło, T. Krzyśko-Łupicka, M. Kręcidło (*Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): INFLUENCE OF DISINFECTANT SOLUTION CONTAINING PERACETIC ACID ON BIOMASS GROWTH OF A TRICHODERMA VIRIDAE ENVIRONMENTAL STRAIN

J. Latosińska (*Kielce University of Technology, Kielce, PL*): THE SYNTHESIS OF ZEOLITES FROM SEWAGE SLUDGE ASH

M. Malinowski, K. Młodnicki, M. Łukasiewicz (*Institute of Agricultural Engineering and Computer Science, Department of Technical Infrastructure and Eco-power engineering, University of Agriculture in Krakow, Kraków, PL*): IMPACT OF SELECTED SOCIO-ECONOMIC FACTORS ON MORPHOLOGICAL COMPOSITION AND ACCUMULATION OF SEGREGATED WASTE IN RURAL AREAS

T. Mederski, A. Gawdzik (*Independent Department of Process Engineering, University of Opole, PL*): WASTE RECYCLING OF CAR WINDOW GLASSES AND CONSTRUCTION WINDOW GLASSES WITH PVB

T. Mederski¹, M. Rybotycki¹, A. Dolhańczuk-Śródka² (1) *Independent Department of Process Engineering, University of Opole, PL;* 2) *Independent Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): ENERGY MANAGEMENT IN COMPANY AS AN EFFECTIVE TOOL FOR ENVIRONMENTAL PROTECTION - PRACTICAL EXPERIENCE

B.B. Nyakuma¹, A. Magdziarz², S. Werle³, (1) *Centre of Hydrogen Energy, Institute of Future Energy, Universiti Teknologi Malaysia, MY;* 2) *Faculty of Metals Engineering and Industrial Computer Science, AGH University of Science and Technology, Kraków, PL;* 3) *Silesian University of Technology, Gliwice, PL*): PHYSICO-CHEMICAL, THERMAL AND KINETIC CHARACTERISTIC OF SEWAGE SLUDGE AS A FUEL

B.B. Nyakuma¹, A. Magdziarz², S. Werle³, (1) *Centre of Hydrogen Energy, Institute of Future Energy, Universiti Teknologi Malaysia, MY;* 2) *Faculty of Metals Engineering and Industrial Computer Science, AGH University of Science and Technology, Kraków, PL;* 3) *Silesian University of Technology, Gliwice, PL*): CURRENT STATUS, CHALLENGES AND PROSPECTS OF SEWAGE SLUDGE VALORIZATION FOR CLEAN ENERGY GENERATION IN POLAND

A. Ociepa-Kubicka¹, T. Nitkiewicz¹, B. Karamon² (1) *Faculty of Management, Czestochowa University of Technology, Czestochowa, PL;* 2) *LESAFFRE POLSKA S.A.,*

Wołczyn, PL): ECOLOGICAL ACTIONS OF COMPANY IN THE RANGE OF ENERGY GENERATION FROM BIOMASS

K.B. Pochwat, D. Słyś (*Department of Infrastructure and Sustainable Development, Faculty of Civil and Environmental Engineering and Architecture, Rzeszów University of Technology, Rzeszów, PL*): VERIFICATION OF THEORETICAL MODEL OF FUNCTIONING OF INSTALLATION OF RETENTION FACILITIES USING CFD SOFTWARE

P. Ratuszny (*Independent Department of Process Engineering, University of Opole, PL*): CHANGE IN DENSITY OF PARTICULATE BEDS UNDER THE ACTION OF PRESSURE

P. Ratuszny, S. Gajda (*Independent Department of Process Engineering, University of Opole, PL*): USING GRANULAR BEDS IN STORING THERMAL ENERGY

T. Rodziewicz¹, A. Zaremba², M. Waclawek¹ (1) *University of Opole, Opole, PL*; 2) *Czestochowa University of Technology, Częstochowa, PL*): THE EFFECT OF SPECTRUM DISTRIBUTION ON THE PERFORMANCE OF PV MODULES

T. Rodziewicz¹, A. Zaremba², M. Waclawek¹ (1) *University of Opole, Opole, PL*; 2) *Czestochowa University of Technology, Częstochowa, PL*): MODELLING OF MODULE MADE OF SPHERICAL CELLS WORK. IMPACT OF POSITION

A. Stec, D. Słyś (*Department of Infrastructure and Sustainable Development, The Faculty of Civil, Environmental Engineering and Architecture, Rzeszow University of Technology, Rzeszów, PL*): THE ANALYSIS OF THE POSSIBILITY OF USE RAINWATER HARVESTING SYSTEM WITHIN CAMPUS AREA IN POLAND

D. Słyś¹, A. Stec¹, J. Dziopak¹, M. Zelenáková², J. Hypiak¹ (1) *Department of Infrastructure and Sustainable Development, The Faculty of Civil, Environmental Engineering and Architecture, Rzeszow University of Technology, Rzeszów, PL*; 2) *Technical University of Košice, Faculty of Civil Engineering, Institute of Environmental Engineering, Košice, SK*): HYDRODYNAMIC ANALYSIS OF MODERNIZATION VARIANTS OF URBAN SEWAGE SYSTEM

S. Tarnawa¹, J. Makuchowska-Fryc² (1) *Municipal Department in Polanica-Zdrój, Polanica-Zdrój, PL*; 2) *Independent Department of Process Engineering, University of Opole, Opole, PL*): MAINTENANCE OF THE FORMER MUNICIPAL LANDFILL IN POLANICA-ZDRÓJ

R. Wardzyńska, B. Załęska-Chróst (*Department of Chemistry, Faculty of Environmental Management and Agriculture, University of Warmia and Mazury, Olsztyn, PL*): EXCESS AND DEFICIENCY OF THE COAGULANT IN THE COAGULATION PROCESS - COMPUTER SIMULATION

S. Werle¹, Ł. Ziółkowski¹, M. Pogrzeba², J. Krzyżak², I. Ratman-Kłosińska², D. Burnete³ (1) *Institute of Thermal Technology, Silesian University of Technology, Gliwice, PL*; 2) *Institute for Ecology of Industrial Areas, Silesian University of Technology, Katowice, PL*; 3) *Institutul de Studii si Proiectări Energetice, Bucharest, RO*): PHYSICO-CHEMICAL PROPERTIES OF THE SOLID AND LIQUID WASTE PRODUCTS FROM THE HEAVY METAL CONTAMINATED ENERGY CROPS GASIFICATION PROCESS

S. Wierzba, M. Majnusz (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): THE USE OF AGRI-FOOD INDUSTRY WASTE FOR THE PRODUCTION OF *Yarrowia lipolytica* YEAST BIOMASS

S. Wierzba, T. Korbecki (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): BIOSORPTION OF CR (III) FROM AQUEOUS SOLUTION BY ACTIVATED SLUDGE

J. Wyczarska-Kokot (*Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL*): ANALYSIS OF THE POSSIBILITY OF WASHINGS DISCHARGE FROM THE SWIMMING POOL TO THE RIVER

B. Załęska-Chróst, R. Wardzyńska (*Department of Chemistry, Faculty of Environmental Management and Agriculture University of Warmia and Mazury, Olsztyn, PL*): SLUDGE AGGREGATES OBTAINED DURING ELECTROCOAGULATION IN A RECIRCULATION SYSTEM

18.00-19.30 Excursion - Geothermal heating system in Aquapark Zakopane

20.00 CONFERENCE DINNER

FRIDAY, 7th October 2016

6.30-7.50 BREAKFAST

8.00-13.00 Posters of POSTER SESSION P3 are available for examination and discussion

8.00-13.00 SECTION SIII

8.00-11.00 PLENARY SESSION S3

8.00-8.45 Rajender S. VARMA^{1,2} (*1) Cincinnati, Ohio, USA and 2) Regional Centre of Advanced Technologies and Materials, Palacky University, Olomouc, CZ*): GREENER ROUTES TO ORGANICS AND NANOMATERIALS: SUSTAINABLE APPLICATIONS OF MAGNETIC NANOCATALYSTS AND MODIFIED GRAPHITIC CARBON NITRIDES IN CATALYSIS AND ENVIRONMENTAL REMEDIATION

8.45-9.30 Ágnes BÁLINT (*Institute of Environmental Engineering, Óbuda University, Budapest, HU*): HEAVY METAL POLLUTION CAUSED BY HEAVY INDUSTRY IN HUNGARY

9.40-10.00 K. KAMIŃSKI¹, W. KAMIŃSKI¹, T. MIZERSKI² (*1) Faculty of Process and Environmental Engineering, Lodz University of Technology Łódź, PL; 2) Zakład Wodociągów i Kanalizacji Sp. z o.o. [Ltd.], Łódź, PL*): APPLICATION OF ARTIFICIAL NEURAL NETWORKS TO THE ASSESSMENT OF TECHNICAL CONDITION OF WATER SUPPLY SYSTEMS

10.00-10.20 M. KUTYŁOWSKA (*Faculty of Environmental Engineering, Wrocław University of Science and Technology, Wrocław, PL*): PREDICTION OF WATER CONDUITS FAILURE RATE - COMPARISON OF RBF-SVM AND RBF-ANN METHODS

10.20-10.40 A. KWIECIŃSKA, S. STELMACH, JAN FIGA, M. CHRUBASIK (*Institute for Chemical Processing of Coal, Zabrze, PL*): COKE OVEN WASTEWATER - FORMATION, TREATMENT AND UTILIZATION METHODS - A REVIEW

10.40-11.00 M. JANAS, A. ZAWADZKA, G. ROGACKI (*Faculty of Process and Environmental Engineering, Lodz University of Technology, Łódź, PL*): SUPERCRITICAL WATER HEAT EXCHANGE AS A CRUCIAL ELEMENT OF THE THERMOHYDROLYSIS PROCESS

11.00-11.30 COFFEE AND TEA BREAK

11.30-13.00 POSTER SESSION P3

E. Adamek, W. Baran, M. Cholewiński, B. Pelczar, I. Lipska (*Medical University of Silesia in Katowice, Katowice, PL*): THE STUDY ON THE EFFECT OF PHOTOCATALYTIC PROCESS INHIBITORS ON DEGRADATION OF THE SELECTED SULFA-DRUGS

E. Adamek, W. Baran, R. Adamczyk, A. Szymkiewicz, J. Wilk, I. Lipska (*Medical University of Silesia in Katowice, Katowice, PL*): THE USE OF PLATELETS TESTS TO ASSESS THE EFFECT OF ANTI-INFECTIVES ON THE SELECTED BIOGENOSIS

W. Baran, E. Adamek, A. Szymkiewicz, J. Wilk, I. Lipska (*Medical University of Silesia in Katowice, Katowice, PL*): THE DYNAMICS OF TYLOSIN BIODEGRADATION AND IDENTIFICATION OF PRODUCTS

W. Baran, E. Adamek, R. Adamczyk, M. Cholewiński, J. Wilk, A. Szymkiewicz, I. Lipska (*Medical University of Silesia in Katowice, Katowice, PL*): THE ASSESSMENT OF THE TREATMENT EFFICIENCY OF WASTEWATER CONTAINING HIGH CONCENTRATION OF ANTI-INFECTIVES

R. Biczak¹, B. Pawłowska¹, J. Feder-Kubis² (1) *Institute of Chemistry, Environment Protection and Biotechnology, Jan Długosz University, Częstochowa, PL*; 2) *Faculty of Chemistry, Wrocław University of Technology, Wrocław, PL*): THE EFFECT OF IONIC LIQUIDS WITH (-)-MENTHOL DERIVATIVE CONTAINING A CHLORIDE ANION ON SELECTED WEED SPECIES

K. Cybulska, S. M. Oraibi, B. Jakubowska (*Department of Microbiology and Biotechnology of Environment, Western Pomeranian University of Technology in Szczecin, Szczecin, PL*): PRESENCE OF BACTERIA ENTEROBACTERIACEAE IN VARIOUS OF POULTRY WASTES

I. Deska, M. Mrowiec, E. Ociepa (*Institute of Environmental Engineering, Technical University of Częstochowa, Częstochowa, PL*): INFLUENCE OF THE SUPERABSORBENT POLYMERS AMENDMENT ON THE RETENTION CAPACITY OF GREEN ROOFS

K. Grata (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): SENSITIVITY OF *Fusarium solani* ISOLATED FROM ASPARAGUS ON ESSENTIAL OILS

R. Kozłowski¹, R. Kruszyk² (1) *Department of Environmental Protection and Modelling, Jan Kochanowski University in Kielce, Kielce, Poland*; 2) *Institute of Geoecology and Geoinformation, Adam Mickiewicz University in Poznań, PL*): STUDY ON ATMOSPHERIC DEPOSITION AND CANOPY LEACHING IN TWO PINE STANDS (WEST POMERANIA, ŚWIĘTOKRZYSKIE MOUNTAINS)

T. Krzyśko-Łupicka, M. Mysiek, Ł. Kręciło (*Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): ENVIRONMENTAL DISSEMINATION OF RESISTANCE AMONG *Escherichia coli* ISOLATES

K. Mokra¹, A. Kuźmińska-Surowaniec¹, K. Woźniak², J. Michałowicz¹ (1) *Department of Environmental Pollution Biophysics, Faculty of Biology and Environmental Protection, University of Łódź, Łódź, PL*; 2) *Department of Molecular Genetics, Faculty of Biology and Environmental Protection, University of Łódź, Łódź, PL*): EVALUATION OF THE EFFECT OF BISPHENOL S ON DNA DAMAGE IN HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS

M. Nabrdalik (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): PRODUCTION AND OPTIMIZATION OF EXOCELLULAR LIPASES PRODUCED BY *PROTEUS MIRABILIS*

M. Nabrdalik, E. Moliszewska (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): APPLICATION OF ANTAGONISTIC PROPERTIES OF *PANTOEA AGGLOMERANS* AGAINST *RHIZOCTONIA SOLANI*

K. Nagrodzka, Moliszewska E., K. Grata, M. Nabrdalik (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): BIOLOGICAL CONTROL OF *Rhizoctonia solani* AG 2-2IIIB BY *Bacillus subtilis* METABOLITES

S. M. Oraibi, K. Cybulska (*Department of Microbiology and Biotechnology of Environment, Western Pomeranian University of Technology in Szczecin, Szczecin, PL*): DRUG RESISTANCE OF *E.COLI* ISOLATES FROM THE AIR IN THE POULTRY POST-SLAUGHTER WASTES MANAGEMENT FACILITIES

B. Pawłowska¹, A. Telesiński², M. Płatkowski², M. Stręć², M. Śnioszek², R. Biczak² (1) *Institute of Chemistry, Environment Protection and Biotechnology, Jan Długosz University, Częstochowa, PL*; 2) *Faculty of Environmental Management and Agriculture, Department of Plant Physiology and Biochemistry, West Pomeranian University of Technology in Szczecin, Szczecin, PL*): TOXICITY OF IMIDAZOLIUM IONIC LIQUIDS WITH THE ANION CONTAINING FLUORINE FOR SOME WEED SPECIES

B. Pieczykolan, I. Płonka, K. Barbusiński (*Silesian University of Technology, Faculty of Energy and Environmental Engineering, Gliwice, PL*): DISCOLORATION OF SOLUTIONS CONTAINING ACID GREEN 16 USING MODIFICATION OF FENTON'S REAGENT WITH SODIUM PERCARBONATE

I. Płonka, B. Pieczykolan, K. Barbusiński (*Silesian University of Technology, Faculty of Energy and Environmental Engineering, Gliwice, PL*): DISCOLORATION OF SOLUTIONS CONTAINING ACID GREEN 16 USING MODIFICATION OF FENTON'S REAGENT WITH CALCIUM PEROXIDE

L. Sabliy¹, S. Konontsev¹, J. Grochowska², M. K. Widomski³, G. Łagód³ (1) *National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Kyiv, UA*; 2) *National University of Water Management and Nature Resources Use, Rivne, UA*; 3) *Lublin University of Technology, Lublin, PL*): EFFICIENCY OF NITROGEN REMOVAL BY LEMNA MINOR AND WOLFFIA ARRHIZA DURING TREATMENT OF WATER FROM RECIRCULATION SYSTEMS IN FISH FARMS

M. Sporek¹, T. Ciesielczuk² (1) *Independent Chair of Biotechnology and Molecular Biology, University of Opole, PL* 2) *Independent Department of Land Protection, University of Opole, PL*): BIOMASS OF SPRING BARLEY (*Hordeum vulgare* L.) IN RELATION TO FERTILISING

L.W. Szajdak¹, R. Kölli², W. Gaca¹, T. Meysner¹, K. Styła¹, M. Szczepański¹, T. Tonutare² (1) *Institute for Agricultural and Forest Environment, Polish Academy of Sciences, Poznań, PL*; 2) *Department of Soil Science and Agrochemistry, Institute of Agricultural and Environmental Sciences, Estonian University of Life Sciences, Tartu, EE*): REMOVAL OF NON-POINT POLLUTION IN AGRICULTURAL LANDSCAPE

A. Świercz¹, E. Zajęcka² (1) *Chair of Environmental Protection and Modelling*, 2) *Institute of Biology, Jan Kochanowski University in Kielce, Kielce, PL*): ASSESSMENT OF HEAVY METAL CONCENTRATIONS IN THE SOILS OF INDUSTRIAL SITES ON THE EXAMPLE OF THE CITIES OF SKARZYSKO-KAMIENNA AND KIELCE

A. Świercz¹, E. Zajęcka² (1) *Chair of Environmental Protection and Modelling*, 2) *Institute of Biology, Jan Kochanowski University in Kielce, Kielce, PL*): ASSESSMENT OF THE

DEGREE OF CONTAMINATION OF SOILS WITH SELECTED CHEMICAL ELEMENTS ON THE EXAMPLE OF THE CITY OF SKARZYSKO-KAMIENNA

M.K. Widomski¹, W. Stępniewski¹, R. Horn² (1)Faculty of Environmental Engineering, Lublin University of Technology, Lublin, PL; 2) Institute for Plant Nutrition and Soil Science, CAU Kiel, Kiel, DE): ASSESSMENT OF SEEPAGE THROUGH MUNICIPAL LANDFILL CLAY LINERS AFTER CYCLIC DRYING AND REWETTING

M. Widlak, M. Dańczuk, W. Nowak (Kielce University of Technology, Kielce, PL): THE CONTENT OF SELECTED POLLUTANTS IN THE GREEN AREAS OF THE KIELCE UNIVERSITY OF TECHNOLOGY

E. Wiśniowska, M. Włodarczyk-Makula, R. Nowak (Department of Chemistry, Water and Wastewater Technology, Częstochowa University of Technology, Częstochowa, PL): TRENDS IN REGULATIONS CONCERNING PERMISSIBLE MICROPOLLUTANTS CONCENTRATIONS IN SEWAGE SLUDGE AND ORGANIC FERTILIZERS USED IN AGRICULTURE

P. Wolski (Institute of Environmental Engineering, Faculty of Infrastructure and Environment, Czestochowa University of Technology, Częstochowa, PL): THE IMPACT OF THE INITIAL DISINTEGRATION ON THE RHEOLOGICAL PARAMETERS OF SUBMITTED FERMENTATION SEWAGE SLUDGE

I. Zimoch, A. Kuśnierski (Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL): IMPACT OF AGRICULTURAL ACTIVITIES ON THE MICROBIOLOGICAL QUALITY OF UNDERGROUND WATER RESOURCES

I. Zimoch, J. Paciej (Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL): SPATIAL ANALYSIS OF WATER QUALITY CHANGES IN WATER SUPPLY SYSTEMS AS A TOOL OF RISK MANAGEMENT OF HUMAN HEALTH

I. Zimoch, M. Dudziak (Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL): EVALUATION OF TOXICITY OF WATER AND WATER-PIPE DEPOSITS IN RURAL WATER SUPPLY SYSTEMS

I. Zimoch¹, E. Łobos² (1) Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL; 2) Institute of Mathematics, Silesian University of Technology, Gliwice, PL): THE MODELING OF TRIHALOMETHANES CONCENTRATION IN WATERPIPE NETWORK BASED ON DIFFERENT EQUATIONS OF REGRESSION

13.00-14.30 LUNCH

13.30-19.00 Posters of POSTER SESSION P4 are available for examination and discussion

14.30-17.15 Session S4: FORUM OF YOUNG SCIENTISTS (FYS)

14.30-14.45 M. KANIEWSKI, E. KLEM-MARCINIAK, M. HUCULAK-MĄCZKA, J. HOFFMANN (Department of Technology and Chemical Processes, Faculty of Chemistry, Wrocław University of Technology, Wrocław, PL): STUDY OF THERMAL STABILITY OF AMMONIUM NITRATE AND POTASSIUM CHLORIDE MIXTURES

14.45-15.00 D. MADEJ, W. BARAN, E. ADAMEK, I. LIPSKA (Medical University of Silesia in Katowice, Katowice, PL): ECOTOXICITY STUDIES OF E-LIQUIDS FOR E-CIGARETTES

15.00-15.15 O. NAMIECIŃSKA, G. WIELGOSIŃSKI, R. CICHOWICZ (*Faculty of Process and Environmental Engineering, Lodz University of Technology, Łódź, PL*): MODELING OF FLUE GASES DRY DESULPHURIZATION

15.15-15.30 G. OŁOŚ, O. ZHUK (*Chair of Biotechnology and Molecular Biology, Faculty of Natural Sciences and Technology, University of Opole, Opole, PL*): COMPARISON OF SELECTED PARAMETERS OF ACUTE TOXICITY OF AMMONIUM IONS ON HYDROBIONTS

15.30-15.45 D. POPLAWSKI, M. HUCULAK-MĄCZKA, K. HOFFMANN, J. HOFFMANN (*Department of Chemical Technology and Processes, Wrocław University of Technology, Wrocław, PL*): ANALYSIS OF THE KINETICS OF COMPLEX REACTIONS ON THE EXAMPLE OF THE DECOMPOSITION OF AMMONIUM NITRATE

15.45-16.00 K. RAJCZYKOWSKI, K. LOSKA (*Institute of Water and Wastewater Engineering, Faculty of Energy and Environmental Engineering, Silesian University of Technology, Gliwice, PL*): CADMIUM AND NICKEL ADSORPTION FROM AQUEOUS SOLUTIONS BY USING VERMICULITE AS AN ADSORBENT

16.00-16.15 A. ROMBEL-BRYZEK, M. RAJFUR, O. ZHUK (*Chair of Biotechnology and Molecular Biology, Faculty of Natural Sciences and Technology, University of Opole, Opole, PL*): THE IMPACT OF COPPER IONS ON OXIDATIVE STRESS IN CRESS SEED *LEPIDIUM SATIVUM*

16.15-16.30 A. SZULECKA, M. BOGACKI (*Department of Environmental Management and Protection, AGH University of Science and Technology, Krakow, PL*): EVALUATION OF AVAILABLE METEOROLOGICAL DATABASES FOR THE IMPROVEMENT OF THE SHORT-TERM SIMULATIONS USING THE WRF-ARW MODELLING SYSTEM OVER THE SOUTH-WESTERN PART OF POLAND

16.30-16.45 E. TOMCZAK, M. BLUS, M. TYLMAN (*Faculty of Process and Environmental Engineering, Lodz University of Technology, Łódź, PL*): INFLUENCE OF PREPARATION METHOD ON STABILITY AND PERMEABILITY OF GRAPHENE OXIDE MEMBRANES

16.45-17.00 J. WIŚNIEWSKI¹, G. WIELGOSIŃSKI², R. CICHOWICZ² (*1) Group Wastewater Treatment Plant Lodz Co. Ltd. Lodz, PL; 2) Faculty of Process and Environmental Engineering, Lodz University of Technology, Łódź, PL*): ANALYSIS OF THE FUNCTIONING OF THE FLUE GASES PURIFICATION SYSTEM IN SEWAGE SLUDGE INCINERATION PLANT IN GROUP WASTEWATER TREATMENT PLANT IN LODZ

17.00-17.15 M. ZIELIŃSKA¹, A. KŁOS¹, Z. BOCHENEK², J. W. BJERKE³, H. TØMMERVIK³, B. ZAGAJEWSKI⁴, D. ZIÓLKOWSKI², M. RAJFUR¹, A. DOŁHAŃCZUK-ŚRÓDKA¹, Z. ZIEMBIK¹ (*1) Independent Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL; 2) Institute of Geodesy and Cartography, Warsaw, PL; 3) Norwegian Institute for Nature Research, Tromsø, NO; 4) Warsaw University, Department of Geoinformatics and Remote Sensing, Warsaw, PL*): CONTAMINATION OF THE FOREST AREAS OF SOUTHERN AND NORTH EASTERN POLAND WITH HEAVY METALS

17.15-17.45 COFFEE AND TEA BREAK

17.30-19.00 FORUM OF YOUNG SCIENTISTS (FYS); POSTER SESSION P4

E. Burdzik-Niemiec, M. Dudziak (*Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL*): ULTRAFILTRATION USING MEMBRANES MODIFIED WITH NANOMATERIALS AND CLASSIC NANOFILTRATION FOR THE SEPARATION OF MICROPOLLUTANTS

E. Chłopińska, D. Szaniawska (*Transport Engineering Institute, Maritime University of Szczecin, Szczecin, PL*): HAZARD IDENTIFICATION IN RELATION TO THE ENVIRONMENT FOR THE LNG SUPPLY CHAIN

M. Dudziak, E. Kudlek, G. Kamińska, J. Bohdziewicz (*Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL*): TOXICOLOGICAL TESTING TO EVALUATE EFFECT OF XENOBIOTICS CONCENTRATION ON BIOLOGICAL ACTIVITY OF DIFFERENT ORGANISMS

P. Godyń, Z. Ziembik, A. Dolhańczuk-Śródka (*University of Opole, Opole, PL*): SEASONAL CHANGES IN THE CONCENTRATIONS OF GAMMA ISOTOPES IN SOIL OF THE FOREST AREAS OF THE KARKONOSZE MOUNTAINS

K. Grata, A. Rombel-Bryzek (*Department of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): ANTAGONISTIC PROPERTIES OF *Bacillus subtilis* BS-2 AND MINT ESSENTIAL OIL AGAINST *Botrytis cinerea*

D. Jerz, M. Rajfur, A. Klos (*Independent Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): USE OF MOSSES AND LICHENS IN EVALUATION OF SEASONAL CHANGES IN HEAVY METALS CONCENTRATION IN FOREST AREAS

G. Kamińska, M. Dudziak, J. Bohdziewicz, E. Kudlek (*Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL*): REMOVAL AND FATE OF PAHs DURING MECHANICAL-BIOLOGICAL WASTEWATER TREATMENT

E. Klem-Marciniak, D. Popławski, M. Porwoł, J. Pająk, K. Hoffmann (*Department of Chemical Technology and Processes, Wrocław University of Technology, Wrocław, PL*): BREEDING OF THE ACTIVATED SLUDGE HAVING PROPERTIES WHICH ENABLE IT IS USAGE IN STUDIES ON BIODEGRADATION OF FERTILIZER CHELATES

E. Klem-Marciniak, K. Hoffmann, M. Kaniewski, J. Hoffmann (*Department of Chemical Technology and Processes, Wrocław University of Technology, Wrocław, PL*): PHYSICAL AND CHEMICAL PROPERTIES SELECTED FERTILIZER CHELATES

R. Kozłowski¹, M. Szwed^{1, 2}, J. Przybylska² (*1) Department of Environmental Protection and Modelling, Jan Kochanowski University in Kielce, Kielce, PL; 2) Institute of Geography, Jan Kochanowski University in Kielce, Kielce, PL*): PHYSICOCHEMICAL PROPERTIES OF SNOW IN THE CONDITIONS OF ANTHROPOGENIC IMPACT IN THE CITY OF KIELCE IN JANUARY 2016

R. Kozłowski¹, J. Przybylska², M. Szwed^{1, 2} (*1) Department of Environmental Protection and Modelling, Jan Kochanowski University in Kielce, Kielce, PL; 2) Institute of Geography, Jan Kochanowski University in Kielce, Kielce, PL*): PHYSICOCHEMICAL PROPERTIES OF WATER FROM SMALL UPLAND RIVERS WITH DIVERSE STRUCTURE OF LAND USE IN CATCHMENT AREA ON THE BASIS OF SELECTED STREAMS IN THE ŚWIĘTOKRZYSKIE MOUNTAINS

E. Kudlek, M. Dudziak, G. Kamińska, J. Bohdziewicz (*Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL*): STUDY OF TOXICOLOGICAL EFFECT OF PHOTOCATALYSTS

W. Kędzia, K. Merc, E. Ociepa (*Faculty of Infrastructure and Environment, Częstochowa University of Technology, Częstochowa, PL*): ACTIVE MONITORING OF THE PUMPING SYSTEM AT THE ZWIK SP. Z O.O. MYSZKOW

J. Loskot¹, M. Smolík¹, V. Štěpánek^{1,3}, L. Hyšplerová¹, L. Trnková², Jan Kříž¹ (1) Faculty of Science, University of Hradec Králové, Hradec Králové, CZ; 2) EMPLA Hradec Králové, Hradec Králové, CZ; 3) Coal power plant Chvaletice, CZ): MODELING AND BIOMONITORING OF MERCURY EMISSIONS FROM LARGE SOLID FUEL COMBUSTION IN THE CZECH-POLISH BORDER REGION

E. Łaskawiec, M. Dudziak, J. Wyczarska-Kokot (Institute of Water and Wastewater Engineering, Silesian University of Technology, Gliwice, PL): EVALUATION OF THE POSSIBILITY FOR RECYCLING SWIMMING POOL BACK WASHING WATER

D. Madej, W. Baran, E. Adamek, A. Szymkiewicz, J. Wilk, M. Cholewiński (Medical University of Silesia in Katowice, Katowice, PL): OZONOLYSIS OF SULFA-DRUGS IN AN AQUATIC ENVIRONMENT

M. Marciniak, A. Kłos, M. Rajfur (Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL): INFLUENCE OF EXPOSURE METHOD ON ACCUMULATION OF HEAVY METALS IN LICHENS AND MOSSES

K. Merc, W. Kędzia, E. Ociepa (Faculty of Infrastructure and Environment, Czestochowa University of Technology, Czestochowa, PL): ANALYSIS OF CONSUMPTION AND LOSSES MAINS WATER BASED ON INDICATORS RECOMMENDED BY IWA

S. Miodoński, M. Muszyński-Huhajło, K. Rucka (Faculty of Environmental Engineering, Wrocław University of Technology, Wrocław, PL): IMPACT OF NITRIFICATION RATE TEST PROCEDURE ON RESULTS IN ACTIVATED SLUDGE TESTS

J. Muszyńska, M. Sikorski, J. Gawdzik (Faculty of Environmental, Geomatic and Energy Engineering, Kielce University of Technology, Kielce, PL): THE IMPACT OF RELATION FE/H_2O_2 ON THE COMPOSITION OF LEACHATE AFTER TREATMENT BY FENTON'S METHOD

M. Muszyński-Huhajło, K. Janiak (Faculty of Environmental Engineering, Wrocław University of Technology, Wrocław, PL): ACCURATE OXYGEN TRANSFER EFFICIENCY MEASUREMENTS BY OFF-GAS METHOD - TANK COVERAGE DILEMMA

G. Ołoś (Chair of Biotechnology and Molecular Biology, Faculty of Natural Sciences and Technology, University of Opole, Opole, PL): THE IMPACT OF HUMAN PRESENCE ON THE CHOICE OF NEST SITES IN THE URBAN POPULATION NIGHTINGALE *Luscinia megarhynchos* IN OPOLE

A. Pacia, A. Dolhańczuk-Śródka, Z. Ziembik (Independent Chair of Biotechnology and Molecular Biology, University of Opole, PL): INVESTIGATION EDCS (ENDOCRINE-DISRUPTING COMPOUNDS) POLLUTION COMING FROM COSMETICS AND EVERYDAY OBJECTS

I. Pietkun-Greber (Independent Department of Process Engineering, University of Opole, Opole, PL): HYDROGEN DAMAGE NON-ALLOY CONSTRUCTION STEEL S235JR

I. Pietkun-Greber, M. Wiener (Independent Department of Process Engineering, University of Opole, Opole, PL): INFLUENCE OF CATHODIC POLARIZATION RESISTANCE CORROSION OF DC01 STEEL

A. Szaniszló¹, R. Pecze², H.E.A.F. Bayoumi¹, Á. Bálint¹ (1) Óbuda University, Institute of Environmental Engineering, Budapest, HU; 2) Szent István University, Gödöllő, HU): EXAMINATION THE HEAVY METAL CONTAMINATION OF THE BUDAPEST MUNICIPAL WASTE INCINERATOR AND THE INTRODUCTORY SECTION OF M3 MOTORWAY IN BUDAPEST

E. Szczyrba, A. Szczotka, G. Bartelmus (Institute of Chemical Engineering Polish Academy of Sciences, Gliwice, PL): MODELLING OF AEROBIC BIODEGRADATION OF PHENOL BY *Stenotrophomonas maltophilia* KB2 STRAIN

P. Świsłowski¹, M. Marciniak², M. Rajfur² (1)*Independent Chair of Environmental Engineering, University of Opole, Opole, PL;* 2)*Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): SORPTION OF COPPER AND ZINC BY *HOTTONIA PALUSTRIS* L.

P. Świsłowski¹, M. Rajfur², A. Klos² (1)*Independent Chair of Environmental Engineering, University of Opole, Opole, PL;* 2)*Chair of Biotechnology and Molecular Biology, University of Opole, Opole, PL*): THE INFLUENCE OF CONDITIONS OF THE BIOMONITORING STUDY USING MOSSES ON ITS RESULTS

E. Tomczak, A. Zielińska (*Faculty of Process and Environmental Engineering, Lodz University of Technology, Łódź, PL*): THE SEWAGE SYSTEM REHABILITATION USING TRENCHLESS TECHNOLOGIES ON THE CHOSEN EXAMPLE

18.55 Announcement of Verdicts of Award by the Jury for the Best Oral and Poster Presentations of FYS

19.00 Maria and Witold WACŁAWEK (*University of Opole, Opole, PL*): **Closing of the Conference**

19.30 GRILLED DINNER

SATURDAY, 8th October 2016

7.00-8.50 BREAKFAST

9.00-13.00 EXCURSION. Excursion on foot in Chocholów - a visit to the hut near the village of Witów with tasting of cheeses and liqueur.

9.00 Departure to Chocholów

12.30-14.00 LUNCH