CONFERENCE PROGRAMME

Venue: MINOA PALACE HOTEL, Plantanias, Chania, Crete

REGISTRATION DESK IS OPEN:

Tuesday afternoon (Sept 2): 12:00 – 19:30 and
Wednesday to Saturday (Sept 3-6): 08:30 – 12:00 & 18:00 – 20:00

TUESDAY, SEPTEMBER 2ND, 2008	
20:00 - 22:30	**Ice-breaker & Welcome Party in Agia Marina** (Busses leave at 20:00 from the venue hotel)
WEDNESDAY, SEPTEMBER 3RD, 2008	
09:15 - 09:45	**Welcome and Opening Remarks -ROOM A**
	N. Kalogerakis, F. Fava, S.A. Banwart, Conference co-Chairs **J. Gryspolakis,** Rector, Technical University of Crete **G. Souflias**, Minister, Ministry of Environment & Public Works **E. Kalfas,** Technical Director, Jet Oil **U. Stottmeister**, President, Intl Society for Environmental Biotechnology
09:45 - 11:00	**Plenary Session -Room A**
09:45 - 10:00	**ENVIRONMENTAL BIOTECHNOLOGY: The *sine qua non* of Knowledge Based Bio-economy** **Dr. Ioannis Economidis** DG Research, European Commission, Brussels, Belgium
10:00 - 11:00	**ENVIRONMENTAL IMPLICATIONS AND APPLICATIONS OF NANOTECHNOLOGY: Fullerene-Bacterial Interactions** **Prof. Pedro J. Alvarez** Chair Civil & Environmental Engineering, Rice University, Houston, USA
11:00 - 11:30	**Coffee break & Poster Viewing (Group I)**
11:30 - 13:15	**SESSION #1: In-situ bioremediation of contaminated soil and groundwater –ROOM A** CHAIR-PERSONS: **C.D. Johnston** (Australia) **and M. Romero-Gonzalez** (UK)
ID 041	**INTERNAL HEAT GENERATION AS A DESIGN CONSIDERATION FOR *IN SITU* BIOSPARGING OF PETROLEUM HYDROCARBONS** **Colin D. Johnston, Jason J. Plumb, Blair S. Robertson, Trevor P. Bastow & James A. Lancaster** CSIRO, Wembley W.A., AUSTRALIA
ID 104	**CONTAMINANT TRANSPORT AND FATE IN ENGINEERED CHARCOAL REMEDIATION SYSTEMS** **J. Bastock, M. Romero-Gonzalez and R.D. Wilson** Kroto Research Institute, University of Sheffield, Sheffield, UK
ID 032	**COLUMN EXPERIMENTS OF BIOLOGICAL TREATMENT USING SULPHATE REDUCING BACTERIA FOR THE TREATMENT OF HEAVY METAL POLLUTED WATERS** **Cruz Viggi Carolinaa, Pagnanelli Francescaa, Luigi Toroa** Department of Chemistry, University of Rome La Sapienza, Rome, Italy
ID 226	**THE APPLICATION OF HUMIC-MATTER CHEMISTRY FOR THE FULL-SCALE BIOREMEDIATION OF A "PHENOL LAKE"** **Stottmeister U., Weissbrodt E., Kuschk P., Wiessner A** Helmholtz Center for Environmental Research - UFZ, Leipzig, Germany

ID 186 **ESTABLISHING OPTIMAL ELECTRON ACCEPTOR DELIVERY TO PROMOTE BIODEGRADATION OF A HIGH CONCENTRATION PHENOL PLUME**

Ryan D Wilson[1] and Kriangsak Pirarai[2]
[1]Groundwater Protection and Restoration Group, University of Sheffield, Sheffield, UK
[2]Bureau of Groundwater Potential Assessment, Department of Groundwater Resources, Bangkok, Thailand

ID 024 **THE TECHNOLOGY OF ELIMINATION OF UNDERGROUND PHENOLIC CONTAMINATIONS**

V.V.Biryukov[1], I.N.Shcheblykin[2], Pan′shin[3]
[1]Moscow State University of Environmental Engineering,
[2]BIGOR Co. Ltd, Moscow, Russia,
[3]Moscow State University of Railway Engineering (MIIT)

11:30 - 13:30 **SESSION #2: Phytoremediation of heavy metal contaminated sites I –ROOM B**
CHAIR-PERSONS: **Kallerhoff** (France) **and Alessia Cao** (Italy)

ID 010 **PHYTOREMEDIATION AND ECOLOGICAL RESTORATION OF HEAVY METAL-CONTAMINATED SOILS: PRINCIPLES, CURRENT PRACTICES AND FUTURE POSSIBILITIES**

Alan J. M. Baker
Applied Ecology Research Group, School of Botany, The University of Melbourne, Parkville, Australia, and Centre for Contaminant Geosciences, Environmental & Earth Sciences International Pty Ltd, North Sydney, Australia.

ID 227 **EFFECT OF CHLORIDE AND SULPHATE ON CADMIUM UPTAKE BY BRASSICA JUNCEA AND ZEA MAYS FROM NUTRIENT SOLUTION UNDER CONDITIONS OF CONSTANT FREE CADMIUM ION ACTIVITY**

Ulrico J. López-Chuken[1] and Scott D. Young[2]
[1]Division of Environmental Sciences, School of Chemistry, Universidad Autonoma de Nuevo Leon, Mexico.
[2]Division of Agricultural & Environmental Sciences, School of Biosciences, University of Nottingham, UK.

ID 205 **INFLUENCE OF SELENITE RESISTANT RHIZOBACTERIA ON THE SEO32-PHYTOEXTRACTION EFFICIENCY OF BRASSICA JUNCEA GROWN ON WATER-FILTERING ARTIFICIAL BEDS**

Silvia Lampis[1], Anita Ferrari[1], A. Cristina F. Cunha-Queda[2], Paula Alvarenga[3], Simona Di Gregorio[4], Giovanni Vallini[1]
[1] Department of Science and Technology, University of Verona, Verona, Italy
[2] Departamento de Química Agrícola e Ambiental, Instituto Superior de Agronomia, Lisboa, Portugal.
[3] Departamento de Ciéncias do Ambiente, Escola Superior Agrária de Beja, Beja, Portugal
[4] Department of Biology, University of Pisa, Pisa, Italy

ID 153 **CADMIUM TOLERANCE, ACCUMULATION AND PARTITIONING IN POPLAR AND WILLOW CLONES: RESULTS OF AN HYDROPONIC SELECTION**

Massimo Zacchini, Fabrizio Pietrini, Giuseppe Scarascia Mugnozza, Valentina Iori and Angelo Massacci
Istituto di Biologia Agro-Ambientale e Forestale – CNR – Monterotondo Scalo (Rome), Italy

ID 142 **CLEAN UP OF CONTAMINATED SOILS TO HEAVY METALS BY MYCORRHIZAL BARELY (HORDEUM VULGARE L.) PLANTS**

Mohammad Rezvani[1], Mohammad Reza Ardakani[2], Farhad Rejali[3], Ghorban Noormohammadi[1], Sadollah Reimouri[2], Faezeh Zaefarian[4], Goodarz Daei[5]
[1] Department of agronomy and plant breeding, islamic azad university, Tehran, Iran
[2] Agriculture, medicine and industrial school, institute of nuclear science and technology, Tehran, Iran
[3] Soil and water of research institute, Tehran, Iran
[4] Agricultural college - tarbiat modares university, Tehran, Iran
[5] Department of agronomy - agricultural college- islamic azad university- karaj branch, Tehran, Iran

ID 001 **USE OF NATIVE SPECIES AND BIODEGRADABLE CHELATING AGENTS IN THE PHYTOREMEDIATION OF ABANDONED MINING AREAS**

Alessia Cao[1], Alessandra Carucci[1], Tiziana Lai[1], Gianluigi Bacchetta[2], Mauro Casti[2]
[1] DIGITA, Dept. of Geoengineering and Environmental Technologies, University of Cagliari, Italy
[2] Centre for Conservation of Biodiversity (CCB), Dept. of Botanical Sciences., University of Cagliari, Italy

ID 119 **PHYTOEXTRACTION OF LEAD BY SCENTED *PELARGONIUM* CULTIVARS: FIELD AND CONTROLLED-CONDITION EXPERIMENTS**

M. Arshad[a], J. Kallerhoff[a] C. Dumat [a], A. Jauneau[b], E. Pinelli[a], J. Silvestre[a]
[a] Ecolab, UMR INPT-CNRS-UPS 5245, ENSAT, PO Box 107, Castanet-Tolosan cedex, 31326, France.
[b] IFR40 CNRS Pôle de Biotechnologie Végétale 31326 Castanet-Tolosan Cedex.

ID 255 **EFFECT OF PHYTOREMEDIATION WITH ATRIPLEX NUMMULARIA IN IRRIGATED SOILS WITH SALINE WASTE**

Célia Maria Maganhotto de S. Silva[1], Rosana Faria Vieira[1], Everaldo Rocha Porto[2]
[1] Embrapa Meio Ambiente, Jaguariúna, SP, Brazil.
[2] Embrapa Semi-Árido, Petrolina, PE, Brazil.

13:30 - 14:30 **LUNCH (Minoa Palace Hotel)**

17:00 - 18:00 **Poster Viewing (Group I)**

18:00 - 18:45 **Keynote Lecture – Room A**

HOW CAN MODELLING HELP BIOREMEDIATION PROCESS INTEGRATION ?
Prof. David F. Ollis, Distinguished Professor
Dept of Chemical Engineering, NCSU, Raleigh, North Carolina, USA

18:45 - 19:15 **Coffee break & Poster Viewing (Group I)**

19:15 - 21:15 **SESSION #3: Bioremediation of hydrocarbon contaminated sites - ROOM A**
CHAIR-PERSONS: **A.P. Loibner** (Austria) and **S.A. Banwart** (UK)

ID 067 **PANUS TIGRINUS BIOAUGMENTATION OF A HYSTORICALLY CONTAMINATED SOIL ENHANCES BIOREMEDIATION AND AFFECTS BACTERIAL COMMUNITY STRUCTURE AND FUNCTION**
Giubilei M.A. [1,2], Federici E. [2], Leonardi V. [1], Federici F.[1], D'Annibale A. [1] and Petruccioli M.[1]
[1] Dipartimento di Agrobiologia & Agrochimica, University of Tuscia, Viterbo, Italy
[2] Dipartimento di Medicina Sperimentale & Scienze Biochimiche, University of Perugia, Perugia, Italy

ID 147 **ROLE OF A *PARACOCCUS* STRAIN IN THE DEGRADATION AND BIOREMEDIATION OF POLYCYCLIC AROMATIC HYDROCARBONS**
Maria Pouli[1], Fabio Fava[2] and Spiros N. Agathos[1]
[1] GEBI, Unit of Bioengineering, Catholic University of Louvain, Louvain-la-Neuve, Belgium;
[2] DICASM, Faculty of Engineering, University of Bologna, Bologna, Italy.

ID 250 **IN-SITU BIOREMEDIATION OF KEROSENE CONTAMINATED SOIL AT A FORMER AIRPORT SITE**
Horst Niebelschütz
ARGUS Umweltbiotechnologie GmbH, Berlin, Germany

ID 135 **BIOSTIMULATION AND BIOAUGMENTATION OF AN ARTIFICIALLY POLLUTED SOIL AND RESPONSE OF ITS BIOLOGICAL PROPERTIES**
Scelza R., Rao M.A., Russo F., Gianfreda L.
Dipartimento di Scienze del Suolo, della Pianta, dell'Ambiente e delle Produzione Animali, Università di Napoli Federico II, Napoli, Italy

ID 102 **REMEDIATION OF SOIL POLLUTED BY HEAVY HYDROCARBONS AND PAHS BY APPLICATION OF BIOLOGICAL PROMOTERS: INTEGRATED STUDY ON REAL SCALE**
Paolo Maggioni, Pierlorenzo Brignoli
Eurovix srl - V.le Europa, CAZZAGO S.M. (BS)

ID 045 **BIODEGRADATION OF BTEX BY SULPHATE REDUCING BACTERIA ISOLATED FROM OIL FIELDS**
Dorota Wolicka
Institute of Geochemistry, Mineralogy and Petrology, Warsaw University, Warsaw, Poland.

ID 273 **EFFECTS OF TPH CONTAMINATED SOIL AGE ON MONITORING BIOREMEDIATION AND EXISTED MICROBIAL POPULATION DYNAMICS IN THE THREE SITES**
Sheng-Shung Cheng[1], Po-Tseng Pan[1], Liang-Ming Whang[1], Ta-Chen Lin[1],Yi-Ting Liao[1], Y. C. Fan[1], Jun-Xuan Gao[1] and Li-Hsin Chang[1] and Pao-Wen Liu[2], Shu-Li Su[3] and Tsung-Chung Chang[3], I-Cheng Tseng[4]
[1] Dept.of Environmental Engineering, National Cheng Kung University,Tainan,Taiwan
[2] Dept. of Safety Health and Environmental Engineering, Chung Hwa University, Taiwan
[3] Dept. of Medical Technology, National Cheng Kung University,Tainan,Taiwan;
[4] Dept. of Life Sciences, National Cheng Kung University,Tainan, Taiwan

ID 195 **MICROARRAY BIOTECHNOLOGY FOR MONITORING BIOAUGMENTATION AND BIOSTIMULATION OF DIESEL-CONTAMINATED SOIL**
Ta Chen Lin[1], Sheng-Shung Cheng[2], Tsung-Chung Chang[3], Po-Tsen Pan[2], Chun-Hsuan Kao[2], Tsung-Lin Hsieh[2]
[1] Sustainable Environment Research Center, National Cheng Kung University, Tainan, Taiwan
[2] Dept. of Environmental Engineering, National Cheng Kung University, Tainan, Taiwan
[3] Dept. of Medical Technology, National Chung Hsing University, Tainan, Taiwan

19:15 - 21:15 SESSION #4: Phytoremediation of Sites Contaminated with Organics -ROOM B
CHAIR-PERSONS: **E.R. Strijakova** (Russia) and **S. Strand** (USA)

ID 165 **ENGINEERING PLANTS FOR THE PHYTOREMEDIATION OF EXPLOSIVES**
Neil C. Bruce
Centre for Novel Agricultural Products, Department of Biology, University of York, York, UK

ID 228 **MANAGING ON-SITE AND OFF-SITE ENVIRONMENTAL RISKS OF PAH-CONTAMINATED SITES BY MEANS OF A VEGETATIVE COVER: PHYTOREMEDIATION AS A RISK MANAGEMENT TOOL**
Victor G. Kabay[1], Phil Mulvey[2], Alan J. M. Baker[1]
[1] Applied Ecology Research Group, School of Botany, The University of Melbourne, Parkville, Australia.
[2] EESI Contracting, Sheffield, UK.

ID 261 **COMPARING EFFECTIVENESS OF ORGANIC AND INORGANIC AMENDMENTS FOR REMEDIATION OF MILITARY RANGE CONTAMINATED SOILS**
Grzegorz Siebielec[1], Rufus L. Chaney[2], Tomasz Stuczynski[2]
[1] Institute of Soil Science and Plant Cultivation, Pulawy, Poland
[2] USDA-ARS, Beltsville, MD, USA

ID 107 **ROLE OF PLANT-ASSOCIATED BACTERIA TO IMPROVE *IN SITU* PHYTOREMEDIATION OF BTEX AND TCE: 2 FIELD EXPERIMENTS**
Nele Weyens[*1], Tanja Barac[1], Jana Boulet[1], Daniel van der Lelie[2], Safiyh Taghavi[2] and Jaco Vangronsveld[1]
[1] Hasselt University, Centre for Environmental Sciences, Agoralaan Building D, Belgium
[2] Brookhaven National Laboratory, Biology Department, Upton NY 11973 USA

ID 214 **PROGRESS IN TRANSGENIC PLANTS FOR DEGRADATION OF ORGANIC POLLUTANTS, MAMMALIAN P450 2E1 IN PLANTS**
Stuart Strand, C. Andy James, Glenda Singleton, Gang Xin, and Sharon Doty
College of Forest Resources and Department of Civil and Environmental Engineering, University of Washington, Seattle WA, USA

ID 256 **INFLUENCE OF HEAVY METALS ON THE DETOXIFICATION OF ORGANIC XENOBIOTICS IN PLANTS**
Peter Schröder, Ljudmilla Ljubenova, Christian Huber
Department of Rhizosphere Biology, Helmholtz Zentrum München,
German Research Center for Environmental Health, Neuherberg, Oberschleissheim, Germany.

ID 138 **HYDROLOGICAL CONTROL AND PHYToREMEDIATION BY POPLAR AND WILLOW Clones IN a contaminated industrial SITE in VENICE LAGOON**
L. Pietrosanti[1], G.Matteucci[2], F. Pietrini[1], S. Stivanello[1], G. Capotorti[3], M. Molinari[3], E. Magnani[1], G. Santarelli[1], M.C. Zuin[4], R. Aromolo[5], A.Massacci[1]
[1] Istituto di Biologia Agro-Ambientale e Forestale – CNR – sez. Monterotondo Scalo (Rome) ITALY
[2] Istituto per i Sistemi Agricoli e Forestali del Mediterraneo – CNR – Rende ITALY
[3] ENI R&M, Rome,Italy
[4] Istituto di Biologia Agro-Ambientale e Forestale – CNR – sez. Legnaro (Padova) ITALY
[5] Istituto Sperimentale Nutrizione delle Piante – Rome – ITALY

THURSDAY, SEPTEMBER 4TH, 2008

8:25 - 9:25 **Keynote Lecture – Room A**

IMPROVED PHYTOEXTRACTION BY SUNFLOWER MUTANTS: A Sustainable Approach to Remove Metals from Contaminated Soils
Prof. Jean-Paul Schwitzguébel,
Swiss Federal Institute of Technology Lausanne (EPFL), Switcherland

9:30 - 11:00 **SESSION #5: Mathematical Modelling of Bioremediation Processes and Performance -ROOM A**
CHAIR-PERSONS: **S. F. Thornton** (UK) and **P. Gikas** (Greece)

ID 078 **DEVELOPMENT OF DIPOLE FLOW REACTIVE TRACER TESTS USING REACTIVE TRACER MIXTURES**
G. L. Barns[1], C. J. Berryman[1], B. Eagle[1], G. N. Roos[2], N. R. Thomson[2], S. F. Thornton[1] and R. D. Wilson[1]
[1] Groundwater Protection & Restoration Group, Kroto Research Institute, University of Sheffield, Sheffield, UK
[2] Department of Civil Engineering, University of Waterloo, Waterloo, Ontario, Canada

ID 248 **ANALYSIS OF BIOREMEDIATION RESPIROMETRIC DATA USING WAVELETS**
Vila, M. Cristina; Fiúza, António M.
CIGAR (Geo-Environment and Resources Research Centre) FEUP (Faculty of Engineering - University of Porto) - Mining Department Rua Roberto Frias, Porto, Portugal

ID 151 **A COMPUTATIONAL FLUID DYNAMICS APPROACH TO MODELLING EX-SITU BIOREMEDIATION**
Martin Crapper and Tong Wu
School of Engineering and Electronics, University of Edinburgh, UK

ID 309 **MODELLING THE NATURAL ATTENUATION OF BENZENE IN GROUNDWATER IMPACTED BY ETHANOL-BLENDED FUELS**
Diego E. Gomez[1], Phillip C. de Blanc[2], William G. Rixey[3], Phillip B. Bedient[1] and Pedro J.J. Alvarez[1]
[1] Rice University, Houston, Texas, USA
[2] GSI Environmental, Inc., Houston, Texas, USA
[3] University of Houston, Texas, USA

ID 182 **MODELING BIOGEOCHEMICAL REACTIVE TRANSPORT AND METAL TOXICITY IN LAKE SEDIMENTS**
Sema Sevinc Sengor[1], Petros Gikas[1,2], Timothy Ginn[1], Nicolas Spycher[3], Sutapa Barua[4], Brent Peyton[4] and Rajesh Sani[5]
[1] University of California at Davis, Department of Civil and Environmental Engineering, Davis, CA USA
[2] Ministry of Environmental Planning and Public Works, Athens, Greece,
[3] Earth Sciences Division, Lawrence Berkeley Laboratory, Berkeley, CA USA
[4] Montana State University Department of Chemical and Biological Engineering, Bozeman, MT USA
[5] Chemical and Biological Eng., South Dakota School of Mines and Technology, Rapid City, SD USA

ID 166 **MONITORING THE IMPACT OF HEXADECANE CONTAMINATION AND NUTRIENT AMENDMENTS ON THE RESPIRATORY QUOTIENT IN SOILS**
Mira Taok, Nelly Cochet and Olivier Schoefs
Department of Chemical Engineering, Université de Technologie de Compiègne, Compiègne Cedex, France

09:30 - 11:00 **SESSION #6: Bioreactor Technologies for ex-situ Treatment -ROOM B**
CHAIR-PERSONS: **Anna Rosa Sprocati** (Italy) and **Jose Duarte** (Portugal)

ID 210 Session Keynote Presentation
HARNESSING NATURAL DEGRADATION POTENTIALS: A CHALLENGE FOR BIOREMEDIATION STRATEGIES
Anna Rosa Sprocati
ENEA, Dept of Environment, Global Change and Sustainable Development, RC-Casaccia, Rome, Italy

ID 063 **AEROBIC BIODEGRADATION OF MTBE IN AN UP FLOW FIXED BED REACTOR**
E. Bianchi, I. Censabella,E. Fascetti, F.Massetti and M.Molinari
Eni S.p.A. Refining & Marketing, Monterotondo Research Center, Rome, Italy

ID 222 **BIODEGRADATION OF SUBSTITUTED PHENOLS IN A TWO-PHASE POLYMER/WATER SEQUENCING BATCH REACTOR**
M. Concetta Tomei[1], M. Cristina Annesini[2], V. Piemonte[2], Andrew J. Daugulis[3] and George P. Prpich[3]
[1] Water Research Institute, C.N.R., Rome, Italy,
[2] Chemical Engineering Department, Sapienza University of Rome, Rome, Italy
[3] Chemical Engineering Department, Queen's Universuty, Kingston, Ontario Canada

ID 116 **METALS RECOVERY FROM MINE LEAD CONCENTRATES: SCREENING OF BIOLEACHING MICROBIAL COMMUNITIES**
JC Duarte, MC Sàágua, SM Paixão, L Baeta-Hall, C Nogueira, P Sá Pereira, and AM Anselmo
INETI, Estrada do Paço do Lumiar 22, Lisboa, Portugal

ID 130 **A DOUBLE APPROACH FOR THE EVALUATION OF COMPOSTING GAS BIOFILTRATION: PERFORMANCE ASSESSMENT AND MICROBIAL STRUCTURE INVESTIGATION.**
Cabrol Léa [1, 3], Malhautier Luc [1], Poly Franck [2], Degrange Valérie [2], Le Roux Xavier [2], Jovic Marc [2], Lepeuple Anne-Sophie [3], Fanlo Jean-Louis [1]
[1] Laboratoire Génie de l'Environnement Industriel, Ecole des Mines d'Alès, Alès Cedex, France.
[2] Laboratoire Ecologie Microbienne du Sol, UMR-CNRS 5557, Université Claude Bernard Lyon I, Villeurbanne Cedex, France.
[3] Anjou Recherche-Veolia Water, Chemin de la Digue, Maisons Laffitte, France.

ID 099 **PENTACHLOROPHENOL UPTAKE BY PINE BARK USING A PACKED-BED COLUMN**
Brás, I.[1,2], Lemos, L.[2], Alves, A.[1] and Pereira, M.F.R.[3]
[1] LEPAE, Departamento de Engenharia Química, Universidade do Porto, Porto, Portugal
[2] Departamento de Engenharia do Ambiente, Instituto Politécnico de Viseu, Portugal
[3] LCM, Departamento de Engenharia Química, Universidade do Porto, Porto, Portugal

11:00 - 11:30 **Coffee break & Poster Viewing (Group II)**

11:30 - 13:30 **SESSION #7: Bioremediation of Sites Contaminated With Chlorinated and Other Recalcitrant Compounds -ROOM A**
CHAIR-PERSONS: **Federico Aulenta** (Italy) and **Françoise Bringel** (France)

ID 092 **THE APPLICATION OF ADSORBENTS FOR BIOREMEDIATION OF PCB-CONTAMINATED SOILS**
Elena R. Strijakova, Galina K. Vasilyeva
Institute of Physical-chemical and Biological Problems in Soil Science RAS, Moscow region, Russia

ID 072 **USE OF SOLID-STATE ELECTRODES AS ELECTRON DONORS FOR THE MICROBIAL REDUCTIVE DECHLORINATION OF TRICHLOROETHENE**
Federico Aulenta, Andrea Canosa, Priscilla Reale, Stefania Panero, Mauro Majone
Department of Chemistry, Sapienza University of Rome, Rome, Italy

ID 090 **MICROBIAL DEGRADATION OF POLYBROMINATED DIPHENYL ETHERS IN SEWAGE SLUDGE**
Hana Stiborova[1], Jana Zlamalikova[1], Jana Pulkrabova[2], Petra Hradkova[2], Michaela Napravnikova[2], Jana Hajslova[2], Martina Mackova[1], Katerina Demnerova[2]
[1] ICT Prague, Department of Biochemistry and Microbiology, Prague, Czech Republic
[2] ICT Prague, Department of Food Chemistry and Analysis, Prague, Czech Republic

ID 091 **MICROBIAL CONSORTIA AS A UNIQUE APPROACH FOR DEGRADATION AND BIOREMEDIATION OF DIMETHOATE IN EGYPTIAN CONTAMINATED WATER**
Ahmed Abdel-Megeed[1] and Fatma Aly Mohamed El-Nakieb[2]
[1] Fculty of Agriculture, Saba Basha, Alexandria University, Plant Protection Dept., Eygypt
[2] Mubarak City for Scientific Research, Environmental Biotechnology Dept., Genetic Engineering & Biotechnology Institute, Egypt.

ID 047 **THE EFFECT OF AOPS ON THE CHEMICAL DESTRUCTION OF 2,4-DINITROTOLUENE AND ON ITS SUBSEQUENT BIODEGRADABILITY BY NATIVE SOIL MICROORGANISMS**
Daniel Cassidy, Abraham Northup, Duane Hampton
Western Michigan University, Department of Geosciences, Kalamazoo, Michigan, USA.

ID 109 **PLANT METABOLITES OF POLYCHLORINATED BIPHENYLS (PCBS) - NOT ONLY HYDROXY-PCBS!**
Rezek Jan[1,2], Doubsky Jan[1], Mackova Martina[2], Triska Jan[3], Macek Tomas[1,2]
[1] Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Czech Republic
[2] ICT-Prague, Dept. of Biochemistry and Microbiology, Prague 6, Czech Republic
[3] Institute of Systems Biology and Ecology, Academy of Sciences of the Czech Republic, Czech Republic

ID 098 **EFFECT OF SULFATE CONCENTRATION ON REDUCTIVE DECHLORINATION IN TCE-FED MICROCOSMS**
Iraklis Panagiotakis[1], Daniel Mamais[1], Marina Pantazidou[1], Federico Aulenta[2], Simona Rossetti[3], Valter Tandoi[3]
[1] School of Civil Engineering, National Technical University of Athens, Zografou 15780, Greece
[2] Department of Chemistry, University of Rome "La Sapienza", Rome, Italy
[3] Water Research Institute, National Research Council (IRSA-CNR), Rome, Italy

ID 077	**IDENTIFICATION OF CCl_4-DEGRADING MICROORGANISMS IN CONTAMINATED GROUNDWATER COMBINING MOLECULAR AND CULTURAL STRATEGIES** **Christian Penny, Thierry Nadalig, Stéphane Vuilleumier, Françoise Bringel** Centre National de la Recherche Scientifique (CNRS) - Université Louis Pasteur Strasbourg, France. Génétique Moléculaire, Génomique et Microbiologie, Strasbourg Cedex, France.
11:30 - 13:30	**SESSION #8: Phytoremediation of Heavy Metal Contaminated Sites - II -ROOM B** CHAIR-PERSONS: **M. Zacchini** (Italy) and **J. Vangronsveld** (Belgium)
ID 106	**METAL ACCUMULATION IN PLANTS WITH ADDED ECONOMICAL VALUE GROWN ON METAL CONTAMINATED SOILS: SUSTAINABLE USE OF THESE SOILS FOR BIO-ENERGY PRODUCTION AND POSSIBILITIES FOR PHYTOEXTRACTION** **Vangronsveld, J.[1], Boulet, J.[1], Weyens, N.[1], Meers, E.[2], Meiresonne, L.[3], Colpaert, J.[1], Thewys T.[1], van der Lelie, D.[4], Ruttens, A.[1]** [1] Hasselt University, Centre for Environmental Sciences, Diepenbeek, Belgium. [2] Ghent University, Analytical Chemistry and Applied Ecochemistry, Ghent, Belgium [3] Research Institute for Nature and Forest, Geraardsbergen, Belgium [4] Brookhaven National Laboratory, Biology Department, Upton, NY, USA
ID 145	**BIOWASTE AND NATIVE WOODY PLANTS IN THE REMEDIATION OF HEAVY-METAL POLLUTED SOIL** **[1]Maija Salemaa, [1]Heljä-Sisko Helmisaari, [1]Tiina M. Nieminen & [2]John Derome** [1]Finnish Forest Research Institute, P.O. Box 18, FI-01301 Vantaa, Finland [2]Finnish Forest Research Institute, P.O. Box 16, FI-96301 Rovaniemi, Finland
ID 058	**BIOREMEDIATION AND POA ANNUA** **Elena Comino, Adriano Fiorucci, Stefania Menegatti, Cecilia Marocco** Politecnico di Torino, Land, Environment and Geo-engineering Department, Torino, Italy.
ID 004	**PHYTOREMEDIATION OF HEAVY METALS FROM CONTAMINATED AREAS OF TURKEY** **Abdul R. Memon[1], Yasemin Yildizhan[1], Eda Kaplan[2], and Taylan Koseoglu[2]** [1] TUBITAK, MAM, Genetic Engineering and Biotechnology Institute, Gebze, Kocaeli, Turkey [2] Department of Biology, Istanbul University, Istanbul, Turkey
ID 014	**EXPERIMENTAL BASSES FOR BIOREMEDIATION OF SOILS CONTAMINATED WITH METALS** **A. Neagoe[1], V. Iordache[2], and H. Bergmann[3]** [1] Research Center for Ecological Services (CESEC), University of Bucharest, Romania [2] Department of Systems Ecology, University of Bucharest, Romania [3] Institute of Earth Sciences, Friedrich-Schiller University, Jena, Germany
ID 059	**CADMIUM AND NICKEL ACCUMULATION AND GROWTH RESPONSES OF SUGAR BEET** **Eleni G. Papazoglou** Dept of Natural Resources Management and Agricultural Eng., Agricultural University of Athens, Greece
ID 274	**PB AND CD ACCUMULATION AND INTERACTIONS IN *ATRIPLEX HALIMUS* L. GROWN ON POLLUTED SOIL UNDER GREENHOUSE CONDITIONS** **E. Manousaki and N. Kalogerakis** Department of Environmental Engineering, Technical University of Crete, Chania, Greece.
ID 018	**THE POSSIBILITY OF PHYTOTECHNOLOGY APPLICATION FOR LAND RECLAMATION OF AREAS CONTAMINATED BY TENORM** **Bogusław Michalik** Laboratory of Radiometry, Główny Instytut Górnictwa, Katowice, Poland.
13:30 – 14:30	**LUNCH (Minoa Palace Hotel)**
17:00 - 18:00	**Poster Viewing (Group II)**
18:00 - 18:45	**Keynote Lecture – Room A**
page 4	**CONTAMINATED SEDIMENTS: Resilience, Recovery and Adaptive Management** **Dr. Sabine E. Apitz,** SEA Environmental Decisions, Ltd., Hertfordshire, United Kingdom
18:45 - 19:15	**Coffee break & Poster Viewing (Group II)**

19:15 - 21:15 SESSION #9: Fungal Bioremediation -Room A
CHAIR-PERSONS: **K. Steffen** (Finland) **and N. Nair** (Australia)

ID 029 **BIODEGRADATION OF ENDOCRINE DISRUPTERS BY LIGNINOLYTIC FUNGI**
Tomáš Cajthaml, Kateřina Svobodová, Zdena Křesinová
Institute of Microbiology, Academy of Sciences of the Czech Republic, Prague, Czech Republic

ID 089 **REMOVAL OF BPA AND ITS ESTROGENIC ACTIVITY BY FUNGAL OXIDATIVE ENZYMES**
G. Kabiersch, J. Kovanen, L. Valentín-Carrera, M. Tuomela, M. Virta, A. Hatakka, K. Steffen
Department of Applied Chemistry and Microbiology, University of Helsinki, Helsinki, Finland

ID 230 **FUNGAL BIOSORPTION IN WASTEWATER TREATMENT: THE CASE OF TEXTILE AND TANNING INDUSTRIES**
Tigini V. [1], Prigione V. [1], Pezzella C. [2], Anastasi A. [1], Sannia G. [2] and Varese G.C. [1]
[1] Department of Plant Biology, University of Turin, Turin, Italy
[2] Department of Organic Chemistry and Biochemistry, University of Naples Federico II, Naples, Italy

ID 129 ***GYMNOPILUS LUTEOFOLIUS* - A PROMISING FUNGUS FOR BIOREMEDIATION OF CONTAMINATED SAWMILL SOIL**
Lara Valentin Carrera, Grit Kabiersch, Marja Tuomela, Kari Steffen and Annele Hatakka
University of Helsinki, Department of Applied Chemistry and Microbiology, Finland

ID 101 **ISOLATION AND CHARACTERIZATION OF FUNGAL STRAINS CAPABLE OF DEGRADAING POLYVINYLE CHLORIDE (PVC) PLASTICS**
I. Ali[1], G. D. Robson[2], I. Javed[1], B. Ahmed[1] and S. Ahmed[1]
[1] Microbiology Research lab, Department of Microbiology, Quaid-i-Azam University Islamabad, Pakistan
[2] Faculty of Life Sciences, University of Manchester, Manchester, UK

ID 247 **BIODEGRADABILITY STUDY OF NEWLY-SYNTHETIZED POLYMERS**
V. Šašek[a*], I. Prokopová[b] , J. Brožek[b], Č. Novotný[a] , J. Turečková[b], M. Kutáčová[b], P. Erbanová[a], J. Náhlík[c]
[a]Institute of Microbiology v.v.i., CAS, Prague, Czech Republic,
[b]Department of Polymers, ICT-Prague, Czech Republic
[c]Department of Solid State Engineering, ICT-Prague, Czech Republic

ID 056 **THE BIODIVERSITY OF BASIDIOMYCETES IN GREECE: AN UNDEREXPLORED RESOURCE FOR BIOREMEDIATION**
E. Kapsanaki-Gotsi, Z. Gonou-Zagou, D. Floudas, C. Antypa, A. Sergentani, S. Karakitsou, G. Bardamaskos, E. Rigopoulou
University of Athens, Faculty of Biology, Department of Ecology & Systematics, Athens, Greece

ID 148 **CHARACTERIZATION OF PENTACHLOROPHENOL DEGRADATION BY THE ASCOMYCETE PENICILLIUM GLANDICOLA**
MB Carvalho[1], C Rodrigues[1,2], MC Leitão[1], I Martins[1], H Garcia[1], M Petkovic[1], A Varela[1,3], Iain McLellan[5], A Hursthouse[5], MV San Romão[2,3,4] and C Silva Pereira [1,2]
[1] Instituto de Tecnologia Química e Biológica – Universidade Nova de Lisboa (ITQB-UNL), Oeiras, Portugal
[2] Instituto de Biologia Experimental e Tecnológica (IBET), Oeiras, Portugal
[3] Estação Agronómica Nacional (EAN), Av. da República, Oeiras, Portugal
[4] Estação Vitivinícola Nacional (EVN), Dois Portos, Portugal
[5] School of Engieering & Science, University of the West of Scotland, Paisley, UK

19:15 - 21:15 SESSION #10: Remediation Soils, Sludges And Industrial Wastewaters -ROOM B
CHAIR-PERSONS: **G. Caminal** (Spain) **and M. Petruccioli** (Italy)

ID 244 **THE EFFECT OF MODIFIED FENTON REAGENT DOSE ON CO-EXISTING CHEMICAL AND MICROBIAL OXIDATION IN SOIL**
Daniel Cassidy[1], Anne-Clarisse Ndjou'ou[2], Joseph Bou-Nasr[2]
[1] Western Michigan University, Department of Geosciences, Kalamazoo, Michigan, USA.
[2] Université Laval, Département de géologie et de génie géologique, Québec, Québec, Canada.

ID 068 **FUNGAL SCREENING FOR BIODEGRADATION OF CLOFIBRIC ACID AND ABILITY OF *TRAMETES VERSICOLOR* IN BIOREACTOR TREATMENT**
Marta Moreno[1], Ernest Marco-Urrea[1], Gloria Caminal[2], Paqui Blánquez[1], and Teresa Vicent[1]
[1] Departament d'Enginyeria Química (EQ) and Institut de Ciència i Tecnologia Ambiental (ICTA), Universitat Autònoma de Barcelona (UAB), Bellaterra, Spain,
[2] Unitat de Biocatàlisis Aplicada associada al IIQAB (CSIC-UAB), Bellaterra, Spain.

ID 074 **SCREENING OF GREEN MICROALGAE SPECIES FOR EXTRACELLULAR PHENOLOXIDASE ACTIVITY USEFUL FOR WASTEWATER PHYCOREMEDIATION**
La Russa M., De Biasi M.G., Chiaiese P., Palomba F., Pollio A.[1], Pinto G.[1], Filippone E.
University of Naples "Federico II", Department of Soil, Plant, Environmental and Animal Production Sciences, School of Biotechnology, Naples. Italy;
[1]University of Naples "Federico II", Dept. of Biological Sciences, Naples, Italy.

ID 064 **EX-SITU BIOREMEDIATION OF WASTEWATER USING LAGOON TANK BIOREACTOR AND MIXED CULTURE OF ALGAE AND BACTERIA**
Abdul Rehman & John Andresen
School of Chemical and Environmental Engineering, University of Nottingham, UK.

ID 167 **COMPARATION BETWEEN BIOAUGMENTED AND NON-BIOAUGMENTED CHEMOLITOAUTOTROPHIC DENITRIFYING BIOREACTORS**
N. Fernández, I. Sánchez, R. Amils and J.L. Sanz
Centro de Biología Molecular, Universidad Autónoma de Madrid, Madrid, Spain

ID 193 ***CANDIDATUS ACCUMULIBACTER PHOSPHATIS* POPULATIONS WITH DIFFERENT DENITRIFYING CAPACITIES**
R. Moita, A. B. Lanham, M. A. M. Reis, P. C. Lemos
REQUIMTE/CQFB, Chemistry Department, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa Caparica, Portugal

FRIDAY, SEPTEMBER 5TH, 2008

8:25 - 9:25 **Keynote Lecture – Room A**

INTEGRATING MULTIDISCIPLINARY ANALYSIS WITHIN PERFORMANCE ASSESSMENT OF MNA IN GROUNDWATER
Dr Steven Thornton,
Groundwater Protection and Restoration Group, Dept of Civil and Structural Engineering, University of Sheffield, UK

9:30 - 11:00 **SESSION #11: Bioremediation of Sites Contaminated with Chlorinatedand and Other Recalcitrant Compounds - ROOM A**
CHAIR-PERSONS: **Ryan Wilson** (UK) **and Tomas Macek** (Czech Republic)

ID 152 **BIOLOGICAL REMEDIATION - SUCCESS AND FAILURE, HYPOTHESE AND FACTS**
Mackova, M.[1,2], Lovecka P. [1], Uhlik O. [2,1], Kochankova L. [3], Jecna K. [1], Chrastilova, Z.[1], Novakova M.[1,2], Vrchotova B. [1,2], Holeckova M. [2,3], Hlavacova E. [1], Demnerova K. [1], and Macek T.[2,1]
[1] ICT Prague, Dept. of Biochemistry and Microbiology, Czech Republic
[2] Institute of Organic Chemistry and Biochemistry, CAS, Dept. of Natural Products, Czech Republic
[3] ICT Prague, Dept of Environmental Chemistry, Prague, Czech Republic

ID 122 **RISKS AND BENEFITS OF BIOLOGICAL CLEANING OF THE ENVIRONMENT POLLUTED WITH HALOGENATED COMPOUNDS**
Demnerova K. [1], Macková M.[1, 2], Jecna K.[1], Stiborova H.[1], Lovecka P.[1], Dudková V.[1], Zlámalíková J.[1], Macek T. [1]
[1] ICT Prague, Fac. Food and Bioch. Technology, Dept. of Biochemistry and Microbiology, Czech Republic.
[2] Institute of Organic Chemistry and Biochemistry, CAS, Dept. of Natural Products, Czech Republic.

ID 124 **ADDITION OF WHEY, LACTOSE AND MODIFIED ORGANIC MATTER EFFECTS COMPLETE REMOVAL OF PCE : TRANSFERRING LAB-SCALE OBSERVATIONS TO IN SITU VALIDATION**
Kerstin Scherr[1], Manfred Nahold[2] and Andreas Paul Loibner[1]
[1] Institute for Environmental Biotechnology, Department for Agrobiotechnology, University of Natural Resources and Applied Life Sciences Vienna, Tulln, Austria
[2] G.U.T. Gruppe Umwelt + Technik GmbH, Linz, Austria

ID 073 **BIOREDUCTION OF PERCHLORATE AND CHLORATE BY DECHLOROSPIRILLUM SP. DB AND DECHLOROSOMA SP. PCC: CHARACTERIZATION AND GROWTH KINETICS**
Filipa P. Prata, Cristina Costa, Maria A. M. Reis, Paulo C. Lemos
REQUIMTE/CQFB, Dep. de Química, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal

ID 069 **AEROBIC DEGRADATION OF 1,2,3- AND 1,2,4-TRICHLOROBENZENE BY THE WHITE-ROT FUNGUS *TRAMETES VERSICOLOR***
Ernest Marco-Urrea[1], Xavier Gabarrell[1], Gloria Caminal[2], Montserrat Sarrà[1], and Teresa Vicent[1]
[1] Departament d'Enginyeria Química (EQ) and Institut de Ciència i Tecnologia Ambiental (ICTA), Universitat Autònoma de Barcelona (UAB), Bellaterra, Spain,
[2] Unitat de Biocatàlisis Aplicada associada al IIQAB (CSIC-UAB), Bellaterra, Spain.

ID 264 **MINERALISATION OF 14C-LABELLED METALAXYL FUNGICIDE IN BRAZILIAN SOILS**
Andrea Maria Spessoto[1], Itamar S. Melo[1], Regina T. R. Monteiro[2]
[1] Laboratory of Microbiology, EMBRAPA ENVIRONMENT, Jaguariúna-SP, Brazil.
[2] Laboratory of Ecoloxicology, CENA, University of São Paulo, Piracicaba-SP, Brazil.

09:30 - 11:00 **SESSION #12: Application of Molecular Biology Techniques to Bioremediation-I -ROOM B**
CHAIR-PERSONS: **Stuart Strand** (USA) **and Daniele Daffonchio** (Italy)

ID 213 **A NEW RDX DEGRADER BUT A FAMILIAR PATHWAY**
Peter Andeer, Neil Bruce[1], David Stahl, Stuart Strand
Dept Civil and Environmental Engineering, University of Washington, Seattle, WA, USA
[1]University of York, York, UK

ID 003 **THE MICROBIAL ECOLOGY OF A PHENOL-POLLUTED AQUIFER**
A. Rizoulis[1], D.R. Elliott[1], S.F. Thornton[2], S.A. Banwart[2], R.W. Pickup[3], S.A. Rolfe[1], J.D. Scholes[1]
[1] Department of Animal and Plant Sciences, University of Sheffield, Sheffield, UK
[2] Department of Civil and Structural Engineering, University of Sheffield, Sheffield, UK
[3] Centre for Ecology and Hydrology, Lancaster Environment Centre, Lancaster, UK

ID 304 **TETRACYCLINE RESISTANCE GENE MAINTENANCE: EFFECT OF ANTIBIOTIC CONCENTRATION, BACTERIAL GROWTH RATE AND GROWTH MEDIUM**
Michal Rysz[1] and Pedro J.J. Alvarez[2]
[1] GSI Environmental Inc., Houston, Texas, USA
[2] Department of Civil and Environmental Engineering, Rice University, Houston, Texas, USA

ID 221 **APPROACHES AND METHODS USED FOR CHARACTERIZATION OF BACTERIA IN PLANT RHIZOSPHERE GROWING IN CONTAMINATED ENVIRONMENT**
Tomas Macek [1,2], Ondrej Uhlik [1,2], Miloslav Sanda [1], Edita Hlavacova[2], Katerina Jecna [2], Petr Štursa[2] and Martina Mackova[1,2]
[1] Institute of Organic Chemistry and Biochemistry, CAS, Prague, Czech Republic
[2] ICT-Prague, Department of Biochemistry and Microbiology, Prague, Czech Republic

ID 173 **CHARACTERIZATION OF A NEW MOLINATE HYDROLASE**
Iris Plumeier[1], Ivone Vaz-Moreira[2], Luisa Barreiros[2], Beatriz Cámara[1], Agata Bielecka[1], Márcia Duarte[2], Howard Junca[1], Dietmar H. Pieper[1], Olga C. Nunes[2]
[1] AG Biodegradation, HZI- Helmholtz Centre for Infection Research, Braunschweig, Germany
[2] LEPAE – Departamento de Engenharia Química, Universidade do Porto, Porto, Portugal

11:00 - 11:30 **Coffee break & Poster Viewing (Group III)**

09:30 - 11:00 **SESSION #13: Ex-situ Bioremediation of Contaminated Soils, Sludges and Industrial Wastewaters -ROOM A**
CHAIR-PERSONS: **B. Antizar-Ladislao** (UK) **and Patryk Oleszczuk** (Poland)

ID 017 **THE USE OF IN-VESSEL COMPOSTING AS A SUSTAINABLE BIOREMEDIATION TECHNOLOGY TO CLEAN-UP PAHS IN AN AGED COAL-TAR CONTAMINATED SOIL**
B. Antizar-Ladislao[1,2], J.M. Lopez-Real[1], N.J. Russell[1], A.J. Beck[1]
[1] Imperial College London, Wye campus, Agriculture Science, Kent, UK
[2] University of Edinburgh, School of Engineering and Electronics, Institute of Infrastructure and Environment, Edinburgh, UK

ID 012 **DEFLUVIICOCCUS VANUS RELATED GLYCOGEN ACCUMULATING ORGANISMS: KINETIC AND METABOLIC DATA**
A. B. Lanham, M. A. M. Reis, P. C. Lemos
REQUIMTE/CQFB, Chemistry Department, Faculdade de Ciencias e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal

ID 042 **BIO-REMEDIATION OF COLORED INDUSTRIAL WASTEWATERS BY THE WHITE-ROT FUNGI *PHANEROCHAETE CHRYSOSPORIUM* AND *PLEUROTUS OSTREATUS* AND THEIR ENZYMES**
Pezzella C.[2], Faraco V.[1], Miele A.[2], Giardina P.[1] and Sannia G.[1]
[1] Department of Organic Chemistry and Biochemistry, University of Naples Federico II, Naples, Italy.
[2] School of Biotechnological Sciences, University of Naples Federico II, Naples, Italy.

ID 160 **BIOREMEDIATING COMPOSTING OF POLYURETHANES WASTES WITH FOOD WASTES AND HORSE DUNG**
Mikio Shimada, Yasuto Tsujimoto, Tadahide Ohsuga, Toru Onishi and Hyoe Hatakeyama
Fukui University of Technology, Fukui , GAkuen 3-chome, Japan

ID 087 **BIOAUGMENTATION OR BIOSTIMULATION? LESSONS FROM TWO BATCH CASE STUDIES OF BIOPILE BIOREMEDIATION FOR DIESEL-CONTAMINATED SOILS**
Liu, P.W.G[1], L.M. Whang[2], T.C. Chang[3], I.C. Tseng[4], S.S. Cheng[2]
[1] Department of Safety Health and Environmental Engineering, Chung Hwa University of Medical Technology, Rende Shiang, Tainan County, Taiwan
[2] Department of Environmental Engineering, Sustainable Environment Research Center (SERC),
[3] Department of Medical Laboratory Science and Biotechnology,
[4] Department of Life Sciences, National Cheng Kung University, Tainan, Taiwan.

ID 183 **EFFECT OF MOBILIZING AGENTS ON MYCOREMEDIATION AND IMPACT ON INDIGENOUS MICROFLORA**
Leonardi V.[1], Giubilei M.A.[1], Federici E.[2], Šašek V.[3], Novotný C.[3], D'Annibale A.[1] and Petruccioli M.[1]
[1] Dipartimento di Agrobiologia & Agrochimica, University of Tuscia, Viterbo, Italy
[2] Dipartimento di Medicina Sperimentale & Scienze Biochimiche, University of Perugia, Perugia, Italy
[3] Experimental Mycology Laboratory, Institute of Microbiology, CAS, Prague, Czech Republic

ID 149 **FUNGAL BIODEGRADATION OF 1-ETHYL-3-METHYLIMIDAZOLIUM SALTS**
M Petkovic[1], H Garcia[1], J Ferguson[2], MB Carvalho[1], I Martins[1], C Rodrigues[1,3], A Varela[1,4], K Seddon[2], LPN Rebelo[1,3] and C Silva Pereira [1,3]
[1] Instituto de Tecnologia Química e Biológica (ITQB), Oeiras, Portugal
[2] Queens University Ionic Liquid Laboratories (QUILL), Belfast, UK
[3] Instituto de Biologia Experimental e Tecnológica (IBET), Oeiras, Portugal
[4] INRB/L-INIA (ex-EVN), Quinta de Almoínha, Dois Portos, Portugal

11:30 - 13:30 **SESSION #14: Bioremediation of Heavy Metal Polluted Sites -ROOM B,**
CHAIR-PERSONS: **D. Zannoni** (Italy) **and I. Ignatiadis** (France)

ID 049 Session Keynote Presentation
THE BACTERIAL RESPONSE TO METALLOIDS AS A TOOL IN ENVIRONMENTAL AND INDUSTRIAL BIOTECHNOLOGY
Davide Zannoni
Department of Biology, Faculty of Sciences, University of Bologna, Bologna, Italy

ID 253 Session Keynote Presentation
BIOSORPTION AND BIOACCUMULATION OF HEAVY METALS: SUSTAINABLE APPROACH FOR SOILS, GROUNDWATER, SURFACE WATER AND SEDIMENTS
Ludo Diels, S. Van Roy, K. Van Broekhoven
Flemish Institute for Technological Research (VITO), Mol, Belgium

ID 188 **BIOSORPTION OF Cu, Ni AND Zn FROM SINGLE METAL SOLUTIONS AND THEIR MIXTURE BY ALGA *CHLORELLA KESSLERI*.**
Kadukova, J., Horvathova, H., Mrazikova, A., Stofko, M.
Technical University of Košice, Faculty of Metallurgy, Department of Non-Ferrous Metals and Waste Treatment, Košice, Slovenia.

ID 095 **OPTIMIZATION OF A BIOLOGICAL PROCESS FOR THE IN-SITU TREATMENT OF CR(VI) POLLUTED GROUNDWATER IN A "PANEL-AND-DRAIN" TYPE BIO-BARRIER**
Fabienne Battaglia-Brunet[1], Annette Esnault-Filet[2], Caroline Michel[1], Dominique Morin[1] and Ioannis Ignatiadis[1]
[1] BRGM, Environment and Process Division, Orléans Cedex 02, France
[2] Soletanche-Bachy, Nanterre, France

ID 115 **EFFECT OF CARBON SOURCE ON THE MERCURY BIOREMEDIATION PERFORMANCE OF MIXED CULTURES**
J. Fradinho[1], A. Oehmen[1], G. Carvalho[1,2], J. L. Capelo[1], M. T. B. Crespo[2], S. Velizarov[1], J. G. Crespo[1] and M. A. M. Reis[1]
[1] REQUIMTE/CQFB, Chemistry Dept., FCT, Universidade Nova de Lisboa, Caparica, Portugal.
[2] IBET/ITQB, UNL, Oeiras, Portugal

ID 141 **USE OF BACTERIA FOR THE REMEDIATION OF MINE WATER**
Maria E. Romero-Gonzalez[1], Bennett Nwaobi[1] and Jim Gilmour[2]
[1] Cell-Mineral Interface Research Programme, Kroto Research Institute, University of Sheffield, Sheffield, UK
[2] Department of Molecular Biology and Biotechnology, University of Sheffield, Sheffield, UK

ID 013 **ACCUMULATION AND REMOVAL OF NICKEL BY AZOLLA MICROPHYLLA BIOMASS**
Anju Arora and Sudhir Saxena
Centre for Conservation of Blue Green Algae Indian Agricultural research Institute, N. Delhi, India.

FRIDAY AFTERNOON - FREE TIME

20:00 - 24:00 **Conference Dinner**
"Greek Night" – location: Costa Costa, Agia Marina.
(Busses leave at 19:45 from the venue hotel)

SATURDAY, SEPTEMBER 6TH, 2008

9:15 - 9:30 **Plenary Announcement – Room A**

FIRST PUBLIC ANNOUNCEMENT: International Association of Mediterranean Agro-Industrial Wastes (IAMAW)
Dr. Roberto Altieri,
Institute for Agricutural and Forest Mediterranean Systems, Consiglio Nazionale delle Ricerche (CNR), Perugia, ITALY

9:30 - 11:00 **SESSION #15: Integrated Technologies and New Technology Trends -ROOM B**
CHAIR-PERSONS: **D. Cassidy** (USA) **and L. Diels** (Belgium)

ID 252 Session Keynote Presentation
IN SITU SLUDGE CONSOLIDATION: A SUSTAINABLE AND ECOLOGICAL SOLUTION FOR SLUDGE DISPOSAL IN RIVER BEDS OR LANDFILLS?
L. Diels, W. Dejonghe, J. Gemoets
Flemish Institute for Technological Research (VITO), Mol, Belgium

ID 121 **THE POTENTIAL FOR BIOREMEDIATION AFTER IN SITU CHEMICAL OXIDATION FOR THE REMEDIATION OF CONTAMINATED SOIL AND GROUNDWATER**
Aikaterini Tsitonaki, Barth Smets and Poul L. Bjerg
Institute of Environment & Resources, Technical University of Denmark, Denmark.

ID 280 **THE PREVENTIVE APPROACH FOR MANAGING AND REMOVING ORGANIC POLLUTANTS: FOUR EXAMPLES IN PARTNERSHIP WITH AMMUNITION AND PHARMACEUTICAL COMPANIES**
Carine Dosiere, Laurence le Campion, Philippe Chaignon, Sylvie Cortial, Marie-Thérèse Adeline, Charles Giannotti, Marcel Delaforge1, Sophie Dezard[1] and Jamal Ouazzani,
C.N.R.S, Institut de Chimie des Substances Naturelles, Gif-sur-Yvette, Cedex– France.
[1]Commissariat à l'Energie Atomique, Gif-sur-Yvette, France.

ID 039 **AN INNOVATIVE TECHNOLOGY FOR TREATING MUNICIPAL AND INDUSTRIAL WASTEWATER WITH LOW SLUDGE PRODUCTION**
C. Di Iaconi[1], G. Del Moro[1], R. Ramadori[2], A. Lopez[1]
[1] Istituto di Ricerca Sulle Acque C.N.R , Bari, Italy.
[2] Istituto di Ricerca Sulle Acque C.N.R , Roma, Italy.

ID 295 **MEDICAL BIOREMEDIATION**
Jacques Mathieu and Pedro Alvarez
Rice University, Civil and Environmental Engineering, Houston, Texas, USA

09:30-11:00 **SESSION #16: Bioremediation & Valorization of Agro-Industrial By-products, Effluents, Wastes and Surplus -ROOM A**
CHAIR-PERSONS: **F. Federici** (Italy) **and D. Manzavinos** (Greece)

ID 223 Session Keynote Presentation
PHOTOBIOHYDROGEN PRODUCTION BY USING PRE-TREATED OLIVE MILL WASTEWATER
Giuseppe Torzillo, Alba Ena, Cecilia Faraloni, Cristina Pintucci
Institute of Ecosystem Study, National Research Council, Sesto Fiorentino, Florence, Italy

ID 209 **ENERGETIC VALORISATION OF AGRICULTURAL RESIDUES BY THE INTEGRATION OF ANAEROBIC DIGESTION PROCESSES WITH MCFC SYSTEM**
Erica Massi[1], Viviana Cigolotti[2], Alessandra Polettini[1], Angelo Moreno[3], Chiara Alisi[3], Flavia Tasso[3] and Anna Rosa Sprocati[3]
[1] University of Rome La Sapienza, Rome, Italy.
[2] University of Naples Federico II, Naples, Italy
[3] ENEA, CR-Casaccia, Rome, Italy.

ID 086 **BIOPOLYMER PRODUCTION BY MIXED MICROBIAL CULTURES FROM SUGAR CANE MOLASSES**
M.G.E. Albuquerque[1], C. Torres[1], S. Bengtsson[2], A. Werker[2], M.A.M. Reis[1]
[1] CQFB-Requimte, FCT/UNL, Caparica, Portugal.
[2] AnoxKaldnes AB, Lund, Sweden

ID 021 **SOLIDIFICATION OF DRIED ACTIVATED SLUDGE IN CERAMIC MATERIALS**
E. Athanasoulia[1], V. Diamantis[1], S. Tastani[2] and A. Aivasidis[1]
[1] Department of Environmental Engineering, Democritus University of Thrace, Xanthi, Greece.
[2] Department of Civil Engineering, Democritus University of Thrace, Xanthi, Greece.

ID 194 **RECOVERY OF PHENOLIC COMPOUNDS FROM SPENT COFFEE GROUNDS**
Roberto Lavecchia and Antonio Zuorro
Department of Chemical Engineering, University of Rome "La Sapienza", Roma, Italy.

ID 050 **PRODUCTION OF VANILLIN FROM WHEAT BRAN HYDROLYZATES VIA MICROBIAL BIOCONVERSION**
Diana Di Gioia[1], Luigi Sciubba[1], Maurizio Ruzzi[2], Fabio Fava[1]
[1] DICASM, Faculty of Engineering, University of Bologna, Bologna, Italy.
[2] Department of Agrobiology & Agrochemistry, University of Viterbo, Italy.

11:00-11:30 **Coffee break & Poster Viewing (Group III)**

11:30-13:30 **SESSION #17: Biomonitoring and Bioremediation of Contaminated Sediments -ROOM A**
CHAIR-PERSONS: **F. Fava** (Italy), **K. Demnerova** (Czech Republic)

Session Keynote Presentation

ID 083 **ENRICHMENT OF PCB DECHLORINATING BACTERIA FROM MARINE SEDIMENTS OF VENICE LAGOON UNDER GEOCHEMICAL CONDITIONS THAT MIME THOSE OCCURRING IN SITU**
Giulio Zanaroli[1], Andrea Negroni[1], Annalisa Balloi[2], Daniele Daffonchio[2], Fabio Fava[1]
[1] Dept. of Applied Chemistry and Material Science, University of Bologna, Bologna, Italy
[2] Dept. of Food Science, Technology and Microbiology, University of Milan, Milano, Italy.

ID 241 **ECOTOXICITY AND BIOREMEDIATION OF PCB-CONTAMINATED SEDIMENTS**
Katarína Dercová[1], Jana Šeligová[1], Lívia Tóthová[2], Pavel Hucko[2], Mária Mikulášová[3], Petra Lovecká[4]
[1] Slovak University of Technology, Institute of Biotechnology and Food Science, Department of Biochemical Technology, Bratislava, Slovakia
[2] Water Research Institute, Bratislava, Slovakia
[3] Institute of Cell Biology, Faculty of Natural Sciences, Commenius University, Bratislava, Slovakia
[4] ICT Prague, Department of Biochemistry and Microbiology, Praha, Czech Republic

ID 060 **BIVALVES AS BIOMARKERS OF POLLUTION IN MARINE AND FRESHWATER ENVIRONMENTS**
Christina Emmanouil[1], Maria Bouga[2], Athanassios Kungolos[1]
[1] Dept of Planning and Regional Development, School of Engineering, University of Thessaly, Volos, Greece
[2] Laboratory of Agricultural Zoology and Entomology, Agricultural University of Athens, Athens, Greece

ID 236 **BIOREMEDIATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN POLLUTED MARINE SEDIMENT BY DENITRIFICATION**
T.Zhang, X.Y. Lu, and H.H.P. Fang
Department of Civil Engineering, The University of Hong Kong SAR, China

ID 037 **INVESTIGATING THE POTENTIAL FOR NITRATE ATTENUATION WITHIN THE HYPORHEIC ZONE OF A UK LOWLAND RIVER**
Nicholas P. Riess [1,2,3], Wairimu A. Muia [5], Jonathan W.N. Smith[5], A. Mark Osborn[3], Steven F. Thornton[2]
[1] Catchment Science Centre, University of Sheffield, Sheffield, UK,
[2] Groundwater Protection and Restoration Group, University of Sheffield, Sheffield, UK,
[3] Animal and Plant Sciences, University of Sheffield, Sheffield, UK,
[4] Department of Biological Sciences, Egerton University, Egerton, Kenya
[5] Environment Agency, Science Department, Solihull, UK

ID 070 **BIOLEACHING AS A BIOREMEDIATION STRATEGY FOR DREDGED SEDIMENTS POLLUTED BY HEAVY METALS**
F. Beolchini,[1] L. Rocchetti,[1] S. Ubaldini,[2] F. Vegliò,[3] R. Danovaro,[1] A. Dell'Anno[1]
[1]Dipartimento di Scienze del Mare, Università Politecnica delle Marche, Ancona, Italy
[2]Istituto di Geologia Ambientale e Geoingegneria – C.N.R., Rome, Italy.
[3]Dipartimento di Chimica, Ingegneria Chimica e Materiali, Università de L'Aquila, Italy

ID 057 **MICROBIAL TRANSFORMATION OF ARSENATE AND SELENATE IN THE NILE DELTA**
El-Aassar S.A., Berekaa M.M., EL-Shaer M., Yussef G.A. and Stolz J.F.[1]
Botany Dept., Microbiology Division, Faculty of Science, Alexandria, Egypt
[1]Department of Biological Sciences, Duquesne University, Pittsburg, PA, USA

11:30-13:30 **SESSION #18: Bioremediation of Olive Mill Wastewater-I -ROOM B**
CHAIR-PERSONS: **F. Santori** (Italy) **and J. Cegarra** (Spain)

ID 033 **VALORISATION OF OLIVE OIL SOLID WASTES FOR THE DEVELOPMENT OF NEW BIOSORBENTS FOR HEAVY METALS**
Pagnanelli Francesca, Cruz Viggi Carolina, Mainelli Sara, Luigi Toro
Department of Chemistry, University of Rome La Sapienza, Rome, Italy.

ID 265 **A NEW PROCESS FOR OLIVE MILL WASTEWATER TREATMENT USING TREES EVAPOTRANSPIRATION**
T. Rega[1], A. Zingaretti[1], S. Bodini[1], B. Ribeiro[2], J. C. Duarte[2] and F. Santori[1]
[1] ISRIM S. C. a r. l. - Department of Environmental Biotechnologies - Terni, Italy
[2] INETI Instituto Nacional de Engenharia Technologia e Inovação - Lisboa, Portugal

ID 176 **GENERAL PLAN FOR THE INTEGRAL TREATMENT, MANAGEMENT AND VALORISATION OF WASTE GENERATED DURING THE PRODUCTION PROCESS OF VIRGIN OLIVE OIL.**
Lara A., Perán J.R., Calvo A., López J. and Gatón P.
Fundación CARTIF, Department of Mechanical Engineering, Valladolid, Spain

ID 216 **ANAEROBIC DIGESTION OF OLIVE MILL WASTEWATER IN A PERIODIC ANAEROBIC BAFFLED REACTOR (PABR)**
Katerina Stamatelatou [1,2], A. Kopsahelis, P. Blika[1] and Gerasimos Lyberatos [1,2]
[1] Department of Chemical Engineering, University of Patras, Patras, Greece
[2] Institute of Chemical Eng. and High Temperature Chemical Processes (FORTH/ICE-HT), Patras, Greece.

ID 133 **BIOTIC AND ABIOTIC CATALYSTS FOR THE BIOREMEDIATION OF PHENOL POLLUTED WASTE WATERS**
Rao M. A., Scelza R., Iamarino G., Russo F., Gianfreda L.
Dipartimento di Scienze del Suolo, della Pianta, dell'Ambiente e delle Produzione Animali, Università di Napoli Federico II, Portici, Napoli, Italy

ID 105 **BIOREMEDIATION OF OLIVE MILL WASTEWATER WITH SELECTED FILAMENTOUS FUNGI**
J. Mann[1], J.L. Markham[2], P. Peiris[2], N. Nair[1], R.N. Spooner-Hart[2]
[1] Centre for Plant and Food Sciences, University of Western Sydney, Australia
[2] School of Natural Sciences, University of Western Sydney, Australia

ID 065 **OIL RECOVERY FROM OLIVE MILL WASTEWATER BY USING PECTINOLYTIC ENZYMES IMMOBILIZED TO ZEOLITES**
Erdinc Ikizoglu [1] , Evrim Taskin [2], Fazilet Vardar Sukan [1]
[1] Ege University, Faculty of Engineering, Bioengineering Dept., Bornova-Izmir - TURKEY
[2] Celal Bayar University, Faculty of Science and Art, Biology Dept., Manisa - TURKEY

ID 308 **ALTERNATIVE METHODS FOR LOW COST TREATMENT OF OLIVE MILL WASTEWATER**
Nicolas Kalogerakis, Dionissios Mantzavinos and Nikolaos Nikolaidis
Department of Environmental Engineering, Technical University of Crete, Chania, Greece

13:30 – 14:30 **LUNCH (Minoa Palace Hotel)**

17:30-18:00 **Coffee break**

18:00-19:15 **SESSION #19: Bioremediation of Olive Mill Wastewater-II -ROOM A**
CHAIR-PERSONS: **Roberto Altieri** (Italy) **and Nektarios Kavroulakis** (Greece)

Session Keynote Presentation

ID 154 **EXPLOITING OLIVE OIL MILL EFFLUENTS AS A RENEWABLE RESOURCE FOR PRODUCTION OF BIODEGRADABLE POLYMERS THROUGH AN ANAEROBIC-AEROBIC PROCESS**
M. Beccari[1], L. Bertin[2], D. Dionisi[1], F. Fava[2], M. Majone[1], M. Villano
[1] Department of Chemistry, Sapienza University of Rome, Rome, Italy
[2] Department of Applied Chemistry and Material Science, University of Bologna, Bologna, Italy

ID 169 **COMPOSTS DERIVING FROM TWO-PHASE OLIVE-MILL WASTES (ALPEORUJO) MAY BE USED IN POTTING MEDIA AND SUPPRESS SOIL-BORNE PATHOGENS**
Spyridon Ntougias[1], Nektarios Kavroulakis[2], Georgios I. Zervakis[1], Constantinos Ehaliotis[3] and Kalliope K. Papadopoulou[4]
[1] Institute of Kalamata, National Agricultural Research Foundation, Kalamata, Greece.
[2] Institute of Chania, National Agricultural Research Foundation, Chania, Greece.
[3] Soils and Agricultural Chemistry Laboratory, Department of Natural Resources and Agricultural Engineering, Agricultural University of Athens, Athens, Greece
[4] Department of Biochemistry & Biotechnology, University of Thessaly, Larissa, Greece

ID 111 **CO-COMPOSTING AN ANIMAL FATTY PROTEINACEOUS WASTE SLUDGE WITH A SOLID LIGNOCELLULOSIC BY-PRODUCT FROM THE OLIVE OIL INDUSTRY ("ALPERUJO")**
J. Cegarra[1], J.A. Alburquerque[1], R. García de la Fuente[2], M. Abad[2] and J. Girbent[3]
[1] Department of Soil and Water Conservation and Organic Waste Management, Centro de Edafología y Biología Aplicada del Segura, CSIC, Murcia, Spain
[2] Instituto Agroforestal Mediterráneo, Universidad Politécnica de Valencia, Valencia, Spain
[3] Bio-integral programme R&D. BIOIBÉRICA S.A., Palafolls, Spain

ID 260 **EFFECTS OF OLIVE SOLID WASTE AND OLIVE SOLID WASTE COMPOST APPLICATIONS ON SOIL BULK DENSITY AND TOTAL POROSITY**
Dilek Killi [1], Ruediger Anlauf [2], Yasemin Kavdır[2]
[1] Canakkale Onsekiz Mart University, Agriculturel Faculty, Soil Science Department, Canakkale , Turkey
[2] Fachhochschule Osnabrück, University of Applied Sciences, Soil Science Department, Osnabrück, Germany

18:00-19:15 **SESSION #20: Application of Molecular Biology Techniques to Bioremediation-II -ROOM B**
CHAIR-PERSONS: **Ileana Stoica** (Romania) **and Olga C. Nunes** (Portugal)

ID 025 **PARAQUAT-TOLERANT POPLAR CLONES (*POPULUS* X *CANESCENS*) SELECTED *IN VITRO***
Bittsánszky A[1,2], G Gyulai[1], G Kátay[1], G Gullner[1], J Kiss[2], L Heszky[2] and T Kőmíves[1]
[1] Plant Protection Institute, Hungarian Academy of Sciences, Budapest, Hungary
[2] St. Stephanus University, Institute of Genetics and Biotechnology, Gödöllő, Hungary

ID 096 **MOLECULAR ANALYSIS ON BACTERIAL STRAINS ISOLATED FROM OIL AND OIL-POLLUTED SOIL**
Robertina Ionescu[2], Tatiana Vassu-Dimov[1], Ana-Maria Nohit[2], Andrei Nicoara[2], Diana Pelinescu[2], Simona Soare-Enache[2], Elena Sasarman[2], Ionela Avram[2], Ileana Stoica[1]
[1] University of Bucharest, Faculty of Biology, Department of Genetics, Bucharest, Romania
[2] University of Bucharest, Faculty of Biology, Center for Research in Microbiology, Genetics, and Biotechnology – MICROGEN, Bucharest, Romania

ID 204 **BIODEGRADATIVE POTENTIAL OF BURKHOLDERIA SP. DBT1 IN THE ABATEMENT OF POLYCYCLIC AROMATIC HYDROCARBONS**
Marco Andreolli, Chiara Zocca, Silvia Lampis and Giovanni Vallini
Department of Science and Technology – University of Verona, Verona, Italy.

ID 200 **MOLECULAR ANALYSIS OF MICROBIAL COMMUNITY STRUCTURE AND DIVERSITY IN CONTAMINATED AND NON CONTAMINATED SITES OF URANIUM MINE AREA AT JADUGUDA, INDIA**
Pinaki Sar[1], Paltu K Dhal[1], Ekramul Islam[1] and Sufia K Kazy[2]
[1] Department of Biotechnology, Indian Institute of Technology, Kharagpur, India.
[2] Department of Agricultural and Food Engineering, IIT Kharagpur, India

19:15-20:00 **PANEL DISCUSSION -Room A**
THEME: **"A Look Into The Future: Where Is Bioremediation Research Heading To?"**
Panel: **P.J. Alvarez, J.-P. Schwitzguébel, C.D. Johnston, I. Economidis**

20:00-20:30 **CLOSING CEREMONY -ROOM A**

Journal of Chemical Technology & Biotechnology BEST PRESENTATION AWARD
Dionyssis Mantzavinos, Associate Editor JCTB, SCI, London, UK

Global NEST Journal BEST POSTER AWARD
Themis Lekkas, Editor Global NEST Journal, Athens, Greece

CLOSING REMARKS AND PLANS FOR FUTURE CONFERENCES
Nicolas Kalogerakis, Conference Chair

SUNDAY, SEPTEMBER 7TH, 2008

SAMARIA GORGE – AN ADVENTURE FOR ALL AGES…
or
TRIP TO ELAFONISSI – THE RELAXING ALTERNATIVE…

POSTER PRESENTATIONS

POSTER GROUP I
(Presentation Period: Wednesday 11:00 to Thursday 9:00)

IN-SITU BIOREMEDIATION OF CONTAMINATED SOIL AND GROUNDWATER

ID 031 **TECHNOLOGY OF BIOREMEDIATION FOR ENZYMATIC TREATMENT OF DIFFERENT CONTAMINATED SOILS WITH DIESEL**

L. Rodríguez[1], J. Villaseñor[2], I. M. Buendía[2], D. Infantes[2], C. M. Fernández[2]
[1] Alquimia Soluciones Ambientales, S.L. C/ de la Calidad, Daimiel (Ciudad Real), Spain
[2] Chemical Engineering Department. Institute for Chemical and Environmental Technologies. University of Castilla-La Mancha. Ciudad Real, Spain.

ID 034 **PRELIMINARY ANALYSIS OF QUERCUS SUBER FOREST SOILS IN TUNISIA: SOIL ENDOGENOUS FUNGAL NICHE AND PHYSICAL-CHEMICAL STATUS**

C Rodrigues[1,2] I McLellan[4], MC Leitão[1], A Varela[1,3], MB Carvalho[1], I Martins[1], H Garcia[1], M Petkovic[1], A Hursthouse[4], MV San Romão[1,2,5] and C Silva Pereira [1,2]
[1]Instituto de Tecnologia Química e Biológica (ITQB), Oeiras, Portugal
[2]Instituto de Biologia Experimental e Tecnológica (IBET), Oeiras, Portugal
[3]INRB/L-INIA (Ex-EAN), Oeiras, Portugal
[4]School of Engieering & Science, University of the West of Scotland, Paisley, UK
[5]INRB/L-INIA (Ex-EVN), Quinta de Almoínha, Dois Portos, Portugal

ID 044 **BIODEGRADATION CAPABILITY AND MICROBIAL COMMUNITY DYNAMICS USING PERMEABLE REACTIVE BARRIERS**

Chi-Wen Lin and Li-Hsun Chen
Department of Environmental Engineering, Da-Yeh University, Taiwan, ROC

ID 079 **BIODEGRADATION OF SOME DINITROPHENYL DERIVATIVES USED AS HERBICIDES AND METABOLIC INHIBITORS**

Gabi Drochioiu[1], Stefana Jurcoane[2], Manuela Murariu[3], Ramona Danac[1], Robert Gradinaru[1]
[1] Al. I. Cuza University of Iasi, 11 Carol I, Iasi, Romania
[2] University of Agronomical Sci. and Veterinary Medicine, Faculty of Biotechnology, Bucharest, Romania.
[3] Petru Poni Institute of Macromolecular Chemistry of Iasi, Iasi, Romania

ID 134 **INTRINSIC SOIL CAPABILITY TO RESIST PRION DISSEMINATION**

Russo F., Rao M.A., Gianfreda L.
Dipartimento di Scienze del Suolo, della Pianta, dell'Ambiente e delle Produzione Animali, Università di Napoli Federico II, Portici, Napoli, Italy

ID 157 **ROLE OF COMPOST, BENTONITE AND CALCIUM OXIDE IN LIMITATION OF EFFECT OF PETROLEUM-DERIVED SUBSTANCES ON PLANTS**

Miroslaw Wyszkowski, Agnieszka Ziólkowska
Department of Environmental Chemistry, University of Warmia and Mazury, Olsztyn, Poland.

ID 158 **EFFECT OF LIME ON RELATIONS BETWEEN CONTENT OF MACROELEMENTS IN BRASSICA NAPUS VAR. OLEIFERA AND AVENA SATIVA L. AND THE ENZYMATIC ACTIVITY OF SOIL CONTAMINATED BY CADMIUM**

Miroslaw Wyszkowski [1], Jadwiga Wyszkowska [2]
[1] Department of Environmental Chemistry, University of Warmia and Mazury in Olsztyn, Olsztyn, Poland
[2] Department of Microbiology, University of Warmia and Mazury in Olsztyn, Olsztyn, Poland

ID 243 **UTILIZATION OF AGRICULTURAL WASTES AND BIOREMEDIATION OF POLLUTED AREA**

Bocharnikova E.A.
Institute Physical-Chemical and Biological Problems in Soil Science RAS, Russia.

ID 298 **MONITORED NATURAL ATTENUATION OF NUTRIENTS AT RIVER BASIN SCALE – THE CASE OF EVROTAS RIVER BASIN**

Katerina Valta[1], Fotini Stamati[1], Daniel Moraetis[1], Andrianaki Maria[1], Ourania Tzoraki[1], Papadoulakis Vassilis[2], Nikolaos P. Nikolaidis[1]
[1] Technical University of Crete, Department of Environmental Engineering, Chania, Greece.
[2] Water resources services of Lakonia Prefecture, Sparta, Greece

ID 302 **THE CREATION NEW NANOBIOPREPARATES ON BASE NANOPARTICLES OF CARBONIZATED RICE HUSK AND MICROORGANISM'S CELLS FOR BIOREMEDIATION OIL-CONTAMINATION SOILS**

A.A. Zhubanova, Z.A. Mansurov
Al-Farabi Kazakh National University, Almaty, Kazakhstan.

BIOREMEDIATION OF SITES CONTAMINATED WITH OILS AND PAHS

ID 136 **BENEFIT OF ECOTOXICOLOGICAL BIOASSAYS IN THE EVALUATION OF A BIOLOGICAL TREATMENT OF PAHS POLLUTED SOIL**

Lors C.[1,2], Perie F.[3], Grand C.[4], Damidot D.[1]
[1] Ecole des Mines de Douai, Civil and Environmental Engineering Department, Douai, France
[2] National Center on Polluted Sites and Soils (CNRSSP), Douai, France
[3] TOTAL, Pôle de R&D Mont Lacq, Lacq, France
[4] ADEME, Angers, France

ID 144 **BIOREMEDIATION OF PHAS CONTAMINATED SITES: ITALIAN ISTITUTE OF OCCUPATIONAL SAFETY AND PREVENTION CONTRIBUTE**

M. Papacchini, C. Simeoni, M. Di Basilio, C.La Gioia
ISPESL – Dipartimento Installazioni di Produzione ed Insediamenti Antropici, Monteporzio Catone, Roma, Italy

ID 155 **CELLULAR AND MOLECULAR MODIFICATIONS INDUCED BY HYDROCARBONS TO *Pseudomonas aeruginosa* IBB_{ML1}**

Mihaela Marilena Lăzăroaie
Institute of Biology of the Romanian Academy, Bucharest, Romania.

ID 163 **ABOUT USING ZEOLITES FOR BIOREMEDIATION OF OIL-POLLUTED SOILS**

Dr. Choupakhina N.
Kaliningrad State Technical University, Kaliningrad, Russia.

ID 197 **BIOREMEDIATION OF ALIPHATIC AND AROMATIC FRACTIONS OF HEAVY CRUDE OIL BY PSEUDOMONAS SP**

Saeed Minoui[1], Dariush Minai-Tehrani[2], Gita Eslami[3]
[1]Institute of Environmental Sciences, Shahid Beheshti University, Tehran, IRAN
[2]BioResearch lab, Faculty of Biological Sciences, Shahid Beheshti University, Tehran, IRAN
[3]Microbiology Section, Shahid Beheshti University of Medical Sciences, Tehran, IRAN

ID 257 **POLYCYCLIC AROMATIC HYDROCARBON DEGRADATION: INCREASING BIOAVAILABILITY BY ADDITION OF CANOLA OIL**

Kerstin Scherr, Marion Hasinger, Francesca Castaldini and Andreas Paul Loibner
Institute for Environmental Biotechnology, Department for Agrobiotechnology, University of Natural Resources and Applied Life Sciences Vienna, Tulln, Austria

ID 263 **BIOSURFACTANT-PRODUCING BACTERIA FROM AN OIL-CONTAMINATED MANGROVE**

Reyes, L. F.[1], Durrant, L. R. [2]& Melo, I. S.[1]
[1]Environmental Microbiology Laboratory, EMBRAPA ENVIRONMENT, Jaguariúna, SP, Brazil.
[2]FEA, Unicamp, Campinas, SP, Brazil.

ID 293 **ABOUT AN OPPORTUNITY OF AN INTENSIFICATION METABOLIC ACTIVITY HYDROCARBON DEGRADING MICROORGANISMS OF ACTIVE SILT WITH THE HELP OF IRRADIATION**

T.A.Karpenyuk, A.V.Goncharova, A.Z.Bekturova
Al-Farabi Kazakh National University, Almaty, Kazakhstan

ID 294 **BIOREMEDIATION OF CONTAMINATED SOILS WITH CRUDE OIL USING A NATURAL HYDROCARBON ABSORBENT**

Mariana Marinescu, M. Dumitru, Anca Lăcătuşu
National Research Development Institute for Soil Science, Agrochemistry and Environmental Protection, Bucharest, Romania

ID 296 **A NOVEL PSEUDOMONAS STRAIN: OBLIGATELY HYDROCARBON-DEGRADING BACTERIUM FROM IRANIAN OIL FIELDS**

Moslem Papizadeh[1], Mohammad Roayaei Ardakani[1], Gholamhosein Ebrahimipour[2] and Hosein Motamedi[1]
[1] Department of Biology, Faculty of Sciences, Shahid Chamran University of Ahvaz, Iran.
[2] Department of Biology, Faculty of Sciences, Shahid Beheshti University of Tehran, Iran

ID 311 **BIOSTIMULATION OF CONTRASTING HYDROCARBON CONTAMINATED SOILS; CHARACTERISTICS OF MICROBIAL COMMUNITIES**

Katherine Martin and John Scullion
Institute of Biological, Environmental & Rural Sciences, Aberystwyth University, Penglais, Ceredigion, UK.

BIOREMEDIATION OF SITES CONTAMINATED WITH CHLORINATED AND OTHER RECALCITRANT COMPOUNDS

ID 005 **PENTACHLOROPHENOL DEGRADATION BY FUNGI IN THE SOIL: TRICHODERMA LONGIBRACHIATUM AS A MODEL ASCOMYCETE SOIL COLONIZER**

A Varela[1,2], C Rodrigues[2,3], MB Carvalho[2], MC Leitão[2], A Garcia[3], I Martins[2], H Garcia[2], M Petkovic[2], JC Martins[1], M. MV San Romão[2,3,4] and C Silva Pereira [2,3]

[1]INRB/L-INIA (ex-EAN), Oeiras, Portugal
[2]Instituto de Tecnologia Química e Biológica/Universidade Nova de Lisboa (ITQB/UNL), Oeiras, Portugal
[3]Instituto de Biologia Experimental e Tecnológica (IBET), Oeiras, Portugal
[4]INRB/L-INIA (ex-EVN), Quinta de Almoínha, Dois Portos, Portugal

ID 043 **PESTICIDE DEGRADATION BY THE *LACCASE*-MEDIATOR SYSTEM OF *CORIOLOPSIS GALLICA***

Torres-Duarte Cristina, Tinoco Raunel and Vázquez-Duhalt Rafael
Instituto de Biotecnología-Universidad Nacional Autónoma de México, Morelos, México.

ID 097 **PRELIMINARY ANALYSES IN MICROBIOLOGICAL BIOREMEDIATION OF DINITROPHENOLIC PESTICIDES - POLLUTED SOILS**

Andrei Nicoara[2], Robertina Ionescu[2], Tatiana Vassu-Dimov[1], Ana-Maria Nohit[1], Diana Pelinescu[1], Ortansa Csutak[1], Oana Negruta[2], Florentina Matei[3], Ileana Stoica[1]
[1] University of Bucharest, Faculty of Biology, Department of Genetics, Bucharest, Romania
[2] University of Bucharest, Faculty of Biology, Center for Research in Microbiology, Genetics, and Biotechnology – MICROGEN, Bucharest, Romania
[3] Center for Microbial Biotechnologies Biotehgen, Bucharest, Romania

ID 123 **A NOVEL APPROACH TO ANALYSIS MICROBIAL POPULATION IN PCB-CONTAMINATED SEDIMENT**

Katerina Jecna, Jiri Koubek, Ondrej Uhlik, Katerina Demnerova and Martina Mackova
ICT Prague, Department of Biochemistry and Microbiology, Prague, Czech Republic

ID 137 **TOXICITY AND DEGRADATION OF ORGANOCHLORINE PESTICIDES IN SOILS**

Petra Lovecká, Pavlína Janů, Michaela Ježková, Martina Macková, Katerina Demnerová
ICT Prague, Dept. of Biochemistry and Microbiology, Prague, Czech Republic

ID 172 **APPROACHES TO THE CHARACTERIZATION OF BACTERIAL POPULATIONS PARTICIPATING IN THE RHIZOREMEDIATION OF PCB-CONTAMINATED SOIL**

Ondrej Uhlik [1,2], Miloslav Sanda [2], Katerina Jecna[1], Mary Beth Leigh [3], Michel Sylvestre [4], Martina Mackova[1] and Tomas Macek [2]
[1] ICT Prague, Department of Biochemistry and Microbiology, Prague, Czech Republic
[2] Institute of Organic Chemistry and Biochemistry CAS, Prague, Czech Republic
[3] Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks, Alaska, USA
[4] INRS-Institut Armand-Frappier, Laval, Québec, Canada

ID 203 **BIODEGRADATION OF NONYL-PHENOL-POLYETHOXYLATES AMONG THE YEAST *CANDIDA SP.***

Nicola Albertarelli, Laura Bortolazzi, Silvia Lampis, Giovanni Vallini
Department of Science and Technology, University of Verona, Verona, Italy

ID 229 **IDENTIFICATION AND CHARACTERISATION OF THE ACTIVE MYCOFLORA OF A CONSORTIUM IN THE BIOREMEDIATION OF A SOIL HISTORICALLY CONTAMINATED BY POLYCHLORINATED BIPHENYLS (PCBS)**

Tigini V[1], Di Toro S[2], Belardo A[1], Prigione V[2], Fava F[2] and Varese GC[1]
[1]Department of Plant Biology, University of Turin, Torino, Italy
[2]DICASM, Faculties of Engineering, University of Bologna, Bologna, Italy

ID 233 **MICROBIAL DECHLORINATION OF POLYCHLORINATED BIPHENYLS**

Vlasta Dudková[1], Kateřina Demnerová[1], and Donna L. Bedard[2]
[1] ICT-Prague, Department of Biochemistry and Microbiology, Prague, Czech Republic
[2] Rensselaer Polytechnic Institute; Department of Biology, Troy, NY, USA

ID 242 **BIODEGRADATION OF PENTACHLOROPHENOL (PCP) IN SOIL AMENDED WITH HUMIC ACIDS ISOLATED FROM LIGNITE AND OXYHUMOLITE**

Marianna Skokanová, Katarína Dercová
Slovak University of Technology, Institute of Biotechnology and Food Science, Department of Biochemical Technology, Bratislava, Slovakia.

ID 284 **ISOLATION AND CHARACTERIZATION OF A BACTERIAL STRAIN ABLE TO DEGRADE 2-FLUOROPHENOL**

A. F. Duque[1], M. F. Carvalho[1], D. B. Janssen[2] and P. M. L. Castro[1]
[1]Escola Superior de Biotecnologia – Universidade Católica Portuguesa, Porto, Portugal
[2]Department of Biochemistry, Groningen Biomolecular Sciences and Biotechnology Institute, University of Groningen, Groningen, The Netherlands

ENVIRONMENTAL MICROBIOLOGY & MOLECULAR BIOLOGY APPLICATIONS

ID 002 **THE CELL MINERAL INTERFACE PROGRAMME**

J. S. Andrews[1], D.R. Elliott[2], J. J. Ojeda[1], A. Razak[2], A. Rizoulis[2], S.A. Rolfe[2], J.D. Scholes[2], S.A. Banwart[1]
[1]Department of Civil and Structural Engineering, University of Sheffield, Sheffield, UK
[2]Department of Animal and Plant Sciences, University of Sheffield, Sheffield, UK

ID 006 **SINGLE-RESIDUE MUTATIONS OF NITROBENZENE DIOXYGENASE ENZYME FOR IMPROVED OXIDATIVE BIODEGRADATION OF NITROAROMATIC COMPOUNDS. A THEORETICAL STUDY.**
Vito Librando, Andrea Alparone
Research Centre for Analysis, Monitoring and Minimization Methods of Environmental Risk and Department of Chemistry, University of Catania, Catania, Italy.

ID 030 **BIOREMEDIATION IN TROPICAL MANGROVE AND SEMI-ARID SOILS FROM PETROLIFEROUS BASIN: METAGENOMIC EVALUATION OF RESPONSIVE INDIGENOUS MICROBIAL COMMUNITIES**
Blaha, C.A.G., Carvalho, C.M., Silva, A.L.S., Santos, I.L.V.L., Pereira, M.S., Silva, C.L.V., Melo, J.T. A.; Sousa, B.G., Medeiros, S.R.B.; Lima, L.F.A.
CROB-Cluster for Research in Oil Biotechnology, Molecular Biology and Genomics Laboratory, Cell Biology and Genetics Department, Biosciences Center, Federal University of Rio Grande do Norte - Natal, RN, Brazil.

ID 052 **BIOREMEDIATION OF PHENOL CONTAMINATED SITES: PERSPECTIVE APPLICATION FROM MOLECULAR AND PHYLOGENETIC ANALYSIS ON THE BACTERIAL GENES FOR THE PHENOL METABOLISM.**
Domenico Davolos, Biancamaria Pietrangeli
Department of Environmental Health Sciences (DIPIA), National Institute for Occupational Safety and Prevention (ISPESL), Rome, Italy

ID 053 **DESIGN AND APPLICATION OF DNA MICROARRAYS: A MEAN FOR MONITORING DENITRIFYING BACTERIA DURING IN-SITU BIOREMEDIATION.**
Domenico Davolos, Biancamaria Pietrangeli
Department of Environmental Health Sciences (DIPIA), National Institute for Occupational Safety and Prevention (ISPESL), Roma, Italy

ID 126 **HORIZONTAL TRANSFER OF CATABOLIC PLASMIDS IN SOIL AND RHIZOSPHERE**
Kosheleva I.A., Esikova T.Z., Sokolov S.L., Boronin A.M.
Institute of Biochemistry and Physiology of Microorganisms, Russian Academy of Sciences, Pushchino, Moscow region, Russia

ID 127 **ON METALLORESISTANCE OF CHLOROCATECHOL DEGRADER *ACHROMOBACTER XYLOSOXIDANS* A8**
Kristina Havranova[1*], Vera Jencova[1], Hynek Strnad[2], Vaclav Paces[2], Tomas Ruml[1] and Pavel Kotrba[1]
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[2] Institute of Molecular Genetics, CAS, Prague, Czech Republic.

ID 128 **THE USE OF A RECOMBINANT YEAST ASSAY FOR EVALUATION OF ENDOCRINE ACTIVITY OF COMPOUNDS RESULTING FROM FUNGAL DEGRADATION OF EDCS**
Svobodová, K., Křesinová, Z., Cajthaml, T.
Laboratory of Experimental Mycology, Institute of Microbiology, CAS, Prague, Czech Republic

ID 131 **EXPLORING OIL BIODEGRADATION AND MICROBIAL POPULATIONS ON AN OLD LANDFARMING SITE FOR OIL REFINERY WASTE**
Leena Suominen, Kaisa Lappi, Anu Mikkonen, Anu Vaalama Annika Wickström and Kaisa Wallenius
Department of Applied Chemistry and Microbiology, University of Helsinki, Finland

ID 132 **RHIZOREMEDIATION OF FUEL OIL CONTAMINATED SOIL AND BACTERIAL POPULATION DYNAMICS DURING THE CLEAN-UP PROCESS**
Anu Mikkonen, Kaisa Lappi, Elina Kondo, Kaisa Wallenius and Leena Suominen
Department of Applied Chemistry and Microbiology, University of Helsinki, Finland

ID 162 **PREPARATION OF GENETICALY MODIFIED FLAX FOR HEAVY METAL REMEDIATION**
Jitka Najmanova[1,2], Pavel Kotrba[1], Martina Mackova[1,2], Tomas Macek[2,1]
[1]ICT Prague, Department of Biochemistry and Microbiology, Prague, Czech Republic
[2]Institute of Organic Chemistry and Biochemistry, CAS, Dept of Natural Products, Prague, Czech Republic

ID 190 **ACINETOBACTER PLASMIDS INVOLVED IN DIFFERENT BIOLOGICAL PROCESSES: A COMPARATIVE AND EVOLUTIONARY ANALYSIS**
Giovanni Bacci, Matteo Brilli, Marco Fondi, Maria Cristiana Papaleo, Alessio Mengoni, Franco Baldi[1], Renato Fani
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ID 218 **TRANSFERRING OF ENVIRONMENTALLY IMPORTANT GENES FOR DIOXYGENASE ISPTOL INTO PLANTS**
Novakova Martina[1,2], Mackova Martina[1,2], Michel Sylvestre[3], Jitka Prokesova[1] and Tomas Macek[2,1]
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ID 225 **DIRECT DETECTION OF DIESEL- AND HEAVY OIL-DEGRADING BACTERIA IN SOIL BY AN OLIGONUCLEOTIDE ARRAY**

Shu Li Su and Tsung Chain Chang
Dept of Medical Laboratory Science and Biotechnology, National Cheng Kung University, Tainan, Taiwan

BIOREACTOR TECHNOLOGIES FOR EX-SITU TREATMENT

ID 038 **EVALUATION OF A NOVEL TECHNOLOGY FOR THE BIOREMEDIATION OF HYDROCARBON CONTAMINATED MATERIALS**

C. L. Rowe[1], D. J. Hill[1], C. D. Williams[1] and J. P. Owen[2]
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[2]Rozone Limited, Darlaston, Wednesbury, West Midlands, United Kingdom

ID 080 **TREATMENT OF WASTEWATER CONTAINING HIGH CONCENTRATION OF DEHP IN TWO SEQUENCING CONTINUOUS-FLOW STIRRED BIOREACTORS**

Gafarov A.B., Boronin A.M.
Institute of Biochemistry and Physiology of Microorganisms, Russian Academy of Sciences, Pushchino, Moscow region, Russia

ID 117 **SULPHATE REDUCING BACTERIA FOR METALS BIOREMEDIATION**

José Duarte[2], Sàágua M. C.[2], Paixão S.[2], Baeta-Hall L.[2], Clara Costa[1]
[1] Universidade do Algarve- FERN- Faro Portugal
[2] INETI-Biotechnology Department, Lisboa Portugal

ID 191 **INFLUENCE OF IONIC SOLVENT ON THE BIODEGRADATION OF PENTACHLOROPHENOL BY ASCOMYCETE FUNGI**

MB Carvalho[1], R Ferreira[1], M Petkovic[1], MC Leitão[1], H Garcia1, J Ferguson[2], I Martins[1], C Rodrigues[1,3], A Varela[1,4], KR Seddon[2], LPN Rebelo[1,3] and C Silva Pereira [1,3]
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[3] IBET, Oeiras, Portugal
[4] INRB/L-INIA (ex-EVN), Quinta de Almoínha, Dois Portos, Portugal

ID 276 **BIO-BASED ADVANCED OXIDATIVE PROCESS FOR TEXTILE WASTEWATER TREATMENT**

Silvia Bani[2,1], Irene Cioni[2,1], Valentina Millarini[2,1], Ilaria Ciullini[3], Enrico Fatarella[1], Fabrizio Briganti[3], Andrea Scozzafava[3], Stefania Giansanti[2],Rebecca Pogni[2], Riccardo Basosi[2]
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[2] University of Siena, Dipartimento di Chimica, Italy.
[3] University of Florence, Dipartimento di Chimica, Italy.

ID 285 **BIOREMEDIATION OF TPH-CONTAMINATED SOIL USING SOIL SLURRY SEQUENCING BATCH REACTOR (SS-SBR)**

Ali Torabian, Gholamreza Nabi Bidhendi, Hamidreza Fatemi, Saber Hasanlou, Behzad Toabifar
Faculty of Environment, University of Tehran, Tehran, Iran

POSTER GROUP II
(Presentation Period: Thursday 11:00 to Friday 9:00)

EX-SITU BIOREMEDIATION OF CONTAMINATED SOILS, SLUDGES AND INDUSTRIAL WASTEWATERS

ID 009 **CHANGES IN MICROBIAL COMMUNITIES DURING BIOREMEDIATION OF FUEL CONTAMINATED DESERT MINING SOIL IN THE ATACAMA DESERT (CHILE)**
A. Godoy-Faúndez[1], L. Reyes-Bozo[1], B. Antizar-Ladislao[2], C. Sáez-Navarrete[1]
[1] Pontificia Universidad Católica de Chile, Santiago, Chile
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ID 019 **WHITE-ROT FUNGI IN BIOREMEDIATION: ECOLOGY IN THE SOIL ENVIRONMENT**
Petr Baldrian
Lab of Biochemistry of Wood-Rotting Fungi, Institute of Microbiology, CAS, Prague , Czech Republic.

ID 020 **BLEACHING OF TEXTILE DYES IN WASTEWATERS:EFFECT OF LACCASES WITH AND WITHOUT MEDIATORS**
Rebecca Pogni, Stefania Giansanti and Riccardo Basosi
Department of Chemistry – University of Siena, Siena, Italy

ID 023 **VOLATILE ORGANIC COMPOUNDS (VOCs) REDUCTION AND BIOLOGICAL YELD INCREASE IN WASTEWATER TREATMENT PLANT BY FENTON PROCESS**
Bianco B.[a], Macolino P.[a], Spera L.[a], Francioli M.[b], Quattranni S.[b], Del Re G.[a], Beolchini F.[c], Vegliò F.[a]
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ID 028 **OPTIMIZATION OF BIOCHEMICAL TREATMENT OF TANNERY WASTEWATER.**
Mahmood M. Barbooti[1], Neran K. Ibrahim And Ali H. Alwan,
[1] Department of Chemical Engineering and Department of Applied Sciences,
University of Technology, Baghdad, Iraq.

ID 055 **DECOLORIZATION OF POLY R-478 BY BASIDIOMYCETES IN THE PRESENCE OF METALS**
Z. Gonou-Zagou, A. Sergentani, C. Antypa, E. Kapsanaki-Gotsi
University of Athens, Faculty of Biology, Department of Ecology & Systematics, Athens, Greece

ID 076 **STUDIES ON AGRICULTURAL WASTE HYDROLYSIS**
Camelia Diguta[1], Stefana Jurcoane[1], Diana Constantinescu[1], Florentina Israel-Roming[2], Florentina Matei[2]
[1] Microbial Biotechnological Center, Bucharest, Romania
[2] Univ. of Agronomical Sciences and Veterinary Medicine, Faculty of Biotechnology, Bucharest, Romania

ID 082 **ENRICHMENT AND CHARACTERIZATION OF BACTERIA CAPABLE OF DEGRADING DIESEL AND HIQ DIESEL HYDROCARBONS FROM THE MICROBIAL CONSORTIUM "ENZYVEBA"**
Sara Di Toro[1,2], Giulio Zanaroli[1], Fabio Fava[1]
[1]DICASM- Faculty of Engineering, University of Bologna, Bologna, Italy.
[2]Marcopolo Engineering SpA, Cuneo, Italy

ID 094 **EXPERIMENTAL DETERMINATION AND BIOGEOCHEMICAL MODELLING OF OPTIMAL PH AND REDOX CONDITIONS FOR ARSENIC SULPHIDE BIO-PRECIPITATION**
Fabienne Battaglia-Brunet, Dominique Breeze and Ioannis Ignatiadis
BRGM, Environment and Processes Division, ORLEANS CEDEX 02, FRANCE

ID 118 **FEASIBILITY OF MIXED MICROBIAL CONSORTIA FROM OIL REFINERY BROWNFIELD SITES FOR TREATMENT OF DIESEL AND PARAFFINS POLLUTED SOIL**
Moliterni E., Fernández F.J., Rodríguez L., Villar M. and Villaseñor J
Chemical Engineering Department, Institute for Chemical and Environmental Technology (ITQUIMA),
University of Castilla La Mancha, Ciudad Real, Spain

ID 168 **PYRITE-BASED DESNITRIFICATION WATER TREATMENT**
N. Fernández[1], R. Amils[1], J. A. Field[2], J.L. Sanz[1]
[1] Centro de Biología Molecular, Universidad Autónoma de Madrid, Madrid, Spain
[2] Department of Chemical and Environmental Engineering, University of Arizona, Tucson, Arizona, USA

ID 174 **ASSESSING THE IMPACT OF PESTICIDE APPLICATION ON THE MICROBIAL COMMUNITY OF RICE PADDY FIELDS**
Ana R. Lopes[1], Luisa Barreiros[1,4], Cátia Faria[1], Inês Duarte[1], Ángeles Prieto-Fernández[2], Carmen Trasar-Cepeda[2], Kornelia Smalla[3], Célia M. Manaia[4], Olga C. Nunes[1]
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[4] Escola Superior de Biotecnologia, Universidade Católica Portuguesa, Porto, Portugal

ID 177 **BIOAVAILABILITY AND SEQUESTRATION OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN COMPOSTED SEWAGE SLUDGES MEASURED BY THREE DIFFERENT METHODS**
Patryk Oleszczuk
Laboratory of Soil Reclamation and Waste Management, Institute of Soil Science and Environmental Management, University of Agriculture, Lublin, Poland

ID 199 **ROLE OF THE MICROBIAL CONSORTIUM ENZYVEBA IN THE BIOREMEDATION OF DIESEL AND HIQ DIESEL-CONTAMINATED SOILS**
Sara Di Toro[1,3], Giulio Zanaroli[1], Cristina Giovanna Varese[2], Alessandro Gatto[2], Mara Perosino[3], Luca Brondello[3], Fabio Fava[1]
[1]DICASM, Faculty of Engineering, University of Bologna, Bologna, Italy
[2]Department of Plant Biology, University of Turin, Turin, Italy
[3]Marcopolo Engineering SpA, Cuneo, Italy

ID 224 **CHANGES ON SOIL PARAMETERS AFTER SUBSURFACE IRRIGATION WITH TREATED AND UNTREATED MUNICIPAL WASTEWATER AND HEALTH RISKS FROM PATHOGENS**
A. Tsigoida[1], A. Kyriacou[2], M. Kotsou[2] and I. Argyrokastritis[1]
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[2] Laboratory of Microbiology, Harokopio University of Athens, Greece

ID 231 **REMOVAL OF HEAVY METALS FROM AN INDUSTRIAL CONTAMINATED AREA USING MYCOREMEDIATION PROCEDURE AND GREEN MANURE AMENDMENT**
Livia Visan[1], Florin Ruta[2], Aurora Neagoe[1]
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[2] Research Center for Environmental Protection and Waste Management, University of Bucharest, Romania

ID 246 **TECHNOLOGY FOR UTILIZATION OF MUNICIPAL SLUDGE**
Matichenkov V.V.
Institute Basic Biological Problems RAS, Pushchino, Russia

ID 270 **BIOREMEDIATION STUDIES OF CHROMIUM (VI) USING SULPHATE-REDUCING BACTERIA**
M. Martins[1] E. S. Santos[1] M. L. Faleiro[2] A. Alegria[1] M. C. Costa[1]
[1] Centro de Ciências do Mar, CCMAR, [2] Centro de Biomedicina Molecular e Estrutural Universidade do Algarve, Campus de Gambelas, Faro, Portugal

BIOMONITORING AND BIOREMEDIATION OF CONTAMINATED SEDIMENTS

ID 027 **MONITORING THE IMPACT OF THE FUNGICIDE TEBUCONAZOLE IN A RIPARIAN WETLAND SOIL BY SOIL MICROBIOLOGICAL ACTIVITIES**
Borja Muñoz-Leoz[1], Carlos Garbisu[2], Iñaki Antigüedad[3], María L. Alonso[4], Rosa M. Alonso[4] and Estilita Ruiz-Romera[1]
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ID 040 **BACTERIAL DIVERSITY AND HEAVY METAL RESISTANCE IN A CONTAMINATED SITE IN PORTUGAL**
C. Pires[1,2], N. Magan[1] and P.M.L. Castro[2]
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ID 048 **CHARACTERIZATION OF MICROBIAL CONSORTIA FROM MARINE SEDIMENTS OF THE VENICE LAGOON CAPABLE OF PCB DECHLORINATION**
Annalisa Balloi[1], Giulio Zanaroli[2], Andrea Negroni[2], Massimo Marzorati[2], Fabio Fava[2] and Daniele Daffonchio[1]
[1] Dept. of Food Science, Technology and Microbiology, University of Milano, Milano, Italy
[2] Dept. of Applied Chemistry and Material Science, University of Bologna, Bologna, Italy

ID 084 **EVALUATION OF PAHS CONTAMINATS IN SURPLACU DE BARCAU AREA, ROMANIA**
G.Pavelescu, C.Roman, E.Pfeiffer, E.A.Levei, M.Miclean, E.Cordos
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ID 085 **INFLUENCES OF THE MINING ACTIVITIES ON THE HEAVY METAL POLLUTION IN SOMES RIVER, NORTH-WESTERN ROMANIA**
C. Roman[1], G. Pavelescu[2], M. Miclean[1], D. Savastru[2], E. Levei[1] and E. Pfeiffer[2]
[1] Research Institute for Analytical Instrumentation, Cluj-Napoca, Romania
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ID 170 **REMOVAL OF PHENOL AND ANILINE BY BACTERIAL BIOFILM**
O. Schreiberova, J. Hrdinova, T. Krulikovska , J. Masak, A. Cejkova, V. Jirku
Institute of Chemical Technology - Prague, Prague, Czech Republic

ID 175 **CONTAMINATED SEDIMENTS IN ITALY: FROM SITE CHARACTERIZATION TO REMEDIATION MANAGEMENT**
A.Ausili, M.Gabellini, P.Renzi, S.Geraldini, S.Dastoli, W.Bambara, L.De Propris
ICRAM. Central Institute for Marine Research. Rome, Italy.

ID 180 **MERCURY-RESISTANT BACTERIAL STRAINS ISOLATED FROM POLLUTED SEDIMENTS OF THE ORBETELLO LAGOON, ITALY, AND THEIR USE IN BIOREMEDIATION**
Milva Pepi[1], Monia Renzi[1], Margherita Volterrani[1], Luciano De Propris[2], Valentina Trama[2], Roberta Girardi[2], Giuseppe Trinchera[2], Arianna Lobianco[1], Marcella Ruta[1], Massimo Gabellini[2], Antonella Ausili[2], and Silvano E. Focardi[1,2]
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ID 202 **THE MOBILITY OF HEAVY METALS IN SEDIMENTS USING THE SEQUENTION EXTRACTION**
Oľga Šestinová, Jozef Hančuľák, Ján Brehuv and Erika Fedorová
Institute of Geotechnics of Slovak Academy of Sciences, Košice, Slovakia

ID 219 **MONITORING OF BACTERIAL ADHESSION BY IMAGE ANALYSIS**
Krulikovska T., Schreiberova O., Masak J., Cejkova A., Jirku V., Hron P.
Institute of Chemical Technology - Prague, Prague, Czech Republic

ID 258 **LEACHING OF HEAVY METALS, USING CHELANT AGENTS, FROM DREADGED MARINE SEDIMENTS COLLECTED IN TARANTO GULF (IONIAN SEA, SOUTHERN ITALY)**
Micaela Buonocore and Nicola Cardellicchio
CNR – Institute for Coastal Marine Environment, Taranto, Italy.

ID 269 **CYCLE OF MERCURY IN THE MAR PICCOLO OF TARANTO (IONIA SEA, SOUTHERN ITALY): BIOCONCENTRATION EVALUATION AT DIFFERENT TROPHIC LEVEL.**
Nicola Cardellicchio, Antonella Di Leo, Lucia Spada
C.N.R. - Istituto per l'Ambiente Marino Costiero, Taranto, Italy.

ID 282 **BUFFERING CAPACITY AND PHYTOREMEDIATION POTENTIAL OF DRAINAGE CANALS AS A LOW COST AGRI-ENVIRONMENTAL MEASURE**
Fotini Stamati, Elpida Peroulaki, Daniel Moraetis, Eleni Kordolaimi, Nikolaos Nikolaidis
Technical University of Crete, Department of Environmental Engineering, Chania, Greece

ID 312 **DEVELOPMENT OF A SIMPLE METHODOLOGY FOR THE ASSESSMENT OF SOIL QUALITY STATUS AND FERTILITY: APPLICATION TO MEDITERRANEAN AGRICULTURAL SOILS**
Fotini Stamati, Nikolaos Nikolaidis, Danae Venieri, Eleftheria Psillakis and Nicolas Kalogerakis
Technical University of Crete, Department of Environmental Engineering, Chania, Greece

ID 315 **IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE AND THE PROPOSED SOIL FRAMEWORK DIRECTIVE IN AREAS WITH GEOGENIC ORIGIN CONTAMINATION: ARSENIC DISTRIBUTION IN THE GEOTHERMAL FIELDS OF CHALKIDIKI, GREECE**
Barbara Casentini[a], Anasthasios Chatzikirkou[b], Nikolaos Veranis [b] and Nikolaos Nikolaidis[a]
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ID 305 **SCREENING THE PRESENCE OF POLYFLUORINATED SULFONATES IN WATER SAMPLES**
A. Papadopoulou[1], Iván Pablo Román Falcó[2], K. Tyrovola[1], A. Canals[2], E. Psillakis[1]
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[2]Department of Analytical Chemistry, University of Alicante, Spain.

BIOREMEDIATION IN MARINE ENVIRONMENTS

ID 207 **MICROBIAL COMMUNITY COMPOSITION OF BALTIC SEAWATER AND NATURAL SORBENT AND THEIR ALTERATIONS DURING BIODEGRADATION OF OIL HYDROCARBONS IN MESOCOSMS**
Sergei Sokolov[1], Arslan Gafarov[1], Ekaterina Vinogradova[1], Irina Kosheleva[1], Alexander Boronin[1] and Martin Romantschuk[2].
[1]Institute of Biochemistry and Physiology of Microorganisms, RAS, Pushchino, Moscow region, Russia.
[2]Dept. Ecological and Environmental Sci., University of Helsinki, Lahti, Finland.

ID 271 **BIOSTIMULATION STRATEGIES FOR CHRONICALLY POLLUTED MARINE ENVIRONMENT WITH HYDROCARBONS**
M. Nikolopoulou and N. Kalogerakis
Department of Environmental Engineering, Technical University of Crete, Chania, Greece

ID 313 **EFFECT OF OLEOPHILIC ADDITIVES ON MICROBIAL DEGRADATION OF OIL SPILLS**
M. Nikolopoulou[1], N. Pasadakis[2] and N. Kalogerakis[1]
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INTEGRATED TECHNOLOGIES AND NEW TECHNOLOGY TRENDS

ID 300 **ADVANCED DEGRADATION TREATMENTS TO RECYCLE WATERS DIFFERENTLY POLLUTED**
Luigi Campanella
Chemistry Department, University of Rome La Sapienza, Rome, Italy

ID 007 **RAMAN SPECTROSCOPY AS A POTENTIALLY USEFUL TOOL FOR PREDICTING BIODEGRADATION RATES OF ALKYLATED POLYCYCLIC AROMATIC HYDROCARBONS.**
Vito Librando, Andrea Alparone
Research Centre for Analysis, Monitoring and Minimization Methods of Environmental Risk and Department of Chemistry, University of Catania, Catania, Italy.

ID 051 **ELECTROCHEMICAL DEGRADATION OF OBSOLETE PESTICIDE STOCKS USING A PT/TI ELECTRODE**
D. Arapoglou[1], C. Israilides[1], A. Vlyssides[2], M.S. El-Zemaity[3], M. Bocari[1] and S.M. Girgis[1]
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[3]Plant Protection Department, Faculty of Agriculture, Ain Shams University, Cairo, Egypt

ID 081 **SOLAR REACTOR FOR ANAEROBIC WASTEWATER TREATMENT**
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ID 114 **COMPARISON OF DIFFERENT CELLULOSE HYDROLYSIS BY THE YEAST STRAIN *TRICHOSPORON CUTANEUM***
Hrdinova J., Mannlova Z., Jirku V., Cejkova A, Masak J.
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ID 139 **CONCRETE BIODETERIORATION BY THE BACTERIA GENUS *THIOBACILLUS* AND *DESULFOVIBRIO***
Alena Luptakova, Eva Macingova and Jana Jencarova
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ID 211 **MICROBIAL FORMULAS FOR THE DEVELOPMENT OF BIOLOGICAL PROCEDURES IN RESTORATION OF ART WORKS**
Flavia Tasso, Chiara Alisi, Nicoletta Barbabietola, Elisabetta Vedovato, Carlo Cremisini and Anna Rosa Sprocati
ENEA, Department of Environment, Global Change And Sustainable Development RC-Casaccia, Rome, Italy.

ID 259 **INFLUENCE OF PSEUDOMONAS PUTIDA AF7 INOCULATION ON SOIL ENZYMES ACTIVITIES**
Célia Maria M. de Souza Silva, Vera Lúcia S. S. de Castro, Pablo Roberto de Oliveira, Aline de H. Nunes Maia
Embrapa Environment, Jaguariúna, SP, Brazil.

BIOREMEDIATION OF HEAVY METALS

ID 015 **BISORPTION OF COPPER(II) FROM AQUEOUS SOLUTION BY *SACCHAROMYCES CEREVISIAE***
Öznur Akçelik, Ayşe Tosun, Mübeccel Ergun
Department of Chemical Engineering, University of Gazi, Maltepe, Ankara, Turkey.

ID 016 **ADSORPTION OF Fe^{3+} AND Cu^{2+} ON ORANGE SKIN AND SUNFLOWER SHELL**
Özlem Önal, Emre Özçelik, Serdar Benli, H. Canan Cabbar
Department of Chemical Engineering, Gazi University, Maltepe, Ankara, Turkey

ID 113 **SORPTION OF HEAVY METALS FROM WASTE WATERS BY BIOSORBENTS**
Jana Jencarova, Alena Luptakova and Eva Macingova
Institute of Geotechnics of Slovak Academy of Sciences, Kosice, Slovak Republic

ID 140 **PROCESSING OF ANTIMONY MINERALS BY OXIDIZING AND REDUCING BACTERIAL PROCESSES**
Alena Luptakova[1], Eva Macingova[1], Stefano Ubaldini[2], Pietro Fornari[2] and Carlo Abbruzzese[2]
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ID 161 **THE USE OF BIOSOLIDS IN THE ATTENUATION OF ACID MINE DRAINAGE**
Vila, M. Cristina; Fiúza, António M.; Futuro, Aurora; Carvalho, J. M. Soeiro
CIGAR (Geo-Environment and Resources Research Centre) FEUP (Faculty of Engineering - University of Porto) - Mining Department, Porto, Portugal

ID 178 **CYSTEINE-RICH PEPTIDES ARE RESPONSIBLE FOR INTRACELLULAR SEQUESTRATION OF SILVER IN SILVER-HYPERACCUMULATING FUNGUS *AMANITA STROBILIFORMIS***

Vaclav Urban[1], Jan Borovicka[2], Petr L. Jedelsky[3], Zdenek Randa[2],Tomas Macek[1,4], Tomas Ruml[1] and Pavel Kotrba[1]

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ID 187 **ZINC REMOVAL FROM MODEL SOLUTION BY BIOSORPTION**

Hedviga Horvathova, Anna Mrazikova, Jana Kadukova, Miroslav Stofko

Department of Non-Ferrous Metals and Wastes Treatment, Technical University of Kosice, Slovakia

ID 279 **ENCAPSULATION OF EPS-ALGINATE FOR METAL BIOSORPTION**

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FUNGAL BIOREMEDIATION

ID 061 **BIODEGRADATION OF FLUORANTHENE BY *PLEUROTUS OSTREATUS***

S. Bobone[1], E. Donati[1], E. Galli[2], C.M. Polcaro[1], P. Rapanà[2]

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ID 062 **BIOREMEDIATION OF THE ANTIMICROBIAL TETRACYCLINES BY *PLEUROTUS OSTREATUS MYCELIUM***

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ID 066 **REDUCING ORGANIC MATTER CONTENT IN CONTAMINATED SOIL BY FUNGI**

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POSTER GROUP III
(Presentation Period: Friday 11:00 to Saturday 13:30)

BIOREMEDIATION OF OLIVE MILL WASTEWATER

ID 071 **THE USE OF IMMOBILIZED WHITE-ROT FUNGI REDUCES TIME REQUIREMENTS AND IMPROVES DETOXIFICATION OF TWO-PHASE DRY OLIVE MILL RESIDUE**

I. Sampedro[1,2], S. Marinari[2], J.A. Ocampo[1], I. Garcia-Romera[1], M. Petruccioli[2] , F. Federici[2] and A. D'Annibale[2]

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ID 181 **TANNIC ACID DEGRADATION BY SERRATIA SPP. AND PANTOEA SP. BACTERIAL STRAINS ISOLATED FROM OLIVE MILLS BY PRODUCTS**

Milva Pepi[1], Arianna Lobianco[1], Guido Perra[1], Monia Renzi[1], Roberto Altieri[2], Alessandro Esposito[2], Antonio Feola[2] and Silvano E. Focardi[1]

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ID 184 **EVOLUTION OF CHEMICAL, PHYSICAL AND BIOLOGICAL PARAMETERS IN OLIVE MILL WASTE MIXTURES DURING AEROBIC STORAGE TRIALS**

Roberto Altieri, Alessandro Esposito

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ID 185 **CONTROL OF *VERTICILLIUM DAHLIAE* BY ADDING OLIVE MILL WASTE TO THE RHIZOSPHERE OF NURSERY GROWN PLANTS**

Giuseppe Lima[a], Domenico Vitullo[a], Roberto Altieri[b], Alessandro Esposito[b], Franco Nigro[c], Isabella Pentimone[c], Gabriele Alfano[d], Giancarlo Ranalli[d]

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ID 220 **HETEROGENEOUS PHOTOCATALYTIC TREATMENT OF OLIVE MILL WASTEWATERS**

Efthalia Chatzisymeon, Dionissios Mantzavinos

Department of Environmental Engineering, Technical University of Crete, Chania, Greece

ID 266 **KINETICS OF A PACKED-BED BATCH REACTOR FOR THE TREATMENT OF OLIVE OIL WASTEWATERS FROM A PORTUGUESE MILL**

José Cardoso Duarte, Belina Ribeiro, Ana Correia, Lina Baeta-Hall, Susana M. Paixão, M.C. Sàágua

INETI, Departamento de Biotecnologia, Lumiar, Lisboa, Portugal

ID 267 **A GIS - BASED LAND SUITABILITY MODEL FOR THE APPLICATION OF OLIVE-MILL WASTEWATERS. A CASE STUDY FOR THE MESSARA PLAIN, CRETA ISLAND, GREECE**

Kalivas D.P. and Ehaliotis C.

Soils & Agricultural Chemistry Lab., Department of Land Resources & Agricultural Engineering, Agricultural University of Athens, Athens, Greece

BIOREMEDIATION & VALORIZATION OF AGRO-INDUSTRIAL BY-PRODUCTS, EFFLUENTS, WASTES AND SURPLUS

ID 093 **CORK DEGRADATION BY THE *ASCOMYCETE PENICILLIUM GLANDICOLA* AND POTENTIAL USE IN WASTE MANAGEMENT**

Helga Garcia[1], Isabel Martins[1], Cátia Rodrigues[1,2], Mariana B.Carvalho[1], Marija Petkovic[1], Adélia Varela[1,3] , M. Vitória San Romão[1,2,4] and Cristina Silva Pereira [1,2]

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ID 196 **PRODUCTION OF GLUCOSE FROM COTTON WASTE BY MICROBIAL EXTRACELLULAR ENZYMATIC HYDROLYSIS**

R. Rajendran, E.M. Rajesh & R. Arthe

PG & Research Department of Microbiology, PSG College of Arts & Science, PO Coimbatore, India.

ID 208 **A BIOBED TO RECOVER AND DETOXIFY POLLUTED EXTERNAL WASHINGS OF AG EQUIPMENT - AN EXAMPLE AT CASTELLO BANFI'S VINEYARDS – MONTALCINO (Central Italy)**

Sergio Miele[1], Maurizio Marmugi[2], Enrica Bargiacchi[3]

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ID 245 **PLANT OILS ARE PERSPECTIVE CARBON SOURCES FOR MICROBIOLOGICAL PRODUCTION OF CITRIC ACIDS**
Kamzolova S.V., Finogenova T.V. and Morgunov I.G.
G.K. Skryabin Institute of Biochemistry and Physiology of Microorganisms, RAS, Pushchino, Moscow Region, Russia

ID 254 **BEET VINASSE EFFECTS ON SELECTED SOIL PROPERTIES**
Monika Skowronska
Agricultural University of Lublin, Department of Agricultural and Environmental Chemistry, Lublin, Poland

ID 281 **FURFURAL PRODUCTION FROM HEMICELLULOSES OF DELIGNIFIED PALM PRESSED FIBER USING TWO-STAGE PROCESS**
Poonsuk Prasertsan[1,2,3], Wiboon Riansa-ngawong[1,3] and Kenji Iiyama[4]
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[4]University of Tokyo1-1-1, Yayoi, Bunkyo-ku, Tokyo, Japan

ID 287 **ANAEROBIC DIGESTION PROCESSES, BIOENERGY PRODUCTION FROM AGRO/ZOO BY PRODUCTS AND DIGESTATE VALORIZATION : THE APPLIED EXPERIENCES OF MARCOPOLO ENVIRONMENTAL GROUP**
L. Brondello[1], S. Di Toro[1], M. Perosino[2]
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ID 290 **MANAGEMENT AND TREATMENT OF EFFLUENTS FROM FOOD-PROCESSING: A UNIFIED APPROACH**
Ioannis Papadopoulos[1], Dionissios Mantzavinos[1,2], Nicolas Kalogerakis[2]
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PHYTOREMEDIATION OF HEAVY METALS AND ORGANICS

ID 008 **MODEL OF HEAVY METALS TRANSLOCATION FROM SOILS TO PLANTS**
A. Pusz
Warsaw University of Technology, Faculty of Environmental Engineering, Department of Protection and Management of Environment, Warsaw, Poland

ID 022 **SELECTION CRITERIA FOR PLANTS APPLICATION IN PHYTOREMEDIATION TECHNOLOGIES**
Betsiashvili M., Kuprava N., Sadunishvili T.
Durmishidze Institute of Biochemistry and Biotechnology, Tbilisi, Georgia

ID 026 **THE EFFECT OF SEWAGE SLUDGE-AMENDED SOIL ON CD, PB AND ZN ACCUMULATION BY HEMP (CANNABIS SATIVA L.) PLANTS**
Marie Bjelková[1], Martina Větrovcová[2] and Miroslav Griga[2]
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[2] Plant Biotechnology Department, AGRITEC Ltd., Šumperk, Czech Republic

ID 035 **EXPLOITING NATURAL PLANT COMMUNITIES OF POLLUTED SITES FOR PHYTOREMEDIATION : ROLES OF CARBOHYDRATE STATUS AND OXIDATIVE STRESS LEVEL IN PLANT XENOBIOTIC TOLERANCE**
Cécile Sulmon[1], Fanny Ramel[1], Laury Blambert[1], Didier Le Cœur[2], Ivan Couée[1], Gwenola Gouesbet[1]
[1] CNRS, Université de Rennes 1, Rennes Cedex, France
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ID 036 **BIOPHYTOREMEDIATION OF CRUDE OIL CONTAMINATED SOIL**
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ID 046 **PHYTOREMEDIATION OF HEAVY CRUDE OIL CONTAMINATED SOIL BY POA TRIVIALIS (ROUGH MEADOW-GRASS)**
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ID 054 **IMPACT OF PB POLLUTION ON THREE PLANT SPECIES**
Parviz Ehsanzadeh, S. Tabatabaei, Z. Mehrabi and S. Fathian
College of Agriculture, Isfahan University of Technology, Isfahan, Iran

ID 075 **REMEDIATION POTENTIAL OF *VERBASCUM THAPSUS* L. ORIGINATING FROM METAL POLLUTED AREA**

Filis Morina, Ljubinko Jovanović, Biljana Kukavica, Sonja Veljović-Jovanović
Institute for multidisciplinary research, Belgrade, Serbia

ID 100 **INVESTIGATING THE INTERACTION OF PLANT SEEDS WITH DIESEL FOR POTENTIAL USE IN THE REMEDIATION OF DIESEL FUEL CONTAMINATED SOILS**

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ID 103 **CARBOHYDRATE STATUS AND XENOBIOTIC TOLERANCE IN THE MODEL PLANT ARABIDOPSIS THALIANA : POTENTIALITIES FOR PHYTOREMEDIATION**

Fanny Ramel, Cécile Sulmon, Ivan Couée, Gwenola Gouesbet
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ID 108 **MODIFIED ENDOPHYTES TO IMPROVE PHYTOREMEDIATION OF MIXED CONTAMINATIONS OF HEAVY METALS (Ni) AND ORGANIC CONTAMINANTS (TOLUENE)**

Nele Weyens[1], Tanja Barac[1], Jana Boulet[1], Daniel van der Lelie[2], Safiyh Taghavi[2] and Jaco Vangronsveld[1]
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ID 110 **PLATINUM-GROUP AND OTHER TRAFFIC-RELATED ELEMENTS AS INDICATORS TRAFFIC POLLUTION IN MADRID BY USE OF BEGONIA PLANTS**

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ID 120 **OPTIMISATION OF *IN VITRO* PLANT REGENERATION FOR LEAD HYPERACCUMULATOR SCENTED *PELARGONIUM* CULTIVARS**

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ID 125 **REMOVAL OF ZINC FROM AQUEOUS SOLUTION BY LIVING DUCKWEED (*LEMNA GIBBA*)**

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ID 143 **ABILITY OF ALFALFA (MEDICAGO SATIVA L.) MYCORRHIZAL PLANTS FOR PHYTOREMEDIATION HEAVY METALS**

Mohammad Rezvani[1], Mohammad Reza Ardakani[2], Farhad Rejali[3], Ghorban Noormohammadi[4], Sadollah Teimouri[2], Faezeh Zaefarian[5]
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ID 146 **THE ABILITY OF HEATHER (*CALLUNA VULGARIS*) TO RECOLONIZE A HEAVY-METAL POLLUTED FOREST AREA**

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ID 150 **PHYTOEXTRACTION OF LEAD, NICKEL AND CADMIUM BY BIOMASS PLANTS**

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ID 159 **GREEN AND GENE TECHNOLOGIES FOR CONTAINMENT AND MODERATION OF HEAVY METALS IN THE ENVIRONMENT**

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ID 189 **HETEROGENEOUS DISTRIBUTION OF BORON IN CONTAMINATED SOIL INFLUENCES THE GROWTH AND BORON UPTAKE OF POPLARS**

Rees, R. [1], Boss, D.[1], Robinson B.H.[1], Grisel, N. [2], Lehmann, E.[3], Schulin, R. [1]
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ID 206 **PHYTOEXTRACTION CAPACITY OF SALIX HULTENI ON CD AND ZN CONTAMINATED SOILS**

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ID 232 **EFFECT OF ORGANIC AMENDMENTS ON LEAD, ZINC AND CADMIUM UPTAKE BY TOBACCO**

Violina Angelova, Krasimir Ivanov
Department of Chemistry, Agricultural University, Plovdiv, Bulgaria

ID 234 **THE COMPARISON OF GENETIC TRANSFORMATION APPROACHES IN FLAX *(LINUM USITATISSIMUM L.)* FOR IMPROVED HEAVY METAL TOLERANCE AND ACCUMULATION**

Vrbová M., Tejklová.E., Smýkalová I., Smýkal P., G riga M.
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ID 235 **CHLOROBENZOATES TRANSOFORMATION BY PLANTS**

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ID 239 **MONITORING OF PBDEs CONTAMINATION IN THE CZECH REPUBLIC AND THEIR REMOVAL USING PHYTOREMEDIATION**

Jana Zlámalíková[1], Hana Stiborová[1], Kateřina Demnerová[1], Martina Macková[1], Jana Hajšlová[2], Jana Pulkrabová[2], Petra Hrádková[2], Michaela Nápravníková[2], Tomáš Macek[3]
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ID 240 **PHYTOREMEDIATION OF POLYCHLORINATED BIPHENYLS BY TRANSGENIC TOBACCO**

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ID 272 **CHARACTERISATION OF A. THALINA RESPONSE UPON NITROAROMATIC TREATMENT AS REVEAL BY RNA PROFILLING**

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ID 275 **INFLUENCE OF SALINITY ON LEAD AND CADMIUM ACCUMULATION BY THE SALT CEDAR (*TAMARIX SMYRNENSIS BUNGE*)**

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ID 277 **COMPACTION OF LOAMY SOILS DUE TO TILLAGE AND CHEMICALS OPERATIONS IN VINEYARDS AND ITS EFFECT ON SOIL OXYGEN CONTENT IN BOZCAADA (SW TURKEY)**

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ID 278 **MAIZE (ZEA MAYS L.) RESPONSE TO TILLAGE SYSTEMS AFTER WINTER VETCH ON A CLAY LOAM SOIL IN WESTERN TURKEY**

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ID 288 **PHYTOREMEDIATION OF FUEL OIL CONTAMINATED SOIL**

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ID 289 **INFLUENCE OF CU ON THE EXUDATION OF ORGANIC ACIDS BY *HALIMIONE PORTULACOIDES***

A. Cristina S. Rocha[1,2], C. Marisa R. Almeida[1], Ana P. Mucha[1], M. Teresa S. D. Vasconcelos[1, 2]
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ID 297 **PHYTOREMEDIATION OF POLLUTED SOILS WITH ZINC**

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ID 299 **GENETIC ENGINEERING OF PLANTS FOR PHYTOREMEDIATION: OVEREXPRESSION OF ATMRP7 IN TOBACCO**

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ID 301 **SAPONARIA OFFICINALIS AS A POSSIBLE GENE SOURCE FOR CONTAMINANT DEGRADATION**

Tomsikova Ivana and Ovesna Jaroslava,
Crop Research Institute, Prague, Czech Republic

ID 306 **SILICON SUPPLY CAN HELP CUCUMBER PLANTS TO TOLERATE HIGH LEAF MANGANESE CONCENTRATION**

Jelena Dragišić Maksimović[1]; Vuk Maksimović[1]; Miloš Mojović[2]; Miroslav Nikolić[1]
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ID 307 **OPTIMIZATION OF NUTRIENT PHYTOREMEDIATION IN LAND TREATMENT SYSTEMS BY USING DIFFERENT PLANT SPECIES**

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ID 310 **EFFECT OF CALCIUM, SILICON, AND SOIL pH ON TOLERANCE TO MANGANESE TOXICITY OF DIFFERENT LETTUCE CULTIVARS**

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