International Conference on the Remediation of Polluted Sites

Rome, Italy - May 13/15, 2009

Promoter
C.I.T.C.A.
Interuniversitary Center of Environmental Chemistry and Technology
operating at the Chemical Engineering Materials Environment Department of the Faculty of Engineering
Sapienza University of Rome
International Conference on the Remediation of Polluted Sites

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Venues

Wednesday 13 May 2009
Sapienza University of Rome – Aula Magna
Piazzale Aldo Moro, 5
00185 Rome

Thursday 14 May and Friday 15 May 2009
Department of Odontostomatology Sciences
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WEDNESDAY 13 MAY 2009
Sapienza University of Rome

Aula Magna

09.00 - 13.00  MORNING SESSION
   Chairman: Enrico Garaci (National Institute of Health)
   09.00 - 09.15  Chancellor welcome: Luigi Frati (Sapienza University)
   09.15 - 09.30  Introductory speech by the Deputy-Minister
                  Roberto Menia (Ministry of Environment)
   09.30 - 10.00  US Representative presentation
                  James Woolford (EPA)
   10.30 - 10.45  Coffee Break
   10.45 - 11.15  EU Representative presentation
                  Claudia Olazabal (UE–DGXII)
   11.45 - 12.45  Italian Ministry of Environment presentation
                  Marco Lupo (Ministry of Environment)
   13.00 - 14.30  Lunch

14.30 - 17.45  AFTERNOON SESSION
   Chairman: Luciano Caglioti (Sapienza University)
   14.30 - 15.00  ISPRA presentation
                  Vincenzo Grimaldi (ISPRA)
   15.00 - 15.30  Characterization and monitoring
                  Lara Autry (EPA)
   15.30 - 16.00  System design and management
                  Roberto Mezzalama (Golder Associates Srl)
   16.00 - 16.15  Coffee Break
   16.15 - 16.45  Treatment costs
                  Massimo Maffucci (ENEA)

THURSDAY 14 MAY 2009
Department of Odontostomatology Sciences

Room A

09.00 - 13.00  MORNING SESSION
   Chairman: Lara Autry (EPA)
   09.00 - 09.30  A.1.1  IMPROVING PRODUCTIVITY AND INCREASING DATA QUALITY IN THE SITE REMEDIATION PROCESS THROUGH AUTOMATED PRESSURIZED FLUID EXTRACTION, CLEANUP AND CONCENTRATION
                  David Friedman
   10.00 - 10.45  Coffee Break
   10.45 - 11.45  A.1.2  EU AND US DECISION SUPPORT FRAMEWORKS & SYSTEMS FOR THE ASSESSMENT AND MANAGEMENT OF POLLUTED SITES
                  A. Marcomini, G.W. Suter II, A. Critto, P. Agostini
   11.45 - 12.45  A.1.3  HUMAN HEALTH RISK ASSESSMENT IN CONTAMINATED SITE MANAGEMENT: ISPRA, ISS AND ISPESL ACTIVITIES
                  L. Arru, L. D’Aprile, L. Musmeci, E. Beccaloni, M. Mariani, S. Berardi
   13.00 - 14.30  Lunch
   14.30 - 15.00  A.1.4  EVALUATING THE RISKS ASSOCIATED WITH REMEDIATION OF CONTAMINATED SEDIMENTS
                  Richard J. Wenning, Victor S. Magar, Mark Travers, Samantha Deacon, Fabio Colombo, Antonino Rapisardi
11.15 – 11.45  A.1.5  
ECOLOGICAL RISK ASSESSMENT FOR HEAVY METAL POLLUTED REGION  
S. Koptsik, G. Koptsik, W. de Vries, B.J. Groenenberg, S. Lofts, J.C. Voogd

11.45 – 12.15  A.1.6  
EXPERIMENTAL ASSESSMENT OF HEAVY METAL EXTRACTION FROM A CONTAMINATED ITALIAN HARBOUR SEDIMENT BY SURFACTANTS  
Luca Di Palma, Ornella Gonzini, Roberta Mecozzi, Carlo Merli

12.15 – 12.45  A.1.7  
PROACTIVE DEVELOPMENT OF TAILORED MICROBIAL FORMULA FOR STRENGTHENING NATURAL BIOREMEDICATION CAPABILITIES  
Anna Rosa Sprocati, Chiara Alisi, Flavia Tasso, Paola Marconi and Carlo Cremisini

13.00 – 14.00  Lunch

**Room B**

09.00 – 13.00  MORNING SESSION  
Chairman: Laura D’Aprile (ISPRA)

09.00 – 09.30  B.1.1  
GEOCHEMICAL BACKGROUND OF POTENTIALLY HARMFUL ELEMENTS IN SOILS AND SEDIMENTS WITH REGARDS TO CONTAMINATED SITE REMEDIATION  
Armiento Giovanna, Cremisini Carlo, Nardi Elisa, Pacifico Renata

09.30 – 10.00  B.1.2  
CHARACTERIZATION OF CADMIUM-RESISTANT BACTERIA AND THEIR APPLICATION FOR CADMIUM BIOREMEDIATION  
Surasak Siripornadulsil, Tepupsorn Saensuk, and Wilailak Siripornadulsil

10.00 – 10.30  B.1.3  
CHARACTERIZATION AND REMEDIATION PROJECTS FOR POLLUTED LAND AND SEDIMENTS: THE CASE STUDY OF THE CLEAN-UP SITE OF NATIONAL CONCERN OF COGOLETO EX-STOPPANI  
Mariotti C., Olvari E., Stacul E.

10.30 – 10.45  Coffee Break

14.00 – 18.00  AFTERNOON SESSION  
Chairman: Mario Mariani (ISPESL)

14.00 – 14.30  A.2.1  
NEW APPROACHES IN REMEDIATION STRATEGIES TO RESTORE SOIL QUALITY AT CONTAMINATED SITES  
Gianniantonio Petruzzelli, Francesca Pedron

14.30 – 15.00  A.2.2  
MOBILITY, BIOAVAILABILITY AND TOXICITY OF HEAVY METALS IN SOILS AFFECTED BY AIR POLLUTION FROM NICKEL-PROCESSING INDUSTRY  
Galina Koptsik, Sergey Koptsik, Svetlana Livantsova, Irina Smirnova
15.00 - 15.30  A.2.3
QUICK AND COMPLETE CHARACTERIZATION ON DRY CLEANER SITES, USING SIMPLE FIELD METHODS
Majbrith Langeland, Børge Hvidberg

15.30 - 15.45  Coffee Break

15.45 - 16.15  A.2.4
ARTIFICIAL RADIONUCLIDES IN SEDIMENT OF THE YENISEI RIVER
Alexander Bolsunovsky and Lydia Bondareva

16.15 - 16.45  A.2.5
PERSISTENCE OF HEAVY METALS IN RIVER SEDIMENT
M.L. Ruello, M. Patrignani, M. Sileno, G. Fava

16.45 - 17.15  A.2.6
EVALUATION OF SORBENT AMENDMENTS FOR IN SITU REMEDIATION OF MIXED METAL- AND ORGANIC-CONTAMINATED SEDIMENTS
Victor Magar, Victor S. Magar, Antonino Rapisardi, Seokjoon Kwon, Jeff Thomas, Upal Ghosh

17.15 - 17.45  A.2.7
REDEFINING A SITE CONCEPTUAL MODEL: MIP INVESTIGATION ON A DNAPL SOURCE AREA
Jean Pierre Davit, Dario Chiarbonello, Filippo Piovano, Piotr Kociolek

Room B

14.00 - 17.45  A.3.1
INTEGRATED PLANNING FOR REMEDIATION OF POLLUTED SEDIMENTS AND ECONOMICAL DEVELOPMENT IN THE PORTO GRANDE OF SYRACUSE
Di Nardo L., Mariotti C., Stacul E.
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<td>09.30 - 10.00</td>
<td>A.3.2</td>
<td>EFFECTS OF METALS FRACTIONATION ON CHELANT-ASSISTED SOIL FLUSHING</td>
<td>G. Mancini, A. Polettini, R. Pomi and M. Bruno</td>
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<td>10.00 - 10.30</td>
<td>A.3.3</td>
<td>ACCUMULATION OF HEAVY METALS IN SOIL AND UPTAKE BY PLANTS SPECIES WITH PHYTOREMEDIATION POTENTIAL</td>
<td>B. Lorestani, N. Yoosefi, M. Cheraghi</td>
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<td>10.45 - 11.15</td>
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<td>REMEDIATION OF 1,2-DICHLORETHANE (1,2-DCA) AND VINYL CHLORIDE (VC) CONTAMINATED GROUNDWATER: LAB AND FIELD PILOT TESTS</td>
<td>Claudio Sandrone, Paola Goria, Marcello Carboni</td>
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<td>Darko Strajin</td>
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<td>REMEDIATION OF DIESEL CONTAMINATED SOIL BY THERMAL DESORPTION: INFLUENCE OF SOIL TEXTURE ON SORPTION CAPACITY, CONTAMINANT REMOVAL EFFICIENCY AND COSTS</td>
<td>P.P. Falciglia, G.A. Giustra and F.G.A. Vagliasindi</td>
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<td>INTEGRATED APPROACH TO THE SCREENING OF REMEDIATION TECHNOLOGIES: A MULTIDISCIPLINARY APPLICATION</td>
<td>Giuseppe Buccheri, Mara Ciucci, Alessandra Marino, Mario Mariani</td>
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<td>Andrea Bianchi (Ministry of Economics)</td>
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<td>Luciano De Propris (Civil Defence Department - ISPRA)</td>
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<td>Emi Morroni (ISPRA)</td>
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<td>Marina Dragotto (AUDIS)</td>
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<td>Mario Morcellini (Sapienza University)</td>
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<td>Gian Mario Baruchello (Roma Tre University)</td>
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22 DISTRIBUTION OF PETROLEUM PRODUCTS FOR TRACTION: ANALYSIS OF A RECLAMATION TECHNOLOGY
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24 DESIGN OF DNA MICROARRAYS FOR MONITORING DENITRIFYING BACTERIA DURING IN-SITU BIOREMEDIATION
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