

## Final Program

### International Conference

# "WASTE MANAGEMENT, ENVIRONMENTAL GEOTECHNOLOGY AND GLOBAL SUSTAINABLE DEVELOPMENT (ICWMEGGSD'07 - GzO'07)"

August 28 – 30, 2007, Grand Hotel Union, Ljubljana, SLOVENIA



The International Conference on Waste Management, Environmental Geotechnology and Global Sustainable Development is a special intermediate year conference initiated by the International Society for Environmental Geotechnology (ISEG) associated with the 8<sup>th</sup> Waste Management (GzO) Conference initiated by the Faculty of Natural Sciences and Engineering, University of Ljubljana. This will be the first ISEG conference in Slovenia. The "ICWMEGGSD'07 - GzO'07" conference will revisit and deepen attention on the three priorities while involving a larger professional corps of international and local experts, practitioners and scientists with a focus on implementation. It will be our pleasure and indeed an honor to host you in Ljubljana.

### ICWMEGGSD'07-GzO'07 CONFERENCE LEADERSHIP

#### Conference Chair:

- As.Prof. Jože KORTNIK, University of Ljubljana, Slovenia

#### Conference Co-Chairs:

- Prof. Uroš BAJŽELJ, University of Ljubljana, Slovenia
- Prof. Hilary I. INYANG, University of North Carolina, USA
- Prof. T. Cássia de Brito GALVÃO, Spelman College, Atlanta, GA, USA.

#### ICWMEGGSD'07 International Scientific Committee:

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#### ICWMEGGSD'07 Local Scientific Committee:

As.Prof. Tomaž AMBROŽIČ, UL-FGG, As.Prof. Evgen DERVARIČ, PV, Prof. Viktor GRILC, KIL, Dr. Marijan IVANC, As.Prof. Vojkan JOVIČIĆ, IRGO, Dr. Marko KOMAC, GeoZS, Prof. Jakob LIKAR, UL-NTF, As.Prof. Janko LOGAR, UL-FGG, Msc. Bernarda PODLIPNIK, RS-MOP, Prof. Franc RUNOVC, UL-NTF, Dr. Slavko V. ŠOLAR, GeoZS, Prof. France ŠUŠTERŠIČ, UL-NTF, Prof. Janez STRAŽIŠAR, UL-NTF, Dr. Marinka VOVK, ORZ, Dr. Željko VUKELIČ, UL-NTF, As.Prof. Milivoj VULIĆ, UL-NTF.

### SPONSORING HOST



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International Society for Environmental Geotechnology (ISEG), Charlotte,  
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Institute of Mining, Geotechnology and Environment (IRGO)



## SPONSORING PARTNERS



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## GzO'07 ORGANIZING COMMITTEE

- **As.Prof. Jože KORTNIK**, UNIVERSITY OF LJUBLJANA, NTF-OGR (president)
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- **Prof. Viktor GRILC**, Chemical Institute Ljubljana
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- **Dr. Marinka VOVK**, Okoljsko raziskovalni zavod, Slovenske Konjice
- **Dr. Franc ČERNEC**, Pulp and Paper Institute, Ljubljana
- **MSc. Bernarda PODLIPNIK**, Ministry for Environment and Spatial Planning, Ljubljana
- **MSc. Janez EKART**, Surovina Maribor
- **Mr. Bojan JELEN**, Institute for Mining, Geotechnology and Environment, Ljubljana
- **Mrs. Klementina HRAST**, ECONO, Ljubljana
- **Mrs. Milka LESKOŠEK**, Javne naprave, Celje
- **Mr. Jože LESKOVAR**, KOSTAK, Krško

## FUTURE ISEG CONFERENCE

**2008 – 9<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development, Hong Kong, China**  
**Chairperson:** Dr. Albert YEUNG, Department of Civil Engineering, University of Hong, China (email:  
 eyeungat@hkucc.khu.hk) and Dr. Irene LO, Department of Civil and Environmental Engineering, Hong Kong  
 University of Science and Technology, China (email: [cemlo@ust.hk](mailto:cemlo@ust.hk))

## PAST ISEG CONFERENCES

- 2006 – International Conference on Infrastructure Development and Environment (ICIDED)**  
 Abuja, Nigeria; **Chairperson:** Dr. Victor FODEKE, Federal Ministry of Environment, Abuja, Nigeria
- 2005 – International Conference on Energy, Environment and Disasters (INCEED)**  
 Charlotte, USA; **Chairperson:** Prof. Hilary I. INYANG, University of North Carolina, Charlotte, USA
- 2004 – 7<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development**  
 Helsinki, Finland; **Chairperson:** Dr. Jouko SAARELA, Finnish Environmental Institute, Helsinki, Finland
- 2002 – 6<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development**  
 Seoul, South Korea; **Chairperson:** Dr. Won-Pyo HONG, Chung-Ang University, Seoul, South Korea
- 2001 – International Symposium on Application of Natural Materials for Environmental Geotechnology**  
 Tokyo, Japan; **Chairperson:** Prof. Hideo MINATO, University of Tokyo, Japan
- 2000 – 5<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development**  
 Belo Horizonte, Brazil; **Chairperson:** Prof. T. Cassia de Brito GALVÃO, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil
- 1999 – 1<sup>st</sup> International Symposium on High Altitude and Sensitive Ecological Environment**  
 Nanjing, China; **Chairperson:** Prof. Shi BIN, Nanjing University, China
- 1998 – 4<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development**  
 Boston, USA; **Chairperson:** Prof. Hilary I. INYANG, University of Massachusetts, Lowell, USA
- 1996 – 3<sup>rd</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development**  
 San Diego, USA; **Chairperson:** Prof. H.Y. FANG and Prof. Hilary I. INYANG, University of Massachusetts, Lowell, USA

**For more information:**

**As.Prof. Jože Kortnik**, University of Ljubljana, Faculty of Natural Sciences and Engineering  
 Department of Geotechnology and Mining Engineering, Aškerčeva 12, 1000 Ljubljana, SI-SLOVENIA  
 Tel.: +386 1 4704500, Fax.: +386 1 2524105, Email: [joze.kortnik@guest.arnes.si](mailto:joze.kortnik@guest.arnes.si), Web: [www.srdit.si/gzo07/indexENG.html](http://www.srdit.si/gzo07/indexENG.html)

## PAST GzO CONFERENCES

- 2006 – 7<sup>th</sup> technical conference with international participation "Waste Management – priprava in obdelava odpadkov", August 31, 2006, Celje, Slovenia.
- 2005 – 6<sup>th</sup> technical conference with international participation "Waste Management – tehnologije ravnjanja z biorazgradljivimi odpadki", September 22, 2005, Ljubljana, Slovenia.
- 2004 – 5<sup>th</sup> technical conference with international participation "Waste Management – gospodarjenje z odpadki z izkušnjami Evropske prakse", September 23, 2004, Maribor, Slovenia.
- 2003 – 4<sup>th</sup> technical conference "Waste Management – zbiranje in seziganje odpadkov ter odpadna embalaža", September 18, 2003, Slovenske Konjice, Slovenia.
- 2002 – 3<sup>th</sup> technical conference "Možnosti uporabe odpadkov", September 19, 2002, Ljubljana, Slovenia.
- 2001 – 2<sup>nd</sup> technical conference with international participation "Ravnjanje z odpadki", November 22, 2001, Ljubljana, Slovenia.
- 1998 – 1<sup>st</sup> technical conference with international participation "Aktualna tematika o gospodarjenju z odpadki in gradnji deponij", June 4, 1998, Ljubljana, Slovenia.

## ICWMEGGSD'07-GzO'07 CONFERENCE PROGRAM OVERVIEW

### Monday, August 27, 2007

- 9.00–15.00 Pre-Conference Worshop: Design, Analysis and Management of Landfills, *Hilary I. NYANG*  
(Venue: lecture room P-5, Faculty of Natural Sciences and Engineering, Aškerčeva 12, Ljubljana)
- 17.00–19.00 Pre-Conference welcome drink reception and early registration (Venue: Grand hotel Union, Garden Hall)

### Tuesday, August 28, 2007 ICWMEGGSD'07

- |             |  |   |
|-------------|--|---|
| 8.30– 9.00  | Registration and Welcome Coffee            | (Venue: Grand hotel Union, Grand Foyer) |
| 9.00–10.30  | Opening Ceremony ICWMEGGSD'07 – GzO'07     | (Venue: Grand hotel Union, Union Hall)  |
| 10.30–11.00 | Press Conference                           | (Venue: Grand hotel Union, White Hall)  |
| 10.30–12.00 | Keynote Presentations (3)                  | (Venue: Grand hotel Union, Unio Hall)   |
| 12.00–13.00 | Lunch Break                                | (Venue: Grand hotel Union Restaurant)   |
| 13.00–15.00 | Session 1.: GLOBAL SUSTAINABLE DEVELOPMENT | (Venue: Grand hotel Union, Union Hall)  |
| 15.00–15.20 | Coffee Break                               | (Venue: Grand hotel Union, Grand Foyer) |
| 15.20–17.00 | Session 2.: ENVIRONMENTAL GEOTECHNOLOGY    | (Venue: Grand hotel Union, Union Hall)  |

### Wednesday, August 29, 2007 GzO'07

- |             |  |   |
|-------------|--|---|
| 8.30– 9.00  | Registration and Welcome Coffee                          | (Venue: Grand hotel Union, Grand Foyer) |
| 9.00–10.30  | Session 3.: WASTE MANAGEMENT                             | (Venue: Grand hotel Union, Union Hall)  |
| 10.30–10.50 | Coffee Break   | (Venue: Grand hotel Union, Grand Foyer) |
| 11.20–13.00 | Session 4.: WASTE MANAGEMENT                             | (Venue: Grand hotel Union, Union Hall)  |
| 13.00–14.00 | Lunch Break  | (Venue: Grand hotel Union Restaurant)   |
| 14.00–16.00 | Session 5.: WASTE MANAGEMENT                             | (Venue: Grand hotel Union, Union Hall)  |
| 16.15–18.30 | TECHNICAL VISIT 1.: Municipal Solid Waste Landfill Barje | (Venue: Grand hotel Union, Union Hall)  |
| 19.00–24.00 | Conference dinner with dance                             | (Venue: Grand hotel Union, Union Hall)  |

### Thursday, August 30, 2007 ICWMEGGSD'07

- |             |   |   |
|-------------|---|---|
| 8.30– 9.00  | Registration and Welcome Coffee               | (Venue: Grand hotel Union, Grand Foyer) |
| 9.00–11.00  | Session 6.: ENVIRONMENTAL GEOTECHNOLOGY       | (Venue: Grand hotel Union, Union Hall)  |
| 11.00–11.20 | Coffee Break                                  | (Venue: Grand hotel Union, Grand Foyer) |
| 11.20–13.00 | Session 7.: ENVIRONMENTAL GEOTECHNOLOGY       | (Venue: Grand hotel Union, Union Hall)  |
| 13.00–14.00 | Lunch Break                                   | (Venue: Grand hotel Union Restaurant)   |
| 14.00–15.00 | Closing Ceremony ICWMEGGSD'07 – GzO'07        | (Venue: Grand hotel Union, Union Hall)  |
| 15.15–19.30 | TECHNICAL VISIT 2.: Uranium Mine Žirovski vrh | (Venue: Grand hotel Union, Union Hall)  |

### Friday, August 31, 2007

- 8.15–18.00 TECHNICAL VISIT 3.: Velenje Coal Mine

## PRE-CONFERENCE PROGRAMME

Monday, August 27, 2007

- 9.00–15.00 Pre-Conference Worshop (Venue: lecture room P-5 Faculty of Natural Sciences and Engineering, Aškerčeva 12, Ljubljana)  
Design, Analysis and Management of Landfills  
- Hilary I. NYANG, Duke Energy Distinguished Professor and Director of Global Institute for Energy and Environmental Systems (GIEES), University of North Carolina at Charlotte, North Carolina, USA.

17.00–19.00	<b>Pre-Conference Welcome Drink Reception and Early Registration (Venue: Grand hotel Union, Garden Hall)</b>
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## ICWMEGGSD'07 – GzO'07 CONFERENCE PROGRAMME

Day 1., Tuesday, August 28, 2007

8.30– 9.00	<b>Registration and Welcome Coffee</b>	<b>(Venue: Grand hotel Union, Grand Foyer)</b>
9.00–10.30	<b>Opening Ceremony ICWMEGGSD'07 – GzO'07</b> Welcome remarks and Good tidings from: <ul style="list-style-type: none"> <li>- President of organizing committee <i>ICWMEGGSD'07-GzO'07 As.Prof. Jože KORTNIK</i></li> <li>- Chancellor of University of Ljubljana <i>Prof. Andreja KOCIJANČIČ</i></li> <li>- Dean of UL, Faculty of Natural Sciences and Engineering <i>Prof. Radomir TURK</i></li> <li>- Minister RS of Environment and Spatial Planning <i>Mr. Mitja BRICELJ</i></li> <li>- Mayor of City Ljubljana <i>Mr. Zoran JANKOVIC</i></li> <li>- Embassy of USA in Slovenia <i>Mrs. Maryrouth COLEMAN</i></li> <li>- President of ISEG <i>Prof. Hilary I. INYANG</i></li> <li>- ISEG South America <i>Prof. Terezinia Cassia de Brito GALVÃO.</i></li> </ul>	<b>(Venue: Grand hotel Union, Union Hall)</b>
10.30–11.00	<b>Press Conference</b>	<b>(Venue: Grand hotel Union, White Hall)</b>
10.30–12.00	<b>Keynote Presentations (3)</b> <b>Session Chair:</b> Prof. Uroš BAJŽELJ, <i>UL, Faculty of Natural Sciences and Engineering, Slovenia.</i>	<b>(Venue: Grand hotel Union, Unio Hall)</b>
	<b>(ID 104) Overcoming energy challenges in the future: diversification of energy sources and technologies</b> Saša Podlogar ŽNIDARŠIČ, <i>HSE, Ljubljana, Slovenia.</i> Djordje ŽEBELJAN, <i>HSE, Ljubljana, Slovenia.</i>	
	<b>(ID 013) A Pragmatic Inquiry into the Next World Summit of Sustainable Development Targeting Options Related to Sanitation and Poverty Reduction</b> Manfred FEHR, <i>Federal University at Uberlândia, Uberlândia, Brazil.</i>	
	<b>(ID 071) Waste Management as Part of Resource Management Within the Context of Sustainability</b> Slavko V. ŠOLAR, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i> Deborah J. SHIELDS, <i>U.S.D.A. Forest Service, Ft. Collins, USA.</i>	
12.00–13.00	<b>Lunch Break</b>	<b>(Venue: Grand hotel Union Restaurant)</b>
13.00–15.00	<b>Session 1.: GLOBAL SUSTAINABLE DEVELOPMENT</b> <b>(Venue: Grand hotel Union, Union Hall)</b> <b>Session Chair:</b> Prof. Terezinia Cassia de Brito GALVÃO, <i>Spelman College, USA.</i> <b>Session Chair:</b> As.Prof. Jože KORTNIK, <i>UL, Faculty of Natural Sciences and Engineering, Slovenia.</i> <b>Session Chair:</b> Prof. Viktor GRILC, <i>Chemical Institute Ljubljana, Slovenia.</i>	
	<b>(ID 075) Landslides in Belo Horizonte, Brazil</b> T. Cássia de Brito GALVÃO, <i>Spelman College, Atlanta, USA.</i> M. G. PARIZZI, <i>Universidade Federal de Minas Gerais, Belo Horizonte, Brazil.</i> F. G. SOBREIRA, <i>Universidade Federal de Ouro Preto, Brazil.</i> Timbó ELMIRO, <i>Universidade Federal de Minas Gerais, Belo Horizonte, Brazil.</i> E.A. BERIGO, <i>Cia Geoestrutural, Belo Horizonte, Brazil.</i>	
	<b>(ID 072) PSInSAR Data Analysis – An Insight into Active Tectonics and Mass Movements in West Slovenia</b> Marko KOMAC, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i> Miloš BAVEC, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i>	
	<b>(ID 092) A Deformation Monitoring with Simultaneous Heterogeneous Observation System</b> Milivoj VULIĆ, <i>University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia.</i> Gregor URANJEK, <i>Velenje, Slovenia.</i> Drago POTOČNIK, <i>PV Invest, Velenje, Slovenia.</i>	
	<b>(ID 027) The Impact of Disposal and Treatment of Coal Mining Wastes on Environment and Farmland</b> Zhengfu BIAN, <i>China University of Mining and Technology, Xuzhou, China.</i> Hui WANG, <i>China University of Mining and Technology, Xuzhou, China.</i> Mu SHOUGUO, <i>China University of Mining and Technology, Xuzhou, China.</i> Leng HAILONG, <i>China University of Mining and Technology, Xuzhou, China.</i>	
15.00–15.20	<b>Coffee Break</b>	<b>(Venue: Grand hotel Union, Grand Foyer)</b>

15.20–17.00	<b>Session 2.: ENVIRONMENTAL GEOTECHNOLOGY</b> (Venue: Grand hotel Union, Union Hall) <b>Session Chair:</b> As.prof. John L. DANIELS, <i>University of North Carolina at Charlotte, USA.</i> <b>Session Chair:</b> As.prof. Vojkan JOVIČIĆ, <i>Institute for Mining, Geotechnology and Environment, Slovenia.</i> <b>Session Chair:</b> Prof. Manfred FEHR, <i>Federal University at Uberlândia, Brazil.</i>
	<b>(ID 066) Control of Methane Accesses from Coal Seams at day Ground</b> Frank OTTO, <i>Technical University of Applied Sciences, Bochum, Germany</i> , Lutz Heinrich BENNER, WBG-GmbH, <i>Bochum, Germany</i> .
	<b>(ID 108) The Development of Technology for Removing Debris, Suspended Material and Sediment from Water, Before Storage Dam</b> Jože LESKOVAR, <i>KOSTAK, Krško, Slovenia.</i>
	<b>(ID 078) Measurements Simulation for Optimisation of Trigonometric Network Monitoring</b> Milivoj VULIĆ, <i>University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia,</i> Dušan SETNIKAR, <i>Geodetski zavod Celje, Celje, Slovenia.</i>
	<b>(ID 079) Influence of a Non-Nodal Point in the Adjustment of Local Levelling Networks</b> Milivoj VULIĆ, <i>University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia,</i> Jure SLATINŠEK, <i>Velenje Coal Mine, Velenje, Slovenia</i> , Matjaž KOŽELJ, <i>Velenje Coal Mine, Velenje, Slovenia.</i>
<b>Day 2., Wednesday, August 29, 2007</b>	
8.30– 9.00	<b>Registration and Welcome Coffee</b> (Venue: Grand hotel Union, Grand Foyer)
9.00–10.30	<b>Session 3.: WASTE MANAGEMENT</b> (Venue: Grand hotel Union, Union Hall) <b>Session Chair:</b> As.Prof. Irina KOSTOVA, <i>University of Architecture, Civil Engineering, Water Supply, Sewerage and Water Treatment, Sofia, Bulgaria.</i> <b>Session Chair:</b> dr. Marinka VOVK, <i>Okoljsko raziskovalni zavod ORZ, Slovenske Konjice, Slovenia.</i> <b>Session Chair:</b> Dr. Marijan IVANC, <i>Slovenia.</i>
	<b>(ID 093) Izvajanje uredbe o odlaganju odpadkov v praksi</b> Tatjana BERNIK, <i>Inspektorat RS za okolje in prostor, Ljubljana, Slovenia.</i>
	<b>(ID 081) Environmental Fee for Waste Deposit – Financing Instrument in Slovenia in the Period 2001-2006</b> Marjana ULRICH SUPOVEC, <i>Ministry of Environment and Spatial Planning, Environmental Agency of the Republic of Slovenia, Ljubljana, Slovenia.</i>
	<b>(ID 025) Wastes in Finland and Waste Management Strategies in Helsinki Metropolitan Area</b> Jouko SAARELA, <i>Finnish Environment Institute, Helsinki, Finland.</i>
	<b>(ID 057) Market Analyse and Demand Estimate of Construction and Demolition Waste: The Case Study of the Municipality of Rio De Janeiro</b> Katia R.A. NUNES, <i>Federal University of Rio de Janeiro, Rio de Janeiro, Brazil</i> , Cláudio F. MAHLER, <i>Federal University of Rio de Janeiro, Rio de Janeiro, Brazil</i> , R. VALLE, <i>Federal University of Rio de Janeiro, Rio de Janeiro, Brazil</i> , T. Cássia de Brito GALVÃO, <i>Spelman College, Atlanta, USA.</i>
	<b>(ID 098) Introduction of the Door-to-Door System to Up-Grade the System of Waste Separation</b> Bojan PIRŠ, <i>Public waste removal service of Rogaška Slatina, Rogaška Slatina, Slovenia.</i>
	<b>(ID 109) Ločeno zbiranje odpadne embalaže v prihajajočem obdobju od leta 2008 do leta 2012 ter predstavitev novosti na področju praktičnega izvajanja zbiranja odpadne električne in elektronske opreme družbe SLOPAK</b> Barbara TIŠLER, <i>SLOPAK, Ljubljana, Slovenia.</i>
10.30–10.50	<b>Coffee Break</b> (Venue: Grand hotel Union, Grand Foyer)
10.50–13.00	<b>Session 4.: WASTE MANAGEMENT</b> (Venue: Grand hotel Union, Union Hall) <b>Session Chair:</b> As.Prof. Jože KORTNIK, <i>UL, Faculty of Natural Sciences and Engineering, Slovenia.</i> <b>Session Chair:</b> MSc. Bernarda PODLIPNIK, <i>Ministry for Environment and Spatial Planning, Ljubljana, Slovenia.</i>
<b>(ID 014) Upgrading Small Municipal Dumpsite into an Environmentally Sustainable Landfill Rationally</b>	

**- Real Case Study**

Igor MADON, *Komunalno stanovanjska družba Ajdovščina, Slovenia.*

**(ID 033) Stability Assessment of Paper Sludge Landfill Cover Barrier**

Jože KORTNIK, *UL, Faculty of Natural Sciences and Engineering, Department of Geotechnology and Mining, Ljubljana, Slovenia,* Vojkan JOVIČIĆ, *Institute for Mining, Geotechnology and Environment, Ljubljana, Slovenia,* Simon SPRUK, *Slovenia.*

**(ID 058) Utilization of the German Recommendation E1-7 GDA in the Classification of the Municipal Solid Waste from Rio de Janeiro - Brazil**

André V.A. BORGATTO, *UFRJ/COPPE/ Rio de Janeiro, Brazil/Technical University of Braunschweig, Germany,* Ronaldo L.S. RIZZO, *UFRJ/COPPE/ Rio de Janeiro, Brazil/Technical University of Braunschweig, Germany,* Cláudio F. MAHLER, *Federal University of Rio de Janeiro, Rio de Janeiro, Brazil.*

**(ID 082) Renewal of Acid Tar Lagoon Site at Pesniški Dvor**

Franc LIPOVŠEK, *KEMIS d.o.o., Radomlje, Slovenia,* Peter KOVAČ, *GORENJE d.d., Energy Engineering and Environmental Protection, Velenje, Slovenia.*

**(ID 106) Regijski center za ravnanje z Odpadki – RCERO Celje**

Milka LESKOŠEK, *Javne naprave, Celje, Slovenia.*

**(ID 083) The Ecoprofit Project and the Programme on Separately Collected Waste Fractions Management – The Case Study of the City Municipality of Maribor, Slovenia**

Vesna SMAKA KINCL, *Mestna občina Maribor, Zavod za varstvo okolja, Maribor, Slovenia,* Živa BOBIČ, *Mestna občina Maribor, Zavod za varstvo okolja, Maribor, Slovenia,* Suzana PRAJNC, *Mestna občina Maribor, Zavod za varstvo okolja, Maribor, Slovenia.*

**(ID 070) Mining Waste of Non-Metal Pits and Querries in Slovenia**

Ana BURGER, *Ribnica, Slovenia,* Slavko V. ŠOLAR, *Geological Survey of Slovenia, Ljubljana, Slovenia.*

**(ID 084) The Innovative Approach Toward the Closure of the Life Cycle of Quartz Sand**

Alenka ŠEŠEK PAVLIN, *TERMIT d.d., Moravče, Slovenia.*

13.00–14.00

**Lunch Break**

**(Venue: Grand hotel Union Restaurant)**

14.00–16.00

**Session 5.: WASTE MANAGEMENT**

**(Venue: Grand hotel Union, Union Hall)**

Session Chair: Dr. Jouko SAARELA, *Finnish Environment Institute SYKE, Finland.*

Session Chair: Prof.dr. Bian ZHENG FU, *China University of Mining and Technolog, Huzhou, China.*

Session Chair: Dr. Marko KOMAC, *Geological Survey of Slovenia, Ljubljana, Slovenia.*

**(ID 089) Reliability of Modeling Results of Future Final Cover Performance**

Jože RATEJ, *Geological Survey of Slovenia, Ljubljana, Slovenia,* Mihael BRENČIČ, *Geological Survey of Slovenia, University of Ljubljana, NTF, Department of Geology, Ljubljana, Slovenia.*

**(ID 086) Zero Carbon Coal in the Cement Industry – From a Vision to Realisation**

Gerald SCHMIDT, *Saubermacher Dienstleistungs AG, Graz, Austria.*

**(ID 095) Possibilities of Environmental Improvements of Soil Condition with the Application of Excavated Soils and Artificial Composed Soils**

Nives V. KUGONIČ, *ERICo, Velenje, Slovenia,* M. SPRINZER, *PKG Consulting, Maribor, Slovenia,* Mojca BOLE, *ERICo, Velenje, Slovenia,* Marko MAVEC, *ERICo, Velenje, Slovenia.*

**(ID 096) Achievement of Special Properties of Concrete with Waste Materials**

Jakob ŠUŠTERŠIČ, *IRMA Institute for Research in Materials and Applications, Ljubljana, Slovenia,* Andrej ZAJC, *IRMA Institute for Research in Materials and Applications, Ljubljana, Slovenia,* Rok ERCEGOVIČ, *IRMA Institute for Research in Materials and Applications, Ljubljana, Slovenia.*

**(ID 085) Izboljšanje stanja okolja ob regijskih odlagališčih komunalnih odpadkov**

Darinka IGNJATOVIĆ, *Institut za ekološki inženiring, Maribor,* Sabina ŽAJA, *Institut za ekološki inženiring, Maribor, Slovenia.*

**(ID 090) Recent Monitoring Results of Landfil Groundwater Interaction – Case Study from Slovenia**

Mihael BRENČIČ, *Geological Survey of Slovenia, University of Ljubljana, NTF, Department of Geology, Ljubljana, Slovenia,* Jože RATEJ, *Geological Survey of Slovenia, Ljubljana, Slovenia.*

**(ID 105) Hidrogeološki monitoring odlagališč na krasu**

Barbara ČENČUR CURK, *Institute for Mining, Geotechnology and Environment, Ljubljana, Slovenia.* Melhior PREGL, *Institute for Mining, Geotechnology and Environment, Ljubljana, Slovenia.* Metka PETRIČ *Inštitut za raziskovanje krasa ZRC SAZU, Postojna, Slovenia.* Janja KOGOVŠEK *Inštitut za raziskovanje krasa ZRC SAZU, Postojna, Slovenia.*

**(ID 097) Stability Properties of Biosludge-Wood Ash Composites**

Franc ČERNEC, *ICP Pulp and Paper Institute, Ljubljana, Slovenia.* Janja ZULE, *ICP Pulp and Paper Institute, Ljubljana, Slovenia.*

**16.15–18.30 TECHNICAL VISIT 1.: Municipal Solid Waste Landfill Barje**

16.15–16.30 Meeting and organizing transport by buses to the Municipal Solid Waste Landfill Barje (Venue: Grand hotel Union, Reception Desk)

16.30–18.00 Introduction and technical visit of the Municipal Solid Waste Landfill Barje

Technical leader: Mitja PRAZNIK, MSc.

18.00–18.30 Return to the Grand hotel Union, Ljubljana

19.00–24:00 Conference Dinner with dance (Venue: Grand hotel Union, Union Hall)

19.00–19.30 Welcome in National Costume (appetiser drink)

19.30–20:30 Cultural Programme and Dinner Speeches

20.30–21:30 Conference Dinner

21.30–24:00 Conference Dance (ansambel Victory)

Day 3., Thursday, August 30, 2007

8.30– 9.00 Registration and Welcome Coffee (Venue: Grand hotel Union, Grand Foyer)

9.00–11.00 Session 6.: ENVIRONMENTAL GEOTECHNOLOGY (Venue: Grand hotel Union, Union Hall)

Session Chair: Dr. Sue STRUTHERS, *Skapa Mining Services, UK.*

Session Chair: Prof. Jakob LIKAR, *UL, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia.*

Session Chair: Prof. Franc RUNOVC, *UL, Faculty of Natural Sciences and Engineering, Slovenia.*

**(ID 062) Site-Specific Distribution Coefficients for Preliminary Modeling Purposes**

John L. DANIELS, *University of North Carolina at Charlotte, Charlotte, USA.* Gautham P. DAS, *University of North Carolina at Charlotte, Charlotte, USA.*

**(ID 041) Numerical Simulation on Resisting Seepage Capacity of Water Resisting Key Strata in Mined Rock Mass**

Pu HAI, *China University of Mining and Technology, Xuzhou, China.* Miao XIEXING, *China University of Mining and Technology, Xuzhou, China.* Bai HAIBO, *China University of Mining and Technology, Xuzhou, China.* Chen RONGHUA, *China University of Mining and Technology, Xuzhou, China.* Qin FENG, *China University of Mining and Technology, Xuzhou, China.*

**(ID 101) Land Use and Groundwater Management Conflicts**

Barbara ČENČUR CURK, *Institute for Mining, Geotechnology & Environment, Ljubljana, Slovenia.*

**(ID 032) Analysis of Water Insulating Effect of Water-Resisting Key Strata in Floor**

Feng MEI-MEI, *China University of Mining and Technology, Xuzhou, China.* Miao XIE-XING, *China University of Mining and Technology, Xuzhou, China.* Mao XIAN-BIAO, *China University of Mining and Technology, Xuzhou, China.*

**(ID 026) An Experiment Study on Influencing Factor on Permeability of Rock for Temperature**

Zhang YUAN, *China University of Mining and Technology, Xuzhou, China.* Qu FANG, *China University of Mining and Technology, Xuzhou, China.* Wan ZHIJUN, *China University of Mining and Technology, Xuzhou, China.* Zhao YANGSHENG, *China University of Mining and Technology, Xuzhou, China.*

**(ID 080) Baghouse Fines of Coraline Limestone or Fossil Coral with Calcium Carbonate - Results of Preliminary Research**

Željko POGAČNIK, *Salonit Anhovo, Deskle, Slovenia.* Miha ANDREJAŠIČ, *Jozef Stefan Institute, Ljubljana, Slovenia.* Igor ŠTERN, *Jozef Stefan Institute, Ljubljana, Slovenia.* Mateja GOLEŽ, *Slovenian National Building and Civil Engineering Institute, Ljubljana, Slovenia.* Simona MURKO, *Jozef Stefan Institute, Ljubljana, Slovenia.*

**(ID 103) Filling-Up Open Mine Spaces in the Uranium Mine Žirovski vrh from the Surface with Filling**

**Concrete**

Jurij ŠPORIN, *Institute for Mining, Geotechnology and Environment, Slovenia.* Željko STERNAD, *Institute for Mining, Geotechnology and Environment, Slovenia.* Željko VUKELIĆ, *UL, Faculty of Natural Sciences and Engineering, Department of Geotechnology and Mining, Ljubljana, Slovenia.* Boris LIKAR, *Rudnik urana Žirovski vrh v zapiranju, Gorenja vas, Slovenia.* Ivan GANTAR, *Rudnik urana Žirovski vrh v zapiranju, Gorenja vas, Slovenia.*

11.00–11.20	<b>Coffee Break</b>	(Venue: Grand hotel Union, Grand Foyer)
11.20–13.00	<b>Session 7.: ENVIRONMENTAL GEOTECHNOLOGY</b>	(Venue: Grand hotel Union, Union Hall) Session Chair: As.prof. Petar HRŽENJAK, University of Zagreb, Croatia. Session Chair: Dr. Slavko V. ŠOLAR, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i> Session Chair: Prof. Frank OTTO, Technical University of Applied Sciences, Bochum, Germany Session Chair: Dr. Željko VUKELIĆ, <i>UL, Faculty of Natural Sciences and Engineering, Department of Geotechnology and Mining, Ljubljana, Slovenia.</i>
<b>(ID 100) Environmental Geotechnology of Closure of Mercury Idria Mine</b> Uroš BAJŽELJ, <i>University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia.</i> Jakob LIKAR, <i>University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia.</i> Marko CIGALE, <i>Idrija Mercury Mine, Idrija, Slovenia.</i> Bojan REŽUN, <i>Idrija Mercury Mine, Idrija, Slovenia.</i>		
<b>(ID 046) Green Mining of Coal Resources Harmonizing with Environment</b> Xu JIALIN, <i>China University of Mining and Technology, Xuzhou, China.</i> Qian MINGGAO, <i>China University of Mining and Technology, Xuzhou, China.</i> Quan XUEHONG, <i>China University of Mining and Technology, Xuzhou, China.</i>		
<b>(ID 094) Abandoned Metal Mining Impacts – Case Study Podljubelj Hg Mine</b> Tamara TERŠIČ, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i> Mateja GOSAR, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i> Robert ŠAJN, <i>Geological Survey of Slovenia, Ljubljana, Slovenia.</i>		
<b>(ID 037) Application of Synthetic Mine Geophysical Prospecting Technique in Detecting Collapse Columns</b> Liu ZHIXIN, <i>China University of Mining and Technology, Xuzhou, China.</i> Yue JIANHUA, <i>China University of Mining and Technology, Xuzhou, China.</i> Liu SHUCAI, <i>China University of Mining and Technology, Xuzhou, China.</i>		
<b>(ID 038) Natural Stone Underground Mining in Slovenia - Stability Assessment Low With-to-Height Ratios Pillars</b> Jože KORTNIK, <i>UL, Faculty of Natural Sciences and Engineering, Department of Geotechnology and Mining, Ljubljana, Slovenia.</i>		
<b>(ID 107) Vrtalno minerska dela pri sanaciji kamnoloma Brestanica za izdelavo kolektorja odpadnih vod</b> Stjepan ŽGANEC, <i>Minervo, Ljubljana, Slovenija.</i> Milan H. ZABUKOVEC, <i>Minervo, Ljubljana, Slovenija.</i>		
13.00–14.00	<b>Lunch Break</b>	(Venue: Grand hotel Union Restaurant)
14.00–15.00	<b>Closing Ceremony ICWMEGGSD'07 – GzO'07 Ljubljana conference</b>	(Venue: Grand hotel Union, Union hall)
15.15–19.30	<b>TECHNICAL VISIT 2.: Uranium Mine Žirovski vrh</b>	
15.15–15.30	<b>Meeting and organizing transport by buses to the Uranium Mine Žirovski vrh</b>	(Venue: Grand hotel Union, Reception Desk)
16.30–18.00	<b>Introduction and technical visit of the Uranium Mine Žirovski vrh Recultivation Works</b>	Technical leader: Franc AVBERŠEK, MSc.
19.30	<b>Return to the Grand hotel Union, Ljubljana</b>	
<b>Day 4., Friday, August 31, 2007</b>		
8.15–18.00	<b>TECHNICAL VISIT 3.: Velenje Coal Mine</b>	
8.15– 9.30	<b>Meeting and organizing transport by buses to the Velenje</b>	(Venue: Grand hotel Union, Reception Desk)
11.00–13.00	<b>Introduction and visit of the Velenje Coal Mine Surface Recultivation Works</b>	Technical leader: Marjan KOLENC, MSc.
13.00–14.00	<b>Lunch (Venue: Restaurant Jezero, Velenje)</b>	
14.00–16.00	<b>Visit of Coal Mining Museum of Slovenia</b>	
18.00	<b>Return to the Grand hotel Union, Ljubljana</b>	

## TECHNICAL VISITS

### Technical visit 1.: (Day 2., Wednesday, August 29, 2007, Time 16.15-18.30)

Technical visit of the city Ljubljana main Municipal Solid Waste Landfill Barje by technical leading Mitja PRAZNIK, MSc. Free transport by buses will provide organizer.

### Technical visit 2.: (Day 3., Thursday, August 30, 2007, Time 15.15-19.30)

Technical visit of surface remedial and recultivation works of Uranium mine Žirovski vrh by technical leading Franc AVBERŠEK, MSc. Free transport by buses will provide organizer.

### Technical visit 3.: (Day 4., Friday, August 31, 2007, Time 8.15-18.00)

Full day technical visit of Underground Velenje Coal Mine. Technical visit of surface remedial and recultivation works by technical leading Marjan KOLENC, MSc. Lunch and visit of Coal Mine Museum of Slovenia. Free transport by buses will provide organizer.

## VENUE

The conference will take place in the Grand hotel Union, Ljubljana. Please make your arrangements for the accommodations directly with the Grand Hotel Union (<http://www.gh-union.si>). In order to get the special conference rate, mention that you will be attending the **ICWMEGGSD'07 - GzO'07 Conference** (the accommodations arrangements are not included in the Conference Registration). Special Conference rates for rooms:

- 1 Night/Room - Single room: 111,75 EUR
- 1 Night/Room - Double room single use: 119,25 EUR
- 1 Night/Room - Double room: 132,75 EUR

All above rates include breakfast and VAT. City tax is 1,01 EUR per person per day and is not included in the room price.

## CONFERENCE BUDGET ACCOMODATION

Due to request made by participants from developing countries, the ICWMEGGSD'07-GzO'07 Organizing Committee has secured hostel accommodation at Youth Hostel Bežigrad DDB (<http://www.hostel-ddb.si>).



Capacity of Youth Hostel Bežigrad (DDB): 20 rooms TWC with 40 beds. Special Conference rates for rooms with toilet and bathroom (breakfast included):

- single room: 38 EUR per person per night,
- double room: 26 EUR per person per night,
- triple room: 22 EUR per person per night.

Youth Hostel Bežigrad (DDB) is situated close to the Secondary School district and Bežigrad Student's Campus, 1.6 km (1 mile) from the conference hotel Grand hotel Union. Location of the Hostel DDB is very good connected by city busses with the center of Ljubljana (every 15 minutes).

## PRE-CONFERENCE TOUR

The ICWMEGGSD'07-GzO'07 will feature several tours to and from Ljubljana to allow conference participants and their accompanying persons to experience first-hand, some of Slovenian's most beautiful landscapes and local traditions. For more information including departure dates or to book please visit the ICWMEGGSD'07-GzO'07 website at [www.srdit.si/gzo07/indexENG.html](http://www.srdit.si/gzo07/indexENG.html).

### Pre-conference tour 1.: Ljubljana-Bled-Ljubljana (Saturday, August 25, 2007)

This trip will show you the best of what Slovenia has to offer in terms of breathtaking landscapes. Beginning in Ljubljana, this tour will take you through Alpine landscape to the north-western part of Slovenia at the **Lake Bled**. The fabulous beauty of Lake Bled has for millenium attracted people's gaze with its miraculous power. The islet in the middle of the lake was frequented as early as prehistory. On the rock rising some 100 m above the lake still mighty castle stood at the time.

Cost: **60 EUR** per person

Includes: all transfers, guide, lunch in Bled, admissions (excl. drinks).

### Pre-conference tour 2.: Ljubljana-Postojna-Piran-Lipica-Ljubljana (Sunday, August 26, 2007)

This trip has been especially designed for those participants traveling onto the ICWMEGGSD'07-GzO'07 Conference. Beginning in Ljubljana, this tour will take you to famous **Postojna Cave**, a 20 km (12-mile) labyrinth of subterranean passages, filled with fantastical stalagmites, stalactites and other rock formations. **Piran** is old Mediterranean town which is situated at the cape of the Piran peninsula on the northern side of Istria. The town is actually one large museum with the medieval architecture and rich culture heritage. **Stud-farm Lipica** has 400 years old tradition of breeding the famous white horses. This is the original home of Lipizzaner rase.

Cost: **60 EUR** per person

Includes: all transfers, guide, lunch in Piran, admissions (excl. drinks).

## ICWMEGGSD'07-GzO'07 CONFERENCE REGISTRATION FORM

(send this registration form by email [joze.kortnik@guest.arnes.si](mailto:joze.kortnik@guest.arnes.si) or fax.: **+386 1 25 24 105**)

Title (Mr., Ms., Prof., Dr.,...): \_\_\_\_\_

Name: \_\_\_\_\_

Surname: \_\_\_\_\_

Organization: \_\_\_\_\_

Department: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Postal Code: \_\_\_\_\_

State: \_\_\_\_\_

Country: \_\_\_\_\_

Telephone: + \_\_\_\_\_ - \_\_\_\_\_

Fax.: + \_\_\_\_\_ - \_\_\_\_\_

Email: \_\_\_\_\_

I am submitting a paper       I am the primary author

I am a GADR or ISEG Board or Executive Member or Counselor

I need a letter for visa application purposes

<b><u>REGISTRATION</u></b>		<b>Before July 31, 2007</b>	<b>After July 31, 2007</b>
<input type="checkbox"/>	<b>Full Registration</b> (includes admission to all technical sessions, a compendium of abstracts and a CD-ROM of the proceedings)	340 EUR	380 EUR
<input type="checkbox"/>	<b>Daily Registration – Number of Days:</b> <b>1 2</b> (includes admission to technical sessions the day)	160 EUR/day	200 EUR/day
<input type="checkbox"/>	<b>Student Registration</b> (includes admission to all technical sessions. Original student ID required at conference venue)	100 EUR	120 EUR
<input type="checkbox"/>	<b>Accompanying person(s)</b> (includes access to the opening reception, coffee breaks and technical visits)	50 EUR	50 EUR
<b><u>SOCIAL FUNCTIONS &amp; TECHNICAL VISITS&amp;TOURS</u></b>			
<input type="checkbox"/>	<b>Welcome Reception</b> – Monday, August 27, 2007	0 EUR	0 EUR
<input type="checkbox"/>	<b>Conference Dinner</b> – Wednesday, August 29, 2007	50 EUR	50 EUR
<input type="checkbox"/>	<b>Closing Ceremony</b> – Thursday, August 30, 2007	0 EUR	0 EUR
<input type="checkbox"/>	<b>Technical Visit 1.</b> – Wednesday, August 29, 2007	0 EUR	0 EUR
<input type="checkbox"/>	<b>Technical Visit 2.</b> – Thursday, August 30, 2007	0 EUR	0 EUR
<input type="checkbox"/>	<b>Technical Visit 3.</b> – Friday, August 31, 2007	0 EUR	0 EUR
<input type="checkbox"/>	<b>Pre-Conference Tour 1.</b> – Saturday, August 25, 2007	60 EUR	60 EUR
<input type="checkbox"/>	<b>Pre-Conference Tour 2.</b> – Sunday, August 26, 2007	60 EUR	60 EUR

### COMMENT:

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### PAYMENT OPTION:

**Through Bank or Cheque Transfers or Bank Drafts:** No personal cheques or demand drafts from abroad will be accepted. Payment should be made by:

**Account Holder:** UL, Faculty of Natural Sciences and Engineering

**Bank Name:** Banka Slovenije, Slovenska 56, Ljubljana, SLOVENIA

**Bank Account Number:** 01100-6030708186 summons on Nr. 50038

**Bank Code:** IBAN SI56

**BIC/Swift Code:** BSLJSI2X

**International Conference  
"WASTE MANAGEMENT, ENVIRONMENTAL  
GEOTECHNOLOGY AND GLOBAL SUSTAINABLE  
DEVELOPMENT (ICWMEGGSD'07 - GzO'07)"  
August 28 – 30, 2007, Grand Hotel Union, Ljubljana,  
SLOVENIA**

