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Preface

This Symposium on Environmental Issues and Waste Management in Energy and Mineral Production is the 12th of a series of SWEMP symposia on the subject matter. SWEMP 2010 is held in the heart of Europe, the Czech capital Prague. The objectives of these SWEMP events are to discuss the various environmental issues, technical, economic and legal aspects and problems that the world energy, coal and minerals production is faced with, and to identify future courses of action in research, expert education, government and industry policies and international cooperation. The SWEMP symposium 2010 has attracted worldwide participation. Participants have come from more than 25 countries. In view of highly topical nature of this international symposium especially the interest from Asia is welcomed showing the growing respect to environmental aspects of nature resources use and achievements in land reclamation and new landscapes creation.

A tradition of mining of raw materials in the Czech Republic is one of the oldest in the Europe. For example, in 1300 a codified mining law Ius Regale Montanorum was issued; it served as a model for other Central European mining laws. The historical development of Czech mining districts is very important: From Middle Age mostly silver, tin and also gold ores were exploited, in the 19th century the importance of pyrite, iron and uranium ores rapidly grew. And then the coal mining became a specific industry, which is until now the reliable base of country energy production and energy supply safety.

Very high Czech reclamation standards address environmental protection including post-mining land uses. SWEMP 2010 is supported by a number of universities and organizations. The generous support of the SD – Severočeské doly a.s., the biggest Czech brown coal mining company, is gratefully acknowledged.

The organization and success of such a symposium is due mainly to the tireless efforts of host Czech University of Life Sciences, International Organizing Committee, session chairpersons, plenary session speakers and authors of papers.

Petr Sklenička
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Dean of the Faculty of Environmental Sciences,
Czech University of Life Sciences in Prague
Raj K. Singhal

*International Chair*

Petr Sklenička

*International Co-Chair*

Miroslav Martiš

*Plenary Session Chair*
Plenary speakers

Carsten Drebenstedt

Carsten Drebenstedt graduated in Mining Engineering, 1982, Moscow Mining Institute and finished the PhD study in Mining Engineering in 1990 at Moscow Mining Institute. From 1982 to 1999 he held different position in German mining industry and foreign consultant activities. Since 1999 is full University Professor, Chair Surface Mining. His research topics: mine planning, mining and environment, technical mine optimisation. He is author of 8 books and 230 publications.

Vladimír Kebo

Vladimír Kebo graduated from the Technical University of Mining and Metallurgy Ostrava in 1981, study branch Automated control systems. In 1993 finished the PhD study at the VŠB- Technical University Ostrava (VŠB-TUO), study branch Automation of technological processes. From 1997 is associate professor from in Automation in Mining at Institute of Economics and Control Systems, The Faculty of Mining and Geology. He is member of presidium of Technology Agency of Czech Republic and member of monitoring committee ESF – Operational Program Research and Development for Innovations (OPRDI) 2007-2013, MEYS.

Sven Knutsson

Sven Knutsson is professor in soil mechanics and head of geotechnology at Dept. of Civil, Mining and Environmental Engineering at Luleå University of Technology (LTU), Sweden. He has more than 30 years experience from industry and university. Educated in Lund and Luleå where he also awarded his PhD. During the 80-ties he spent about 4 years at universities and research institutes in US and Canada. Member of several national and international professional organizations and is often used as national and international expert related to tailings dams. LTU is one of the two Swedish national research units for dam engineering. Most work is here related to design and long time performance of tailings dams with special attention to cold climate.
Plenary speakers

Jan Pokorný

Jan Pokorný graduated from the Faculty of Natural Sciences of Charles University Prague in biology and chemistry on 1969. Plant physiologist dealing with photosynthesis and nutrient uptake of plants and wetland ecology. Aimed at functioning of plant stands in distribution of solar energy and water cycle. Principal investigator of projects on restoration of wetlands, eutrophic lakes and on methods of study of solar energy distribution in ecosystems. Member of Ramsar Scientific Technological Panel, member of Scientific Panel of Natural Sequence farming (Australia). Lecturer with Charles University Prague, University of Applied Sciences Turku, UNESCO_IHE Delft, ass. prof Czech Agriculture University Prague, director ENKI, o.p.s. Třeboň.

Richard Poulin

Dr. Richard Poulin is professor of mineral economics at Université Laval in Québec City. He holds a Ph.D. from McGill University and is Fellow of the Canadian Institute of Mining. He also has been professor of mineral economics at The University of British Columbia from 1990-96. He previously worked in mineral engineering consultancy for 12 years in Canada and overseas, mainly in Africa and South America. His main research topics are mineral resource valuation by real options and risk associated with environmental bonding. He is currently director of the International Office and assistant vice-president studies and international activities at Université Laval.

Michel Sponar

Michel Sponar is working as Policy Officer at the European Commission in the Directorate General Environment, "Sustainable Production and Consumption Unit". He is responsible for (1) the follow-up of the implementation of the Mining Waste Directive; (2) the coordination of the impact assessments studies (ship dismantling, batteries, bio-waste); (3) integrating resource efficiency aspects into the European product policies (Ecodesign). From 2002 to 2007, he was Policy Officer in the Unit Air, transport and Climate, Member of the team in charge of the preparation, adoption and follow up of the Thematic Strategy on air pollution. Between 1991 and 2002, he was Deputy Head of the Cabinet of the Minister for the Environment at the Brussels Region and before he was working during 3 years in the Seychelles and Madagascar in development projects. His background is Bio Engineer (Scientific education) with a complement in Economy (Business Management).
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