

## SDIMI 2003 List of Presentations

Opening (May 22, 08.15 - 08.45)

### ***1. Keynote***

#### **1. Keynote (May 22, 08.45-10.45)**

*Chair Person: M. Karmis*

P. Van Der Veen, J. Strongman - Sustainable development - The way forward for the mining industry

L. Brykman - Sustainable development indicators for the EU non-energy extractive industries.

S. Stewart - Mining and sustainable development

A. Roper - ICMM: Sustainable development framework: Principles and reporting

D.J. Shields, L.A. Wagner, D.J.A. van Zyl - Indicators of mineral systems contributions to sustainability in the USA

### ***2. Sustainable Development Criteria and Concepts***

#### **2a. Approaches and Issues (May 22, 11.05-13.05)**

*Chair Persons: S. Botts & A. Kefalas*

P.N. Martens - A resource-oriented analysis of metallic raw material flows

R. Matikainen - Sustainable exploration - the changing role of geological surveys in the EU

K. Komnitsas, Z. Agioutantis - Risk assessment and sustainable development framework in the mining industry

P. Christmann, B. Martel Jantin, Sustainability indicators for the mining industry: Issues and challenges

G. Hilson, A.J. Basu - Sustainable development in the mining and minerals industry: An analysis of baseline interpretations

#### **2b. Application and Progress (May 22, 14.15-16.15)**

*Chair Persons: D. Van Zyl & S. Moellerherm*

K. Fytas - Sustainable development in the Canadian mineral industry

E. Turner, R. Doome, M. Wyart-Remy - Achieving sustainability: Tracking progress in the European minerals industry using SDI

M. Cambridge - The sustainability of gold mining in Europe

W. Ripmeester - Canada's minerals and metals indicators (MMI) initiative

H. Hejny, H. Schultheis - Contribution and benefit of Thematic Networks to common agreement on sustainable development

#### **2c. Impacts and Life Cycle Concepts (May 22, 16.35-18.35)**

*Chair Persons: E. Turner & D. Shields*

D.J.A. Van Zyl - Mining employment, economic contributions and their impacts in the USA

G. Gibson, M. Veiga, M. Scoble - Projecting poverty: Local and project level indicators on the extractive industries in World Bank Group funded projects

I. Douni, M. Taxiarchou, Paspaliaris - I. Life cycle inventory methodology in the mineral processing industries

A. Korre, G. Munoz-Melendez, S. Durucan, L. Chane-Kon - Development of a life cycle assessment model for metalliferous mining projects

C. Bauer - Site-specific environmental parameters - a baseline for the development of tailored indicator approaches for metallic raw material flows

W. Kuckshinrichs, K.L. Huttner - A set of sustainability indicators for metallic raw material flows -A decision support approach

### ***3. Applications and Case Studies***

#### **3a. Commodity and Project Applications (May 22, 11.05-13.05)**

*Chair Persons: V. Badino & T. Shaw*

C. Cassios, S. Peppas - Integrated sustainability assessment of S&B's bauxite operations

M. Ruhrberg - Reporting on product stewardship in the copper industry

A. Shaw, D.C. Constantinides - Sustainable development practices in mining: The Sappes project

L. Karka - Sustainability assessment of the gold processing plant location in Olympias coastal area (NE Chalkidiki - Central Macedonia)

M. Cimini, P. Massacci - Mine and quarry visibility indicator

#### **3b. Examples and Case Studies (May 22, 14.15-16.15)**

*Chair Persons: R. Yoon & R. Matikainen*

M. Sagisaka, A. Inaba, N. Narita - Life cycle CO<sub>2</sub> emission for copper production and recycling in Japan

D. Sotiropoulos, N. Kolovos, A. Georgakopoulos - Environmental sustainability indices: A comparison case study

J. Loredo, A. Ordonez, F.Pendas - Problems and options in relation to abandoned mine sites (Asturias, Spain)

V. Badino, G.A. Blengini, C.Dinis da Gama - Sustainable development indicators as a tool for monitoring unfair international market competition of mineral commodities

#### **3c. Financial, Educational and Cultural Issues (May 22, 16.35-18.35)**

*Chair Persons: G. Panagiotou & M. Cambridge*

B. Karatzoglou - Traditional accounting return ratios: A foe to business sustainability

T. S. Golosinski, R. Larry Grayson - Online education in sustainable development of mineral resources

V. Badino, G.A. Blengini - The importance of marble in cultural sustainability  
M. Ericsson, P. Sarkka - Socio-economic impact of the Finnish extractive industries

#### ***4. Sustainable Development Applications in Industrial Minerals, Construction Materials and Aggregates***

##### **4a. Methodology and Concepts (May 23, 10.35-12.35)**

*Chair Persons: J. Testard & K. Komnitsas*

S. Murray - Driving forward European Industrial Minerals Industry's commitment to Sustainable Development  
W.H. Langer, S.V. Solar, D.J.Shields, C. Giusti - Sustainability indicators for aggregates  
S. Maurigiannakis, Z. Agioutantis, P. Kokkiniotis, E.Kagiaras - Suitability of artificial stone as building material: A sustainable development option for the construction industry  
E. Lovera, I. Sacerdote - Environmental and technical criteria for dimension stone quarrying sustainability  
B. Salopek, I. Sobota, G.Bedekovic - Production of construction aggregates in urban areas

##### **4b. Examples and Applications (May 23, 14.05-16.05)**

*Chair Persons: P. Maraboutis & S. Murray*

K.G. Tsakalakis - The Greek cement-industry sector and its potential towards sustainable development  
K. Nielsen - Sustainable development indicators in the aggregate industry: A Norwegian perspective  
I. Tsolas, L. Patmanidou - South Field lignite mine aggregate environmental performance indicators  
W.T. Hennies, A. dos Santos Almeida - Ore quality indicators: Case studies of crushed stone and industrial sand  
V. Avdiyskiy and Sh. Kurmashov - Sustainable development conception and its measurement

#### ***5. Technology Development Towards Sustainable Criteria***

##### **5a. Sustainable Development Technologies (May 23, 08.15-10.15)**

*Chair Persons: J. Monhemius & I. Paspaliaris*

A. Korre, J.R. Gay, S. Durucan - Quantitative assessment of the risks associated with high soil heavy metal loads in mining districts  
K. Adam, A. Kourtis, I. Halikia, B. Gazea - Sustainable development indicators applied for the evaluation of anaerobic wetlands as alternative method for the treatment of acidic mine waters  
H.Z. Kuyumcu - Investigations on reducing process water consumption in mineral processing plants  
S.N. Groudev, I.I. Spasova, P.S. Georgiev, K. Komnitsas, I. Paspaliaris - Feasible rehabilitation schemes at an abandoned uranium mine site  
E. Stamboliadis, E. Manutsoglu, O. Pantelaki - Developments in gold recovery equipment and their use in Milos, Greece

## **5b. Applications of Advanced Technologies (May 23, 08.15-10.15)**

*Chair Persons: K. Fytas & A. Pasamehmetoglou*

S.G. Mougiakakou, A. Tsouchlaraki, C. Cassios, K.S. Nikita, G. Matsopoulos, N. Uzunoglu, A. Leka - SCAPEVIEWER: A semi-automatic system for landscape quality classification and landscape indices selection

S. Mertikas, E. Ieronymidi, D.T.Hristopulos - A proposal for the development of an integrated monitoring system for hazards control in the mining industry using remote sensing and related technologies

E. Spyridonos, R. Prissang, E.Manutsoglu, G. Exadaktylos, J. Mastoris - State-of-the-art 3D modeling techniques: Vital tools to ensure the efficient use of non-renewable resources

S. Schafrik, M. Karmis, Z.Agioutantis, T. Chewning - Sustainable development of mineral resources: Improving communications using visualization techniques

C. Tompouloglou - The innovation indicator in drilling, mining and tunneling

## **6. Sustainability Issues in Rehabilitation, Reuse and Recycling**

### **6a. Rehabilitation (May 23, 10.35-12.35)**

*Chair Persons: S. Durucan & P. Christman*

W.L. Daniels - Strategies for the return of heavy mineral sands mines to productive agricultural uses

F. Pavloudakis, Z. Agioutantis, A. Papadimitriou - Planning for sustainable land use management in surface coal mining areas

A. Foscolos, I. Typou, C. Kavouridis - Land reclamation of lignite mines in the Ptolemais-Amynteon area, Macedonia, Greece.

F. Fujimura, W.T. Hennies, L. Soares, R.D. de Barros - Geological and geotechnical aspects to assist the reclamation of areas degraded by surface mining

G. Petrakis, E. Rigopoulos - Application of sustainable development concepts in the reclamation of mining disturbed lands on Milos Island in Milos, Greece

### **6b. Recycling and Waste Management (May 23, 14.05-16.05)**

*Chair Persons: K. Adam & W.L. Daniels*

S. Durucan, J.Q. Shi, E. Lewis - Hydrological characterisation and pollutant transport modelling of rehabilitated coal mine waste dumps

R.-H. Yoon, G.H. Luttrell, C.D.Henry, P.R. Jamison - Use of advanced separation technologies for sustainable mining

W. Dresler, R. Berardi, D. Krofchak - Base metal smelter slag as a sustainable source of copper, nickel, cobalt, and supplementary cementing materials

P.K. Gbor, C.Q. Jia - Waste recycling in the metallurgical industry; The case of metal extraction from non-ferrous smelter slag using aqueous sulphur dioxide

## **7. Conclusions**

**7. Closing Remarks (May 23, 16.25-17.25)**

*Chair Person P. N. Martens*