

6th International Conference

# SDIMI2013

# SUSTAINABLE DEVELOPMENT IN THE MINERALS INDUSTRY



30 June - 3 July 2013, Milos Island, Greece Milos Conference Center - George Eliopoulos

P R O G R A M M E





Recognition Award 2012 on Resource Efficiency

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# Aim

The objective of this Conference is to assist the minerals industries in their global transition to sustainable development.

At present, the focus of public perception is placed on environmental and social consequences of mining. Growing environmental and social concerns, supply chain procurement standards, as well as public pressure and regulatory measures, will profoundly shape the global mineral business in the near future.

In order to cope with these challenges, the minerals community must integrate sustainable development concepts, best-practices and stakeholders participation into the technical considerations, business strategies and performance goals that are associated with all facets of mineral exploitation, from exploration to mine closure.

The main theme of the meeting, therefore, is the development, monitoring and assessment of sustainable development criteria for mineral operations.

The Conference also aims to conclude with a consensus plan and a process, representing a variety of stakeholders, which can provide guidance and direction to the minerals community on the path to sustainable development.





The conference is a Milos Conferences event. The Milos Conferences is a function of the "Milos Conference Center - George Eliopoulos", a non-profit organization, located on the island of Milos, Greece.

The objective of the "Milos Conferences" is to create the conditions for interaction between academia and industry, and between different disciplines and to disseminate scientific and technological developments especially to young scientists.



#### UNDER THE AUSPICES OF







Society for Mining, Metallurgy & Exploration



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The Conference is jointly organized by:

- · Virginia Tech, USA
- · Technical University of Crete, Greece
- · Aachen University of Technology (RWTH), Germany
- · University of British Columbia, Canada

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- · Agioutantis Zach, Technical University of Crete, Greece
- · Karmis Michael, Virginia Tech, USA

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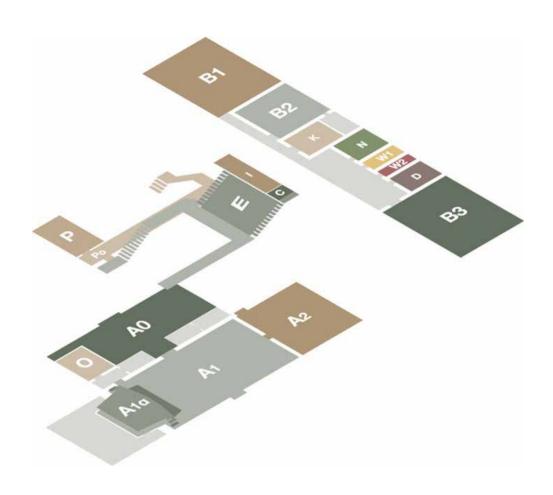
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# MILOS CONFERENCE CENTER HALLS LAYOUT



Main Hall – Ground Floor

A0. Reception Hall

AI. Main Hall

A2. Secondary Hall

Ala. Stage

O. Offices

Main Hall – Balcony

E. Balcony

I. Translation Booths

C. Central Control Panel

P. Press Room

Po. Poster Space

**Euripides Mavrommatis Wing** 

BI. Multipurpose Hall

B2. Multipurpose Hall

K. Catering

N. Internet Room

WI. WC

W2. WC Disabled

D. Infirmary

B3. Multipurpose Hall



# Programme

## **SUNDAY 30 JUNE, 2013**

**09:00-18:00:** Boat tour of the island (weather permitting)

18:30-20:30: Registration & Welcome Reception, Room: Lobby Area

### MONDAY 1 JULY, 2013

08:30-09:00: Registration, Room: Lobby Area

09:00-09:15: Welcome and Conference Opening, Room: Al

Chair(s): Zach Agioutantis and Michael Karmis

09:15-11:00: Keynote Session, Room: Al

Chair(s): Zach Agioutantis and Michael Karmis

Keynote Lectures by Spiliopoulou, M., Hodge, T., Vidalis, E., Faidros, E.

11:00-11:30: Coffee Break, Room: BI

11:30-13:00: Sustainability in Minerals Education A, Room: Al

Chair(s): Deborah Shields

- I. Mining and SD: implementation of undergraduate and graduate courses at four universities van Zyl, D., T. lannachioni, J. Craynon and E. Sarver
- 2. Building minerals education capacity in Africa The first steps Laurence, D. and M. Hermanus
- 3. The next generation of mineral industry professionals Industry expectations and how best to train them *Jeffrey, K.*
- 4. Assessing the familiarity of students in engineering with sustainability *Aktsoglou*, D., K. *Angelakoglou* and G. *Gaidajis*
- 5. Challenges of promoting sustainability in the Namibian minerals education *Musiyarira*, H., D. Tesh and G. Dzinomwa

#### 11:30-13:00: Technological Developments A, Room: A2

Chair(s): Lee Daniels

- I. Deep zero-impact mines of the future The European I2Mine-Project Falck W.E. and H. Hejny
- 2. Near-to-face processing An approach towards improved primary resource efficiency Dammers, M., C. Schropp, P.N. Martens, L. Rattmann and C. Robben
- 3. Some principles of expert systems for environment and mining Rumenjak, D., D. Rajkovic and S. Stambuk
- 4. Evaluation of unfolding techniques for grade and resource estimation of tectonically deformed deposits Kapageridis, I.K., K. Koios and N. Ioannidis
- 5. New philosophy of coal extraction *Bondarenko*, *V.*



#### 11:30-13:00: Social Contributions and Local Communities A, Room: B3

Chair(s): Fiona Haslam Mckenzie

- 1. Beyond science and engineering: Tackling socio-environmental issues in the resources industry Everingham, J., N. Collins, T. Baumgartl, S. Vink, D. Mulligan, W. Rifkin, D. Rodriguez and J. Cavaye
- 2. Using a Due Diligence approach to managing business environment performance health *Baker*, *P.*
- 3. Financial assurance for mine reclamation: An examination of Alberta's oil sands regulations *Thorley*, *U*.
- 4. The role of science in public ecology and sustainable development in mining *Craynon, J.R., E.A. Sarver and M.E. Karmis*
- 5. The WBCSD cement sustainability initiative and the leadership of TITAN cement: An important opportunity and a long-term commitment Alexiou, M., A. Katsiamboulas, J. Mastoris, C. Seretis and F. Tasoulas

#### 13:00-14:00: Lunch, Room: BI

#### 14:00-15:45: Capacity Building and Human Resources, Room: Al

Chair(s): David Laurence

- 1. Wellbeing of fly-in/fly-out and drive-in/drive-out employees: Evidence from Australia Tuck, J. and E.C. Temple
- 2. Involving stakeholders in a meaningful way in decision making on mine sites The strategies of the EO-Miners research project Falck, W.E. and J.H. Spangenberg
- 3. Titan Antea cement plant: Education for sustainable development in the case of a Greenfield plant, in an emerging economy (Albania)

  Alexiou, M., A. Kalogerakos, C. Caracostas and J. Mastoris
- 4. Oil development and social acceptance in Greece: The Katakolo field case *Vergoulis*, *P. and D. Damigos*
- 5. IdleNoMore and reinvigorated aboriginal activism: Risk or opportunity for Canada's extractive sector *Johnson, A.*
- 6. A multi-dimensional and dynamic view of corporate social responsibility Zu, B., Z. Li, Y. Zhao and C. Li

#### 14:00-15:45: Technological Developments B, Room: A2

Chair(s): Christos Roumpos

- 1. Development of a decision support instrument of mine-wide operations for Agnico Eagle Kittila mine Song, Z., M. Rinne and A. van Wageningen
- 2. "Blue Mining" The future of mining Langefeld, O. and M. Kellner
- 3. Challenges in deep mine rescue within the European I Mine Project Lehnen, F., P.N. Martens and L. Rattmann
- 4. Orogenic mineralizations A new exploration target for gold-polymetallic ore deposits in Greece Michael, C., N. Arvanitidis, A. Iliadis, K. Papavasileiou and C. Christidis
- 5. Underground coal gasification: A case study on the Kozani lignite deposits Koukouzas, N. and I. Katsimpardi



#### 14:00-15:45: Health and Safety, and Risk Management, Room: B3

Chair(s): Bruce Hebblewhite

- 1. Greater site and community security through partnerships *Hendry, K.*
- 2. Water resources management, risk assessment, and mitigation: A 5-year program for Titan Cement in Zlatna Panega Plant, Bulgaria

Dragasakis, K., J. Mastoris, E. Shilegarska, A. Pophristova and M. Dimitrov

3. Transfer for good: Requisites of Southeast Asian coal mining industries in applying a risk management system from Germany

Kretschmann, J. and N. Nguyen

4. Production data and Sustainable Development Indicators (SDIs) for the Greek mining/metallurgical industry in the period 2007-2011

Tzeferis, P.G., C. Kavalopoulos and K. Komnitsas

5. Occupational health & safety management at PPC's lignite mines N. Galitis, A. Dimitriou and Th. Vlachos

#### 15:45-16:15: Coffee Break, Room: BI

#### 16:15-17:45: Technological Developments C, Room: Al

Chair(s): Bern Klein

I. Evaluation of micro-bubble flotation for treating ultra-fine particles and improvement by applying ultrasonic irradiation

Owada, S., E. Matsunaga and N. Kuroki

2. Use of biosolids and its main component as frothers and collectors for the concentration of copper sulphide ores

Reyes-Bozo, L., J.L. Salazar, H. Valdes-Gonzalez, E. Vyhmeister, A. Godoy-Faundez and R. Herrera-Urbina

3. Marine Aggregates deposits - MARE project Stamatakis, M., S. Poulos, A. Tsoutsia, N. Papavlassopoulou, A. Karditsa, M. Anastasatou, A. Velegrakis, T. Hasiotis, V. Kapsimalis and G. Roussakis

- 4. Applications of geothermal energy in mineral processing Fytikas, M. and N. Andritsos
- 5. Sustainable use of resources into fired clay bricks Samaras, P., V. Karayannis, X. Spiliotis, K. Ntampegliotis and G. Papapolymerou

#### 16:15-17:45: Sustainable Mining Practices A, Room: A2

Chair(s): Dirk Van Zyl

1. The importance of confining strata integrity in mining, coal seam gas extraction and geological storage of industrial waste (CO2 and nuclear): towards early detection indicators of potential groundwater contamination

Bouzalakos, S. and W.A. Timms

- 2. Indicators of reclamation success for mineral sands mining in the USA Daniels, W.L. and Z.W. Orndorff
- 3. A model for stakeholder engagement in mineral exploration in Finland *Eerola*. *T.*
- 4. Assessing the progress of mining industry towards sustainability: In need of new methodological frameworks

Angelakoglou, K. and G. Gaidajis

5. Dealing with controversies over gold mining projects: A case study from Greece Damigos, D., M. Menegaki and D. Kaliampakos



#### 16:15-17:45: Social Contributions and Local Communities B, Room: B3

Chair(s): Phil Baker

- I. Industry diversification in remote Western Australia: Managing community expectations and planning for enduring value

  Haslam McKenzie. F.
- 2. Corporate social responsibility and the future of mining in Greece Kolovos C.J.
- 3. Supporting mining community development through economic diversification: The adoption of Enterprise Facilitation (EF)TM in Cobar, Australia McFaul, S., N. Mafu and A.M. Xavier
- 4. Stakeholder engagement of mineral exploration companies in Finland Ziessler, S., T. Eerola and M. Tuusjarvi
- 5. Socio-economic mine closure (SEMC) guideline: A management tool for addressing the social and economic challenges of mine closure and to contribute to community sustainable development *Xavier, A.M., M.M. Veiga and D. van Zyl*
- 6. The economic impact of mining activity on Milos Island Tserkezis, L. and A. Tsakanikas

#### 20:00-22:00: Banquet

## TUESDAY 2 JULY, 2013

08:00-17:00: Registration, Room: Lobby Area

#### 09:00-10:30: SNAP-SEE, Room: AI

Chair(s): Gian Andrea Blengini

I. Data and methodologies for a resource-efficient planning of primary and secondary aggregates in South East Europe (SEE) countries

Blengini, G.A., A. Moltrer, M. Valbusa, K. Komnitsas, Z. Agioutantis and E. Garbarino

Sustainable aggregate resources management and planning issues in south east Europe: From SARMa to SNAP-SEE project

Hatzilazaridou, K., F. Chalkiopoulou and D. Shields

- 3. Stakeholder identification in the planning phase of aggregate and quarrying projects Komnitsas, K., Z. Agioutantis, D. Shields, G.A. Blengini and P.G. Tzeferis
- 4. Sustainable aggregates planning in South East Europe Tiess, G. and D.J. Shields
- 5. Stakeholder involvement as a key factor for sustainable aggregates planning and management Dolinar, U. and Z. Kozinc
- 6. The potential and perspectives to promote and develop policies in order to achieve sustainable aggregates planning in Greece (SNAP-Greece)

  Chalkiopoulou, F., K. Hatzilazaridou, N. Arvanitidis, P.G. Tzeferis, K. Alexiou and G. Tiess

#### 09:00-10:30: Environmental Conservation and Climate Change B, Room: A2

Chair(s): John Craynon

- 1. Mining and climate change mitigation via the Clean Development Mechanism *Taplin, R., M. Blommerde, N. Uddin and D. Laurence*
- 2. Reducing the environmental footprint in the industrial mineral sector: Case studies and industry innovation initiatives

  Shtiza, A., R. Doome and M. Wyart



### 09:00-10:30: Environmental Conservation and Climate Change B, Room: A2 [Continued]

- 3. Coal quality control techniques and selective grinding as means to reduce CO2 emissions *Vamvuka*, *D.*, *M. Galetakis and C. Roumpos*
- 4. Biodiversity Programme in two quarries in the Volos area Assimakopoulos, K.
- 5. Titan Patras cement plant: Biodiversity study for the Artimes limestone quarry *Papanikolaou, I. G. latrou, M. Panitsa, N. Papageorgiou and A. Katsiamboulas*

#### 09:00-10:30: Technological Developments D, Room: B3

Chair(s): George Gaidajis

- I. Triboelectric belt separator for beneficiation of fine minerals Bittner, J.D., S.A. Gasiorowski, F.J. Hrach, L.A. Canellopoulos and H. Guicherd
- 2. Mineralogical composition of the Olympias tailings in NE Chalkidiki, N. Greece Zaimis, S., M. Vavelidis, V. Melfos, N. Kantiranis, D. Alifragkis and M. Daftsis
- 3. Assessment of environmental impact of surface mining equipment Lashgari, A. and V. Kecojevic
- 4. Chromium stabilization in tannery sludge using phosphogypsum Zouboulis, A., E. Pantazopoulou, O. Zebiliadou, F. Noli, M. Mitrakas and P. Samaras
- 5. Backfilling technologies for Estonian oil shale mines Valgma, I., M. Kolats, A. Anepaio, V. Vaizene, M. Saarnak and J.-R. Pastarus

#### 10:30-11:00: Coffee Break, Room: BI

#### 11:00-12:30: WFEO Technical Presentations, Room: Al

Chair(s): Nikhil Trivedi

- 1. WFEO-CEE Task Group on Sustainability and Mining Trivedi. N.
- 2. A methodology to integrate sustainable development performance in the mine design and planning process: A case study Botin, J.A. (presented by D. Shields)
- 3. WFEO Task Force: Environmentally sound engineering technologies and practices in mining van Zyl, D., M. Chanda and J. Brune
- 4. Some examples of reuse, repurposing and recycling of minerals to improve the resource efficiency in mining

Kojo, I.V., M.A. Reuter and K. Heiskanen

- 5. A framework of toolbox for risk management in the minerals sector Z. Li, G. Lyu, T. Li, Y. Zhao and C. Li
- 6. WFEO Thematic Area 3 Best practices in Eco-efficient use of resources *Moran, C.*

#### 12:30-14:00: Lunch, Room: BI

#### 14:00-15:30: Alternative Perspectives on Mining and Sustainable Development, Room: Al

Chair(s): John Hayden

Panel Participants: Danyluk, D., Kogel, J., Karmis, M.

#### 14:00-15:30: Sustainable Energy and Land Use, Room: A2

Chair(s): Oliver Langefeld

- I. The energy transition in Germany Coping with the third industrial revolution Twinge M
- 2. Is there any future for EU Energy Road Map 2050? *Leonardos. M.*



### 14:00-15:30: Sustainable Energy and Land Use, Room: A2 [Continued]

- 3. Application of an indicators-based tool for the evaluation of alternatives for sustainable mining/mineral processing operations in NATURA 2000 and other protected areas *Marnika, E. and E. Christodoulou and A. Xenidis*
- 4. Mining waste management of Estonian mineral resources Karu, V., J. Gulevits, T. Rahe, R. Roots, R. Iskul and A. Polder
- 5. Sustainable reclamation scheme for bauxite mines by implementing GIS tools *Argyriou, A., A. Adam, D. Papakonstantinou and K. Cassios*

# 14:00-15:30: Environmental Conservation and Climate Change A, Room: B3

Chair(s): Nikos Arvanitidis

- 1. The suitability for rehabilitation and the resistance to grazing of 11 plant-species in bentonite deposits in Milos Island
  - Brofas G., G. Mantakas, C. Varelides, G. Petrakis
- 2. Installation of natural vegetation on old tailing disposal area at Olympias Halkidiki mine after chemical stabilization and phytoremediation
  - Alifragkis, D., H. Voulgaridou, M. Voulgaropoulou, M. Vavelidis, M. Orfanoudakis, E. Gazea, A. Galatsianou and M. Alifragki
- 3. Mycorrhizal effectiveness on growth and tolerance of Nerium oleander plants, at ore disposal sites located in NE Chalkidiki
  - Orfanoudakis, M., M. Alifragi and A. Pavlatou-Ve
- 4. Investigation of the effect of soil replacement and fertilization on the improvement of calcareous mining spoils productivity in mountain Ghiona-Central Greece Brofas, G., G. Mantakas, C. Varelides and C. Mermiris
- 5. Relocation of Soulou Trench, in PPC's mines, Ptolemais, Greece *Giouli, G., K. Machtis and A. Sokratidou*

#### 15:30-16:00: Coffee Break, Room: BI

### 16:00-17:30: Posters, Room: Poster Area

- I. Greek national policy for the exploitation of mineral resources Greek Ministry of Environment, Energy and Climate Change (YPEKA)
- 2. Innovative approaches to extend the life of surface mining operations Siefert, M., G. Jandl, H. Wagner and H. Blaha
- 3. Sustainable energy planning of Greek Islands Agioutanti, E. and T.D. Tsoutsos
- 4. Improving the health protection of high north miners Skandfer, M., L.V. Talykova, T. Brenn, T. Nilsson and A. Vaktskjold
- 5. Surface water and groundwater management in West Macedonia Lignite Center Andreadou, S., F. Pavloudakis, C. Sachanidis and S. Tsouflidou
- 6. Assessing the environmental footprint of selected industrial minerals by means of life cycle inventory analysis: A sectoral study

  Shtiza, A., R. Doome and M. Wyart
- 7. Steps forward aesthetic reclamation of mine "Rallaki" in Milos Island Balomenou, P., M. Lambrou, C. Cassios and S.G. Alonso
- 8. Conventional flotation to recovery carbon matter from coal tailings Gonzalez Davilla, G.B. and I.A. Schadach de Brum
- 9. Mining and Tourism on Milos: MILOTERRANEAN Geo Experience *Tzintzos*, S.
- 10. Upgrading mining waste to develop added value final products Aggelatou, V., E.I.P. Drosos, Th. Zampetakis, A. Meidani, S. Dambitzias and N. Arvanitidis
- 11. Stoicism project and sustainable development in industrial minerals Jouffret, F., D. Moseley, M. Baricot, A. Coe, P. Chauhan and S. Moradi



#### 16:00-17:30: Posters, Room: Poster Area [Continued]

- 12. Setting the Standard for CCUS *Carpenter*, S.M.
- 13. Sustainable Mining Approach to Sangan Iron Ore Mines Project Kretschmann, J., R. Amiri and F. Rashidinejad
- 14. Material Flow Analysis and Sustainability Evaluation on resource management in Korea Kim, Y.

#### 16:00-17:30: Sustainable Mining Practices C, Room: Al

Chair(s): Vlad Kecojevic

- 1. Underground limestone mines Case histories of sustainable industrial, research and commercial use Newman, D.
- 2. A quest for sustainability: Environmental and social aspects of mining design in Chalkidiki, Greece Papagrigoriou, S., Y. Katselis and G. Tentes
- 3. Best practices for geotechnical planning and design in open pit mining operations A sustainable engineering approach
  Steiakakis, C., Z. Agioutantis, P. Schilizzi, E. Papakosta, A. Tsalidis and G. Pagonis
- 4. Strategic mine planning of surface mining projects incorporating sustainability concepts Roumpos, C. and E. Papacosta
- 5. Challenges for adapting the sustainable development concept in Thailand's minerals industry Sakamornsnguan, K., T. Katz, P.N. Martens and J. Kretschmann

## 16:00-17:30: Sustainability in Minerals Education B, Room: A2

Chair(s): Ingo Valgma

- 1. Integration of safety and risk management into the University of Utah's mining engineering curriculum Nelson, M.G. and T.A. Hethmon
- 2. An assessment of environmental learning in US mining engineering schools *Wright, M.A.*
- 3. Filling the gaps in sustainability management by characterising co-accountability networks Kunz, N.C., C.J. Moran and T. Kastelle

#### 18:00-20:30: Miloterranean Geoexperience in Coordination with Mine Site Visit

# WEDNESDAY 3 JULY, 2013

08:00-17:00: Registration, Room: Lobby Area

#### 09:00-10:50: Sustainable Mining Practices B, Room: Al

Chair(s): David Newman

- 1. Multi-scaled, mixed-method research: An approach to understanding complex local and regional socioeconomic effects of global mining operations in regional Australia Hoath, A. and F. Haslam McKenzie
- 2. Mining in consistency with long term planning: A key element to social acceptance *Kolovos*, *C.J.*
- 3. Heap leaching technique in mining within the context of best available techniques (BATs) Zanbak. C.
- 4. Rare earth elements: Building a best practices roadmap to sustainable mining Kamenopoulos, S.N. and Z. Agioutantis



#### 09:00-10:50: Sustainable Mining Practices B, Room: AI [Continued]

- 5. Case studies on effective quarry rehabilitation and biodiversity management: Awarded initiatives for Titan America in the Center Sand (Florida), and Roanoke Cement (Virginia) operations Mastoris, J., K. Dragasakis, L. Clark and K. Folsom
- 6. A contribution to sustainable development in Vietnamese hard coal mining by mine dust mitigation and waste rock dump stabilization

  Martens, P.N., T. Katz, I. Oezdemir, A. Foerster and M. Fuchsschwanz

#### 09:00-10:50: Technological Developments E, Room: A2

Chair(s): Michael Stefanakis

I. GIS-based mineral resources maps - A valuable exploration tool for discovering potential ore deposits in Greece

Arvanitidis, N.D., C. Michael, C. Christidis, D. Cassard, G. Bertrand, G. Perantonis, D. Ballas, V. Bakalis, G. Gaal and J. Kaija

- 2. Multicriteria risk analysis for the classification of closed extractive waste facilities *Adam*, A., A. *Liakopoulos and* []. *Xenidis*
- 3. The effect of fine aggregate properties on the quality of composite materials Fournari, R., D. Vatyliotis and I. Ioannou
- 4. Using 3D/4D modeling tools in exploration of gold-polymetallic potential areas in Greece Arvanitidis, N.D., C. Michael, C. Christidis, P. Weihed, G. Gaal, J.J. Royer, G. Perantonis, V. Bakalis and D. Ballas
- 5. Possibilities for mitigating negative effects of noise and dust caused by extraction of sand, gravel and peat Orru, M., H. Milvek, A. Anebaio, S. Vendla and I. Valgma
- 6. Prediction of iron ore mine closure causes under uncertainty condition, using Vikor technique Minaei Mobtaker, M. and M. Osanloo

#### 09:00-10:50: Sustainability Reporting, Room: B3

Chair(s): Thomas Androulakis

- I. Sustainability: Is the GRI enough? Mangos, N.
- Corporate sustainability reporting for water: Water footprint, global reporting initiative and the water accounting framework
   Danoucaras, A.N., A. Woodley and S. Vink
- 3. A perspective on mining and corporate social responsibility projects Yilmaz, M.
- 4. 'Milos+10' for the Titan Cement Group Sustainability Reporting: The history of learning, the success story, and the road ahead *Alexiou, M., J. Mastoris, C. Seretis and F. Tasoulas*
- 5. Mining company sustainability reporting in the Macquarie and Lachlan catchments, NSW, Australia: Usability for local community needs

  Leong, S., R. Taplin, W. Timms, D. Laurence and J. Hazleton
- 6. CSR and Law: How they interact *Voulgari D.*

#### 10:50-11:15: Coffee Break, Room: BI

11:15-12:00: Conference Closing, Room: Al

Chair(s): Michael Karmis, Dirk Van Zyl, Deborah Shields

12:00-13:00: Lunch, Room: B1



# SDIMI2013

# SUSTAINABLE DEVELOPMENT IN THE MINERALS INDUSTRY

The main objective of this series of conferences is to assist the global minerals industries in their transition to sustainable development.

The first conference, **SDIMI 2003**, was very successfully held in the island of Milos, Greece and attracted 200 international attendees. On that occasion, the "Milos Declaration" was adopted, a statement of contribution to a sustainable future through the use of scientific, technical, educational, and research skills and knowledge in minerals extraction and utilization that was endorsed by the leading global professional and scientific organizations and institutes representing the minerals professional.

The second conference in this series, **SDIMI 2005**, was held in Aachen, Germany, and was again a successful forum in convening the minerals community engaged in sustainable development, with particular emphasis on sustainability indicators, data evaluation and reporting and life-cycle assessment and product stewardship.

**SDIMI 2007** returned to Milos, Greece. The focus of the meeting was on issues of benchmarking, SD value creation, operationalization of SD, creation of knowledge hubs, modeling and fiscal issues and best practices and tools. The meeting provided opportunities for presentations and panel discussions. The Conference was organized in three tracks representing a variety of stakeholders, which can provide guidance and direction to the minerals community on the path to sustainable development.

**SDIMI 2009** was held in Brisbane, Australia, 6-8 July. Themes included: Frameworks and tools for integrating sustainable development considerations into mine and plant design, Innovative methodologies for measuring sustainable development performance at the operational, corporate and industry level, Mining and minerals processing in a carbon-constrained world: reducing the GHG footprint, Sustainable development challenges in emerging mining countries, Community impacts and benefits of mineral resource developments, Stewardship and the management of products and wastes, Cumulative impacts of intensive resource development, Advances in life cycle and sustainability assessment, Industrial and regional synergies, Overcoming the barriers to the uptake of sustainability innovations, Integration of sustainability thinking into professional education.

**SDIMI 2011** was held again in Aachen, Germany in the framework of the AIMS conference. Organization was very successful and delegates from many countries attended the event. A young professionals event attracted a lot of attention.

For more information on the SDIMI conferences please visit www.sdimi.org





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