

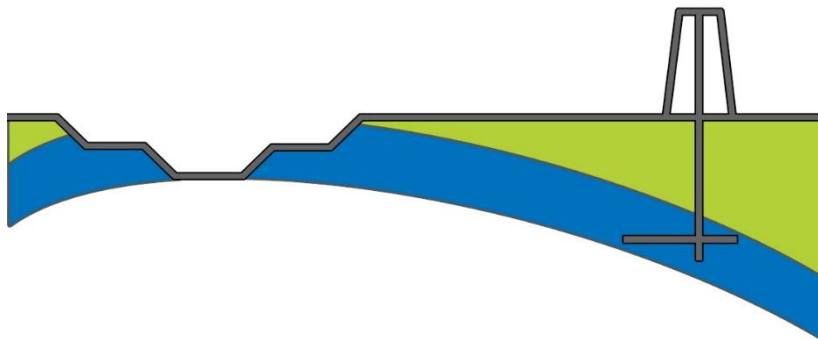
Aachen International Mining Symposia (AIMS 2016)

First International Conference

Mining in Europe

18 - 19 May 2016

RWTH Aachen University, Aachen, Germany



Preliminary Conference Programme

as of April 29th 2016, still subject to changes!



CATERPILLAR®



Tuesday 17 May (Kármán Auditorium, Eilfschornsteinstr. 15)

	Start
Registration at Kármán Auditorium	16:00
Familiarization presentation hall and equipment	-
Poster installation	18:00

Tuesday 17 May (Institute of Mineral Resources Engineering, Wüllnerstr. 2)

Informal Welcome Reception	18:00
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Wednesday 18 May (Kármán Auditorium, Eilfschornsteinstr. 15)

	Start
Registration	08:00
<i>Welcome Coffee</i>	08:00
Welcome Bernd Lottermoser	08:50
Keynote: Dr Frank Bierlein, Qatar Mining, QATAR: Project Generation in Mineral Exploration – from Conceptual Targeting to Resource Definition	09:00
Keynote: Dr Nick Cook, Mawson Resources Ltd, FINLAND: Mineral Exploration at All Scales: from the Continent to the Mass Spectrometer	09:30
Keynote: Dr Karen Hanghøj, EIT RawMaterials, GERMANY: EIT RawMaterials, a European Knowledge and Innovation Community in Raw Materials	10:00
<i>Morning Tea</i> <i>Exhibition & Poster Session</i>	10:30

Wednesday 18 May (Kármán Auditorium, Eilfschornsteinstr. 15)

<p>Session: Responsible Mining – Collaborative Opportunities Chair: Hanghøj (EIT RawMaterials, Germany) Rasmus (University of Ulm, Germany): <i>Determining Aspects of Institutional Design of Sustainability Initiatives Including the Mining Sector</i></p> <p>Amirkhanian (AUA Center for Responsible Mining, Armenia): <i>Institutionalizing Responsible Mining: A University-Based Approach</i></p> <p>Preusse (RWTH Aachen University, Germany): <i>Subsurface Spatial Planning – Challenges for Research and Practice</i></p> <p>Leroy (University of Liège, Belgium): <i>OreVal – A European Network for Ore Characterization and Valuation</i></p> <p>Novák (Watrads, Czech Republic): <i>Competence Centre for Effective and Ecological Mining of Mineral Resources (CEEMIR) – Reevaluation of Raw Minerals in the Czech Republic</i></p> <p>Kretschmann (TH Georg Agricola Bochum, Germany): <i>Cooperation Opportunities Between German and Iranian Mining Companies</i></p>	<p>Session: Mining Technologies – Real Time Planning Chair: Glass (University of Exeter, UK) Bartnitzki (RWTH Aachen University, Germany): <i>Mining 4.0 – More than Automation</i></p> <p>Buxton (TU Delft, Netherlands): <i>Real-Time Mining: Sensor Based Continuous Process Control and Optimization in Mineral Resource Extraction</i></p> <p>Behrens (Bruker AXS, Germany): <i>Process Control Made Easy – Which Technology Do You Prefer?</i></p> <p>Niestroj (RWTH Aachen University, Germany): <i>Ultra-Wideband Technology for Mining Automation</i></p> <p>Thapa (Sandvik Mining and Construction, Finland): <i>Integrated Mine Management System</i></p> <p>Dohmen (Dohmen, Herzog & Partner GmbH, Germany): <i>Information System in the Mining Industry</i></p>	11:00
<p style="text-align: center;"><i>Lunch</i> <i>Exhibition & Poster Session</i></p>		12:45
<p style="text-align: center;">Keynote: Dr Corina Hebestreit, Euromines, BELGIUM: EU Raw Materials Production till 2050 – a Critical Outlook</p>		13:45

Wednesday 18 May (Kármán Auditorium, Eilfschornsteinstr. 15)

<p>Session: Responsible Mining – Mine Closure and Environment Chair: Wedig (VRB, Germany) Junker (RAG Deutsche Steinkohle AG, Germany): <i>Research and Development in the German Coal Industry – Reflecting on Company Development through the Years</i></p> <p>Beckett (Laurentian University, Canada): <i>Sudbury, Canada – A Lifetime of Healing and Creating a Novel Functional Ecosystem on a Smelter-Impacted Landscape</i></p> <p>Gosse (HeidelbergCement, Belgium): <i>HeidelbergCement's Biodiversity Strategy and Partnership Approach: A Win-Win for Business and Nature</i></p> <p>Matsumoto (Kyushu University, Japan): <i>Evaluation Method of Soil Conditions in Rehabilitation Area in Consideration of the Effects of Acid Soil on Vegetation in Coal Mines in Indonesia</i></p> <p>Kallmeier (Beak Consultants GmbH, Germany): <i>Temporal and Spatial Prediction of Lignite Mining Waste Rock Pile Stability by Using Artificial Neural Networks</i></p> <p>Van Nees (VITO, Belgium): <i>METALert – An Emergency Response System for Heavy Metals in the Environment</i></p>	<p>Session: Mining Technologies – Alternative Extraction Methods Chair: Buxton (TU Delft, Netherlands) Hamanaka (Muroran Institute of Technology, Japan): <i>Numerical Simulation on Product Gas of Underground Coal Gasification Based on Laboratory Scale Experiment</i></p> <p>Semíková (Watrad, Czech Republic): <i>The Stimulation of Rock Massive</i></p> <p>Märten (Heathgate Resources, Australia): <i>Advances In-Situ Leaching Technology for Uranium – From Innovative Exploration to Optimized Recovery</i></p> <p>Mundry (Caterpillar Global Mining, Germany): <i>Efficient Mining of High Seams with LTCC Operations</i></p> <p>Thote (VNIT, India): <i>Highwall Mining: A New Futuristic Coal Mining Technology for Recovery of Locked Coal</i></p> <p>Haneklaus (RWTH Aachen University, Germany): <i>Energy Neutral Mineral Development Processes – An Overview</i></p>	14:15
<p style="text-align: center;"><i>Afternoon Tea</i> <i>Exhibition & Poster Session</i></p>		16:00

Wednesday 18 May (Kármán Auditorium, Eilfschornsteinstr. 15)

<p>Session: Responsible Mining – Health and Safety Chair: Hebestreit (Euromines, Belgium) Füllenbach (Colorado School of Mines, USA): <i>Economic Benefits of Mine Safety Improvements</i> Becker (Becker Mining Systems, Germany): <i>Small Spaces, Big Machines - Collision Awareness Systems for Hazardous Areas</i> Brune (Colorado School of Mines, USA): <i>Underground Mine Communications Technology</i> Hermülheim (Clausthal University of Technology, Germany): <i>Open Questions of Mine Rescue Hazard Evaluation – How Can Academic Research Assist?</i> Rott (PRAKLA Bohrtechnik GmbH, Germany): <i>Mine Rescue: Drilling Criteria Explained by the Pingyi Rescue Operations in China</i> Nazarova (Russian Academy of Sciences, Russia): <i>Estimation of State and Properties of Coal-Rock Mass Based on Inverse Problem Solution</i></p>	<p>Session: Mining Technologies – Innovative Machinery Chair: Ozkan (Istanbul University, Turkey) Stöckmann (VDMA Mining, Germany): <i>Areas of Expertise of the German Mining Equipment Manufacturers</i> Peters (DMT GmbH & Co. KG, Germany): <i>Special Applications of Optical Borehole Tools for Geotechnical Rock Mass Assessment Under Difficult Mining Conditions</i> Roeters (DSM Dyneema, Netherlands): <i>The Benefit of HMPE Fiber in Mining</i> Schroeder (ThyssenKrupp Industrial Solutions AG, Germany): <i>BARRACUDA – A Revolutionary New Mining Concept</i> Mesutoglu (Selçuk University, Turkey): <i>Evaluations of Inclinator Measurement Results in a Lignite Open-Pit Mine</i> Preiß (Martin Engineering GmbH, Germany): <i>Martin Cleanscape – A Revolutionary Innovation in Belt Cleaning Technology for the Mining Industry</i></p>	16:30
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Wednesday 18 May (Aula Carolina, Pontstr. 7-9)

<p style="text-align: center;"><i>Networking Drinks</i> <i>Dinner</i></p>	19:00

Thursday 19 May (Kármán Auditorium, Eilfschornsteinstr. 15)

	Start	
Registration	08:00	
Welcome Coffee	08:00	
Keynote: Dr Michael Drobniewski, RAG, GERMANY: Mine Water Concept of the RAG AG	08:30	
Keynote: Dr Adam Jarvis, Newcastle University, UK: The Importance and Management of Point and Diffuse Source Pollution in the UK's Abandoned Mining Districts	09:00	
Keynote: Dr Friedrich von Bismarck, GS StuBA, GERMANY: 20 Years of the Governmental Rehabilitation Program in East Germany	09:30	
Morning Tea	10:00	
Exhibition & Poster Session	10:00	
<div>Session: Mineral Resources – Exploration Chair: Langefeld (TU Clausthal, Germany) Nykänen (Geological Survey of Finland, Finland): Dynamic Prospectivity Mapping Tools for Mineral Exploration Beswick (Marriott Drilling Group, UK): Exploration Drilling for a Major Potash Deposit in NE England Hensler (RWTH Aachen University, Germany): Application of Portable Spectrometers to Mineralogical and Geochemical Exploration: State-of-the-Art, Limitations and Potential Ellefmo (NTNU, Norway): Quantifying the Potential for Deep Marine Mineral Resources Along the North Atlantic MAR Knodt (MHWirth GmbH, Germany): A Review of the German Pilot Mining Tests for Marine Minerals in the Late 70's of the Last Century and Future Perspectives for Manganese Nodules Binder (Clausthal University of Technology, Germany): From Waste to Value – Resource Estimation for Mine Tailings Krause (Ruhr-University Bochum, Germany): GIS Based Resource Identification and Resource Cadastres for Existing Buildings Allen (Dassault Systèmes GEOVIA, France): Mining Productivity Re-imagined</div>	<div>Session: Mining Technologies – Mineral Processing Chair: Kahraman (Hacettepe University, Turkey) Komnitsas (Technical University Crete, Greece): Production of Alkali Activated Materials from Chalcopyrite Tailings and Industrial Wastes Rousseau (ERAMET Research, France): Slag Valorisation by Ore Dressing Processes Palm (Kleemann GmbH – Wirtgen Group, Germany): In-Pit Crushing – Iron Ore Mining in Australia Sharifi (Imperial College London, UK): Reframing Design Objectives for Fine Grinding Equipment Borg (PMS GmbH, Germany): How to Combine Better Particle Liberation and Particle Size Reduction with Significantly Less Energy Consumption? High-Velocity Comminution by VeRo Liberator Atutxa (Ingeteam Power Technology, SA, Spain): Speed Is the Key Factor: Optimizing Grinding Process in Comminution Circuits by Using Variable Speed Drives Ozkan (Istanbul University, Turkey): Investigation of a Newly Designed Ultrasonically Assisted Flotation Cell Galetakis (Technical University Crete, Greece): Prediction of the Short-Term Quality Fluctuations of the Nickeliferous Ores and Mineral Fuels Used in LARCO Ferronickel Plant by Using Autoregressive Neural Networks</div>	10:30

Thursday 19 May (Kármán Auditorium, Eilfschornsteinstr. 15)

Lunch Exhibition & Poster Session		12:45
Session: Mineral Resources – Future Mines Chair: Pirard (University of Liège, Belgium) Safirova (United States Geological Survey, USA): <i>Trends in Mineral Production in Europe, 2005-2014</i> Lauri (Geological Survey of Finland, Finland): <i>Critical Raw Material Potential in Finland</i> Hennig (RWTH Aachen University, Germany): <i>Distribution of By-Products in Coarse Aggregate Production</i> Schnug (Julius Kühn-Institut, Germany): <i>The Contribution of Urban Mining to Alleviate Phosphorus Supply Security Concerns</i> Langefeld (Clausthal University of Technology, Germany): <i>"Blue Mining" – The Sustainable Future of Mines</i> Bartlett (Micon International Co Limited, UK): <i>Why Mines Fail</i> Bartkowiak (Independent Coal Industry Advisor, Germany): <i>The Effect of the Commodity Downturn on the Coal Export Industry</i> Eyll-Vetter (RWE Power AG, Germany): <i>The Future of Lignite Mining in North-Rhine-Westphalia</i>	Session: Mining Technologies – Mine Development Chair: Komnitsas (Technical University of Crete, Greece) Neye (Herrenknecht AG, Germany): <i>Update on Mechanized Shaft Sinking</i> Benecke (DMT GmbH & Co. KG, Germany): <i>iDeepMon – Intelligent Deep Mine Shaft Monitoring</i> Kluge (DBE mbH, Germany): <i>Repository Konrad – Challenges Regarding the Expansion of the Shaft Landing Station</i> Katz (GHH Fahrzeuge / HAZEMAG & EPR, Germany): <i>The HRE – A Narrow Tunnel Roadheading System</i> Rennkamp (Herrenknecht AG, Germany): <i>New Developments for Tunnel Boring Machines in Mining</i> Kahraman (Hacettepe University, Turkey): <i>Predicting the Performance of Transverse Type Roadheaders From the Needle Penetration Index in Mine Roadway Excavation</i> Hartlieb (Montanuniversitaet Leoben, Austria): <i>Microwave Irradiation as Means of Alternative rock Extraction Technology</i> Sasaoka (Kyushu University, Japan): <i>Quantitative Evaluation and Prediction Method of Cutter Bit Wear for Driving Machine</i>	13:45
Afternoon Tea Exhibition & Poster Session		16:00
Award Ceremony: Best Technical Paper, Best Scientific Paper, Best Poster, Best Exhibition Stand Closing Remarks Chairperson Bernd Lottermoser		16:15

Poster Presentations (Kármán Auditorium, Eilfschornsteinstr. 15)

Buxbaum-Conradi (RWTH Aachen University, Germany): *Compositional Variations of Selected Rock Salt Horizons in Context of an Increase of Deposit Utilization*

Dammers (RWTH Aachen University, Germany): *Evaluation of the New HRE Roadheading Excavator – A Scenario Based Comparison Using Discrete-Event Simulation*

Dammers (RWTH Aachen University, Germany): *Latest Developments in Modularized Rail Haulage Systems - Is the Underground Mining Industry Missing a Chance?*

Evrard (University of Liège, Belgium): *Electromagnetic Investigation of the Pb-Zn Deposit of Lontzen, Belgium*

Greassidis (Ruhr University Bochum, Germany): *Integrated Planning Concept on Post-Mining Land Use for Quang Ninh, Vietnam*

Hosoi (Akita University and Natural Resources of Japan, Japan): *Mine Development, Mine Closure, Community and Activation of Mine Town*

Hunt (University of Liège, Belgium): *Gold Deportment and Geometallurgical Variability, Certej, Romania*

Ingendahl (Caterpillar Global Mining, Germany): *Operational Experiences of the Cat® GH800B Plow Systems in Very Low Coal Seams at the Ibbenbueren Mine*

Kahraman (Hacettepe University, Turkey): *The Effect of Water Saturation on the Strength of Sedimentary Rocks*

Kamradt (Martin Luther University Halle-Wittenberg, Germany): *Potential Advances in the Comminution of Kupferschiefer-Type Black Shale Ore by the Utilization of Alternative Impact Crushing Technology*

Leroy (University of Liège, Belgium): *Bulk Mineralogy of Particles in Mineral Slurries*

Matshusa (Council for Geoscience, Republic of South Africa): *Occurrence of Potential Harmful Elements (PHEs) around Abandoned Mines in South Africa: A Case Study at Albert Silver Mine, Mpumalanga Province*

Oppong (University of Cape Coast, Ghana): *Management Localisation in Ghanaian Mining Industry: A Case Study of Policy and Practice*

Shungu (University of Goma, D.R. Congo): *Impact of Artisanal Mining in Idjwi Sud (D.R. Congo) According to Environment Protection and Sustainable Development*

Simon (TU Bergakademie Freiberg, Germany): *Mine Water Related Mine Design - Hydrogeochemical Carbonat Buffering and Geochemical Initial Effects to Sediment Liquefaction*

Spürk (RWTH Aachen University, Germany): *Development of an Indicator to Assess Resource Efficiency in Mining*

Sunjay (Geophysics BHU, India): *Capacitively Coupled Resistivity Imaging*

Tetteh (Synergy HR, Ghana): *Impact of Structural Adjustment Programmes on the Ghanaian Mining Industry*

Tsafack (RWTH Aachen University, Germany): *Productivity Improvement in Mining Operation through Flexibility: Which Potential Does it Have?*

Van Nes (VITO, Belgium): *In-Situ Zinc Bioprecipitation with Glycerol and Vegetable Oil in a High-Flow Aquifer*

Vardanyan (NAS of Armenia, Armenia): *Chemical Oxidation Integrated into Bioleaching of Pyrite and Chalcopyrite Using Immobilized Biomass*

Volkman (RWTH Aachen University, Germany): *Deep-Sea Mining - Giving Inside into the Blue Mining Project with Special Focus on the Exploitation of Polymetallic Nodules*

Vossen (RWTH Aachen University, Germany): *Seascope as a Sustainable Transformation of the Lignite Surface Mine Inden*

Zarjabad (University of Birjand, Iran): *Archaeometallurgical Research in Eastern Iran (South Khorasan) Based on Archaeological Evidence Case Study: Mesgaran and Arabkhaneh*

Exhibition Stands (Kármán Auditorium, Eilfschornsteinstr. 15)

Becker Mining Europe GmbH

Blue Mining

Caterpillar Global Mining Europe GmbH

Deilmann-Haniel Mining Systems GmbH

DMT GmbH & Co. KG

DOHMEN, HERZOG & Partner GmbH

Georesources

HeidelbergCement

Herrenknecht

IMR

Kalenborn Kalprotect GmbH & Co. KG

KIC/EIT Raw Materials

Martin Engineering

Mining Report GLÜCKAUF

OREVAL

Sandvik

SEEBACH GmbH

Springer Verlag / BHM

SST Prof. Dr.-Ing. Stoll & Partner Ingenieurgesellschaft mbH

Aachen City Map with AIMS Locations and selected Hotels

