



T16.1 - Mineral Resources Evaluation, Geostatistics and Mathematical Geoscience

Date **Monday, 29 August 2016**

Time **14:00** to **15:30**

Chair

Room **Westin - Ballroom East**

Times		Paper # Title	Speaker	
14:00	14:15	5633 IAMG Award Ceremony		
14:15	15:15	5634 MATHERON LECTURE: The Geostatistical Invasion of the Petroleum Industry; One Perspective from an Applied Geostatistician	Dr. Jeffrey Yarus	Keynote

Times		Paper # Title	Speaker	
16:00	17:00	5570 KRUMBEIN LECTURE: The stochastic modelling and simulation of fractures in rock masses	Prof. Peter Dowd	Keynote
17:00	17:45	5557 GRIFFITS AWARD: From constant sum constraint to association of compositional variables	Dr. Juan Jose Egozcue	Keynote

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16:00	16:15	4869 Sequential Gaussian Simulation in the Gangjiang Copper-polymetallic Deposit of Nimu, Tibet, China	Prof. JIANGUO CHEN
16:15	16:30	5322 Using Simulation to Quantify Uncertainty in Ultimate Pit Limits and Inform Infrastructure Placement	Mr. Mhlonipheki Brilliance Mabhena
16:30	16:45	3415 A review of current Quality Assurance and Quality Control (QAQC) practices in the mining industry	Mr. Mark Burnett
16:45	17:00	4813 Creaming and the likelihood of discovering additional giant petroleum fields	Prof. Richard Sinding-Larsen Prof Richard Sinding-Larsen
17:00	17:15	817 Integrated cause-effect analysis of geological and geophysical maps in mineral resource assessment	Dr. susanna Sirotinskaya
17:15	17:30	5144 What are Mathematical Geosciences? Are Mathematical Geoscientists at the Earth Science Frontiers?	Prof. Qiuming Cheng
17:30	17:45	5518 Grade Control Efficiencies using XRF and Spectral Techniques in gold deposits	N.H.S Oliver

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08:00	08:15	212 Modelling long-term transportation of ore-sourced geochemical elements in the vertical profile of the loess cover	Prof. DEYI XU
08:15	08:30	251 Drilling strategies when evaluating the Merensky and UG2 Reefs	Mr. Dave Young
08:30	08:45	812 High dimensional data visualization helps data mining from well log data	Dr. Shaoqun Dong
08:45	09:00	2695 Dealing with outliers within the Kriging Framework	Mr. Leon Tolmay
09:00	09:15	2999 Multiple Reef packages and its impact on estimation techniques applications	Mr. Leon Tolmay
09:15	09:30	705 Identification and visualization of anomalous areas by using the cause-effect analysis of spatial data	Dr. susanna Sirotinskaya
09:30	09:45	4650 Practical Application of Gy Sampling Theory in Mining: An Example from Mogalakwena Open Pit Pt Mine	Mr. Trust Muzondo
09:45	10:00	4445 Optimal sampling for variogram estimation in order to determine sample line spacing for a Marine Diamond deposit .	Prof. Christien Thiar

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10:30	10:45	3551	Finding the Optimal Dynamic Anisotropy Resolution for Grade Estimation Improvement at Driefontein Gold Mine, South Africa	Ms. Senzeni Mandava
10:45	11:00	4223	Constructing 3D Geological model with modified multiple-point statistics algorithm	Dr. Weisheng Hou
11:00	11:15	780	The ore body model and reserves estimation of the Tiegelongnan deposit ,northern Tibet	Dr. Yong Song
11:15	11:30	921	A favourable topographical characteristics for locating Fe deposits in Fujian Province of China	Prof. Renguang Zuo
11:30	11:45	1122	Characterization of primary geochemical haloes associated with Sn-Zn mineralization at the Dulong deposit, China	Dr. Zhao Jiangnan
11:45	12:00	4489	Resource identification and commercial evaluation of Dimension stone Granite deposits of Pudukottai district, Tamil Nadu, India	Dr. Jayabalan Kaliyaperumal

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14:00	14:15	1055 Mapping gold pathfinder metal ratios – A methodological approach based on compositional analysis of spatially distributed multivariate data	Dr. Luis Braga
14:15	14:30	1449 Interpretable principal balances for compositional data in geochemistry	Dr. Josep-Antoni Martin-Fernandez
14:30	14:45	1437 Latent endmember identification by means of Gaussian anamorphosis	Dr. Raimon Tolosana-Delgado
14:45	15:00	1923 Spatial hazard assessment using simplicial indicator kriging	Dr. JJ Egozcue
15:00	15:15	1341 Surface Roughness and Micromorphology of Carbonates Dissolved in Three Different Acids by Multifractal Analysis	Mr. Mohai Zhang

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16:00	16:15	3074 Correlation analysis for compositional data using logratio coordinates	Dr. Karel Hron
16:15	16:30	3419 Analysis of geochemical well logs in crystalline rocks using statistical approach: Case study of Chinese Continental Scientific Drilling Main Hole	Dr. Ahmed Amara KONATE
16:30	16:45	1138 Pixel-Based Simulation Approaches for Profiling the Weipa Lateritic Bauxite Deposit	Dr. Oktay Erten
16:45	17:00	1767 Modelling the Merensky Reef variability at Lonmin's Marikana Operations	Mr. Dennis Hoffmann
17:00	17:15	600 Open pit mine planning using multivariate conditional simulation	Mr. Ngoc Luan Mai
17:15	17:30	154 The Importance of the International Reporting Codes in the Mining Industry	Mr. Ken Lomberg
17:30	17:45	5198 Value Based Extraction Decisions under Challenging Market Conditions at Mogalakwena Platinum Complex	Mrs. Kavita Mohanlal

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	2877 The statistical distribution pattern of zinc concentrations at Belousovskoye deposit (Rudny Altai)	Г-жа. Katerina Petrich
	4622 Assessment of Mineral Resources Potential by combining Monte Carlo and Weights of Evidence Models	Dr. Luping Pu
	2170 Three-dimensional modeling of Fracture-cavity reservoirs	Dr. Jiagen Hou
	3606 Geostatistical Modelling of Log-derived Petrophysical Data for Quantifying Uncertainties in “AMESERE” Field, Niger Delta.	Mr. Abayomi Osotuyi
	3753 Prediction Theory and Technique of China National Mineral Resource Potentiality	Dr. Shuwen Xing
	5015 Application of Fitness-Distance-Ratio Based Particle Swarm Optimization for Travel Time and Constrained AVO Inversion	Mr. Aayush Agarwal

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08:00	08:30	5613 Modern resource modelling with quantitative geological constraints	Dr. J Antonio Vargas-Guzman Keynote
08:30	08:45	71 Output selection for Gaussian Processes classification in iron ore deposits	Dr. Katherine Silversides
08:45	09:00	125 Determination of Cu mineralized zones utilizing number-size (N-S) fractal modeling in Takht-e-Gonbad porphyry deposit (SE Iran)	Mr. Mohammad Eskandarnejad Tehrani
09:00	09:15	2519 A General Robust Probability Classifier Based on the ϕ -divergences and Its Application on Lithology Classification	Prof. Yongzhi Wang
09:15	09:30	3034 Application of Bi-dimensional empirical mode decomposition (BEMD) modeling for extracting gravity anomaly indicating the ore-controlling geological architectures and granites in the Gejiu tin-copper polymetallic ore field, Southwestern China	Dr. Yongqing Chen
09:30	09:45	3650 Determining elemental associations by multivariate analysis of regional-scale geochemical data	Dr Jennifer McKinley
09:45	10:00	4321 Computer assisted drill hole data interpretation for iron ore exploration	Mr. David Nathan

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10:30	10:45	153 Critical aspects in the estimation of Mineral Resources for Narrow Tabular PGM Deposits	Mr. Ken Lomberg
10:45	11:00	841 Application of geospatial technologies in Lineament analysis for mineral prognostication- A Case Study-- Ramagiri schist belt and surrounding areas of Eastern Dharwar Craton	Mrs. Gauri Motghare
11:00	11:15	1518 Russian mineral base of gold: Current situation and future views	Dr. Anatoly Ivanov
11:15	11:30	2452 Resource and Risk Evaluation of two Coal Seams at Kriel Colliery	Mr. Luan Nel
11:30	11:45	4590 REAL OPTIONS TO VALUE A MINING PROJECT UNDER 2 UNCERTAINTIES: A QUANTITATIVE MODEL FOR REVENUE SHARE AND MINING FISCALITY.	Dr. Abdoul Aziz NDiaye
11:45	12:00	5143 Singularity Theories and Methods for Quantitative Assessment of Concealed Mineral Resources in Covered Areas	Prof. Qiuming Cheng