



35TH INTERNATIONAL GEOLOGICAL CONGRESS

T9.10 - Geological Mapping & Mineral Exploration: Case studies from Africa / Spectral Geology in Exploration (minerals, hydrocarbon, geothermal) and Production

Date **Wednesday, 31 August 2016**

Chair

Time **16:00** *to* **17:45**

Room **MR 2.44 - 2.46**

Times		Paper #	Title	Speaker
16:00	16:15	3963	A hyperspectral remote sensing flight campaign in the VNIR-SWIR-TIR wave length for reconnaissance mapping of the BIFs of the Kaapvaal Craton	Dr. Michaela Frei
16:15	16:30	237	Spectral Characteristics of Plants Growing On Chromite Mineralization In West Pokot District, Kenya	Prof. Beneah D. Odhiambo
16:30	16:45	5152	Structural setting of the Asmara area, Eritrea	Dr. Tsehaie Woldai
16:45	17:00	4002	The Chaîne des Mongos- a newly discovered Precambrian fold belt in Central African Republic and South Sudan	Dr. Sharad Master
17:00	17:15	2575	A rapid characterisation strategy involving hyperspectral core logging (HyLogging™), X-ray diffraction (XRD) and Laser Induced Breakdown Spectroscopy (LIBS) – A case study	Dr. Suraj Gopalakrishnan
17:15	17:30	2086	Applications of hyperspectral sensing in oil sands mining operations	Dr. Benoit Rivard
17:30	17:45	4277	Australia's National Virtual Core Library: Examples of integrating data across geological terranes to highlight prospectivity	Ms. Belinda Smith

Times	Paper # Title	Speaker
	4152 Mapping and mineralogical discrimination of linear paleoproterozoic carbonatite complexes from Ihouhaouene area (In Ouzzal terrane, Hoggar, Algeria)	Mr. Massinissa Amara
	4583 Sampling methods in colluvium material for metallurgical characterisation	Mr Willem Van der Schyff
	3495 Application of Multispectral Image Landsat OLI and ASTER for Detection of Gold Mineralization in Macossa District – Mozambique	Mr. Félix Arnaldo Cumbane

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08:00	08:15	3789 Characterization of the Lead-Zinc mineralization of Aggeneys, South Africa, by VNIR-SWIR and TIR hyperspectral airborne data	Dr. Michaela Frei
08:15	08:30	3600 Exploration applications of laboratory, field, and airborne imaging spectrometer data collected from the Orange Hill copper porphyry deposit, east-central Alaska, USA	Mr. Raymond Kokaly
08:30	08:45	939 GeoMAP Base a Generic Expert System Mapper for Imaging Spectroscopy	Mr. Christian Mielke
08:45	09:00	1593 GeoMAP-outcrop – 3D hyperspectral outcrop mineral and REE mapping	Dr. Christian Rogass
09:00	09:15	1095 Hydrocarbon detection with multiple remote sensing platforms	Mr. Saeid Asadzadeh
09:15	09:30	4995 Identification of rocks using a hyperspectral supercontinuum lidar	Prof. Jussi Leveinen
09:45	10:00	1074 New advances on uranium exploration using airborne hyperspectral remote sensing technology: A case study of Xuemisitan volcanic belt, Xinjiang, China	Dr. Fawang Ye

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10:30	10:45	4969 New approaches in mineral mapping using diverse hyperspectral data as well as simulated EnMap and Sentinel 2 data	Dr. Veronika Kopackova
10:45	11:00	719 Remote Sensing of the Copper Creek District, Arizona. Results from Aster, Airborne Hyperspectral and Field Spectroscopy.	Dr. Marc Goossens
11:00	11:15	4824 The Influence of Sample Surface Preparation on Thermal Infrared Spectroscopy Results	Dr. Christoph Hecker
11:15	11:30	1383 Using thermal imagery to find G-spots	Dr. Neil Pendock
11:30	11:45	1288 Using Spectral Data in Exploration for Geothermal Resources	Dr. Wendy Calvin
11:45	12:00	1260 High resolution rapid revisit InSAR monitoring of surface deformation	Dr. Vern Singhroy

Times		Paper #	Title	Speaker
14:00	14:15	5001	EARLY WARNING SYSTEM FOR EARTHQUAKES DISASTER MITIGATION INSYRIA BY USING REMOTE SENSINED DATA AND SPACE IMAGERY. CASE STUDY: DETECTING AND MONITORING THE ACTIVE FAULTING ZONESALONG THE AFRO-ARABIAN- SYRIAN RIFT SYSTEM.	Dr. Moutaz Dalati
14:15	14:30	2884	Influence of the Environmental Conditions on Surficial Mapping Using LANDSAT-5 TM and RADARSAT-2 Polarimetric SAR Images	Brigitte Leblon
14:30	14:45	1644	Potential of sinkhole precursor detection through interferometric SAR	Mr. Andre Theron
14:45	15:00	2482	Remarkable land subsidence in plain aquifers of Iran: evidence from two decades of InSAR observations	Dr. Mahdi Motagh
15:15	15:30	1756	Satellite synthetic aperture radar for monitoring of surface deformation in shallow underground mining environments	Dr. Jeanine Engelbrecht

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16:00	16:15	1931 Pre- and co-seismic surface deformation of earthquakes: the 1997 Colfiorito earthquake (Northern Apennines, Italy)	Ms. Emanuela Valerio
16:15	16:30	899 Future Hyperspectral VSWIR and Multispectral TIR Spaceborne Instruments	Mr. Michael Abrams
16:30	16:45	1625 Geological mapping of Mountain Pass Carbonatite Complex, USA, using the EnGEOMAP (basic mineral mapping and REE mapping)	Ms. Nina K. Boesche
16:45	17:00	5124 Global Hydrocarbon Exploration and Monitoring: Current Possibilities and Projections for the Near Future and Beyond	Prof. Carlos Souza Filho
17:00	17:15	2096 Potential of spaceborne imaging spectroscopy for surface mineral detection in northern latitudes	Dr. Benoit Rivard
17:15	17:30	1282 The Future of Global Mapping for Energy and Mineral Resources	Dr. Wendy Calvin
17:30	17:45	2640 Insight into the geodynamics of southern Africa; crustal thickness and upper mantle structure of Botswana	Prof. Mark Van Der Meijde

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	2498	Multispectral Landsat 7 ETM+ enhancement images and airborne geophysics data processing for geological mapping of the Ahnet terrane (Western Hoggar, Algeria).	Prof. Safouane Djemai
	2494	Remote sensing and airborne geophysics for geological mapping of the Tefedest terrane (Central Hoggar, Algeria).	Prof. Safouane Djemai

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	2521 Surface deformation monitoring by Insar techniques. Case study of the region of In Salah, Algeria.	Prof. Mohammed Abed
	2468 Use of RADARSAT-2 and ALOS-PALSAR images for organic terrain mapping in New Brunswick	Dr. Armand LaRocque
	1613 Assessment the activity of deep-seated landslide by using TCP-InSAR interferometry from ALOS/PALSAR images	Dr. Rou-Fei CHEN
	1757 Longwall mining and surface deformation – lessons learned from dInSAR measurements	Dr. Jeanine Engelbrecht
	1094 Spectral analysis of fresh and weathered rocks overlying the Alborz hydrocarbon trap, Qom area, Iran: remote sensing implications	Mr. Saeid Asadzadeh
	4457 Application of remote sensing in surveying for REE-rich carbonatites in Tamil Nadu (Southern India)	Mr Petr Mixa
	1141 Recent Surface Deformation in western Himalaya: Uttarakhand state of India	Prof. Chung-Pai Chang
	1754 Fully polarimetric ALOS PALSAR data to aid geological mapping in densely vegetated areas	Dr. Jeanine Engelbrecht

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08:00	08:15	4062 Random Forests applied as a soil spatial predictive model across an aridic to ustic area of Indian States	Mr. GAURAV SHUKLA
08:15	08:30	570 The Architecture on Geological Survey Intelligent Space	Dr. LI CHAOLING
08:30	08:45	2272 Multifractal Analysis for Threshold Determination in Hydrothermally Altered Images around Dutsen Danbakoshi, Northwestern Nigeria.	Mr. Abdulgafar Amuda
08:45	09:00	4444 Radar interferometry for ground subsidence identification and monitoring using ALOS-2 PALSAR-2 data: a case study of KOSH region of South Africa	Dr. Abraham Thomas
09:00	09:15	4382 Spatial and temporal variation of suspended sediment concentration in the near shore waters, Southern Karnataka, India	Mr. ATEETH SHETTY

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10:45	11:00	3556	Towards a global mineral mapping of Earth's surface	Mr. Michael Abrams
11:00	11:15	2467	Application of remote sensing and GIS to near-surface aquifer mapping for landslide susceptibility assessment: a case study in Hoa Binh Province, Vietnam	Dr. Le Quoc Hung
11:15	11:30	2487	Mapping Surface Lineaments in the Umiujalik Lake Area, Nunavut Using Multi-Beam Radarsat-2 Polarimetric SAR Images	Dr. Brigitte Leblon
11:30	11:45	2463	Use of RADARSAT-2 SAR and LANDSAT-5 TM Images for permafrost feature distribution mapping	Dr. Prof. Brigitte Leblon

Times	Paper # Title	Speaker
	2126 Using GIS to Evaluate Lake Palestine and Potential Impacts of Raw Water Withdrawal for an Expanding Population	Mr. Ryan Michell
	5115 The Study on the Mechanism for Weak Anomaly Spectral Response of Porphyry Copper Mineralization Alteration	Mrs. Zhifang Zhao
	2712 Geological and geomorphological mapping with digital mono- and 3D stereo-photogrammetry.	Prof. Silvio Seno