



T31.10 - The Deep Earth

Date Wednesday, 31 August 2016

Time 16:00 to 17:45

Chair

Room Hall 4B3

| Times | | Paper # Title | Speaker |
|-------|-------|---|---|
| 16:00 | 16:15 | 2746 International Continental Scientific Drilling Program: Accomplishments, developments, strategies | Dr. Uli Harms |
| 16:15 | 16:30 | 4371 Development, properties and drilling test of high performance Φ 147mm aluminum alloy drill pipe | Dr. Baochang Liu |
| 16:30 | 16:45 | 992 In-depth research of geology is inseparable from the support of advanced drilling technology | Prof. Zhang Xiaoxi Associate Professor Hui Zhang |
| 16:45 | 17:00 | 4347 Scientific drilling project of MK-2 well for gas hydrate exploration in Mohe basin of China | Dr. Rui Jia |
| 17:00 | 17:15 | 2034 Mylonitic roots of the Scandinavian Caledonides revealed by deep drilling | Dr. Uli Harms |
| 17:15 | 17:30 | 3775 Online Monitoring of Drilling Mud Gas in ICDP and IODP scientific drilling projects | Dr. Thomas Wiersberg |
| 17:30 | 17:45 | 4254 The Colorado Plateau coring project (CPCP): exportable chronostratigraphic context for Triassic-Jurassic Earth System Events and Processes | Dr. Paul Olsen |

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| | 4325 Study of ultrasonic vibration mechanism of rock fragmentation | Dr. Zihang Sun |
| | 4344 Development and experiments of hole-bottom freezing drilling tool for gas-hydrate-bearing sediments sampling | Dr. Wang Yuan |
| | 4023 Nano Oxide Particles Modified Drilling Fluid for Deep, Complicated Drilling Conditions | Dr. Baochang Liu |
| | 4323 Research on elevated temperature resistant aluminum alloy drilling pipe for deep and ultra-deep wells | Dr. Shaoming Ma |
| | 4167 Simulation of Auto-drilling System of The Crust-1 Continental Scientific Drilling Rig | Youhong Sun Yan Zhao |
| | 296 AEROMAGNETIC AND GRAVITY STUDIES FOR EVOLUTION OF DEEP CRUSTAL CONFIGURATION OF SAURASHTRA-CAMBAY BASIN-DECCAN LARGE IGNEOUS PROVINCE, INDIA. | Dr. Somanchi Srinivas |
| | 4471 Design and Preliminary Field Experiment of Oil Shale Borehole Hydraulic Mining Tool with Expandable Nozzle | Dr. Shuai Gao |
| | 4464 Numerical study on lag time correction of cuttings in Songliao Basin Drilling Project | Mr. Haidong Wu |

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| 08:00 | 08:15 | 3866 New tectonic and Metallogenic Maps of North, Central, East Asia and Adjacent Areas | Dr. Gennadiy Babin |
| 08:15 | 08:30 | 2738 Enhancement on deep structure by constraint inversion with gravity seismic and borehole data sets | Dr. Ping Yu |
| 08:30 | 08:45 | 2212 Cratons forged by large igneous provinces: Evidence from the Siberian and Yangtze Cratons | Prof. Qin Wang |
| 08:45 | 09:00 | 2433 Measuring Pb in Mantle Sulfides Using In-Situ Techniques | Dr. Megan D'Errico |
| 09:00 | 09:15 | 505 REE enriched Carbonatite from Kamthai area, Barmer district, Rajasthan, India: imprints of a $\delta^{34}\text{S}$ depleted mantle source. | Mr. Subhasish Ghosh |
| 09:15 | 09:30 | 111 Planar deformation bands in zircon: a new evidence of seismicity | Dr. Elizaveta Kovaleva |
| 09:30 | 09:45 | 3699 Oxidation state of the lithospheric mantle beneath the Massif Central, France: the message from clinopyroxene | Dr. Alan Woodland |
| 09:45 | 10:00 | 4617 A new generation 3D density model of the lithosphere and upper mantle of Asia and surroundings | Dr. Mikhail Kaban |

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| 10:30 | 10:45 | 4285 Global Seismic Lithosphere-Asthenosphere-Boundary Measurements from Full Waveform Tomography | Dr. Huaiyu Yuan |
| 10:45 | 11:00 | 4893 Imaging the lithosphere-asthenosphere boundary beneath continents using mineral physics and surface observational constraints | Prof. Alan Jones |
| 11:00 | 11:15 | 5009 Interaction of melt and deformation at the lithosphere-asthenosphere boundary | Dr. Mary-Alix Kaczmarek |
| 11:15 | 11:30 | 4275 Lithospheric thickness beneath the East African Rift System: results from surface wave tomography | Dr. Stewart Fishwick |
| 11:30 | 11:45 | 5343 The Stability of Tibetan Continental Mantle Lithosphere | Prof. Gregory Houseman |
| 11:45 | 12:00 | 3210 Do Mantle Plumes Preserve the Heterogeneous Structure of their Deep Mantle Source? | Dr. Rhodri Davies |

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|-------|-------|---------|---|------------------------|
| 14:00 | 14:15 | 2104 | The geology and petrochemistry of the pre–Middle Jurassic Pontic Ophiolites, central-northern Turkey | Dr. Ender Sarifakioglu |
| 14:15 | 14:30 | 4334 | Geological processes and mineralization of the continental margin in the Western Pacific Ocean | Mr. Tingdong Li |
| 14:30 | 14:45 | 2951 | Relationship of important geological events and Large-scale Mineralization: evidences from the China & Adjacent Areas | Dr. Qiu Ruizhao |
| 14:45 | 15:00 | 5117 | Academic "Treasure" from Industry "Trash"- Unconventional Imaging with Large N Seismic Exploration Datasets. | Prof. Larry Brown |
| 15:00 | 15:15 | 1790 | Metamorphic zones and constraining on timing of the major metamorphism event in the Qinling Complex, western Henan Province | Dr. Liudong Ren |
| 15:15 | 15:30 | 5130 | Deep Seismic Reflections and Mineral Deposits | Prof. Larry Brown |

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| 16:00 | 16:15 | 1942 Deep Structure Maps of Northern, Central and Eastern Asia | Dr. Evgenia Milshtein |
| 16:15 | 16:30 | 1823 Northern-Central-Eastern Asia: Main Structures and Processes of the Earth Crust Formation of Different Ages | Dr. Sergey Shokalsky |
| 16:30 | 16:45 | 4934 Integrated 3D Geophysical Model of the Main Karoo Basin | Prof Susan Webb |
| 16:45 | 17:00 | 1580 Can mantle suction flow trigger subduction initiation at passive margins? | Dr. Marzieh Baes |
| 17:00 | 17:15 | 4524 Conditions, durations and the response of the lower crust to high-temperature metamorphic events | Dr. Chris Clark |
| 17:15 | 17:30 | 1326 Petrological and Metamorphic Evolution Study of the Staurolite-bearing Garnet Amphibolite in the Nyingchi complex of the Lhasa Block | Dr. Cong Zhang |
| 17:30 | 17:45 | 4496 Seismic structure and heterogeneity of the oceanic crust | Prof. Qin Wang |

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| | 4242 The Deep Processes and Magmatism of China's Peri-Pacific | Prof. Tingdong Li |
| | 2854 Redox reactions caused by exsolution: A potential factor influencing mantle redox state and diamond formation | Dr. Alexander Proyer |
| | 1178 SAPHYR: the Swiss Atlas of Physical properties of Rocks | Dr. Alba Zappone |
| | 740 Further on China lithospheric tectonic units | Professor Tingdong Li |
| | 4244 The Deep Processes and Magmatism of China's Peri-Pacific | Mr. Tingdong Li |
| | 1975 Integration of geophysical methods in creating models of the Earth's crust and upper mantle (case study of the Geotransect "Central Asian Fold Belt–South of the Siberian Craton–Verkhoyansk-Kolyma Fold Area") | Dr. Evgenia Milshtein |
| | 1617 Geodynamic model of development and the tectonic structure of Kazakhstan from the standpoint plume tectonics | Prof. Adilkhan Baibatsha |
| | 3192 Earth's Crust and Upper Mantle Density Models of North-East Russia on the Basis of Offshore Wide-angle Seismics | Dr. Evgenia Milshtein |
| | 4313 Geochronology and tectonic evolution of the west section of the Jiangnan Orogenic Belt in South China | Dr. Heng Zhang |
| | 3923 The oxidation state of the sub-arc lithospheric mantle: New data and models | Dr. Alan Woodland |
| | 3613 Thermal conductivity determinations on granitoids from central India: A comparison between measured and calculated thermal conductivity | Ms. NISHU CHOPRA |
| | 2184 Three dimensional velocity and Poisson's ratio structure beneath Eastern-Central China and implication for deep geodynamics | Prof. Guibin Zhang Dr. Guoming Jiang |
| | 3268 Estimation of Co-seismic gravity change for the earthquake in Koyna-Warna region | Mr. Roshan Kumar Singh |
| | 1379 Numerical Modelling of Subduction Zones: a New Beginning | Ms. Eleonora Ficini |
| | 3258 Earth's Crust and Upper Mantle Density Model of the Offshore-Onshore Geotransect "East Siberian Sea – Chukchi-Kolyma Region – Okhotsk Sea" | Dr. Evgenia Milshtein |
| | 938 Metasomatized spinel peridotite xenoliths from the Quaternary intraplate alkali basalt, Jeju Island, South Korea | Dr. Kyounghee Yang |
| | 1903 The Identification of Magnetic Stripes: Corrected Age of Seafloor Spreading in the South China Sea Basin | Prof. Xiaohong Meng |

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| 08:00 | 08:15 | 2434 Western Yarlung Zangbo Ophiolites in South Tibet Formed in Forearc Setting: Evidence from Structure, Geochronology and Geochemistry | Mr. Fei Liu |
| 08:15 | 08:30 | 2173 Diamond-bearing Ophiolites and Their Geological Occurrence | Prof. Jingsui Yang |
| 08:30 | 08:45 | 3912 Multi-stage process of the Bulqiza chromitites, Eastern Ophiolitic Belt, Albania | Dr. Fahui Xiong |
| 08:45 | 09:00 | 3269 Ophiolite-hosted Type Ib microdiamonds: spectroscopic evidence for their natural origin | Dr. Karen Smit |
| 09:00 | 09:15 | 3266 Preservation of C centres in Ib diamonds due to rapid tectonic exhumation following Gondwana assembly: Re-Os age constraints of West African diamonds | Dr. Karen Smit |
| 09:15 | 09:30 | 3155 The Kokchetav Massif: Type locality of metamorphic diamonds | Dr. H.-P. Schertl |
| 09:30 | 09:45 | 4041 The significance of zircon in oceanic mantle peridotites and chromitites | Dr. Paul T Robinson |
| 09:45 | 10:00 | 5568 Structure of the Baimarang massif from the Xigaze ophiolite, Yarlung Zangbo Suture Zone, Tibet, China | Dr. Yuan Li |

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| 10:30 | 10:45 | 3850 | Microdiamonds in the Scandinavian Caledonides related to Ordovician continent-arc and Siluro-Devonian continent-continent collision | Prof. David G Gee |
| 10:45 | 11:00 | 4204 | Application of "CRUST-1" Continental Scientific Drilling Rig in CCSD-SK-2 Scientific Drilling Engineering | Prof. Youhong Sun |
| 11:00 | 11:15 | 1698 | Constraining residual topography by virtual deep seismic sounding (VDSS) | Prof. Wang-Ping Chen |
| 11:15 | 11:30 | 3361 | Responding to the Indo-Asian collision: from the crust to the mantle | Dr. Mian Liu |

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| | 92 The gravity derived Moho depth of Botswana and its implication in the recent geodynamic activities | Mr. Chikondi Chisenga |
| | 4447 Crust and uppermost mantle structure of Madagascar. | Mr. Fenitra Andriampenanana |
| | 2806 Water contents on peridotite xenoliths from Southwest China | Dr. Rong Wang |
| | 267 Preliminary Gravity Survey of Western Bhutan | Dr. Kevin Mickus |
| | 4950 Crustal conductors and lithospheric structure in an accretionary Svecofennian orogeny in Fennoscandia | Dr. Toivo Korja |
| | 4922 Deep structure of the East European Craton marginal zone in Poland from joint inversion of surface-wave dispersion and receiver functions | Mr. Kajetan Chrapkiewicz |
| | 2192 Poisson's ratio and porosity in deep seismic zone under Izu-Bonin, Japan | Dr. Guoming Jiang |
| | 2857 Reducing environment in chromitites: possible causes for PGE and diamond formation | Dr. Alexander Proyer |
| | 2771 Mathematical modeling of shear and converted waves in deep seismics offshore | Dr. Alexander Rybalka |
| | 3307 Along the strike magnetotelluric profile to map electrical structure of Radhanpur-Ajmer transect in Rajasthan, India. | Dr. Tanvi Arora |
| | 299 Gravity anomalies over Indian Cratons and their Geological implications | Mr. JAMMIVENKATA RAMARAO |
| | 1608 Structural heterogeneity of West-Pacific subduction zones and its implications for interplate megathrust earthquakes | Dr. Xin Liu |
| | 4422 Thickness and composition of the crust in southern Africa | Prof. Hans Thybo |
| | 959 Petrogenesis Implications of Zoned Spinel from Northeastern Jiangxi Province Ophiolite (NEJXO), China | Dr. Guolin Guo |
| | 249 Deep earth exploration by Magnetotelluric (MT) survey | Dr. DULAL CHANDRA NASKAR |
| | 2070 Crustal Architecture along BABEL and FIRE profiles – Insight in the Growth of the Svecofennian Orogen, Fennoscandian Shield | Dr. Annakaisa Korja |
| | 2286 Crustal structure and composition beneath northeastern Tibetan Plateau from teleseismic receiver function analysis | Prof. Xinfu Li |
| | 743 Seismic structure of northern segment of the N-S tectonic belt in North-Central China and its geological implications | Dr. Cheng Shunyou |
| | 1328 The multi-stage tectonic evolution of the Xitieshan terrane, North Qaidam orogen, western China: from Grenville-age orogeny to early-Paleozoic ultrahigh-pressure metamorphism | Dr. Cong Zhang |

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| 14:00 | 14:15 | 4839 | Mineral physics and surface observational constraints on the topographic uplift of the Southern African Plateau due to the African Superswell | Prof. Alan Menzel-Jones |
| 14:15 | 14:30 | 4260 | Seismic and Magmatic Evidence for Crustal and Mantle Lithospheric Delamination under the Puna Plateau of the Central Andes | Prof. Suzanne Kay |
| 14:30 | 14:45 | 4974 | Seismic structure of the crust in Eurasia | Prof. Hans Thybo |
| 14:45 | 15:00 | 1143 | Crustal Structure Deformation in the Eastern Margin of the Tibetan Plateau constraints from Deep Seismic Reflection Profiles | Prof. Rui Gao |
| 15:15 | 15:30 | 93 | Integrating Magnetic and Gravity for mapping the Earth Structure using color scheme: a case study of Botswana | Mr. Chikondi Chisenga Miss Tamara Faith Kamanga |