





UNESCO Interregional Engineering Conference in Technology and Education Global Benchmarking and Monitoring, UCTE 2016

December 08-11, 2016; Krakow, Poland

AGH University of Science and Technology (AGH UST)

UNESCO Chair for Science, Technology and Engineering Education, Av. A. Mickiewicza 30, PL 30-059 Kraków, Poland www.unesco.aqh.edu.pl

PROGRAM

December 08, 2016

12.00 - 12.45, Registration (bld. U2, 2 floor)

13.00 - 16.20, Opening Ceremony and Plenary Session P01, Chair: prof. dr hab. inz. Janusz Szpytko (bld. A2/A3, auditorium room, 1 floor)

- 13.00 13.10, Welcome address, Prof. dr hab. inz. Jerzy Lis, AGH UST Vice-Rector for Cooperation, Poland
- 13.10 13.20, UCTE 2016 programme, Prof. dr hab. inz. Janusz Szpytko, UNESCO AGH Chairholder, Poland
- 13.20 13.30, Diplomas for awarded SARIESS 2016 lectures and diplomas for the SARIESS 2016 participants
- 13.30 14.10, Social engineering and physical security, securing systems applications, Dr inz. Marek Zachara, Poland
- 14.10 14.30, Soundscape as an element and worth of UNESCO World Heritage Sites, Prof. dr hab. inz. Jerzy Wiciak, Poland
- 14.30 14.50, Lost and found sounds in Bialowieza Forest and Niepolomicka Forest, Dr hab inz. Janusz Piechowicz, Poland
- 14.50 15.10, Acoustics of chosen UNECSO wooden Churches and Tserkvas in Poland, Dr inz. Paweł Małecki, Poland
- 15.10 15.30, The unique soundscape of valleys surrounding Longyearbyen on Spitsbergen, Mgr inz. Dorota Czopek, Poland
- 15.30 15.50, Comprehensive applications of nano-catalytic conversion of the carbon dioxide (CO2) into value-added products, Dr Obid Tursunov, Uzbekistan
- 15.50 16.00, Discussion

December 09, 2016

- 07.30 -18.15, one day **technical visits** (for invitation only)
- 07.30, bus departure, meeting point AGH UST Student Campus, DS 5 Strumyk
- 09.30 (app.), arrival to Tarnowskie Gory
- 10.00 11.00, visit in Black Trout Adit
- 11.40 13.10, visit in Historic Silver Mine
- 13.30 15.00, lunch time in Chorzow
- 15.30 16.30, visit in the Planetarium in Chorzow (biggest and the oldest in Poland, from 1955)
- 18.15 (app.), arrival to Krakow

December 10, 2016

- 08.15 11.40, **technical visit** at the AGH UST Educational and Research Laboratory of Renewable Energy Sources and Energy Saving (for invitation only)
- 08.15, bus departure to Miekinia (Krzeszowice), meeting point bld. U2, ground floor
- 09.00 11.10, visit in the Laboratory, mgr inz. Jaroslaw Kotyza
- 11.40 (app.), arrival in Krakow AGH UST
- 11.50 12.30, lunch break

12.40 - 15.20, Session S01, bld. U2, room 204, Chair: DJEKORNOM Ngardoum Elias, CHAD (by Presenters and title of the contribution)

- 12.40 13.00, DJEKORNOM Ngardoum Elias, CHAD, Drilling Cost Analysis,
- 13.00 13.20, DIKHANOV Rustem, KAZAKHSTAN, Drill Off Test,
- 13.20 13.40, DIAZ MATOS Heber Alberto, CUBA, Bit Nozzle Selection,
- 13.40 14.00, DUONG Van Hao, VIETNAM, 3D Geochemical Block Modeling of the IOCG Singuyen Deposit, North Vietnam: Implication For Resources Evaluation
- 14.00 14.20, APPOLINAIRE Baryana, BURUNDI, Analysis of use Geothermal Water for Energetical Purposes: The Case of Burundi,
- 14.20 14.40, KUMAR Nitin, INDIA, Experimental Determination for Alpha and Beta Activities of Radium Isotopes in Mineral Waters,
- 14.40 15.00, RAKOTOARIMANANA Truong Lova Nirina, MADAGASCAR, Selected Geological Objects and their Geotouristic Values of the Southern Part of Madagascar,
- 15.00 15.20, RANAIVOARINOELY Manampisoa Jeannie, MADAGASCAR, Selected Geological Objects and their Geotouristic Values of the Northern Part of Madagascar.

12.40 - 15.20, Session S02, bld. U2, room 205, Chair: RODRIGUEZ PEREZ Enrique, MEXICO (by Presenters and title of the contribution)

- 12.40 13.00, RODRIGUEZ PEREZ Enrique, MEXICO, Utilization of the Phase Change Materials (PCM) in Refrigerated Transport
- 13.00 13.20, PALACIOS Miguel Orlando, MEXICO, Use of Frequency Converters in Armored Face Conveyors for Improving the Efficiency in the Long Wall Method,
- 13.20 13.40, OCHOA VERA Joel Benjamin, PERU, Automated Construction of Artificial Muscles
- 13.40 14.00, GASSAMA Hamet, MALI, Selected Problems in Mining Devices,
- 14.00 14.20, RUBIO Darien, CUBA, Position Control with PLC S71200,
- 14.20 14.40, ABDILLAHI Umulkher Ali, KENYA, Mobile Money and Economic Growth: The Case of M-Pesa in Kenya,
- 14.40 15.00, NAWAZ Adil, PAKISTAN, Geological Mapping of the Area of North Waziristan (Pakistan) Based on Remotely Sensed Images,
- 15.00 15.20, BADRALT Enkhtur, MONGOLIA, Adaatsag Region Magmatic Rock, Mineral Prospecting South East Mongolia.
- 15.20 15.50, coffee break, bld. U2, 2 floor

15.50 - 17.30, Session S03, bld. U2, room 204, Chair: NKOULOU MASSENE Emmanuel Wilfried, CAMEROON

- 15.50 16.10, Nkoulou Massene Emmanuel Wilfried, CAMEROON, Reservoir Fluid Recombination in Conventional and Unconventional Gas Condensate Wells,
- 16.10 16.30, SALEH Djasrabe, CHAD, Possibilities of Application the Salt Cavern for the Storage of Natural Gas,

- 16.30 16.50, SARMA Sankar Ram, INDIA, Compressed Air Energy Storage (CAES) in Salt Cavern,
- 16.50 17.10, ASOMANI Mc Omari, GHANA, Nodal Analysis of Unconventional Tight Gas Reservoirs,
- 17.10 17.30, KUSZNIR Tom, POLAND, Quadrocopter Control Using Lyapunov Based Control and Fuzzy-Lyapunov Method.

15.50 - 17.30, Session S04, bld. U2, room 205, Chair: ABBASOV Kanan, AZERBAIJAN (by Presenters and title of the contribution)

- 15.50 16.10, ABBASOV Kanan, AZERBAIJAN, Formation of Gedabek Intrusive and Relation of Intrusive with Ore Mineralization,
- 16.10 16.30, Bemboguina Eric, CHAD, Geological Characteristic of Tin Deposit in Africa, Case Study of Jos Plateau in Nigeria,
- 16.30 16.50, Massengo Roxan Farel, CONGO, Characteristic of Chromite Deposit in Balkan,
- 16.50 17.10, Thipane Mamolisana, LESOTHO, Geological Characteristics of Tin Deposits in Africa
- 17.10 17.30, Hoang Anh Quy, VIETNAM, Geological Characteristic of Tin Deposit, Africa Case Study,

December 11, 2016

08.40 - 12.00, Session S05, bld. U2, room 204, Chair: NUNEZ FERNANDEZ Dennis Hernando, PERU (by Presenters and title of the contribution)

- 08.40 09.00, NUNEZ FERNANDEZ Dennis Hernando, PERU, Implementation of a New Architecture for Hand Poses Recognition,
- 09.00 09.20, VIKNASVARRI Ayerdurai, MALAYSIA, Characterization of Nanocomposite Based on Fe_3O_4 Particles in a Polymer Matrix,
- 09.20 09.40, BIZIMANA Emmy, RWANDA, Electrochemically Engineered Materials- Synthesis, Properties and Possible Application,
- 09.40 10.00, SAMAKE Adama, MALI, Control of Microsystem Throughput Based on Surrounding Condition,
- 10.00 10.20, CHAUHAN Deepak Singh, INDIA, Cu Nanoparticles Embedded in Fe₂O₃ Matrix,
- 10.20 10.40, GUNTIN Rosemary, CUBA, Effect of Synthesis Conditions on the Morphology of the Binary Compounds in the Cao-Al₂O₃ System,
- 10.40 11.00, ARUSTAMIAN Artem, UKRAINE, Identification of Yield Point of Polymer-Based Composite Material in the Conditions of Increased Temperatures,
- 11.00 11.20, PANDYA Yashesh, INDIA, Live Data Stream Anonymization Technique for Cloud Data Security,
- 11.20 11.40, SOKUR Yuliia, UKRAINE, Desulfurization of Steel With Transition Sulfur in the Gas Phase.
- 11.40 12.00, JAVED Mubashir, PAKISTAN, UBADAH Muhammad, PAKISTAN, late submission.

08.40 - 12.00, Session S06, bld. U2, room 205, Chair: MANJORO Innocent Tichaona, ZIMBABWE (by Presenters and title of the contribution)

- 08.40 09.00, MANJORO Innocent Tichaona, ZIMBABWE, Design of a Vehicle Tracker and Locking System Based on Global System Mobile Communication (GSM) and Global Positioning System (GPS),
- 09.00 09.20, ROJAS CERULIA Norge, CUBA, The Use of ICT Technology in Oil Transportation: Case of Study Cuba,
- 09.20 09.40, ESCOBAR ALBA Adriana Patiricia, COLOMBIA, Guidelines to Implement Pedestrian Crosswalks in Bogota Based on European Cities Case Study,

- 09.40 10.00, JONGI Lawrence, ZIMBABWE, Transportation System and Devices in Manufacturing: The Zimbabwe Case Study,
- 10.00 10.20, MUNOZ FRANCO Juan Pablo, COLOMBIA, 5th Generation Wireless Systems Impact for Transport Systems and Devices Under Operation,
- 10.20 10.40, BETANCOURT Arianne, CUBA, Technical Review of Leak Detection Methods in Pipeline Systems,
- 10.40 11.00, AZMI Elmi Alif, MALAYSIA, Risk Assessment Categories of Public Transportations Related to Transit Oriented Development in Malaysia,
- 11.00 11.20, COGHI FERNANDEZ Jorge Esteban, COSTA RICA, Availability Problems in Transportation Systems and Devices, Costa Rica Case Study,
- 11.20 11.40, MONTEIRO TAVARES Carla Mericia, CAPE VERDE, Robustness Assessment in Vehicles with Electronic Fuel Injection System (Common Rail Types), Developing Countries Case Study,
- 11.40 12.00, YADAV Arun Kumar, INDIA, Real Time Monitoring and Controlling System for Air Pollution in Vehicles.
- 12.15 13.20, lunch break

13.30 - 16.00, Thematic panels: A1/ A2/ A3, bld. U2, room 204

- 13.30 14.20, Thematic panel A1, Higher engineering education in global village: today situation, needs, environment and culture background, business targeting, and potential, Chair: ABDILLAHI Umulkher Ali, KENYA; Co-chair: BIZIMANA Emmy, RWANDA
- 14.20 15.10, Thematic panel A2, Policies and capacity building in science, technology and innovation for sustainable development worldwide experience, Chair: ASOMANI McOmari, GHANA; Co-chair: GUNTIN Rosemary, CUBA,
- 15.10 16.00, Thematic panel A3, Scientific progress in engineering and technological innovation: today and future, Chair: JONGI Lawrence, ZIMBABWE; Co-chair: VIKNASVARRI Ayerdurai, MALAYSIA.

13.30 - 16.00, Thematic panel: A4/A5/ A6, bld. U2, room 205

- 13.30 14.20, Thematic panel A4, Global priorities in engineering identification for Africa, Asia, Latin America, Chair: SARMA Sankar Ram, INDIA; Co-chair: BETANCOURT Arianne, CUBA,
- 14.20 15.10, Thematic panel A5, Engineering potential building across Africa, Asia, Latin America in the field of science, technology and innovation, Chair: MUNOZ FRANCO Juan Pablo, COLOMBIA; Co-chair: AZMI Elmi Alif, MALAYSIA,
- 15.10 16.00, Thematic panel A6, Enhancing the leverage of science through integrated science, technology and innovation, Chair: THIPANE Mamolisana, LESOTHO; Co-chair: APPOLINAIRE Baryana, BURUNDI,
- 18.00 21.00, Round table discussion: Priorities in engineering in Global Village (for invitation only)

Moderator: Prof. dr hab. inz. Janusz Szpytko, AGH UST, POLAND

Reporters: ABDILLAHI Umulkher Ali, KENYA; ASOMANI McOmari, GHANA; JONGI Lawrence, ZIMBABWE; SARMA Sankar Ram, INDIA; MUNOZ FRANCO Juan Pablo, COLOMBIA; THIPANE Mamolisana, LESOTHO;