International Conference on Geomatics Education
- Challenges and Prospects (ICGE) - Rundown

Location: N003, G/F, Block N, The Hong Kong Polytechnic University (PolyU)

10 May 2023 (Wed)		
10:00 – 13:00	Registration @ *outside N002, PolyU*	Location
14:00 – 14:20	**Opening Ceremony** Welcome Remarks *by Prof. Xiangdong LI, Dean of Faculty of Construction and Environment* Opening Addresses *- by Sr CHANG Kwok Fai, Deputy Director, Survey and Mapping Office, Lands Department, The Hong Kong SAR Government* *- by Prof. Derek Lichti, International Society for Photogrammetry and Remote Sensing (ISPRS)* *- by Prof. Tao WANG, International Cartographic Association (ICA)* Group Photo Taking	N003
14:20 – 14:50	**Keynote Speech 1**: Sailing Through Radical Changes in the Geomatics Education *by Prof. Liqiu MENG, Technical University of Munich*	
14:50 – 15:30 Session Chair: Prof. Liqiu Meng	**Session 1**: **Web-based Tools for Surveying Education** 14:50 – 15:10: The Design of Scalable Web GIS Microservice Framework for Undergraduate Education *by Dr Haiyang LYU, Nanjing University of Posts and Telecommunications, China* 15:10 – 15:30: Geospatial Approach for Petrol Pumps Valuation with Urban Prediction Modelling by Cellular Automata in Creeds of Metropolitan Expanse *by Mr Danish RAZA, Wuhan University, China*	
15:30 -16:00	*Tea Break*	
16:00 – 17:40 Session Chair: Prof. Derek Lichti	**Session 2: Curricula Development** 16:00 – 16:20: Urban Informatics - a Foundational Interdiscipline for Future Smart Cities *by Prof. John SHI, The Hong Kong Polytechnic University, Hong Kong* 16:20 – 16:40: Multiple Pedagogical Approaches to Teaching GIS for Environmental Science *by Prof. Zhiyong HU, University of West Florida, United States* 16:40 – 17:00: Remote Sensing Related Practices for Geomatics Education in Undergraduate Curriculum at the IMNU *by Prof. Bayaer WULIANGHA, Inner Mongolia Normal University, China* 17:00 – 17:20: Abwi Airborne Binocular Whiskbroom Imager: Camera Principles and the Workflow *by Mr Jieke DONG, Wuhan University, China* 17:20 – 17:40: Four-In-One Scientific and Innovative Surveying and Mapping Postgraduates Talent Training System of "Ideological And Political - Curriculum - Platform - Team" *by Ms Ying XU, Shandong University of Science and Technology, China*	N003
18:30 – 20:30	*Banquet @ King Yat Hin (景逸軒), 8/F, Harbour Plaza Metropolis, Hung Hom*	

11 May 2023 (Thu) AM		
9:00 – 9:30	**Keynote Speech 2:** Integrating New and Emerging Concepts into a Geomatics Engineering Curriculum *by Prof. Derek LICHTI, The University of Calgary*	
9:30 – 10:50 Session Chair: Dr Wallace Lai	**Session 3: Promotion of Young Professional** 9:30 – 9:50: 'Remote Sensing Plus' Training Mode of Innovation and Entrepreneurship Talent Nurturing through College Student Competitions *by Prof. Xiaoliang MENG, Wuhan University, China* 9:50 – 10:10: Faculty of Geomatics as the Focal Point in Geomatics Education in Sri Lanka *by Dr Herath Prasanna, Sabaragamuwa University of Sri Lanka, Sri Lanka* 10:10 – 10:30: A Teaching-Learning and Storytelling Platform: Students' Perspectives on Applying Story Map in Education in Geo-Informatics Subjects *by Ms Fangyi CAI, The Hong Kong Polytechnic University, Hong Kong*	N003
10:30 – 10:50	*Tea Break*	
10:50 – 11:30 Session Chair: Dr Guenther Retscher	**Session 4: Multi-level Education** 10:50 – 11:10: Cesium-MRS: A Cesium-based Platform for Visualizing Multi-source Remote Sensing Data Remote Sensing Data* *by Mr Chuanbin LIU, ShanDong University of Science and Technology, China* 11:10 – 11:30: PyRS - Python Package for Remotely Sensed Data Processing* *by Mr Xichen MENG, Shandong University of Science and Technology, China*	N003
12:00 – 13:30	*Lunch @ Chinese Restaurant (聚賢樓), 4/F, Communal Building*	

online presentations

11 May 2023 (Thu) PM		
13:30 – 14:00	**Keynote Speech 3:** Experiences from several Erasmus+ Education Projects *by Prof. Georg GARTNER, Vienna University of Technology*	N003

11 May 2023 (Thu) 14:00 – 16:00 Session Chair: Prof. Georg Gartner	**Session 5/6: Promotion of Materials on Geomatics & Emerging Techniques in Surveying** 14:00 – 14:20: Design and Implementation of the Integrated Practicum of Geomatics According to Engineering Education Accreditation *by Prof. Ling ZHU, Beijing University of Civil Engineering and Architecture, China* 14:20 – 14:40: Designing Blinded Experiments for Bias Mitigation in Geophysical Surveying Subject *by Dr Wallace LAI, The Hong Kong Polytechnic University, Hong Kong* 14:40 – 15:00: Measure Up: A Serious Game for Topographic Education *by Mr Jelle VERMANDERE, KU Leuven, Belgium* 15:00 – 15:20: Building3D: A Urban-Scale Dataset and Benchmarks for Learning Roof Structures from Point Clouds* *by Prof. Ruisheng WANG, University of Calgary, Canada* 15:20 – 15:40: Nurturing Talents of Geomatics Surveyors to Meet the Challenges of Land Supply, Works Projects and Smart City of Hong Kong *by Mr Ben Siu-bun CHAN, The Hong Kong Polytechnic University, Hong Kong* 15:40 – 16:00: Development of AI-Hardware Related Curriculum for Universities in Brandenburg and Bavaria: Visions and Experiences from BB-KI Chips *by Ms Zhouyi XIONG, Technical University of Munich, Germany*	N003
15:30 – 16:00	*Tea break*	
11 May 2023 (Thu) 16:00 – 18:20 Session Chair: Dr Wei YAO	**Session 7/8: Multi-level Surveying Education & Cost-effective Surveying Education** 16:00 – 16:20: Monitoring Work Progress of Dam Construction based on Photogrammetric Point Clouds and BIM Building Elements *by Prof. Pratama Arliandy, Jakarta State Polytechnic, Indonesia* 16:20 – 16:40: Environment Monitoring along China-Europe Railway Express with Remote Sensing and Artificial Intelligent Technology: A Regional Collaboration Project between China and Serbia *by Dr Xian GUO, Beijing University of Civil Engineering and Architecture, China* 16:40 – 17:00: Using Indoor Positioning Technology to Evaluate Students' Academic Performance with Their Classroom Performance *by Dr Keru LU, The Hong Kong Polytechnic University, Hong Kong* 17:00 – 17:20: Interdisciplinary Approach to Curricula Development in Geomatics Education: Erasmus+ LBS2ITS Project *by Dr Guenther RETSCHER, Vienna University of Technology (TUW), Austria* 17:20 – 17:40: Reflections on the State of Geomatics Engineering Curricula in Spanish Higher Education *by Prof. Angel COLLADO, University of Castilla-La Mancha (UCLM), Spain* 17:40 – 18:00: A Comparative Study on Multi-source Remote Sensing Image Registration Algorithms* *by Ms Yiyao WANG, Shandong University of Science and Technology, China* 18:00 – 18:20: Virtual Reality Traverse: A Novel Way to Teach Traverse Surveying *by Dr Lawrence LAU, The Hong Kong Polytechnic University, Hong Kong*	7/8N003

online presentations

12 May 2023 (Fri) AM		
9:20 – 10:20 Session Chair: Dr Xiaolin ZHU	**Session 9: Innovation for Asset Management** 9:00 – 9:20: Establishment and Practice of Undergraduate Education System for Marine Surveying and Mapping in the New Stage *by Prof. Fanlin YANG, Shandong University of Science and Technology, China* 9:20 – 9:40: The "Integration of Science and Education, International Cooperation" Mode of Training Talents in Geomatics *by Prof. Chaoying ZHAO, Chang'an University, China* 9:40 – 10:00: From Tectonic Geodesy to Natural Disasters: Video, Science and Response *by Dr Ting CHEN, Wuhan University, China* 10:00 – 10:20: A Comparison Study on Feature Extraction and Matching using Manually Designed and Deep Learning-based Methods *by Mr Zhanquan LIU, Shandong University of Science and Technology, China*	N003
10:20 – 10:40	*Tea break*	
10:20 – 11:00 Session Chair: Dr Xiaolin ZHU	**Session 9: Innovation for Asset Management** 10:20 – 10:40: Technical Approach A 2d GNSS Cadastral Survey on Prismatic Compass Lot *by Mr Abdul Khaliq BUJANG, Brunei Survey Department, Brunei Darussalam* 10:40 – 11:00: Comprehensive Analysis of UNet Backbone and Decoder for Deep Learning-based Building Segmentation *by Dr Jian YANG, University of Tsukuba, Japan*	N003
11:20 – 11:30	**Closing Ceremony**	

More conference information: https://www.polyu.edu.hk/lsgi/icge22/

Conference Abstract Proceedings:

Updated Programme: