



Athens Institute for Education and Research
A World Association of Academics & Researchers



4th Annual International Conference on Engineering Education & Teaching, 3-6 June 2019, Athens, Greece

Organized by the [Engineering & Architecture Division](#) & the [Education Unit](#) of ATINER

Sponsored by the [Athens Journal of Technology & Engineering](#)

Conference Venue: Titania Hotel, 52 Panepistimiou Avenue, Athens, Greece (close to metro station *Panepistimio*)

Monday 3 June 2019

07:50-08:40 Registration and Refreshments

08:50-09:20 (Room B - 10th Floor): [Welcome and Opening Address](#) by Gregory T. Papanikos, President, ATINER and David Philip Wick, Director, Arts, Humanities & Education Division, ATINER & Professor of History, Gordon College, USA.

09:30-11:00 Session I (Room A - 10th Floor): Project-based Learning

Chair: Virginia Sisiopiku, Head, Transportation Engineering Unit, ATINER, & Associate Professor, The University of Alabama at Birmingham, USA.

1. [Sergey Dubikovsky](#), Associate Professor, Purdue University, USA, Katherine Minarik, Graduate Student, Purdue University, USA & Peng Hao Wang, Assistant Professor, Purdue University, USA. A Correlation between Operational Status of Equipment and Technical Proficiencies of Aeronautical Engineering Technology Students: A Case Study.
2. Gene Hou, Professor, Old Dominion University, USA. Cross-Departmental Collaboration for a Project Based Senior Class: Intelligent Machines.
3. [Kian Jon Ernest Chua](#), Associate Professor, National University of Singapore, Singapore & Md Raisul Islam, Senior Lecturer, National University of Singapore, Singapore. Studying the Effectiveness of Combining Flipped Classroom to an Engineering Project Based Learning Module.
4. [Jing Liang](#), Professor, China University of Mining and Technology, China & Rongli Jiang, Dean, Department of Applied Chemistry, China University of Mining and Technology, China. Developing Students' Critical Thinking, Problem Solving, and Analysis Skills in a Problem-based Organic Synthesis Course.

11:00-12:30 Session II (Room A - 10th Floor): Innovative Teaching Methods and Technologies

Chair: Sergey Dubikovsky, Associate Professor, Purdue University, USA.

1. [Tom Wanyama](#), Assistant Professor, McMaster University, Canada, Ishwar Singh, Professor, McMaster University, Canada & Omar Danta, Facilities Manager, McMaster University, Canada. A Platform for Teaching PLC System Integration and PLC Systems Data Access.
2. Anneli Kakko, Project Manager & Senior Lecturer, JAMK University of Applied Sciences, Finland. Smart HEI-Business Collaboration for Skills and Competitiveness.
3. [Md Raisul Islam](#), Senior Lecturer, National University of Singapore, Singapore & Kian Jon Ernest Chua, Associate Professor, National University of Singapore, Singapore. The Hybrid Interactive Platform – Blended Learning Pedagogy for Concept-Heavy Engineering Modules to Foster Engagement and Learning.

12:30-14:00 Session III (Room A - 10th Floor): Emerging Technologies

Chair: Srdjan Vujicic, Professor, University of Dubrovnik, Croatia.

1. Grzegorz Sierpinski, Associate Professor, Silesian University of Technology, Poland & Marcin Staniek, Assistant Professor, Silesian University of Technology, Poland. Intelligent Solutions Supporting the Development of Electromobility.
2. Marcin Staniek, Assistant Professor, Silesian University of Technology, Poland & Grzegorz Sierpinski, Associate Professor, Silesian University of Technology, Poland. The Potential and Limitations of Transport System as Factors Affecting the Development of Electromobility.
3. Simon Cohen, Senior Researcher, IFSTTAR, France & Zoi Christoforou, Associate Researcher / Associate Professor, IFSTTAR / Ecole des Ponts ParisTech, France. Travel Time Estimation by Bluetooth and FCD Technologies: A Comparison Study on Motorway.
4. Sheikh Shahriar Ahmed, Graduate Research Assistant, University at Buffalo, The State University of New York, USA, Grigorios Fountas, Lecturer, Edinburgh Napier University, UK, Ugur Eker, Researcher, University at Buffalo, The State University of New York, USA, Stephen E. Still, Professor, University at Buffalo, The State University of New York, USA & Panagiotis Ch. Anastasopoulos, Associate Professor, University at Buffalo, The State University of New York, USA. An Empirical Exploratory Analysis of Potential Residence Relocation Trends from the Future Introduction of Flying Cars.

This session is jointly offered with the Transportation Engineering Unit.

14:00-15:00 Lunch

15:00-16:30 Session IV (Room A - 10th Floor): Experiential Learning

Chair: George S. Tsagaris, Associate Professor, Cleveland State University, USA.

1. Geok Chin Ivy Tan, Associate Professor, Nanyang Technological University, Singapore. Student-Teachers' Conception and Perception of the Use of the Inquiry-Based Approach in Geography Fieldwork in Singapore.
2. YM Tang, Teaching Fellow, The Hong Kong Polytechnic University, Hong Kong, To Sum Ho, Assistant Professor, The Hong Kong Polytechnic University, Hong Kong & Chun Ho Wu, Assistant Professor, The Hong Kong Polytechnic University, Hong Kong. Engineering Education with Mixed Reality (MR).
3. Jose Miguel Alvarez Romero, PhD Student, Instituto Universitario de Microgravedad "Ignacio Da Riva" (IDR/UPM), Spain, Elena Roibas-Millan, Professor, Instituto Universitario de Microgravedad "Ignacio Da Riva" (IDR/UPM), Spain, Santiago Pindado, Professor, Instituto Universitario de Microgravedad "Ignacio Da Riva" (IDR/UPM), Spain, Javier Pérez-Álvarez, Professor, Instituto Universitario de Microgravedad "Ignacio Da Riva" (IDR/UPM), Spain & Ángel Sanz-Andrés, Professor, Instituto Universitario de Microgravedad "Ignacio Da Riva" (IDR/UPM), Spain. UPMSAT-2 Communications System Design, Integration and Testing, within MUSE (Master in Space Systems) Academic Plan.

21:00-23:00 Greek Night and Dinner

Tuesday 4 June 2019

08:00-11:00 Session V: An Educational Urban Walk in Modern and Ancient Athens

Group Discussion on Ancient and Modern Athens.
Visit to the Most Important Historical and Cultural Monuments of the City (be prepared to walk and talk as in the ancient peripatetic school of Aristotle)

11:30-13:00 Session VI (Room A - 10th Floor): Student Engagement and Service-Learning

Chair: Anneli Kakko, Project Manager & Senior Lecturer, JAMK University of Applied Sciences, Finland.

1. Aaron Brown, Professor, Metropolitan State University of Denver, USA & Michael Bauer, Sustainability Director, Naropa University, USA. Merging Engineering Education with Service-Learning: How Humanitarian Engineering Education Can Encourage Socially Conscious Engineers.
2. Melanie Basantis, Director, Engineering Outreach/Professor, Rowan University, USA & Kauser Jahan, Department Head Civil Engineering/Professor, Rowan University, USA. A Model for STEM Success, 20 Years of the Attracting Women into Engineering (AWE) Workshop, Sharing the Pedagogy and Assessing the Impact.

13:00-14:30 Session VII (Room A - 10th Floor): Special Topics /Teaching Strategies

Chair: Melanie Basantis, Director, Engineering Outreach/Professor, Rowan University, USA.

1. Srdjan Vujcic, Professor, University of Dubrovnik, Croatia, Nermin Hasanspahic, PhD Student, University of Dubrovnik, Croatia, Ana Gundic, Professor, University of Zadar, Croatia & Niko Hrdalo, PhD Student, University of Dubrovnik, Croatia. Assessment for Adequately Qualified Instructors in Maritime Education and Training Institutions.
2. Krystle Ontong, Lecturer, Stellenbosch University, South Africa. Exploring Place and Space as 'Fluid Centres' for Preparing Geography Student Teachers in Becoming Curriculum-Makers.
3. Arthur Firipis, PhD Student, Deakin University, Australia, Siva Chandrasekaran, Lecturer, Swinburne University of Technology, Australia & Matthew Joordens, Lecturer, Deakin University, Australia. Nurturing Creativity through Differentiation while using 1:1 Mobile Devices for Learning?

14:30-15:30 Lunch

20:00- 21:30 Dinner

Wednesday 5 June 2019
Mycenae and Island of Poros Visit
Educational Island Tour

Thursday 6 June 2019
Delphi Visit

Friday 7 June 2019
Ancient Corinth and Cape Sounion

All ATINER's conferences are organized by the [Academic Council](#). This conference has been organized with the assistance of the following academics, who contributed by a) setting up the program b) chairing the conference sessions, and/or c) reviewing the submitted abstracts and papers:

1. Gregory T. Papanikos, President, ATINER & Honorary Professor, University of Stirling, UK.
2. Nicholas N. Patricios, Vice President of Strategic Planning & Analysis, ATINER and Professor & Dean Emeritus, School of Architecture, University of Miami, USA.
3. Theodore Trafalis, Director, Engineering & Architecture Division, ATINER, Professor of Industrial & Systems Engineering and Director, Optimization & Intelligent Systems Laboratory, The University of Oklahoma, USA.
4. Virginia Sisiopiku, Head, Transportation Engineering Unit, ATINER, & Associate Professor, The University of Alabama at Birmingham, USA.
5. Mike Mavromihales, Academic Member, ATINER & Senior Lecturer and Course Leader, University of Huddersfield, UK.
6. Sergey Dubikovskiy, Associate Professor, Purdue University, USA.
7. Melanie Basantis, Director, Engineering Outreach/Professor, Rowan University, USA.
8. Rosalie Van Baest, Academic Member ATINER & Lecturer, Fontys University of Applied Sciences, The Netherlands.
9. Anneli Kakko, Project Manager & Senior Lecturer, JAMK University of Applied Sciences, Finland.
10. Srdjan Vujcic, Professor, University of Dubrovnik, Croatia.
11. George S. Tsagaris, Associate Professor, Cleveland State University, USA.