

# Athens Journal of Technology & Engineering



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# Athens Journal of Technology & Engineering

*Published by the Athens Institute for Education and Research (ATINER)*

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- Dr. Timothy M. Young, Director, [Center for Data Science \(CDS\)](#) & Professor and Graduate Director, The University of Tennessee, USA.
- Dr. Panagiotis Petratos, Vice-President of Information Communications Technology, ATINER & Fellow, Institution of Engineering and Technology & Professor, Department of Computer Information Systems, California State University, Stanislaus, USA.
- Dr. Nikos Mourtos, Head, [Mechanical Engineering Unit](#), ATINER & Professor, San Jose State University USA.
- Dr. Theodore Trafalis, Director, [Engineering & Architecture Division](#), ATINER, Professor of Industrial & Systems Engineering and Director, Optimization & Intelligent Systems Laboratory, The University of Oklahoma, USA.
- Dr. Virginia Sisiopiku, Head, [Transportation Engineering Unit](#), ATINER & Associate Professor, The University of Alabama at Birmingham, USA.

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*ATINER is an Athens-based World Association of Academics and Researchers based in Athens. ATINER is an independent and non-profit Association with a Mission to become a forum where Academics and Researchers from all over the world can meet in Athens, exchange ideas on their research and discuss future developments in their disciplines, as well as engage with professionals from other fields. Athens was chosen because of its long history of academic gatherings, which go back thousands of years to Plato's Academy and Aristotle's Lyceum. Both these historic places are within walking distance from ATINER's downtown offices. Since antiquity, Athens was an open city. In the words of Pericles, Athens "...is open to the world, we never expel a foreigner from learning or seeing". ("Pericles' Funeral Oration", in Thucydides, The History of the Peloponnesian War). It is ATINER's mission to revive the glory of Ancient Athens by inviting the World Academic Community to the city, to learn from each other in an environment of freedom and respect for other people's opinions and beliefs. After all, the free expression of one's opinion formed the basis for the development of democracy, and Athens was its cradle. As it turned out, the Golden Age of Athens was in fact, the Golden Age of the Western Civilization. Education and (Re)searching for the 'truth' are the pillars of any free (democratic) society. This is the reason why Education and Research are the two core words in ATINER's name.*

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The *Athens Journal of Technology & Engineering (AJTE)* is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas engineering (civil, electrical, mechanical, industrial, computer, transportation etc), technology, innovation, new methods of production and management, and industrial organization. Many of the papers published in this journal have been presented at the various conferences sponsored by the [Engineering & Architecture Division](#) of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's [Publication Ethical Policy and Statement](#).

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The current issue is the fourth of the eighth volume of the *Athens Journal of Technology & Engineering (AJTE)*, published by the [Engineering & Architecture Division](#) of ATINER.

Gregory T. Papanikos, President, ATINER.



## Athens Institute for Education and Research

*A World Association of Academics and Researchers*

### 12<sup>th</sup> Annual International Conference on Civil Engineering 20-23 June 2022, Athens, Greece

The [Civil Engineering Unit](#) of ATINER is organizing its 12<sup>th</sup> Annual International Conference on Civil Engineering, 20-23 June 2022, Athens, Greece sponsored by the [Athens Journal of Technology & Engineering](#). The aim of the conference is to bring together academics and researchers of all areas of Civil Engineering other related areas. You may participate as stream leader, presenter of one paper, chair of a session or observer. Please submit a proposal using the form available (<https://www.atiner.gr/2022/FORM-CIV.doc>).

#### Academic Members Responsible for the Conference

- **Dr. Dimitrios Goulias**, Head, [Civil Engineering Unit](#), ATINER and Associate Professor & Director of Undergraduate Studies Civil & Environmental Engineering Department, University of Maryland, USA.

#### Important Dates

- Abstract Submission: **22 November 2021**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **23 May 2022**

#### Social and Educational Program

The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Atiner.

- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Delphi Visit
- Ancient Corinth and Cape Sounion

#### Conference Fees

Conference fees vary from 400€ to 2000€  
Details can be found at: <https://www.atiner.gr/fees>



## Athens Institute for Education and Research

*A World Association of Academics and Researchers*

### 10<sup>th</sup> Annual International Conference on Industrial, Systems and Design Engineering, 20-23 June 2022, Athens, Greece

The [Industrial Engineering Unit](#) of ATINER will hold its 10<sup>th</sup> Annual International Conference on Industrial, Systems and Design Engineering, 20-23 June 2022, Athens, Greece sponsored by the [Athens Journal of Technology & Engineering](#). The aim of the conference is to bring together academics, researchers and professionals in areas of Industrial, Systems, Design Engineering and related subjects. You may participate as stream leader, presenter of one paper, chair of a session or observer. Please submit a proposal using the form available (<https://www.atiner.gr/2022/FORM-IND.doc>).

#### Important Dates

- Abstract Submission: **22 November 2021**
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More information can be found here: <https://www.atiner.gr/social-program>

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