

NEWS RELEASE 25-JUL-2022

Dan M. Frangopol honored with European Council on Computing in Construction Thorpe Medal

Lehigh University engineering professor co-authored award-winning paper on role of digital technology in developing infrastructure resilient to climate change

Grant and Award Announcement
LEHIGH UNIVERSITY



Dan M. Frangopol, the inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture at Lehigh University, is a co-author of a paper recognized with the 2022 European Council on Computing in Construction (EC³) Thorpe Medal.

The paper, "Digital technologies can enhance global climate resilience of critical infrastructure," was published online in December 2021 in *Climate Risk Management* (Elsevier), a peer-reviewed, open-access journal.

The writing team includes Frangopol—a pioneering researcher in the fields of life-cycle performance analysis, design, maintenance, management, and multi-objective optimization of civil and marine structures under uncertainty—as well as other international experts in fields such as structural safety, risk, resilience, sustainability, structural health monitoring, natural hazards, and climate change effects on infrastructure.

Established in 2018, the award honors Antony Thorpe, a pioneering professor in construction information technology and co-founder of COMIT (Construction Opportunities for Mobile IT), the community for mobile computing in construction. The medal recognizes a paper that "contributes to either practical or research aspects of engineering informatics disciplines in the built environment," according to EC³. A panel evaluates nominated papers on "the practical value of contribution and its impact on engineering informatics practice."

The award will be formally announced July 26, 2022, during the European Conference on Computing in Construction (2022EC³) Conference in Rhodes, Greece. The biennial meeting, organized by the European Council for Computing in Construction, is the premier European conference for information, communication, and technological research, innovation, and policy for the construction sector as a whole in Europe. The event gathers researchers, practitioners, and construction industry professionals from around Europe to meet and share information about the latest developments in all aspects related to computing in construction.

"Existing and emerging digital technologies, such as Internet of Things (IoT), digital twin (DT), and machine learning (ML), as well as cutting-edge modeling will play a leading role in developing and enhancing the resilience of critical infrastructure systems to climate change," says Frangopol. "Leveraging expertise in these fields is key to guiding decision-making to achieve international economic and societal goals that depend on safe, reliable, resilient, and sustainable infrastructure systems."

Frangopol's main research interests are in the development and application of probabilistic and optimization concepts and methods to civil and marine structures under various types of hazards.

He is a distinguished member of the American Society of Civil Engineers and has been recognized with numerous awards and honors from ASCE and other leading professional

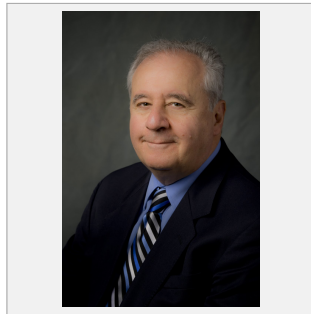


IMAGE: PROFESSOR DAN M. FRANGOPOL IS THE INAUGURAL FAZLUR R. KHAN ENDOWED CHAIR OF STRUCTURAL ENGINEERING AND ARCHITECTURE IN LEHIGH UNIVERSITY'S P.C. ROSSIN COLLEGE OF ENGINEERING AND APPLIED SCIENCE. [view more >](#)

CREDIT: LEHIGH UNIVERSITY

Media Contact

Katie Kackenmeister
Lehigh University
engineering@lehigh.edu

More on this News Release

Dan M. Frangopol honored with European Council on Computing in Construction Thorpe Medal
LEHIGH UNIVERSITY

DOI
[10.1016/j.crm.2021.100387](https://doi.org/10.1016/j.crm.2021.100387)

KEYWORDS

STRUCTURAL ENGINEERING
STRUCTURAL DESIGN CIVIL ENGINEERING
BRIDGE CONSTRUCTION
BUILDING CONSTRUCTION
CLIMATE CHANGE EFFECTS
ENVIRONMENTAL ISSUES
MATHEMATICAL MODELING MODELING
SUSTAINABLE DEVELOPMENT
ARTIFICIAL INTELLIGENCE
COMPUTER SCIENCE MACHINE LEARNING

ORIGINAL SOURCE

<https://engineering.lehigh.edu/news/article/frangopol-honored-european-council-computing-construction-thorpe-medal>

organizations. He is the founder and editor-in-chief of [Structure and Infrastructure Engineering](#), an international peer-reviewed journal launched in 2005.

Frangopol is an elected member of the National Academy of Construction of the United States, an international fellow of the Canadian Academy of Engineering, a foreign member of the Academia Europaea (Academy of Europe, London), a foreign associate of the Engineering Academy of Japan, a foreign member of the Royal Academy of Belgium for Science and the Arts, an honorary member of the Romanian Academy, and an honorary member of the Academy of Technical Sciences of Romania. He holds four honorary doctorates, 14 honorary professorships, and six guest professorships.

Frangopol has authored/co-authored 4 books, 64 book chapters, over 450 articles in peer-reviewed journals, including 13 award-winning papers, and more than 600 papers in conference proceedings. He was ranked as the 10th most-cited civil engineering author in the August 2019 Stanford University worldwide citation survey published in *PloS*, and ranked No. 45 (United States), and No. 95 (World) on April 6, 2022, by Research.com on the list of top scientists in Engineering and Technology.

Frangopol is the founding president of the International Association for Bridge Maintenance and Safety ([IABMAS](#)) and of the International Association for Life-Cycle Civil Engineering ([IALCCE](#)), and the founding vice-president of the International Society for Structural Health Monitoring of Intelligent Infrastructure ([ISHMII](#)). He is also the past vice-president of the International Association for Structural Safety and Reliability ([IASSAR](#)), and past vice-president of the Engineering Mechanics Institute of ASCE and past member of its Board of Governors.

Read more about Frangopol's research and achievements [here](#).

Related Links:

- [Website: Dan M. Frangopol](#)
- [Climate Risk Management: "Digital technologies can enhance global climate resilience of critical infrastructure"](#)
- [European Council on Computing in Construction: Thorpe Medal](#)
- [Rossin College Faculty Profile: Dan M. Frangopol](#)

DOI

[10.1016/j.crm.2021.100387](https://doi.org/10.1016/j.crm.2021.100387)

Disclaimer: AAAS and EurekAlert! are not responsible for the accuracy of news releases posted to EurekAlert! by contributing institutions or for the use of any information through the EurekAlert system.



 facebook.com/EurekAlert

 [@EurekAlert](https://twitter.com/EurekAlert)

 youtube.com/EurekAlert

[Help / FAQ](#)

[Services](#)

[Eligibility Guidelines](#)

[Contact EurekAlert!](#)

[Terms & Conditions](#)

[Privacy Policy](#)

[Disclaimer](#)

 |



Copyright © 2022 by the American Association for the Advancement of Science (AAAS)