

MONDAY, FEBRUARY 17, 2025

Home / News

Prof. Dan Frangopol elected to National Academy of Engineering

Pioneer of life-cycle engineering earns engineering's top accolade

Professor **Dan M. Frangopol**, the inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture, has been elected to the National Academy of Engineering (NAE) for his contributions to life-cycle civil engineering and leadership in its global development and adoption. Election to NAE membership is one of the highest professional honors accorded to engineers.

"I am deeply honored and humbled to have been elected to the National Academy of Engineering," says Frangopol. "Both the University of Colorado Boulder and Lehigh University have provided great academic environments and colleagues. This honor would not have been possible without the excellent students, post-doctoral researchers and visiting scholars who inspired me during my academic career, and without the unwavering support of my wife."

NAE membership honors those who have made outstanding contributions to engineering practice, research, or education, to the pioneering of new and developing technological fields, to major advancement in traditional fields of engineering, to the development and implementation of innovative approaches to engineering education and leadership. Individuals elected to the NAE are among the most accomplished engineers globally, representing diverse fields from across business, academia, and government; they are called upon to provide expertise and advice on critical issues affecting the nation and the world.

"Dan's election acknowledges his groundbreaking work in life-cycle civil engineering and his outstanding leadership in its global development and application," says **Shamim Pakzad**, chair of the Department of Civil and Environmental Engineering at Lehigh. "Since his arrival at Lehigh in 2006, Frangopol has made transformative contributions to structural reliability, optimization, and sustainable infrastructure management. His work represents the dedication to research and scholarship that our department strives to cultivate."

About Dan Frangopol

Frangopol, the inaugural holder of the Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture at Lehigh and Professor Emeritus of Civil Engineering at the University of Colorado Boulder, is internationally acclaimed for pioneering the field of life-cycle civil engineering. He is credited with the development of the field of life-cycle civil engineering and with setting the stage for its use across civil engineering practice.

Frangopol's main research interests are in the development and application of probabilistic and optimization concepts and methods to civil and marine engineering in a life-cycle context, including: structural reliability and probabilistic mechanics; life-cycle cost analysis; probability-based assessment, design, and multi-criteria life-cycle optimization of structures and infrastructure systems; structural health monitoring; life-cycle performance maintenance and management of structures and distributed infrastructure under extreme events (earthquakes, tsunamis, hurricanes, and floods); risk-based assessment and decision-making; multi-hazard risk mitigation; infrastructure sustainability and resilience to disasters; and climate change adaptation.

His contributions have earned numerous research, education (including the ASCE OPAL Lifetime Achievement in Education), and service awards from several organizations including the American Society of Civil Engineers (ASCE), the International Association for Bridge and Structural Engineering (IABSE), the International Association for Structural Safety and Reliability (IASSAR), the International Society for Structural Health Monitoring of Intelligent Infrastructure (ISHMII), and the International Society of Automotive Engineers (SAE International), among others.

A prolific scholar, Frangopol has authored/coauthored four books, over 60 book chapters, and more than 500 peer-reviewed journal articles, including 15 award-winning papers. He holds five honorary doctorates and 14 honorary professorships and has achieved membership in eight academies, spanning the U.S., Canada, Mexico, Japan, Belgium, Romania, Europe, and beyond.

In 2023, ASCE established the **Dan M. Frangopol Medal for Life-Cycle Engineering of Civil Structures** to honor his groundbreaking work.

Frangopol is a teacher and mentor who committed most of his career to furthering civil engineering education around the world. He is the founding president of two international associations, International Association for Bridge Maintenance and Safety (IABMAS) and the International Association for Life-Cycle Civil Engineering (IALCCE), with over 3,000 members from 75 countries, where membership is free and major biennial conferences, usually held on different continents, promote international cooperation and the enhancement of society's overall welfare. Frangopol is also the founder and editor-in-chief of *Structure and Infrastructure Engineering*, a well-respected international peer-reviewed journal launched in 2005.

Prof. Frangopol has supervised the dissertations of 50 PhD students (37 as dissertation advisor and 13 as co-advisor) and the theses and reports of 56 MS students. In addition, he has supervised and sponsored 22 post-doctoral researchers and hosted over 70 visiting scholars. Thirty of his former doctoral students and post-doctoral researchers are university professors in the United States and abroad, and many are prominent in professional practice and research laboratories. He is also the initiator and organizer of Lehigh's **Fazlur R. Khan Distinguished Lecture Series** and the founder of the **Computational Laboratory for Life-cycle Structural Engineering**.

Steve DeWeerth, professor and dean of the P.C. Rossin College of Engineering and Applied Science, says, "Professor Frangopol's election to the NAE is a testament to his exceptional contributions over a long and distinguished career in engineering education and research. His work exemplifies the innovative spirit and commitment to excellence that define us as an institution. As the creator of life-cycle engineering and a mentor to the first wave of engineers schooled in the field, Dan absolutely embodies Lehigh's commitment to inspiring future makers."

Professor Frangopol will be formally inducted during the NAE's Annual Meeting on Oct. 5, 2025. For more about his work, visit [his Web site](#).



Dan M. Frangopol, inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture, Department of Civil and Environmental Engineering, Lehigh University



The Dan M. Frangopol Medal for Life-Cycle Engineering of Civil Structures was officially endorsed by the ASCE Board of Direction on October 18, 2023.

Related News

Prof. Hannah Dailey receives Presidential Early Career Award
Tue, Feb 4, 2025

Prof. Vinod Nambodiri named inaugural Forlenza Endowed Chair in Health Innovation and Technology
Wed, Jan 29, 2025

Lehigh awarded \$800K DOE grant for advanced computational materials modeling
Wed, Jan 29, 2025

Related Links:

- [Web site: Professor Dan M. Frangopol, Lehigh University](#)
- [Web site: Dan M. Frangopol Medal for Life-Cycle Engineering of Civil Structures](#)
- [Wikipedia: Dan M. Frangopol](#)

Media Coverage:

- [NAE: National Academy of Engineering Elects 128 Members and 22 International Members](#)

Department/Program:

- [Civil & Environmental Engineering](#)
- [College of Engineering](#)
- [Institute for Cyber Physical Infrastructure and Energy](#)



DIRECTORY

MAPS

CONTACT

EMERGENCY INFO

WEB
ACCESSIBILITY

LEHIGH MOBILE
APP

ACCOUNT

TERMS OF USE

PRIVACY

HIGHER EDUCATION
OPPORTUNITY ACT

EQUITABLE
COMMUNITY

NON-
DISCRIMINATION

ANNUAL SECURITY
& ANNUAL FIRE
SAFETY REPORT

REPORT A
CONCERN

P.C. ROSSIN COLLEGE of ENGINEERING & APPLIED SCIENCE



(610) 758 4025



19 Memorial
Drive W.
Lehigh
University
Bethlehem, PA
18015



engineering@lehigh.edu

RESOLVE MAGAZINE →

STUDENT RESOURCES →

APPLY NOW →

CHAT WITH US →