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Frangopol, former Ph.D. student win prestigious civil engineering award

The [American Society of Civil Engineers](#) (ASCE) has bestowed a prestigious award on Dan M. Frangopol, professor of civil engineering, and his former graduate student, Nader M. Okasha.

Frangopol and Okasha have been selected by ASCE to receive the 2012 [Arthur M. Wellington Prize](#) for their paper that was published in the Journal of Structural Engineering.

The Wellington Prize recognizes a paper that discusses transportation on land, on water, in the air or on foundations and closely related subjects. It was endowed in 1912 by the structural engineering journal Engineering News-Record in honor of Arthur M. Wellington (1847-1895), an American civil engineer who designed and built railroads in Mexico and wrote The Economic Theory of Railway Location.

The paper by Frangopol and Okasha, which was published in August 2010, was titled "Novel Approach for Multicriteria Optimization of Life-Cycle Preventive and Essential Maintenance of Deteriorating Structures."

The award will be presented in October at ASCE's annual conference in Montreal. It represents the most significant contribution to the field of transportation from all of ASCE's 30-plus journals (more than 7,000 papers per year) published from July 1, 2010, to June 30, 2011.

[Frangopol](#) is the Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture. Okasha, now an assistant professor at a university in Saudi Arabia, is one of 35 Ph.D. students whom Frangopol has advised in three decades as a university professor in the United States. In 2009, [Okasha won the Nevada Medal](#) for Distinguished Graduate Student in Bridge Engineering in an international competition.

ASCE award supplements honors in Europe and China

The Wellington Prize is one of several noteworthy honors Frangopol has recently received. In March, he was selected as one of about 60 Inaugural Fellows of ASCE's [Structural Engineering Institute](#), which has more than 20,000 members.

Also in March, Frangopol was the only U.S. expert named to a 12-person international team that evaluated 10 institutes related to civil and environmental engineering at the [Swiss Federal Institute of Technology](#) (ETH) in Zurich.

On April 12, Frangopol presented the [Wenyuan](#) Lecture, titled "Life-Cycle Reliability, Risk and Resilience of Civil Infrastructure Systems," at [Tongji University](#) in Shanghai. The next day he was elected the first honorary member of the newly formed [China Group](#) of the [International Association for Bridge Maintenance and Safety](#) (IABMAS).

In June, Frangopol will join a team of eight experts evaluating research departments at the [Royal Institute of Technology](#) (KTH) in Stockholm.

Frangopol's research focuses on life-cycle performance, safety, reliability, risk and multi-criteria optimization of structural systems; bridge inspection, maintenance, and management based on life-cycle cost under uncertainty; reliability and risk-oriented structural health monitoring; risk-based decision making in structural engineering; stochastic analysis and optimization of networks of damaged structures under extreme events; and infrastructure resilience to disasters. He is also interested in application of methods of probability and statistics to marine engineering, probabilistic engineering mechanics, and earthquake engineering.

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