NEWS RELEASE 5-MAY-2020

ASCE honors Dan Frangopol, Yan Liu with 2020 Raymond C. Reese Research Prize

Lehigh University civil and environmental engineering professor and former postdoc recognized for achievements in structural engineering research

LEHIGH UNIVERSITY

Dan M. Frangopol, the inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture at Lehigh University, and his former postdoc Yan Liu, an associate professor at the School of Naval Architecture and Ocean Engineering in Wuhan, Hubei, China, are the recipients of the 2020 Raymond C. Reese Research Prize awarded by the American Society of Civil Engineers (ASCE).

IMAGE: DAN M. FRANGOPOL, FAZLUR R. KHAN ENDOWED CHAIR OF STRUCTURAL ENGINEERING AND ARCHITECTURE, P.C. ROSSIN COLLEGE OF ENGINEERING AND APPLIED SCIENCE, LEHIGH UNIVERSITY view more ›

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According to ASCE, which represents more than 150,000 members of the civil engineering profession in 177 countries, this prestigious prize is:

"awarded to the author or authors of a paper in a print issue of an ASCE journal in the twelve-month period ending with June of the year preceding the year of the award that describes a notable achievement in research related to structural engineering and which indicates how the research can be used. The paper should include the results of research (experimental and/or analytical) and, in particular, should indicate and recommend how the research can be applied to design; it is this latter feature that is considered to be most important."

ASCE established the award in 1970 to recognize outstanding contributions to the application of structural engineering research. In this context, the 2020 Raymond C. Reese Research Prize was awarded to recognize the outstanding achievement in research related to structural engineering and, in particular, the novelty of the proposed design approach using utility theory to consider the attitude and preference of the decision maker toward the inspection outcome and its application to design of an integrated decision-making framework for optimum inspection planning of fatigue sensitive structures, such as highway bridges and naval ships. The results of this outstanding research were shared with the academic and professional community through the article "Utility and Information Analysis for Optimum Inspection of Fatigue-Sensitive Structures," which appeared in the *ASCE Journal of Structural Engineering*, Volume 145, Number 2 (February), 2019.

This is the 11th award-winning journal paper of Frangopol and his current and former PhD students and postdocs, including nine from ASCE (Alfred Noble Prize (2015), Croes Medal (2001 & 2014), Moisseiff Award (2003), Reese Research Prize (2020), State-of-the-Art of Civil Engineering Award (1998, 2004, 2019), and Wellington Prize (2012)), one from IABSE (Outstanding Paper Award (2007)), and one from Elsevier (Munro Prize(2006)).

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Dan M. Frangopol (IMAGE)

ORIGINAL SOURCE

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