

2022 SOCIETY AND EMI AWARD RECIPIENTS

Zdeněk P. Bažant Medal for Failure and Damage Prevention

HUAJIAN GAO, PH.D., AFF.M.ASCE

Nanyang Technological University, Singapore



"for his contributions to fracture mechanics and failure prevention in nanostructured materials, including metals, metamaterials and battery electrodes"

Maurice A. Biot Medal

JIAN-FU SHAO, PH.D.

University of Lille, France



"for his seminal contributions to understanding the role of microstructure to macroscopic behavior of porous materials"

Alfred M. Freudenthal Medal

CHRISTIAN SOIZE, PH.D.

University of Marne-la-Vallée, France



"for his fundamental contributions to computational stochastic mechanics and its application to emerging problems in engineering"

George W. Housner Structural Control & Monitoring Medal

SHIRLEY J. DYKE, PH.D., A.M.ASCE

Purdue University



“for her ground-breaking research and innovative contributions to develop structural control and monitoring systems, as well as her dedication in the training and professional development of the next generation of engineers”

Raymond D. Mindlin Medal

SOMNATH GHOSH, PH.D., F.EMI, M.ASCE

Johns Hopkins University



“for his outstanding novel contributions to the field of computational mechanics of materials through development of fundamental concepts in spatiotemporal multi-scale, multi-physics modeling of metals, composites and multifunctional materials, and bridging the mechanics and materials communities through strong interdisciplinary leadership”

Nathan M. Newmark Medal

GIOVANNI SOLARI, P.E., F.EMI, M.ASCE

Università di Genova

(posthumously)

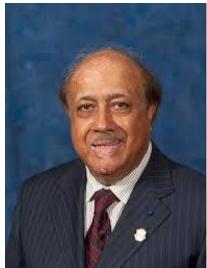


“for his outstanding contributions to wind engineering and their impact on structural engineering and mechanics”

Nathan M. Newmark Medal (2021)

AHSAN KAREEM, PH.D., F.EMI, NAE, DIST.M.ASCE

University of Notre Dame



“for his innovative contributions to advancements in a wide range of areas in structural engineering and engineering mechanics from theory and practice to leadership and education”

Robert H. Scanlan Medal

BALAKUMAR BALACHANDRAN, PH.D., A.M.ASCE

University of Maryland



“for his distinguished contributions in nonlinear, engineering mechanics, with a focus on structures and aeroelasticity, including wind energy harvesters”

Theodore von Kármán Medal

ROGER GHANEM, PH.D., F.EMI, A.M.ASCE

University of Southern California

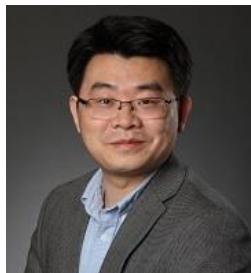


“for his lasting contributions to the field of stochastic mechanics its application to emerging problems in science and engineering”

EMI Leonardo Da Vinci Award

QIMING WANG, PH.D.

University of Southern California



"for his groundbreaking research in mechanics of bioinspired living materials made by integrating living components (including living chemistry, living bacteria, and living plants) into engineering materials to achieve self-healing, self-growing, and self-strengthening"

J. James R. Croes Medal

AHSAN KAREEM, PH.D., F.EMI, NAE, DIST.M.ASCE

University of Notre Dame



for the paper, *"Dynamic Mode Decomposition of Random Pressure Fields over Bluff Bodies,"* won jointly with Xihaier Luo, Ph.D., Aff.M.ASCE, published in the Journal of Engineering Mechanics, April 2021.



XIHAIER LUO, PH.D., AFF.M.ASCE

Brookhaven National Laboratory

Dr. Kareem and Dr. Luo will both receive the J. James Croes Medal at the ASCE Convention, October 23-26, 2022, Anaheim, CA.

Walter L. Huber Civil Engineering Research Prizes

HAO WANG, PH.D., M.ASCE

Rutgers University



“for the development of sustainable, durable, resilient, and smart pavement systems through innovative material science, computational modeling, and life-cycle analysis”

GAURAV N. SANT, PH.D., A.M.ASCE

University of California, Los Angeles



“for the development of carbon dioxide utilization processes and technologies relevant to the production of carbon-neutral and carbon-negative construction materials. The fundamental scientific research by Dr. Sant has opened avenues to commercialization of technologies as well”

Dr. Wang and Dr. Sant will both receive the Huber Research Prizes at the ASCE Convention, October 23-26, 2022, Anaheim, CA.

Jack E. Cermak Medal

TIMOTHY A. REINHOLD, PH.D., P.E., M.ASCE

Insurance Institute for Business & Home Safety
(award presented at the SEI Structures Congress)