

## 2022 SOCIETY AND EMI AWARD RECIPIENTS

### **Zdeněk P. Bažant Medal for Failure and Damage Prevention**

**HUAIJIAN 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-Vallee, 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

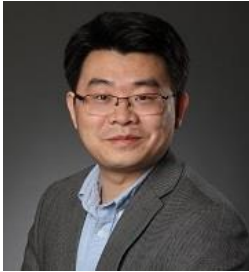


*“for his lasting contributions to the field of stochastic mechanics its application to emerging problems in science and engineering”*

## **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”*

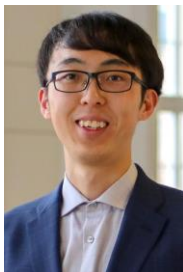
## **J. James R. Croes Medal**

**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)*