

2021 CNU-ACE (Architecture and Civil Eng.) Mini Symposium

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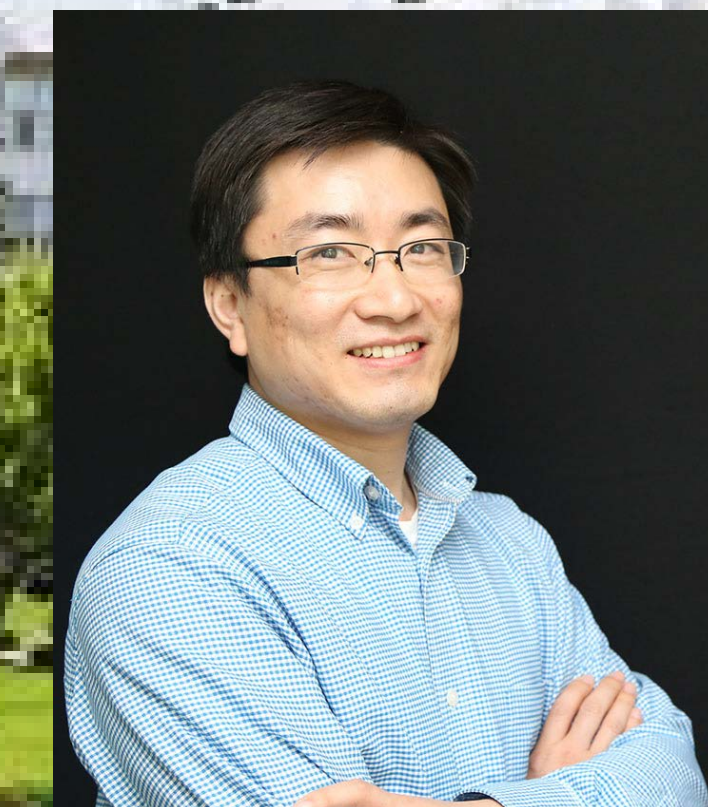
December 3, 2021

Started from 09:00 (Seoul)

Invited Speakers



Kyung-Hee Kim
(U. of North Carolina)



Sheng Dai
(Georgia Institute
of Technology)



Douglas Cortes
(New Mexico State Univ.)



Ruchi Choudhary
(U. of Cambridge &
The Alan Turing Institute)

Toward Carbon Neutrality:
Performance-based
Design

Properties of granite
at elevated temperature
using nano-indentation

A bio-inspired approach
to subsurface
exploration on the Moon

Subsurface
Environments

Biography of Invited Speakers

Kyung-Hee Kim (U. of North Carolina)

Kyoung Hee Kim, Ph.D, AIA, is an Associate Professor of Architecture and the Director of the Integrated Design Research Lab at the University of North Carolina at Charlotte. Her expertise lies in performance-based design, innovative building systems integration and high-performance facades as a way to improve the sustainability of the built environment. Dr. Kim is a recipient of grants from National Science Foundation (NSF) and American Institute of Architects (AIA) to develop advanced building technologies toward net zero energy architecture. Dr. Kim holds a Bachelor of Architectural Engineering from CBNU, Korea, and a Master of Architecture and a Ph.D. in Architecture from the University of Michigan.

Sheng Dai (Georgia Institute of Technology)

Sheng Dai, Ph.D., P.E., is an Associate Professor and Group Coordinator of geosystems engineering at Georgia Tech. His research group strives to advance the fundamental understanding and predictive capabilities of geomechanics for energy and the environment, including areas of subsurface energy recovery and storage, granular mechanics, geomaterials at elevated pressure and temperature, and subsurface multiphase flow.

Douglas Cortes (New Mexico State Univ.)

Douglas Cortes is the Harold Foreman Endowed Professor for Excellence in Civil Engineering at New Mexico State University. He received his BS, MS, and PhD degrees from the Georgia Institute of Technology, Atlanta, GA, USA. He is the secretary of the ASCE Sustainability in Geotechnical Engineering Committee, the Principal Investigator for NMSU's new NASA M-STAR grant, a senior investigator at the Center for Bio-mediated and Bio-inspired Geotechnics and the POC for New Mexico State University at the Lunar Surface Innovation Consortium. His research interests include bio-inspired geotechnics, ground improvement, wireless underground sensor networks, and planetary landed exploration, construction and mining.

Ruchi Choudhary (U. of Cambridge & The Alan Turing Institute)

Ruchi Choudhary is Professor in the Department of Engineering, University of Cambridge and Group Leader in Data-centric Engineering, Alan Turing Institute. She is leading the multi-disciplinary Energy Efficient Cities initiative (EECi) with colleagues in transport technologies and urban planning. Her current research concerns urban-scale energy simulation of built environments, with specific emphasis on uncertainty analysis and retrofits of existing buildings. The work investigates how simulation science can support pathways towards energy efficient cities, taking into account large variability among buildings, and a highly dynamic context associated with economics, regulations, and the influence of new emerging technologies.