

iFAST: The International Forum on Advanced Environmental Sciences and Technology

A series of distinguished seminars by eminent scientists

8:00 pm CDT; 9:00 pm EDT; 1:00 am GMT (Oct. 22) ; 9:00 am Beijing (Oct. 22)

Wednesday, October 21, 2020



Richard Luthy

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<https://luthygroup.stanford.edu/>

Richard G. Luthy is the Silas H. Palmer Professor of Civil and Environmental Engineering and Senior Fellow in the Woods Institute for the Environment at Stanford University. He is the director of the NSF Engineering Research Center for Re-inventing the Nation's Urban Water Infrastructure, a four-university consortium that seeks more sustainable solutions to urban water challenges in the arid west. His area of teaching and research is environmental engineering and water quality with applications to water reuse, stormwater use, and systems-level analysis of our urban water challenges. His research addresses management of persistent organic contaminants and contaminants of emerging concern in natural systems that are engineered to improve water quality and protect the environment and human health. He is a past President of the Association of Environmental Engineering and Science Professors and past chair of the National Research Council's Water Science and Technology Board. He is a member of the National Academy of Engineering, a member of the Academy of Distinguished Alumni—Department of Civil and Environmental Engineering, UC Berkeley, and a Fellow of the Water Environment Federation. He is a founding board member of the new ACS Journal— *ES&T Engineering*.

The Urban Water Revolution: Sustainable Water Supplies for Semi-arid Cities

California has consistently altered natural water resources to provide water for its growing population and to support the fifth-largest economy in the world. However, the old ways of coping with the California's urban water needs—overdraft of groundwater, stream depletion, and greater imports—will no longer meet the demands of the 21st century. Promising solutions to the challenge of urban water security include a combination of conservation and efficiency, desalination, stormwater capture, water reuse, and water banking. These options for urban water, including direct potable reuse, will help dry cities in California and elsewhere achieve more sustainable and diversified water supply portfolios. Pilot and demonstration-scale projects, along with innovations in systems management and new regulations, point the way towards more resilient water supplies for dry cities. Movement towards regional collaboration, implementation of new technologies, and new regulatory regimes are helping to realize a one-water vision.



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Register for the Zoom conference at www.ou.edu/ieg/seminars

Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; <https://www.ou.edu/ieg>)
Xueduan Liu (Central South University, China)

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