

# Kimberly E. Kurtis

## Associate Dean for Faculty Development and Scholarship & Professor

Structural Engineering, Mechanics and Materials; Construction and Infrastructure Systems Engineering Resilient Infrastructure Systems, Smart Cities, Sustainable Communities

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- <https://www.facebook.com/Kurtis00group/?ref=bookmarks>
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### Biography

Ph.D., Civil Engineering, University of California at Berkeley, 1998.

M.S., Civil Engineering, University of California, Berkeley, 1995.

B.S.E., Civil and Environmental Engineering, Tulane University, 1994.

Dr. Kimberly (Kim) E. Kurtis is Professor in the School of Civil and Environmental Engineering at Georgia Institute of Technology. She has served as Associate Dean of Faculty Development and Scholarship in the College of Engineering since 2014 and was interim chair of the School for the 2017-2018 academic year. Dr. Kurtis earned her BSE in civil engineering from Tulane University under a Deans Honor Scholarship and her Ph.D. in civil engineering from the University of California at Berkeley, where she was a Henry Hilp Fellow and a National Science Foundation (NSF) Fellow.

Dr. Kurtis's innovative research on the multi-scale structure and performance of cement-based materials has resulted in more than 100 technical publications and two US patents. In addition to her technical and educational service contributions at the American Concrete Institute (ACI), American Ceramics Society (ACerS), Portland Cement Association (PCA),

Transportation Research Board (TRB), American Association of State and Highway Transportation Officials (AASHTO), and Federal Highway Administration (FHWA), she has held two leadership positions – Chairman of ACI Committee 236: Materials Science of Concrete (2006-2012) and Chair of American Ceramic Society’s Cements Division (2008-2009) – central to advancing science-based research on cement-based materials. Dr. Kurtis has served as Associate Editor of ASCE Journal of Materials in Civil Engineering and as an Editorial Board member of Cement and Concrete Composites. Having previously served six years on ACI’s Educational Activities Committee (EAC), she is currently appointed to ACI’s 12-member Technical Activities Committee, which oversees development of ACI standards, technical committee activities, and technical content presented at ACI conventions and in archival publications. Since 2018, she has been Trustee at the ASCE Foundation, representing District 5.

She has been honored with ACI ’s Walter P. Moore, Jr. Faculty Achievement Award (2005), ACI’s Del Bloem Award for Service (2013), Outstanding Senior Undergraduate Research Mentor Award at Georgia Institute of Technology (2013), the ACI James Instruments Award for Research on NDE of Concrete (2008), Award for Outstanding Article in ASTM’s Journal of Testing and Evaluation (2010), and ASCE’s Huber Civil Engineering Research Prize (2013). Dr. Kurtis is a Fellow of the American Concrete Institute and the American Ceramics Society.

## Research Interests

- Multi-scale structure, properties, and durability of cement-based materials
- Sustainable infrastructure materials
- Development of novel methods for multiscale characterization of infrastructure materials
- Fiber-cement composites
- Applications of nondestructive evaluation methods to cement-based materials
- Upscaling of emerging concrete technology

## Honors & Awards

- AASHTO Sweet 16 High Value Research Project Award for “Corrosion-free Precast Prestressed Concrete Piles made with Stainless Steel Reinforcement: Construction, Test, and Evaluation” with Preet Singh and Larry Kahn, via Georgia DOT, 2016.
- ASCE Biot Lecture, “21ST Century Cement Technology: Addressing Sustainability through Innovation” delivered at Columbia University, October 17, 2016.
- Outstanding Reviewer, Cement and Concrete Research, 2015.

- Outstanding Paper Award, Materials and Structures, 2015, for “Quantitative evaluation of carbonation in concrete using nonlinear ultrasound.”
- ASCE Walter L. Huber Prize in Research, 2013.
- Outstanding Undergraduate Research Mentor Award (Senior Faculty), Georgia Institute of Technology, 2013.
- Delmar L. Bloem Distinguished Service Award, American Concrete Institute, 2013.
- Fellow, American Ceramics Society, 2011.
- Award for Outstanding Article in the Journal of Testing and Evaluation, ASTM, 2010. (for Garas, Kahn, and Kurtis, ASTM J. Test. Eval. V38(6),pp.1-9.)
- Fellow, American Concrete Institute, 2010.
- ACI James Instruments Award for Research on NDE of Concrete, 2008. (for Chen, Jayapalan, Kurtis, Kim, and Jacobs, J. ACI Materials, V.106(4): 340-8.)
- ACI Walter P. Moore, Jr. Faculty Achievement Award, 2005.