

CIVIL AND ENVIRONMENTAL ENGINEERING DEPARTMENT SEMINAR



GIRUM URGESSA, Ph.D., P.E., F.ASCE

Associate Professor

Sid and Reva Dewberry Dept. of Civil, Environmental
and Infrastructure Engineering

George Mason University

Date: Friday, November 3rd, 2023

Time: 12:45pm – 2:00pm EST

Location: Bingham Bldg., Room 140

Zoom Link: [Here](#)

Concrete Structures Subjected to Explosions and Projectile Impact

Abstract: Civil engineers, as stewards of infrastructure, are increasingly tasked with incorporating resilience through new protective design measures or improved asset management practices for mitigating the impacts of both natural and human-caused hazards. Dr. Girum Urgessa will present his research on the response of structures subjected to short-duration dynamic loads to support mitigation efforts for human-caused hazards. He will provide highlights from representative projects, including the retrofitting of concrete masonry buildings subjected to internal air blast, testing and modeling of projectile penetration of normal and high-strength concrete targets, testing reinforced concrete slabs subjected to external air blast, and modeling underwater explosions for assessing the performance of reinforced concrete columns. You do not want to miss this one; **You will have a blast (pun intended)!**

Bio: Dr. Urgessa is a Fellow of ASCE and an Associate Professor of Structural Engineering at George Mason University. Prior to joining academia, he was a research engineer at Weidlinger Associates and a structural engineer at Dekker/Perich/Sabatini. His research interests include dynamic response of structures subjected to air blast, projectile impact, progressive collapse, and underwater explosions; and durability of cementitious materials. His research has been funded by DoD, NSF, 4-VA, and ASCE. He is an Associate Editor of ASCE Practice Periodical in Structural Engineering and Construction, and ASCE OPEN: Multidisciplinary Journal of Civil Engineering. A passionate teacher, he is the recipient of the 2022 John Toups Presidential Medal for Faculty Excellence in Teaching, the 2020 Chi Epsilon Cumberland District James M. Robbins Excellence in Teaching Award, and the 2015 George Mason University Teaching Excellence Award.