



Stony Brook University

Department of Civil Engineering
College of Engineering and Applied Sciences

FALL 2022 SEMINAR SERIES

Dr. Neill Elvin, Ph.D.

Professor, Department of Mechanical Engineering,
City College of New York (CCNY)

Friday, October 14th, 1:00 – 1:55 PM
Frey Hall Room 201

**The Mechanical Characterization of High Strength Adhesives
in Extreme Environments**

Abstract

Our research group is focused on the mechanical characterization of high strength adhesives subjected to high loading rate events under various environmental conditions such as cold and hot temperatures. Though high-strength and ductile structural adhesives are now available, their experimental characterization under high-strain rate loading is not well developed. The understanding of their mechanical behavior is further complicated under extreme temperatures. The seminar will also highlight some of the challenges faced in trying to computationally model these adhesives.

Speaker Biography

Niell Elvin is a professor of Mechanical Engineering at The City College of New York (CCNY). His research interests include smart materials and sensing with a focus on energy harvesting. Recently his research interest has also focused on the characterization of high strength adhesives in extreme environments. Niell Elvin completed his undergraduate degree at the University of Witwatersrand in South Africa and his graduate degrees (SM and PhD) at MIT. He was an assistant professor in the Department of Civil Engineering at Michigan State University from 2004 to 2007 and joined the Department of Mechanical Engineering at CCNY in 2008.

