



**STRUCTURAL
ENGINEERING
INSTITUTE**
Lehigh Valley
Chapter



**STRUCTURAL
ENGINEERING
INSTITUTE**
Graduate Student Chapter
Lehigh University

**9th ANNUAL "BEN T. YEN" STRUCTURAL ENGINEERING SEMINAR VIRTUAL
FOUR 1 PDH SESSIONS OVER TWO EVENINGS**

**SEI LEHIGH VALLEY CHAPTER / SEI LEHIGH UNIVERSITY GRADUATE STUDENT CHAPTER /
ASCE LEHIGH VALLEY SECTION / LEHIGH UNIVERSITY FRITZ ENGINEERING RESEARCH SOCIETY**

When: Thursday, August 11, 2022, 4:00PM to 6:00PM
Thursday, August 18, 2022, 4:00PM to 6:15PM

Where: **VIRTUAL, via Zoom**

Cost: **Practicing or Academic Professionals** – \$50 per attendee (for up to 4 sessions).
Proceeds support student activities including participation at SEI Structures Congress.
Students – Free for SEI Lehigh University Graduate Chapter Students and FERS Students. Students
please RSVP to Kevin Augustyn at kea217@lehigh.edu.

Continuing Education: 1.0 PDH per confirmed session attendance.
SEI LV is an approved provider of PDH for PE's licensed in the State of New York.

RSVP: Please register by Tuesday, August 9, 2022 online by [clicking here](#).

Please pass this e-mail onto anyone you think may be interested in attending or sponsoring!

SPONSORS



D'HUY Engineering, Inc.



ADDITIONAL SPONSORSHIP OPPORTUNITIES AVAILABLE!!! Local Firms or Individuals - Sponsors will have their name mentioned and/or displayed. Standard sponsorship is \$50. The Ben T. Yen Structural Engineering Seminars serve a dual purpose: the critically important continuing education of professional engineers, and the equally important support of engineering students as they prepare to enter the profession. Through their support, our corporate sponsors help ensure continued economic strength of the Lehigh Valley and surrounding region. We send our thanks to our past and current corporate sponsors, and we look forward to sharing the names and logos of this year's sponsors in our publicity -- distributed to approximately 1,800 members and friends in the Lehigh Valley area
[REGISTER for corporate sponsorship using the link above or contact Lane Wilder at \[lew@dhuy.com\]\(mailto:lew@dhuy.com\) for more information.](#)

SEMINAR SCHEDULE Please see below for more information on the presentations and speakers!

AUGUST 11:

4:00PM **SESSION 1 – "Reality Capture Technologies & Design Visualization in AEC"**
presented by Cory Hessel, Pennoni Associates Inc.

5:00PM **SESSION 2 – "Construction and Field Evaluation of an Electrically Isolated Tendon System in the Coplay Bridge"**
presented by Clay Naito, Ph. D., P.E., FPIC, Professor of Structural Engineering at Lehigh University

AUGUST 18:

4:00PM **SESSION 3 – Engineering Ethics, "Revisiting the Hyatt Regency Walkway Collapse"**
presented by Stephen J. Ressler, P.E., Ph.D., Dist. M. ASCE, F.ASEE

5:00PM **STUDENT PRESENTATION - Aerik Carlton, M.S. - participation at ACI Conference**

5:15PM **SESSION 4 – "NIST Florida Condo Collapse"**
presented by Joseph M. Englot, P.E., M. ASCE, National Director of Infrastructure Security and Associate Vice President HNTB Corporation, New York, NY

This is a great opportunity to obtain 4.0 PDH's at a low cost! It is the responsibility of the Registrant to determine if each presentation qualifies for PDH's based on requirements of the licensing Board in each state.

SESSION 1 – Reality Capture Technologies & Design Visualization in AEC



This presentation will discuss how reality capture technologies, such as 3D high-definition laser scanning (HDLS), unmanned aerial systems (UAS, AKA 'drones'), and design visualization are being used in the Architectural, Engineering, Construction (AEC) industry.

Cory Hessel is a software developer and reality capture specialist with Pennoni Associates. He is part of Pennoni's survey, reality capture, and design visualization teams, in which he leverages emerging technologies to develop new workflows and custom solutions. Cory's technical specialties include HDLS, CAD, 3D modeling, geospatial technologies, design visualization, automation, and software development.

SESSION 2 – Construction and Field Evaluation of an Electrically Isolated Tendon System in Coplay Bridge



The seminar will focus on the recent integration of an electrically isolated tendon system in the Coplay-Northampton Bridge. The bridge system is composed of precast pretensioned bulb tee beams that are field spliced and post-tensioned. This is the first application of EIT technology in the United States. A background on the system and lessons learned will be discussed.

Clay Naito, Ph.D., P.E., FPCI is a professor of structural engineering at Lehigh University. He has served as a faculty member at Lehigh University since 2002. He received his Ph.D. and M.Sc. degrees from the University of California Berkeley and his B.Sc. degree from the University of Hawaii. His research is focused on experimental and analytical evaluation of reinforced and prestressed concrete structures subjected to extreme dynamic events including earthquakes, impacts, and intentional blast demands. He has published over 90 peer reviewed articles and over 80 technical reports and conference papers. He is a past associate editor for the ASCE Bridge Journal, past member of the Precast/Prestressed Concrete Institute Technical Activities Committee, and past chair of the PCI Blast Resistance and Structural Integrity Committee. He also served as a member of the American Concrete Institute 318 Subcommittee G and ACI 550, and is a past associate member of the ASCE 7-16 Subcommittee on Tsunami Loads and Effects.

SESSION 3 – Engineering Ethics: Revisiting the Hyatt Regency Walkway Collapse



Although the *engineering issue* that caused the Hyatt Regency collapse is well known to most structural engineers, many popular accounts of the disaster overlook or misstate important *procedural, organizational, and management issues* that contributed substantially to the failure. Because of their superficiality, these accounts also obscure the ethical issues associated with the Hyatt Regency disaster. In this lecture, we will examine these procedural, organizational, and management issues, with the goal of identifying the many factors that contributed to the Hyatt Regency walkway collapse. By identifying these contributing factors precisely and comprehensively, we can greatly clarify the ethical issues and responsibilities underlying the disaster—and its aftermath.

Dr. Stephen Ressler is a Professor Emeritus from the U.S Military Academy (USMA) at West Point, NY, and currently serves as President of the Lehigh Valley Section of ASCE. He holds a B.S. degree from USMA, M.S. and Ph.D. degrees in civil engineering from Lehigh University, and a Master of Strategic Studies degree from the U.S. Army War College. He served as a commissioned officer in the U.S. Army Corps of Engineers and retired at the rank of Brigadier General in 2013. Since then, he has developed five online lecture series for the Great Courses.

SESSION 4 – Compelling Theories for the Miami Florida Condo Collapse



Nearly a year after the Champlain Towers South residential condominium collapsed, there is still no clear answer to what caused the collapse. The seminar plans to review the potential causes and the ways in which modern technology is helping with the analysis of these hypotheses. Based upon his extensive experience in damage assessment and disaster recovery of numerous structures due to cyclic loading, fracture, ship collision, truck collision, storms, and acts of terrorism Joe will discuss his theories for the Miami Condo Building Collapse which have been voluntarily submitted to the NIST information portal for their consideration. The collapse theories are based upon supporting engineering research publications, analysis of video, diagrams, published photographs, and firsthand experience investigating similar structural failures. They will be presented to the audience to judge whether they are reasonable.

Joseph M. Englot, P.E., M. ASCE, is the National Director of Infrastructure Security and Associate Vice President at HNTB Corporation, NY, NY. He oversees projects to help reduce the vulnerability of bridges, tunnels, terminals, and other types of transportation facilities. Prior to HNTB, Joseph worked for the Port Authority of New Jersey and New York, reaching the position of Chief Structural Engineer and Assistant Chief Engineer.
