

**NHERI Council Monthly Meeting No. 6, Y-8**  
**Dec 7, 2023 2:00 – 3:00 PM, Eastern (11:00 to Noon, Pacific)**

**NHERI Council Meetings**

**Title:** NHERI Council - Fall 2023

**Location:** <https://DesignSafe-ci.zoom.us/j/99141202473>

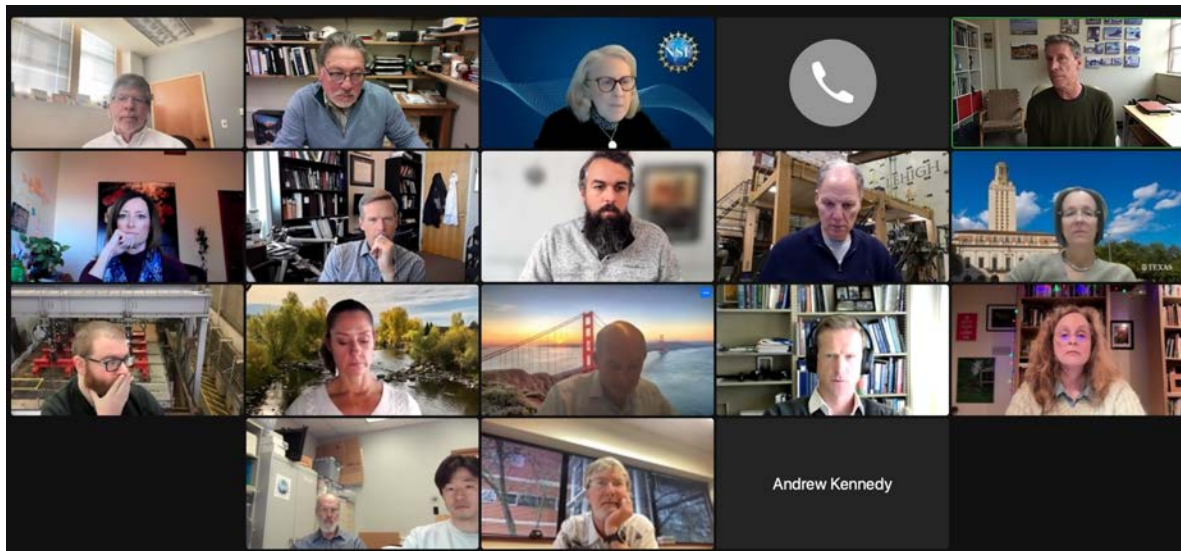
**When:** December 7, 2:00 to 3:00 PM Eastern

**Attending:**

- Oregon State University: Dan Cox (EF Dir.) and Pedro Lomonaco (Fac. Dir.) Hinsdale
- University of California, Berkeley: Matt DeJong (Co-Dir.), and Matt Schoettler (Assoc. Dir. – Ops), Stanford University: Greg Deierlein (Co-Dir), SimCenter
- University of California, Davis: Jason DeJong (EF Dir) and Dan Wilson (Assoc. Dir.) CGM
- University of California, San Diego: Joel Conte (EF Dir.,) LHPOST
- University of Colorado Boulder: Lori Peek (Dir., CONVERGE)
- University of Florida: Jennifer Bridge (EF Dir. and Council Chair) Powell Lab
- University of Texas at Austin: Ellen Rathje (CI Dir.) and Tim Cockerill (Dep. Proj. Dir.) DesignSafe-CI
- University of Texas at Austin: Ken Stokoe (EF Dir.), Tricia Clayton (CoPi), and Sungmoon Hwang (syongmoon@utexas.edu) (Operations Manager) Texas Mobile Equipment Facility
- University of Washington: Joe Wartman (EF Dir. and Council Vice-Chair) and Jeff Berman (CoPI and Fac. Manager) RAPID
- National Science Foundation: Joy Pauschke (Prog. Dir, NHERI)
- Purdue University: Julio Ramirez (NCO Dir., Council Secretary), JoAnn Browning (NCO ECO Leader), and Dan Zehner (NCO Sch./Ops. Coord.)
- Florida International University: Arindam Chowdhury (EF Dir.), Ioannis Sizis (CoPI) and Steve Diaz (Site Operations Manager) WOW
- Lehigh University: Jim Ricles (EF Dir.), Liang Cao ([lic418@lehigh.edu](mailto:lic418@lehigh.edu)), Joe Saunders, (Facility Manager)
- Guests: Cheryl Ann Blain, NCO Communications Lead, Marti LaChance, NCO Media Communications Manager, and Andrew Kennedy University of Notre Dame.

## Minutes

### 1. Attendance and introductions (All, 5 min)



In addition, Cheryl Ann Blain (NCO-Communications Lead) and Steve Diaz (FIU) joined by phone.

Joy made a few remarks related to NSF and reminded the PIs that is very important to put their publications from the award in NSF's Public Access Repository (PAR).

**Action Item:** Joe will contact Jared Kusters and Norah Schneider from Nexight Group to join the February Council meeting and ask Jared and Norah if we could record their remarks.

### 2. (3 min) Review and Approval of Minutes of 11/02/23 Meeting No. 5 in Y-8 (Joe Wartman.) Minutes were approved as distributed. Lori moved and Greg seconded the motion to approve the minutes.

Approved Minutes posted at: <https://www.designsafe-ci.org/facilities/nco/governance/nheri-council/>

### 3. (45 min) Old Business –

#### a. Post Summit Activities

- i. Update Summit 2024 May 14-15, 2024 College Park, MD (Dan Cox, Jennifer Bridge, and Julio Ramirez, 5 min)

Nexight will participate at the Summit. It will be represented by Norah and would provide a presentation on the finding of the final report of the Decadal Study.

- ii. Suggestions for possible Lightning Talks on Day (Dan Cox, 5 min)

**Action Item for the Council:** please submit nominations for lightning talks, include both early career and established researchers.

- b. NHERI presence at conferences and professional meetings from Oct 1., 2023 to Sept. 30th, 2024. (Joe Wartman, Julio, Dan Zehner, 5 min)

Dan Z. updated the Council on the presence of the NHERI Booth at the AGU from Dec. 11 to 15.

- c. Update on NCO Communications and Outreach Activities (Marti LaChance, 15 minutes)

Marti provided an update on the NHERI-wide outreach activities. Her update slides are attached to these Minutes.

- d. Update on NHERI Impact Collection in Frontiers (Cheryl Ann Blain, 5 min)

We have received abstracts from 7 NHERI components, but are missing contributions from RAPID, UC San Diego, UT Mobile Shakers, Lehigh and OSU. If these components want to participate, please return in an abstract by Monday Dec. 18. After that date we will open up submission from other entities such as EER groups and others.

- e. NHERI Special Collection in ASCE Journals (Andrew Kennedy, 10 min)

Andrew shared an update that ASCE Journals was opening the door to put together collections from multiple journals. Update slides are attached.

**Action Item: the Council will add this item for the agenda at a future meeting.**

#### 4. New Business

- a. Proposed schedule of Council Meetings in January - June 2024: January 11, February 8, March 7, April 4, May 2, and June 6. (2 min)

Council accepted the dates with all 1-hr meetings starting at 2:00 PM Eastern. Separate calendar invitations will be issued for each meeting.

#### 5. Adjourn

Julio moved and Lori seconded the motion to adjourn. Meeting adjourned at 3:00 PM Eastern.



# Communications Updates and Ideas for Promoting NHERI

Marti LaChance

Communications Manager

Dec 7, 2023

# NHERI Community Emails

- About 7,500 subscribers
- Lists: NHERI Newsletter, Announcements, News Briefs, Webinars, and Jobs
- Stats:
  - About 10 emails per month
  - Open rate average = 30%
  - Email “call to action” click rate = 2%
- Vital resource for NHERI workshops and webinars



# NHERI News Update

- The NHERI newsroom: running list of news, features, events, and announcements
- NHERI news releases go to publications (ENR, Popular Mechanics, ASCE Smartbrief)
- The DesignSafe Radio podcast, on DesignSafe, podcast apps, and YouTube
- All shared via email and social media





# NHERI LATEST NEWS

## NHERI Network at the AGU Fall Meeting in San Francisco

posted 12-04-23

Stop by AGU booth #206 to meet NHERI faculty and staff and learn about NHERI facilities suitable for coastal and geotechnical research – and all fields that touch on natural hazards, such as social sciences and public health.



Stay current! Check out the NHERI Newsletter.

## More News

- [NHERI in the Media](#)
- [News Releases](#)
- [DesignSafe Radio](#)

## Connect



## Explore DesignSafe's Enhanced OpenSees Resources

posted 12-04-23

OpenSees developer Silvia Mazzoni has joined the DesignSafe team to optimize a version of the full suit of OpenSees tools for integration directly into the DesignSafe website.

Decision Matrix for OpenSees Applications

Market Size	OpenSees Applications			
	OpenSees	OpenSees/SP	OpenSees/MP	OpenSees/MP
small-medium	green	green	green	green
medium	green	green	green	green
medium-large	green	green	green	green
large	green	green	green	green

Recommended solution:

- The additional work time due to the SPC solver makes it a weak solution for this case
- The need to ensure element collocation in OpenSees/SP makes it a weak solution for this case
- The annual license discontinuation for large models requires additional sampling effort
- The additional run time due to a single thread makes it a bad solution for this case

DESIGNSAFE

## Early-Career Researcher Alia Amer Is All About Resilience – in Large-Scale Structures, and in the Engineering Profession

posted 11-27-23

Postdoctoral researcher Alia Amer shares in her own words the path she took to the NHERI community from Cairo, Egypt, to Lehigh University. Now a vital contributor to the NHERI Tallwood project, Alia reflects on her exciting career so far and gives advice for future hazards engineers.



## NHERI Science Plan: A Guide for Future Research in Natural Hazards Engineering

posted 11-08-23

The Network Coordination Office (NCO) has released the much anticipated third edition of the NHERI Science Plan to help guide natural hazards researchers with best practices and tackling the



# NHERI DESIGNSAFE RADIO PODCAST

## ENGINEERS VERSUS NATURAL HAZARDS


We've all experienced natural hazards: earthquakes, hurricanes, tornadoes, tsunamis, and floods. They hit us hard where we live and work. Engineers and social scientists in the NHERI network work to prevent natural hazards from becoming national disasters. From the NSF-funded Natural Hazards Engineering Research Infrastructure: This is DesignSafe Radio!

 [DesignSafe Radio Facebook](#)



 [DesignSafe Radio Twitter](#)

 [NHERI DesignSafe YouTube](#)

DesignSafe Radio | EP155

**DESIGN SAFE RADIO** 

**Nicos Makris: Dampers: shock a...**

  00:00 06:02

1X [PRIVACY](#) [SHARE](#) [SUBSCRIBE](#)

E155	<b>Nicos Makris: Dampers: shock absorbers for b...</b>	06:02
E156	<b>SPECIAL EPISODE: NHERI Science Plan (Span...</b>	07:06
E154	<b>SPECIAL EPISODE! NHERI Science Plan, Part 2</b>	11:05
E153	<b>SPECIAL EPISODE! Introducing the NHERI Sci...</b>	07:08
E152	<b>Understanding major storms: key to coastal r...</b>	05:04

 **Dampers: Shock Absorbers for Buildings |...**   Share 1/70

**Absorbers for Buildings**

**Featuring Nicos Makris**  
Addy Family Centennial Professor in Civil Engineering, Southern Methodist University

[MORE VIDEOS](#)

    0:02 / 10:35    

Listen and Subscribe On:





# NHERI Social Media Update

- X (Twitter): 2,380 followers (9K impressions/mo)
- Facebook: 1,000 followers
- NHERI DesignSafe YouTube: 1,400 subscribers
- LinkedIn: 1,780 followers (3%-8% engagement/mo)



# NHERI-affiliated social media accounts

Listed on the DesignSafe site

<b>NHERI DesignSafe-CI</b>	<a href="#">Facebook</a>   <a href="#">Twitter</a>   <a href="#">Instagram</a>   <a href="#">YouTube</a>   <a href="#">LinkedIn</a>
<b>DesignSafe Radio</b>	<a href="#">Facebook</a>   <a href="#">Twitter</a>   <a href="#">Apple Podcasts</a>   <a href="#">Spotify</a>   <a href="#">Stitcher</a>
<b>NHERI Education and Community Outreach (ECO)</b>	<a href="#">Facebook</a>   <a href="#">Twitter</a>   <a href="#">Instagram</a>
<b>NHERI User Forum</b>	<a href="#">Twitter</a>
<b>NHERI Graduate Student Council</b>	<a href="#">Facebook</a>   <a href="#">Twitter</a>   <a href="#">Instagram</a>   <a href="#">LinkedIn</a>
<b>Florida International University</b> <i>Wall of Wind</i>	<a href="#">Facebook</a>
<b>Lehigh University</b> <i>Advanced Technology for Large Structural Systems (ATLSS) Research Center</i>	<a href="#">Facebook</a>   <a href="#">Twitter</a>
<b>Oregon State University</b> <i>OH Hinsdale Wave Research Laboratory</i>	<a href="#">Twitter</a>
<b>University of California   Berkeley</b> <i>NHERI SimCenter</i>	<a href="#">Facebook</a>   <a href="#">Twitter</a>   <a href="#">YouTube</a>   <a href="#">LinkedIn</a>
<b>University of California   Davis</b> <i>Center for Geotechnical Modeling</i>	<a href="#">Facebook</a>
<b>University of California   San Diego</b> <i>Large High Performance Outdoor Shake Table (LHPOST)</i>	<a href="#">Facebook</a>   <a href="#">Twitter</a>   <a href="#">YouTube</a>
<b>University of Colorado-Boulder</b> <i>CONVERGE</i>	<a href="#">Twitter</a>   <a href="#">LinkedIn</a>   <a href="#">Instagram</a>   <a href="#">YouTube</a>
<b>University of Florida</b> <i>Powell Family Structures and Materials Laboratory</i>	<a href="#">Twitter</a>
<b>University of Texas at Austin</b> <i>Large Scale Mobile Shakers</i>	<a href="#">Facebook</a>   <a href="#">Twitter</a>
<b>University of Washington</b> <i>Rapid Response Research Facility (RAPID)</i>	<a href="#">Facebook</a>   <a href="#">Twitter</a>

# NHERI Campaigns Update: Lehigh EF

- Coverage of rolling pendulum research
- 2023 REU story
- “Diverse Paths to Engineering” profile
- Lehigh user Nicos Makris on DesignSafe Radio
- Early-career researcher Alia Amer on DSR
- Next up: UC Davis



# How to Promote NHERI: Communications Ideas



# “Always be advertising”



# ABA Basics: Promote NHERI and NSF in your —

- Papers, talks, events, job posts
- Facility signage
- Professional networks
- NHERI EF website
- Email signature, using the EF logo
- University communications office
- Reports to NCO liaisons





# ABA Pro tips

- Develop an EF-centric marketing tactic
- Select one social media application and learn to use it well
- Assemble a library of video clips describing your EF



# Media coverage? Video is key.



# A communications opportunity

Join the NHERI User Forum Communications committee



# Thanks!

Marti LaChance

[lachance@purdue.edu](mailto:lachance@purdue.edu)

765-918-6517





National Science Foundation

The NHERI Network Coordination Office is supported by the National Science Foundation award CMMI Award #2129782. Any statements in this material are those of the presenter(s) and do not necessarily reflect the views of the National Science Foundation.

# Special Collections of NHERI Research in ASCE Journals

Andrew Kennedy

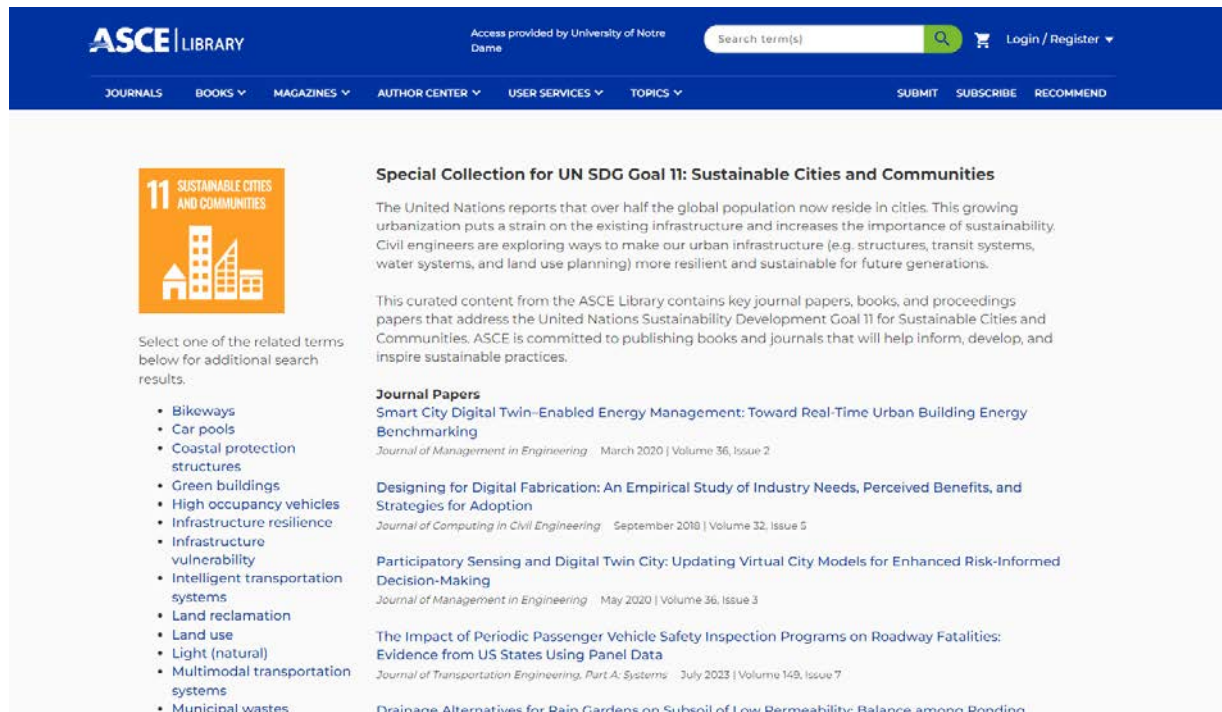
University of Notre Dame

December 7, 2023



# NHERI Special Collection across ASCE Journals

- ASCE has Special Collections: groups similar papers across issues: both existing and future
  - Even Special Collections across journals now: UN Sustainable Development



The screenshot displays the ASCE Library website interface. At the top, there is a navigation bar with the ASCE LIBRARY logo, access information for the University of Notre Dame, a search bar, and links for Login/Register. Below the navigation bar, there are tabs for JOURNALS, BOOKS, MAGAZINES, AUTHOR CENTER, USER SERVICES, TOPICS, SUBMIT, SUBSCRIBE, and RECOMMEND. The main content area features a special collection for UN SDG Goal 11: Sustainable Cities and Communities. On the left, there is an orange icon with the number 11 and the text 'SUSTAINABLE CITIES AND COMMUNITIES'. Below the icon, there is a list of related terms for additional search results. The main text describes the special collection, which includes key journal papers, books, and proceedings papers that address the United Nations Sustainability Development Goal 11 for Sustainable Cities and Communities. Three specific journal papers are listed with their titles, journal names, and publication dates.

**ASCE LIBRARY** Access provided by University of Notre Dame Search term(s) Login / Register

JOURNALS BOOKS MAGAZINES AUTHOR CENTER USER SERVICES TOPICS SUBMIT SUBSCRIBE RECOMMEND

**11 SUSTAINABLE CITIES AND COMMUNITIES**

Select one of the related terms below for additional search results.

- Bikeways
- Car pools
- Coastal protection structures
- Green buildings
- High occupancy vehicles
- Infrastructure resilience
- Infrastructure vulnerability
- Intelligent transportation systems
- Land reclamation
- Land use
- Light (natural)
- Multimodal transportation systems
- Municipal wastes

**Special Collection for UN SDG Goal 11: Sustainable Cities and Communities**

The United Nations reports that over half the global population now reside in cities. This growing urbanization puts a strain on the existing infrastructure and increases the importance of sustainability. Civil engineers are exploring ways to make our urban infrastructure (e.g. structures, transit systems, water systems, and land use planning) more resilient and sustainable for future generations.

This curated content from the ASCE Library contains key journal papers, books, and proceedings papers that address the United Nations Sustainability Development Goal 11 for Sustainable Cities and Communities. ASCE is committed to publishing books and journals that will help inform, develop, and inspire sustainable practices.

**Journal Papers**

**Smart City Digital Twin-Enabled Energy Management: Toward Real-Time Urban Building Energy Benchmarking**  
*Journal of Management in Engineering* March 2020 | Volume 36, Issue 2

**Designing for Digital Fabrication: An Empirical Study of Industry Needs, Perceived Benefits, and Strategies for Adoption**  
*Journal of Computing in Civil Engineering* September 2018 | Volume 32, Issue 5

**Participatory Sensing and Digital Twin City: Updating Virtual City Models for Enhanced Risk-Informed Decision-Making**  
*Journal of Management in Engineering* May 2020 | Volume 36, Issue 3

**The Impact of Periodic Passenger Vehicle Safety Inspection Programs on Roadway Fatalities: Evidence from US States Using Panel Data**  
*Journal of Transportation Engineering, Part A: Systems* July 2023 | Volume 149, Issue 7

**Drainage Alternatives for Rain Gardens on Subsoil of Low Permeability: Balance among Ponding**

# NHERI Special Collection across ASCE Journals

- **At ASCE Editors' Workshop in November, we opened the possibility of a NHERI Special Collection across multiple ASCE journals**
- An Open Access NHERI Special Collection could provide a one-stop shop for much NHERI research – find everything in one click
- “NHERI” Keyword search: 72 results across ASCE journals
  - Journal of Structural Engineering; 34
  - Journal of Geotechnical and Geoenvironmental Engineering; 17
  - Natural Hazards Review; 8
  - Journal of Waterway, Port, Coastal, and Ocean Engineering; 4
  - ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering; 2
  - Journal of Architectural Engineering; 2
  - Journal of Performance of Constructed Facilities; 2
  - Journal of Bridge Engineering; 1
  - Journal of Engineering Mechanics; 1
  - Journal of Environmental Engineering; 1
- Paper by Paper look at Journal of Waterway, Port, Coastal, and Ocean Engineering: approximately 16 existing candidates (more than the 4 in just ‘NHERI’ search)

# Next Steps?

- Tentatively positive response from ASCE, but not set in stone
- Possibly begin with three journals?
  - Journal of Structural Engineering (John van de Lindt)
  - Journal of Geotechnical and Geoenvironmental Engineering (Catherine O'Sullivan)
  - Journal of Waterway, Port, Coastal, and Ocean Engineering (Andrew Kennedy)
- Need to define potential existing papers (and criteria for inclusion), and put out call for Special Collections (where appropriate for the journal)
- **A push from NHERI would help with ASCE**

# Next Next Steps?

- Add other journals?
  - Natural Hazards Review (Louise Comfort)?
  - ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering (Michael Beer)?
  - Journal of Performance of Constructed Facilities (Norbert Delatte)?
- **Make a deal to get Open Access for all NHERI papers?**
  - \$1000 per article for older articles (24 months)
  - \$2500 per article for newer articles
  - Probably (not certainly) we could get a discount