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Message from the 2022 Division Chair

Dr. Tonya Nilsson, Santa Clara University



As the 2022-2023 Division Chair I would first like to thank Matt Lovell for his great leadership last year as Division Chair. I also want to congratulate this year's slate of officers and thank them for their service to the Division. We are lucky to have Jenny Retherford as our 2022-2023 Program Chair as she is a creative, out-of-the-box thinker who is sure to develop a great program for the 2023 National Conference in Baltimore.

As we progress into the coming year, we will be testing out the ASEE Hub as an additional way to communicate. I encourage everyone to check it out as ASEE Nationals is planning to dissolve the email listservs by December of 2023.

On an important note, a new bylaw change will allow voting for bylaw changes to move into an online format. The hope is this will allow more discussion and engage a larger portion of the Division than only those able to attend the annual business meeting at the National Conference. Watch for emails about proposed bylaw changes in the coming months with links to a discussion forum, most likely on the ASEE Hub, followed by a voting period.

Wishing everyone a successful 2022-2023 school year and hope to see you in Baltimore!

Message from the 2021 Division Chair



Dr. Matthew Lovell, Rose-Hulman Institute of Technology

CE Division Colleagues, it was my pleasure to serve as the 2021-2022 Civil Engineering Division Chair. It was a great pleasure to serve as Program Chair for our virtual Long Beach annual meeting. We had a collection of outstanding papers and presenters. The social events, while not as great as in person, were a wonderful way to connect with new and old members of the division. I was incredibly disappointed to come down with COVID right before this year's conference and have to miss our in-person meeting in Minneapolis. I want to thank Tonya along with the rest of the Division Board for their outstanding leadership and direction of this year's meeting. I am extremely grateful that we are returning to in-person meetings. I am highly confident that our division is in good hands with Tonya and Jenny as we move forward.

Civil Engineering Division

Message from Division Chairs and Program Chair

Message from the 2020 Division Chair



Dr. Steven Burian, University of Alabama

Dear Friends!

Speaking as the 2020-2021 Civil Engineering Division Chair, I wish to thank our outstanding members who published and presented at the 2020 virtual conference. The shift to a virtual meeting because of the pandemic was met by all with flexibility, resilience, and enthusiasm, which I would expect from the Division! Hearty congratulations again to the 2020 awardees – an amazing group dedicated to advancing civil engineering education and the division. They set a wonderful example for us all to follow. The Division is in great hands with Matt Lovell and the leadership team as they help us discover new approaches to share experiences and build community in a post-covid world. I wish the Division and you all continued success!

Message from the 2022 Program Chair



Dr. Jenny Retherford, P.E. (T.N.), University of Tennessee at Knoxville

Division members, thank you for contributing each year to the annual conference activities. We have a healthy civil engineering division, rich with quality education endeavors. Thank you for participating in the 2022 Annual Conference hosted in Minneapolis. The sessions were informative, and Tonya did excellent with programming similar topics and thought-provoking content. I look forward to seeing your contributions to the 2023 Annual Conference which will be held in Baltimore, Maryland. Please consider developing technical papers sharing research, theory, case studies, and works-in-progress. Answer the call for papers or contribute your unique works. The community we have in the CE Division is valuable to my professional development and I hope the same is true for you. I hope to follow in the esteemed

footsteps of Tonya and the other officers who have led the way in developing this division. Have a great academic year and I look forward to seeing you next June!

2023 ASEE Annual Conference

Civil Engineering Division Call for Papers

The Civil Engineering Division (CED) seeks papers for presentation at the 2023 ASEE Annual Conference and Exposition to be held in Baltimore, Maryland, June 25-28, 2023. Paper submission is a two-step process: (1) Abstract submission, review, and acceptance; followed by (2) Paper submission, review, and acceptance. The submission and review process is double-blind; please do not include names of authors or institutions within the title or body of the Abstract. Abstracts are limited to 500 words and should provide a clear statement of the objectives of the work, relevance to the civil engineering community, assessment methods used, and major findings. Authors of accepted Abstracts will be invited to prepare full papers for peer review. The CE Division invites papers on topics listed below, organized into sessions proposed by the Division's Standing Committees.

ASCE Liaison Committee

Chair: Leslie Nolen (lnolen@asce.org),
Scott Hamilton (shamilton@ycp.edu)

Educational & Professional Issues of Strategic Importance to the Civil Engineering Profession and ASCE.

This session will explore several of the important issues that are being addressed (or should be addressed) by ASCE. Authors are not required to be representatives of an ASCE organizational unit. Topics might include, but are not limited to, the following:

- The new Civil Engineering Program Criteria for 2024
- Changes to ABET EAC Criterion 5: How are we embracing diversity, equity, and inclusion as a profession?
- Preparing the future civil engineer; partnering with industry and academia to mentor students
- New initiatives from the Civil Engineering Education Summit Action Plan and the Committee on Reform of Structural Engineering Education (CROSEE2).

- Trends around declining professional participation: society membership, licensure, practicing engineers.
- Using ASCE's Future World Vision in the Classroom

Committee on Effective Teaching

Chair: Anuja Kamat (kamata@wit.edu), Manish Roy (manish.roy@uconn.edu)

Co-Chairs: Joan Carter (jcarter@inverhills.edu), Led Klosky (ledlie.klosky@westpoint.edu), Jakob Bruhl (jakob.bruhl@westpoint.edu), Shannon Parks (shannon.parks@pitt.edu), Ismail Halts (ismailhalts@kings.edu), Anthony Battistini (Anthony.battistini@angelo.edu), Jim Hanson (hanson@rose-hulman.edu)

The Telltale Grade: Exploring New Assessment Strategies

This session seeks papers sharing best practices related to mastering grading efforts. Topics of interest include (but are not limited to): academic integrity, grade inflation, un-grading methods, professional skill development assignments, specifications grading or other evidence-based techniques.

Means and Methods for Deliberately Developing Creative and Innovative Engineers

Writing the Poem: Deliberate Development of Creative Professionals

Panelists will be invited to host an interactive, open-format discussion session focused on practical ways to integrate creativity into the curriculum. The discussion will share ideas for classroom activities and assignments, as well as strategies for assessing student work, and techniques to create an organizational culture that encourages and celebrates creativity. Panelists will include a diverse group of professionals from engineering, architecture, and the fine arts. The session is intended to serve as a sharing ground for those seeking to develop student creativity, assign grades to creative activities, and build consensus around creativity in the curriculum, and concepts to avoid common pitfalls experienced by both faculty and students. Attendees will leave with

2023 ASEE Annual Conference

Civil Engineering Division Call for Papers

practical ideas to implement in their own courses and programs.

Nevermore: Reimagining the Classroom Experience Part 1

Papers focused on new curriculum and teaching techniques are sought for this session aimed at sharing new means for effective teaching and learning. Some topics may include focus on curricular changes, innovations in education on topics such as sustainability and other professional skills, and improvements to the classroom environment to enhance student learning.

Nevermore: Reimagining the Classroom Experience Part 2

In this engaging session, presenters are asked to demonstrate a mini-class and share methods used to effectively teach their students. Please submit a standard Abstract to participate in this session; please limit paper length to two pages and focus content on the supporting literature, teaching concept, and means or mechanisms to implement the strategy. Selected authors will be provided more specific session instruction prior to the annual conference, but should anticipate offering a short demonstration, short explanation, and engagement in small group discussions.

Committee on Professional Practice

Chair: Joel Sloan (joel.sloan@afacademy.af.edu)

Co-Chairs: Paul McMullin (pmcmullin@uvu.edu)

Integration with Industry Professionals

This session will be used to exchange ideas and best practices related to industry/professional interactions. Topics will include strategies for initiating and maintaining relationships with partners, techniques to manage long-term programs such as capstone experiences, and may extend not only to best practices but unexpected failures. Full papers are requested to build the scholarship of knowledge in this realm, but the session is intended to be hosted in a small group discussion style to facilitate conversations with authors. Ideally, collaboration between academics and

professionals is desired for the paper and participation by representatives from both sides of partnerships in the conference session is requested.

Committee on Instructional Technology

Chair: Kevin McMullen (kevin.mcmullen@westpoint.edu)

Co-Chairs: Shinae Jang (shinae.jang@uconn.edu), Jacob Henschen (jhensche@illinois.edu)

Teaching without Technology? Nevermore!

This session invites papers incorporating integration of innovative technology in the classroom for better student engagement. Topics include, but are not limited to:

- Use of mobile devices and apps
- Social media for student engagement
- Augmented or virtual reality
- Digital codes for design practices
- Mobile sensors and digital image correlation (DIC)
- 3D printing for design and demonstration

Other efforts to link technology to creative design or classroom demonstrations are welcomed.

Committee on Educational Policy

Chair: Aaron Hill (aaron.hill@westpoint.edu)

Co-Chairs: Jerry Wang (gjwang@cmu.edu), Mary Katherine Watson (mwatson9@citadel.edu), [Tonya Nilsson](mailto:TonyaNilsson@scu.edu) (tnilsson@scu.edu)

Unique Pillars of Your Curriculum

This session looks for a broad discussion of unique programs or methods of integrating broader topics we can address diverse issues in our classrooms, in our departments, and within our curricula. Topics may include:

- Common themes/threads/pillars developed throughout your curriculum, especially those connecting professional skills such as leadership, unity, equity, ethics, sustainability, etc.
- Themes of Humanitarian Engineering
- Professional certifications or Minor programs

2023 ASEE Annual Conference

Civil Engineering Division Call for Papers

- Alignments between curriculum designs and department/college/university strategic plans, ABET requirements, quality enhancement plans, regional industry needs, school mission statements, and other drivers

Old Bay? Holistically Seasoning Students and Faculty

This session seeks insights on systems and programs used to holistically develop faculty and students as whole persons and whole engineers. Topics may include:

- Mentorship programs
- Self-directed learning
- Leadership development
- Community building
- Diversity, inclusion, and equity learning and support programs
- Intrinsic motivation frameworks in application

Important Dates:

- Abstract Submission: Open – September 2022
- Abstract Submission: Due – October 2022
- Draft Paper Due – February 2023
- Revised Paper Due – March 2023

Please note that the Civil Engineering Division requires that podium and poster presenters publish their papers in the ASEE conference proceedings. Additionally, the papers and presentations are expected to contain assessment methods and results, unless otherwise noted in the session description. If the paper is a “Work-in-Progress” for a designated session, please include the phrase “Work In Progress” in the title. If the paper describes an effort that does not include current or planned assessment, it should be designated as a “Case Study” in the title.

For additional information, please contact:

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CE Division 2022-2023 Program Chair
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2023 ASCE Annual Conference

Civil Engineering Division Award Winners

ASCE JCEE Outstanding Associate Editor Award

Angela Bielefeldt, Ph.D., P.E. University of Colorado, Boulder

The *Journal of Civil Engineering Education* presents issues of broad professional interest and diverse views of engineering education, and professional practice. Topics include engineering education at all levels, professional practice issues, ethics, and history/heritage. Old title is the Journal of Professional Issues in Engineering Education and Practice.

ASCE JCEE Best Technical Paper Award

Tripp Shealy, Andrew Katz, Allison Godwin, and Michael Bell

“Civil Engineering Students’ Beliefs about Global Warming and Misconceptions about Climate Science.”

ASCE JCEE Best Cast Study Award

Santos Sanchez-Cambronero, Jose A. Lozano-Galant, Francisco J. Castilla, Elisa Poveda, Alvaro Galan, Rocio Porras, Inmaculada Gallego and Raul Lopez-Moya

“Introducing High School Students into the Multidisciplinary World of Bridge Construction Using Project-Based Learning.”

ASCE ExCEED New Faculty Teaching Award

Alison Kennicutt, Ph.D., M. ASCE, York College of Pennsylvania

Kevin McMullen, Ph.D., M. ASCE, United States Military Academy

The award was established by ASCE’s Project ExCEED and the Committee on Faculty development to recognize and reward outstanding new faculty. Nominees are judged based on a Letter of Endorsement from their current Department Chair/Dean, Curriculum Vitae, and Teaching Portfolio.

ASCE ExCEED Thomas A. Lenox Leadership Award

Kevin Hall, Ph.D., P.E., M. ASCE, M. ASEE, University of Arkansas

Leslie Nolen, ASCE

The award honors an ASCE member who has shown exceptional leadership and dedication to educational activities within the organization and is presented at the American Society for Engineering Education Annual Conference.

ASEE CED Emerging Leader Fellow Award

Paul Leidig, Ph.D., P.E., Purdue University

The Emerging Leader Fellow Award is awarded to a member of the Division who has been a member of the division for no longer than five years and aspires to a leadership position. The purpose of the award is to recruit and support promising members of the division to participate in and learn more about Division leadership activities.

2023 ASEE Annual Conference

Civil Engineering Division Award Winners

ASEE CED Gerald R. Seeley New Faculty Best Paper Award

Kevin McMullen, Ph.D., M. ASCE, United States Military Academy

The Gerald R. Seeley Award is awarded to a civil engineering faculty member with five or fewer years of teaching experience. The basis for selection is the quality of a paper submitted for presentation in a CE Division session at the ASEE Annual Conference. This year's paper was entitled "*Comparison of Four Flipped Classroom Implementations in a Civil Engineering Curriculum during the COVID-19 Pandemic.*" The award consists of a \$500 reimbursement for conference registration. The recipient receives an ASEE certificate and is invited to attend CE Division events.

ASEE CED Stephen J. Ressler Best Paper Award

Secil Akinci-Ceylan, Yiqi Liang, Kristen Sara Cetin, Benjamin Ahn, and Bora Cetin

The Stephen J. Ressler Best Paper Award is given for the best paper on a topic in civil engineering education, presented at the ASEE annual conference and published in the Proceedings in the year prior to the award. Each co-author is awarded an engraved plaque and one complimentary ticket to all CE Division social events at the ASEE annual conference at which the award is presented. The winning paper this year was entitled "*Engineering Faculty's Beliefs About Teaching and Solving Ill-structured Problems*"

ASEE CED Glen L. Martin Practitioner Service Award

Stefanie Farrell, EIT, M. APWA, M. WEA, LDA Engineering

The Glen L. Martin Practitioner Service Award is awarded to an engineering practitioner for distinguished service to or support of civil engineering education. While the recipient can be a former faculty member, the distinguished service must occur over a period of time when the recipient served as an engineering practitioner in a position not normally held by an engineering educator.

ASEE CED George K. Wadlin Distinguished Service Award

Brock Barry, P.E. Ph.D., F. ASCE, M. ASEE, United States Military Academy

The George K. Wadlin Distinguished Service Award is given to a member of the Division for outstanding service in support of civil engineering education and the Civil Engineering Division of ASEE. The recipient is awarded an engraved plaque and a complimentary ticket to all CE Division social events at the ASEE annual conference.

2023 ASCE Annual Conference

Civil Engineering Division Award Winners

2020 and 2021 Awardees

ASCE JCEE Outstanding Associate Editor Awards

2021 Rachel Anderson, Ph.D. Clemson University

2019 Joe Manous, Ph.D., P.E., D. WRE, F. EWRI, F., ASCE

ASCE ExCEED New Faculty Teaching Awards

2021 Kristen Cetin, P.E., Ph.D., Michigan State University and Virginia Smith, Ph.D., Villanova University

2020 Dong Zhao, Ph.D., Michigan State University

ASCE ExCEED Thomas A. Lenox Leadership Awards

2021 Colonel Joseph P. Hanus, Ph.D., P.E., U.S. Military Academy

2020 Camilla Saviz, Ph.D., P.E., University of the Pacific

ASCE National Outstanding Teaching Award

2020 Brock Barry, P.E., Ph.D., U.S. Military Academy

ASCE CED Emerging Leader Fellow Awards

2021 Shinae Jang, Ph.D., P.E. University of Connecticut

2020 Timothy Kennedy, Ph.D., P.E. Abilene Christian University

ASCE CED Gerald R. Seeley New Faculty Best Paper Awards

2021 Kun Zhang, Ph.D., P.E. California State University, "Improving technical writing for civil engineering students through short written assignments."

2020 Ben Dymond, Ph.D., University of Minnesota, Duluth, "Implementation of a Laboratory Experience in Reinforced Concrete Courses."

ASCE CED Stephen J. Ressler Best Paper Award

2021 Ryan L. Solnosky, Ph.D., P.E. "Mini-project Explorations to Develop Steel and Concrete Gravity System Design Skills."

2020 Sean L. Geston, Shane A. Brown, Matthew S. Barner, Masoud G. Abadi, and David S. Hurwitz, "Factors Contributing to the problem-solving Hueristics of Civil engineering Students."

ASCE CED Glen L. Martin Practitioner Service Awards

2021 Wayne R. Bergstrom, Ph.D., P.E., Bechtel Infrastructure and Power

2020 Jon D. Nelson, P.E. Tetra Tech Inc.

ASCE CED Wadlin Distinguished Service Awards

2021 Kevin Hall, Ph.D., P.E., University of Arkansas

2020 Matthew W. Roberts, P.E., PhD., Southern Utah University

Congratulations to all our award winners!

2023 ASEE Annual Conference *Civil Engineering Division Award Winners*



(a)



(b)



(c)

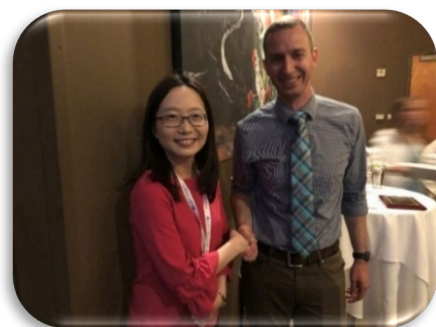
Figure 1. (a) Paulo Ignacio – Accepting the ASCE Journal of Civil Engineering Education 2022, Best Technical Paper Award on behalf of Trip Shealy, (b) Kevin McMullen – Accepting the 2022 ASCE ExCEED New Faculty Teaching Award, (c) Leslie Nolen and Kevin Hall – Accepting the 2022 ASCE ExCEED Thomas A. Lennox Leadership Award.



(a)



(b)



(c)

Figure 2. (a) Angela Bielefeldt – Accepting the ASCE Journal of Civil Engineering Education 2022 Outstanding Associate Editor Award, (b) Cecil Akinci-Ceylan – Accepting the 2022 Stephen J. Ressler Best Paper Award. (c) Shinae Jang – Accepting 2021 ASEE CED Emerging Leader Fellow Award.

Civil Engineering Division Officers 2022-2023



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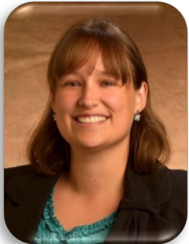
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2022 ASEE Annual Conference

Session Summaries

Sunday, 6/26/2022

ASCE Liaison Committee – Accreditation and Curriculums – What Changes Are Occurring?



Moderators: Dr. Scott Hamilton and Dr. Ronald W. Welch

A Comparison of Licensed Engineers' Conduct Requirements, the ASCE Code of Ethics, and EAC-ABET Civil Engineering Accreditation Criteria, by Matthew Swenty and Brian J. Swenty.

Identifying Obstacles to Masters' Level ABET EAC Accreditation, by Norb Delatte, Camilla M. Saviz, Audra N. Morse, and Brock E. Barry.

Practical Use of the Civil Engineering Body of Knowledge by Bradley Aldrich, Norma J. Mattei, Kleio Avriithi, Jennifer Hofmann, Anthony Kulesa, Kenneth J. Fridley.

Proposed Engineering Accredited Curriculum, by Sami Alshurafa, Laura Wieserman, Hanan Alhayek, Khaled Hussein.

Preparing the Future Civil Engineer: ASCE's Proposed Revision of the ABET Civil Engineering Program Criteria by Leslie Nolen, Jay A. Puckett, David A. Dzombak, Wayne R Bergstrom

Changing How We Teach: Flipping, Project-Based Learning, and More!



Moderators: Dr. Brock E. Barry, and Dr. Anuja Kamat

Comparison of Four Flipped Classroom Implementations in a Civil Engineering Curriculum during the COVID-19 Pandemic by Kevin Francis McMullen, David Carlson, Brad G Davis, Jes Barron, Brock E. Barry, Jakob C Bruhl.

Theory to Practice: Application of Problem-based learning, Flipped-classroom, and Just-in-time-teaching in an Advanced Geotechnical Engineering Course by Jes Barron, Brock E. Barry, James Ledlie Klosky.

Student Perceptions of Project-Based Learning as Applicable to the Formation of Trusted Professionals by Jennifer Retherford, Sarah Mobley, Brad C McCoy, Aaron T Hill.

Does the Active Learning Help Students Learn and Improve the Performance? A Case Study of Engineering and Management by M. A. Karim, Sanjeev Adhikari.

Promoting Student Learning and Teaching in the Virtual Environment and In-Person by Monique H. Head, Christos Aloupis, James Hanson, Allen A. Jayne.

Enhancing the Undergraduate Civil Engineering Experience through 3D-Printing, Problem-

2022 ASEE Annual Conference

Session Summaries

Based Learning Opportunities by Philip Scott Harvey, Chase Landon Hibbard.

Monday, 6/27/2022

Innovative Changes to the typical Civil Engineering Coursework



Moderators: *Dr. Matthew D. Lovell, Dr. James Kaklamanos, and Dr. Tonya Nilsson*

Including Principles of Sustainability in Design by Implementing the Engineering for One Planet Framework by Andrea L Welker, Virginia Smith, Shweta Shrestha, Kristin M. Sample-lord.

Fostering the Deliberate Development of Creative Engineers by Jakob C Bruhl, James Ledlie Klosky, Andrea E Surovek.

Development of a Project-Based Civil & Environmental Introductory Course by Jacob Henschen, Jordan Ouellet.

Early Engagement and Vertically-Integrated Learning: Developing Whole-Person and Entrepreneurially-Minded Engineers by Ellen Zerbe Adjo A Amekudzi-Kennedy, Kevin Haas, Emily Grubert, Susan E Burns, Iris Tien, Kari Watkins, John H Koon, Robert Simon, John E. Taylor, Donald Webster, Lisa Gail Rosenstein.

Building Learning Frameworks by Deborah Besser, Anna Roiger, Nick E Pawlak, Emma Sullivan.

Innovating New Ways to Teach



Moderators: *Dr. Kristen L. Sanford and Dr. Brad Wambeke*

Using Scaled Realistic Building Models for Classroom Instruction by Nicholas Tymvios Miles Book, Elif Miskioglu, Gugulethu Sibanda, Meaghan Elizabeth Yant.

I Think We Should Break Up...Class, That Is by Matthew Swenty, Benjamin Z. Dymond, David Saftner, Camilla M. Saviz, Jeffrey Shafer, Kacie Caple D'Alessandro, Tanya Kunberger, Christopher R. Shearer.

Teaching Post-Tension Concrete Design: Leveraging Practical Industry Expertise by Ryan Solnosky, M K Parfitt.

Teaching from Multiple Angles: Aligning the Teaching Materials and Activities with Preferred Learning Styles of the Students by Ismail Haltas.

Teaching Techniques and How Faculty Engage the Engineering Classroom by Scott R Hamilton, Tanya Kunberger, David Saftner, Camilla M. Saviz.

2022 ASEE Annual Conference

Session Summaries

Civil engineering Division – Integration of Engineering and/or Technical Rigor with Diversity, Equity, Inclusion and Justice (DEIJ)



Moderators: Dr. Anthony Battistini and Dr. Gerald J. Wang

Re-design of a Large Statics Course to Foster Creativity and Inclusion by Shinae Jang.

Redesigning Soil Mechanics as an Inclusive Course by Manish Roy, Connie Syharat, Maria Chrysochoou.

To Do Good, Learn Well: Engineering a Virtuous Cycle between Technical Rigor and Diverse, Equitable, and Inclusive Teaching Practice by Gerald J. Wang.

Re-contextualizing Civil Engineering Education: A Systematic Review of the Literature by Kristen L. Sanford, Frederick Paige, Philip Parker, Rodolfo Valdes-Vasquez, Peter Canevari, Timothy James Larsen, Elizabeth Diacik.

Women Students Learning a STEM Subject: An Analysis of Note-Taking Practices in a Civil Engineering Course and the Association with Self-Efficacy, Cognitive Engagement, Test Anxiety, and Course Achievement by Monica Palomo, Pauline Muljana.

Mechanics Applied and the Best in Five... Get Ready!



Moderators: Dr. Charles Riley and Dr. Kevin Dong

Instruction and Assessment of Mohr's Circle Concepts in Undergraduate Geotechnical Engineering Courses by James Kaklamanos, Simon Thomas Ghanat, Craig M. Shillaber, Tanya Kunberger, Brock E. Barry, Shawn Griffiths, Corrie Walton-macaulay, Suresh Immanuel, David Saftner, Chris Swan.

3D Printed Composite Body Illustrating Area and Mass Moment of Inertia with Mohr's Circle and Pole Method by Timothy Aaron Wood, Ege Candemir Arslaner.

Design and Implementation of Experiential Learning Modules for Steel Design by J Chris Carroll, John Aidoo, Matthew D. Lovell, Kyle Ker-shaw.

Yielding and Fracture and Block Shear, Oh My! (Best in 5 Session) by Anthony Battistini, Guillermo Alvarez.

Multiple Interactive Hands-on Applications in Statics (Best in 5 min Demonstrations Sessions) by Mohammad Yamin, Khosrow Ebrahimi, Kevin Schull.

2022 ASEE Annual Conference

Session Summaries

Identifying Sticking Points: Common Mechanics Errors Made by Civil Engineering Students by Jakob C Bruhl, Joseph P Hanus, Kevin Francis McMullen, Brett Rocha.

Fifteen-Plus Years of Strength of Materials with Pool Noodles and More! by Harry G Cooke

Tuesday 6/28/2022

ASCE Liaison Committee – Supporting the Development of the Next Civil Engineers



Moderators: Leslie Nolen and Dr. Andrea L. Welker

Department Policy and Programs that Support NCEES FE Exam Prep in Civil and Environmental Engineering by Rebecca E Kiriazes Ellen Zerbe.

ASCE's Response to the Pandemic: Execution of a Remote ExCEED Teaching Workshop by Kelly Salyards, Allen C Estes, Camilla M. Saviz, Patricia Clayton, Julian Ly Davis, Corinna Marie Fleischmann, Tonya Lynn Nilsson, Pinar Omur-Ozbek Fethiye Ozis, Monica Palomo, Carolyn Rodak, Cassandra Rutherford, Cristina Torres-Machi, Dion Karean Coward, Leslie Nolen.

ASCE's Response to the Pandemic: Development of a Remote ExCEED Teaching Workshop by Audra N. Morse, Patricia Clayton, Carolyn Rodak, Jacob Henschen, Pinar Omur-Ozbek, Charles Riley, David Saftner.

Practitioner and Academic Surveys + Engineering Education: A Blended Observation of Student Preparedness by Kevin Dong, Scott Mason Francis, Brent Alan Perkins.

ASCE's Response to the Pandemic: A Virtual ExCEED Community Exchange by Patricia Clayton, Daniel Ivan Castaneda, Monica Palomo, Carolyn Rodak, Stacey Kulesza, Pinar Omur-Ozbek.

Division Poster Session and ASEE Focus on Exhibits Networking Break

Augmented and Virtual Reality Resource Infrastructure for Civil Engineering Courses: Work in Progress by Shinae Jang, Pablo Aguero-Barrales, Richard Christenson.

Construct First, Design Later - Evolution over the past 25 years by Brad Wambeck.

Innovative Industry-Related Research Projects for Civil Engineering Undergraduate Students by Mohammad Jonaidi, Simin Nasseri.

Integrating Ecology and Sustainability into Civil Engineering Design: A Civil Engineering Capstone Project by Xi Wang, Charles Tucker Cope.

What Early Career Civil Engineers Wish They Had Done Differently: Lessons For Students and Faculty by Sarah Allison Grajdura, Kacey Beddoes

Work in Progress: Collaborative Environments in Architecture and Civil Engineering Education - Case Study by Vanessa Guerra, Miguelandres Guerra.

Work in Progress: Supporting Engineering Laboratory Report Writing with Modules Targeted for Instructors by Charles Riley, Dave Kim, Ken Lulay, John Lynch.

2022 ASEE Annual Conference

Session Summaries

Exploring Connections Between Academia and Practice – Panel



Moderators: Dr. Jennifer Retherford and Dr. Paul A. Leidig

A panel of four Minneapolis-based practitioners was assembled and asked to share insights about academic-practice partnerships. The panel shared best practices for initiating partnerships, developing relevant relationships, and maintaining long-term alignments. The panel included a diverse subset of engineers representing different sectors of civil engineering work and different corporate and personal goals for partnerships. The audience was guided through a focused exercise to solicit questions from the panel, so discussion better captured different types of audience questions. The audience was well engaged throughout both the moderator-led and audience-influenced Q&A.

Is This Real? Reaching Students with Virtual and Augmented Reality



Moderators: Dr. Shinae Jang and Dr. Monica Palomo

Enhanced Learning of Load Path in a 3D Structural System using Virtual Reality by Juan Andres Torres, Ann C Sychterz, Jacob Henschen.

A Case Study on Leveraging Augmented Reality for Visualization in Structural Design by Ayatollah Yehia, Jacqueline Chao, Connor Lyons, Mehrdad Shafiei Dizaji, Devin K. Harris.

Virtual Reality Field Trip of a Steel Building Under Construction by Edward J. Sippel, Hannah Blum.

Teaching Earth Systems beyond the Classroom: Developing a Mixed Reality (XR) Sandbox by Damith Tennakoon, Aman U. Usmani, Muhammad Usman, Apostolos Vasileiou, Sasha Latchaev, Melanie Baljko, Usman T Khan, Matthew A Perras, Mojgan A Jadidi.

2022 ASEE Annual Conference

Session Summaries

Wednesday 6/29/2022

The New Normal: Enduring Technology Improvements in the Classroom



Moderators: Dr. Aaron Hill, U.S. Military Academy

Are the Technological Tools used in Virtual and Hybrid Classrooms Still Useful in a Fully In-Person Setting? An Assessment of the Effectiveness of the Technological Tools in Enhancing the Pedagogy in the New Normal by Mousumi Roy, Manish Roy.

Cloud technologies for scalable engagement and learning in flipped classrooms by Sotiria Koloutsou-vakakis, Christopher Tessum, Eleftheria Kontou, Hadi Meidani, Lei Zhao.

We Can't Go Back: Student Perceptions and Remote Learning Protocols by Alyson Grace Eggleston, Robert J. Rabb, Ronald W. Welch.

Implementing Digital Learning to Enhance Post-Pandemic Civil Engineering Teaching by Amanda Bao

From In-Person to Remote to Hybrid: Transitioning of an Undergraduate Design Event Due to COVID-19 by Rania Al-Hammoud, Reza Abolhelm, Trevor D Hrynyk.

Civil Engineering Division Planning Meeting



Moderators: Dr. Jennifer Retherford

The Civil Division Planning Session was extremely well attended. The attendees broke into five working groups matching the standing committees as recognized by the Division's bylaws. Folks contributed ideas in each of these categories: educational policy, professional practice, effective teaching, instructional technology, and ASCE. Each group developed at least one theme for next year's conference call for papers, with many producing two or more ideas. Discussion also confirmed an interest in creating diverse learning opportunities by modifying the standard presentation structures (podium, poster) to more active styles of interactions. These ideas will help form the sessions for Baltimore's experience.

2022 ASEE Annual Conference

Session Summaries

Huh? What Did You Say? What Does That Mean?



Moderators: Dr. David Saftner, Dr. Tonya Nilsson, and Dr. Jennifer Retherford

Writing and Engineering – Perfect Together by Lynn Mayo, Katie Wheaton.

Training for Life: Reimagining a Codes and Regulations Course by Michelle Marincel Payne, Namita Shrestha.

Redesigning Writing Instruction Within a Lab-Based Civil Engineering Course: Reporting on the Evolution Across Several Semesters by Mia Renna, Rebecca Avgoustopoulos, Ryan Ware Karthik Pattaje Sooryanarayana, John Popovics, Julie L Zilles.

Work in Progress: The Strategic Importance of Data Science in Civil Engineering: Encouraging Interest in the Next Generation by Cristina Torres-Machi, Angela R Bielefeldt, Qin Lv.

Integrating Technical Communication Block in a Computer Applications Course: Lessons Learned by Joel Sloan, Karin L Becker, Timothy Frank.

Historian's Report

Important Notes

Division Trivia

A highlight of the Civil Engineering Division's annual General Membership Meeting is the Historian's report which includes a Division Trivia contest spotlighting significant events in the Division's prior 30 years. For the third consecutive year (and now a tradition) the Division Trivia contest was conducted remotely before the Annual Meeting. Answers will be reviewed during the General Membership Meeting and prizes will be awarded.

CE Division's Historical Files

The Historian maintains many administrative documents (agendas, minutes, and treasurer reports, and past newsletters). These files are fairly complete for the period from 1975 to the present. There are no documents on file for any date prior to 1975. The Historian also maintains a database of Division Officers and award winners between 1975 and the present – available upon request. The newest Award winners will be added to the CE Division web site every year.

The entire volume of historical documents scanned in 2021 and filed in the Division's cloud-based storage. This material is available for Division members to review upon request.

Inventory of Division Newsletters

Our semiannual newsletters are a valuable source of historical information. This inventory is available on the Civil Engineering Division page of the ASEE website.

ASEE Civil Engineering Division

We have obtained a short biographical sketch and an acceptable head-and-shoulders color picture from all Past Chairs between 1993 and 2021. Past Chair biographical sketches are maintained in a single document on the Civil Engineering Division page of the ASEE website.

Brock E. Barry, P.E. Ph.D., F. ASCE
The Historian (2020 - present)
Professor and Director of Civil Engineering
United States Military Academy
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Historian's Report

Division Trivia

25 Years Ago (AY 1996-97)

- The Division Chair was _____ of the US Coast Guard Academy.
- The Program Chair was _____ of the US Military Academy.
- The annual conference was held in _____.
- The Division's annual expenses included \$321.08 for mailing the Fall newsletter.

20 Years Ago (AY 2001-2002)

- The Division Chair was _____ of the University of Louisville.
- The Program Chair was _____ of the US Military Academy.
- The annual conference was held in _____.

15 Years Ago (AY 2006-07)

- The Division Chair was _____ of Lafayette College.
- The Program Chair was _____ of the US Military Academy.
- The annual conference was held in _____.

10 Years Ago (AY 2011-2012)

- The Division Chair was _____ of University of Tennessee at Knoxville.
- The Program Chair was _____ of the University of Iowa.
- The annual conference was held in _____.

5 Years Ago (AY 2016-17)

- The Division Chair was _____ of the US Military Academy.
- The annual conference was held in _____.
- The annual awards banquet was held at _____.
- The recipient of the George K. Wadlin Distinguished Service Award that year was _____.

Historian's Report

Past Conferences

Year	Annual Meeting	Chair
2022-2023	Baltimore, MD	Tonya Nilsson
2021-2022	Minneapolis, MN	Matthew Lovell
2020-2021	Long Beach, CA (Virtual)	Steve Burian
2019-2020	Montreal, CA (Virtual)	C. J. Riley
2018-2019	Tampa, FL	Andrea Welker
2017-2018	Salt Lake City, UT	Sean St. Clair
2016-2017	Columbus, OH	Brock Barry
2015-2016	New Orleans, LA	Kevin Hall
2014-2015	Seattle, WA	Yusuf Mehta
2013-2014	Indianapolis, IN	Matthew Roberts
2012-2013	Atlanta, GA	M. Asghar Bhatti
2011-2012	San Antonio, TX	Shashi Nambisan
2010-2011	Vancouver, BC, CAN	Kevin Sutterer
2009-2010	Louisville, KY	Norm Dennis
2008-2009	Austin, TX	Dennis Fallon
2007-2008	Pittsburgh, PA	Ron Welch
2006-2007	Honolulu, HI	Kristen Sanford Bernhardt
2005-2006	Chicago, IL	Jim Hanson
2004-2005	Portland, OR	Wilf Nixon
2003-2004	Salt Lake City, UT	Vince Drnevich
2002-2003	Nashville, TN	Steve Ressler
2001-2002	Montreal, Quebec, CAN	J. P. Mohsen
2000-2001	Albuquerque, NM	Sam Clemence
1999-2000	St. Louis, MO	Jim Nau
1998-1999	Charlotte, NC	Alan Prasuhn
1997-1998	Seattle, WA	Tom Lenox
1996-1997	Milwaukee, WI	Howard Dunn
1995-1996	Washington, DC	William Kelly

Historian's Report

Past Conferences

Year	Annual Meeting	Chair
1994-1995	Anaheim, CA	Tom Mulinazzi
1993-1994	Edmonton, Alberta, CAN	Bob Henry
1992-1993	University of Illinois at Urbana-Champaign, IL	Fred Beaufait
1991-1992	Toledo, OH	Edward Reitz
1990-1991	New Orleans, LA	M. Dean Parsons
1989-1990	Toronto, Ontario, CAN	William Highter
1988-1989	Lincoln, NE	Noel Tolbert
1987-1988	Portland, OR	Mardith Thomas
1986-1987	Reno, NV	Gerald Seeley
1985-1986	Cincinnati, OH	Colby Ardis
1984-1985	Atlanta, GA	Roger Seals
1983-1984	Salt Lake City, UT	Ron Eck
1982-1983	Rochester Institute of Technology, Rochester, NY	Jim McDonough
1981-1982	Texas A&M University, College Station, TX	Marvin Criswell
1980-1981	University of Southern California, Los Angeles, CA	Gordon Batson
1979-1980	University of Massachusetts, Amherst, MA	Eugene Chesson
1978-1979	Louisiana State University, Baton Rouge, LA	Donald L. Bender
1977-1978	University of British Columbia, Vancouver, CAN	William J. Wilhelm