International Symposium on Sustainable Systems and Technology (ISSST) 2023 Conference
Fort Collins, Colorado

June 13 – 15, 2023
(pre-conference workshops June 12)

Call for Contributions

Now in our 30th year, ISSST is one of the longest-running research conferences on sustainability and the intersection of technology, policy, and behavior. We are a vibrant community of engineers, scientists, professionals, and educators, sharing cutting-edge research and forming interdisciplinary teams for future collaboration. Our mission is to think beyond the traditional and envision a future where science has no limits.

The ISSST 2023 Conference welcomes the submission of abstracts that apply methods to define, design, assess, support, or implement technologies, policies, and systems for sustainability. For more information about the conference, please visit our website at https://issst.net.

This year's conference will highlight the following thematic areas:

- **The intersection of agroecology and industrial ecology**
  The fields of Agroecology and Industrial Ecology look to ecosystems for guidance in designing sustainable systems, particularly for agriculturally-derived products and systems such as bioenergy, biomaterials, and food. ISSST invites abstracts from both fields to share methods (e.g., life cycle assessment) and perspectives in the areas where these fields intersect to identify synergistic opportunities. Areas of particular interest include but are not limited to carbon: nitrogen dynamics in relation to carbon accounting; characterizing sustainability in rural vs. urban environments and their intersection; modeling methods for assessing sustainability indicators.

- **Integrated human-physical systems**
  This theme may include how to integrate human dimensions into sustainability design and implementations and research/projects focused primarily on linking knowledge with actions, environmental justice, decision science, participatory approaches, social life cycle assessment methods, etc.

- **Sustainability and/or resiliency of energy and infrastructure systems**
  ISSST is a leader in quantitative assessment of the sustainability and resiliency of various systems associated with energy, water, transportation, buildings, and waste management systems, including their interconnections and future uncertainties. Abstracts that provide cutting-edge insights, case study results, and methods are welcome.

- **Sustainability education**

  Educating future generations to be capable of realizing sustainable solutions is challenging and critical. ISSST welcomes you to share your educational approaches for community, K-12, university, and the workplace. We want to learn from you!

- **Other creative sustainability-related topics**

  ISSST has long encouraged participants to dream big and try new approaches to realize sustainable futures. Please consider sharing new methods and ideas that demonstrate unique partnerships, big ideas, and perspectives from non-STEM (science, technology, engineering, math) disciplines. We also welcome creative submissions for unconventional or experimental sessions, such as exploring sustainability through games and other activities.

We also welcome contributions in:
- Ecosystem Services
- Materials Flow Analysis
- Applied machine learning and data science
- Business & Industry Practices or Case Studies
- Policy, Management & Regulation
- Open Science and Communication of Sustainability Science
- Equity and Justice
- Life Cycle Assessment and Evaluation of Emerging Technologies
- Advances in Sustainability Assessment Methods
- Computational Tools for Sustainability
- Energy and Sustainability in the Global South

Instructions for Abstract Submission: Participants are invited to submit abstracts for **oral and/or poster presentations** through https://www.conftool.org/issst2023. Abstracts should be about 500 words and will be reviewed relative to four criteria: (1) Impact; (2) Originality; (3) Technical Quality; and (4) Completeness. The abstract should include a brief background/motivation but should focus on methods and results/anticipated results, or your proposed conference activity.

ISSST encourages submissions from students as well as professionals, and we aim for the symposium to represent our emerging diversity including gender, sexuality, race, ethnicity, class, national origin, disability, career stage, professional affiliation, and educational journey.

During abstract submission, you can indicate the thematic area most appropriate for your abstract in the online submission form. In addition, please note your preference for an oral and/or poster presentation at the time of abstract submission. The program committee will evaluate abstracts for acceptance into the program, designate them for an oral or poster presentation, and place them within thematically organized sessions. Inquiries should be directed to issstnetwork@conoscente.net.

Workshop Proposals:
Workshops will be held on Monday, June 12, 2023, from 10:00 AM until 4:00 PM, preceding the Tuesday-Thursday main conference days. ISSST 2023 will include full-day (6 hours) or half-day (3 hours) workshops. Lunch will be included as part of the workshops.

Workshop proposals on the following topics are strongly encouraged: 1) career advising and mentoring for the ISSST community; 2) participatory research; 3) sustainability education; 4) team building and conducting convergent projects; and, 5) technical topics of high relevance and/or urgency to the ISSST community (e.g., data visualization in python, machine learning and data science).

Workshop proposals should be 1 page and follow the template below (12-point font, single-spaced):
- Workshop title
- Workshop duration: Full-day or half-day
- Workshop motivation and description
- Intended audience and size limit (if applicable)
- Workshop Organizers.

For full consideration, submit abstracts via ConfTool for oral presentations, poster presentations, and workshops by January 13, 2023.

ISSST 2023 Program Committee

Executive Committee
Daniel Posen, U of T
Derrick Carlson, NETL
Jeremy Gregory, MIT
Kiara Winans, DEQ
Lise Laurin, EarthShift Global
Beth Shafer, Executive Director, Sustainability Conoscente and ISSST

ISSST 2023 Program Co-Chairs
Christine Costello, PSU
Obste Therasme, SUNY

Conference Coordinator/Program Chair in Waiting
Jennifer Russell, VT

ISSST 2023 Themes Chairs
Christine Costello, PSU, and Kiara Winans, DEQ (The intersection of agroecology and industrial ecology)
Jasmina Burek, UMASS Lowell (Integrated human-physical systems)
Mike Chester, ASU, and Alysha Helmrich, UGA (Sustainability and/or resiliency of energy and infrastructure systems)
Nelson Granda Marulanda, WCU, and Jennifer Dianne Russell, VT (Sustainability education)
Opeolowa Wonulola Olawale, CSM, Lu Liu, ISU, Ray Smith, EPA, Olivia Muza, UR (Other sustainability-related topics)

Workshop Chair
Jonah Greene, CSU

Poster Session and Student Poster & Presentation Competition Committee
Sam Markolf, UC Merced (chair)
Qingshi Tu, UBC (co-chair)
Darlene Echeverria, Eastman
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Jason Quinn, CSU

Sponsorship and Grants Chair:
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International/ Diversity/Sector differentiation committee
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