



## Call for Extended Abstracts!

**Submission Deadline is October 24**

**SUBMIT YOURS TODAY at**

<https://event.asme.org/Joint-Rail-Conference>

**JRC 2023** is the major, multidisciplinary railroad conference encompassing all aspects of rail transportation and engineering research.

You are invited to submit your extended abstracts for presentation consideration at the JRC 2023, the seminal U.S. railroad engineering event. The extended abstracts are submitted in two steps:

1. Submit a clear title, authors' names and affiliations, and brief abstract (no more than 400 words) within the theme of the conference, "**Intelligent Railroading**," at [SUBMIT ABSTRACT](#). **The brief abstracts due no later than October 24, 2022.**
2. Within one week of submission, the authors will be notified of a decision on their brief abstracts. The successful authors will be invited to submit a **3-page extended abstract (1000 words and graphics)** for final selection to present at the conference. The extended abstracts must be detailed enough to allow

evaluating the scientific merits and importance of the topic. **The extended abstracts are due by November 30, 2022.** At least one of the co-authors for each extended abstract agrees to register for the conference and attend the event to make a presentation. Failure to do so will result in rescinding the acceptance decision.

3. After the conference in April 2023, the extended abstracts that have been presented at the conference will be invited to submit a full paper for publication consideration in **a special issue of the ASME Open Journal of Engineering (<https://asmedigitalcollection.asme.org/openengineering>)**. The submitted full papers will undergo the customary peer review process for the journal. In recognition of the authors contribution to the JRC 2023, the publication charges for the accepted papers will be waived. **The journal publication is not mandatory.** The decision to submit a full paper to the journal is at the full discretion of the authors.

The submissions to the conference must explore topics related to railroad engineering related to the topics specified in the following [conference tracks](#). Submissions must be on technical topics for existing, state-of-the-art, or future innovations. They can also have a focus on industry-relevant approaches for implementation such as system integration, configuration management, or technical project management.

**Track 1: Track Systems, Structures, and Railway Infrastructure: (Sponsored by ASCE)**

**Chair: Dimitris Rizos, University of South Carolina**

Topics include, but are not limited to, intelligent technologies and innovations, materials, sustainability, resilience, vehicle-track interaction (VTI), track dynamics, health monitoring, condition assessment, change detection, track stability, and remote sensing.

**Track 2: Mechanics of Rolling Stock (Sponsored by ASME RTD)**

**Chair: Mehdi Ahmadian, Virginia Tech; Co-Chairs: Abe Meddah, MxV Rail and Timothy Mast, Wabtec**

Includes topics related to locomotives, railcars, wheels, draft gears, suspensions, bearings, bogies, materials, onboard systems, onboard intelligent systems, and related matters.

**Track 3: Electrical Signal, Communication, and PTC Systems (Sponsored by IEEE)**

**Chair: David Thurston, CP Rail; Co-Chair: Lamont Ward, Amtrak**

Includes topics related to Communications Based Signaling, The Internet of Railway Things (IoT), Asset Management, Health/Welfare and condition assessment, Wireless communications, Positive Train Control, Enhanced Train

Control, Networks, Security, Automated Testing, Artificial Intelligent (AI) for safety systems, and related matters.

**Track 4:** Safety Engineering and Risk Analysis (Sponsored by ASME SERAD)

**Chair: Mohammad Pourgol-Mohamad, University of Maryland; Co-Chair: Magdy Elsibaie, University of Maryland; Co-Chair: Arun Veeramany, Pacific Northwest National Laboratory**

Includes topics related to Mathematical Methods and Computations for Reliability and Safety; Reliability and Risk Analysis for Emerging Technologies and Intelligent Railroad; Failure and Forensic Analysis for Accidents and Trespassing; System and Structural Health Monitoring and Prognostics; Machine Learning and Big Data for Reliability, Maintenance, and Safety; Reliability Centered Maintenance; Resiliency and Sustainability Analysis; Human Factor; Reliability Analysis; and related matters.

**Track 5:** Electrification and Transit Systems (Co-sponsored by IEEE and ASME RTD)

**Chair: John Grantham, Atkins; Co-Chair: Brian Donohue, WSP**

Includes topics related to electrification systems overhead contact systems, third rail contact systems, traction power substations, stray current and corrosion control, electro-magnetic interference (EMI), transit systems, and passenger transportation.

For any website or paper-related questions, please contact Lori Lee, Web Tool Specialist, at [toolboxhelp@asme.org](mailto:toolboxhelp@asme.org). For any conference-related or logistical questions, contact Mary Jakubowski, Manager, Events Management, at [jakubowskim@asme.org](mailto:jakubowskim@asme.org). For any questions about topics, abstracts, tracks, or any other program-related inquiries, please contact Brian Donohue (Brian.Donohue@wsp.com) or Mehdi Ahmadian (Ahmadian@vt.edu), Technical Program Co-chairs.

**SUBMIT YOUR ABSTRACT at**

**<https://event.asme.org/Joint-Rail-Conference>**

The American Society of Mechanical Engineers®

( ASME® )

082421 - 24735