JRC
Joint Rail Conference

Snowbird, UT

April 9-12, 2019

CALL FOR PAPERS & PRESENTATIONS

Abstracts due date is October 1, 2018!

https://www.asme.org/events/joint-rail-conference

"150 Years of Innovation Continues"

JRC 2019 is the major, multidisciplinary North American railroad conference encompassing all aspects of rail transportation and engineering. In order to create a diverse and engaging technical program, conference organizers are seeking papers and presentations on novel research, application of advanced or non-traditional technology, and cutting-edge technology development from researchers active in academia, government and the private sector which have the potential for making a real impact on railroad operations, efficiency and safety. Technical tracks will include the following:

Railroad Infrastructure Engineering
Design, engineering, and construction of track, bridge structures and grade crossings. Geotechnical engineering of track substructure and right-of-way. Best practices and advances in technology for the inspection and maintenance of the railroad infrastructure.

Rail Equipment Engineering
Motive power technology, vehicle/track interaction, wheels, couplers, components, rolling stock design, manufacturing, materials, and maintenance.

Signal and Train Control Engineering
Systems integration, track and wayside components, equipment components, positive train control, interoperability, and microprocessor control.

Service Quality and Operations Research
Service availability and reliability, capacity models, impacts of aging equipment on service quality, transport mode integration especially with high-speed rail, passenger information systems and passenger reservation systems, freight railroad network optimization, asset planning, and train scheduling.

Planning and Development
Project management, planning & financing, new start and expansion development, service planning, environmental impact, and workforce development.

Safety and Security
System safety approaches, safety data management, risk analysis approaches, accident avoidance, accident survivability, train and employee safety, human-factors-informed safety improvements, hazmat risk management, security assurance, emergency preparedness and response.

Energy Efficiency and Sustainability
Energy conservation and efficiency, energy storage modeling, hybrid vehicles, emissions reduction and control and alternative energy sources.

Urban Passenger Rail Transport
Investigations, insights, innovations, and implementations in all aspects of urban passenger rail transport.

Electrification
Catenary design, third rail design, materials, safety, efficiency, electrification approaches, design for high speeds, electromagnetic compatibility (EMC), corrosion control, load flow simulation, energy savings, energy storage devices, regenerative braking, smart electrical supply.

Vehicle-Track Interaction
Wheel/rail contact, best practices in testing methods and modeling tools, passenger and freight applications.

Railroad History
Topics may include notable structures, equipment, facilities and persons of historical interest to the railroad engineering community.

Abstracts can be submitted to: http://www.asmeconferences.org/JRC2019/Login.cfm. Abstracts **must** be in English and a maximum of 400 words in length. The abstract should include the following elements:

- An introduction that provides the motivation and purpose of the paper.
- The novelty and contribution of the work represented in the paper, with a clear statement distinguishing it from previously published papers. The paper must represent either the first publication of material or the first publication of an original compilation of information from a number of sources as specifically noted by footnotes and/or bibliography.
- The methodology used (e.g., experimental techniques, analytical, computational, etc.).
- Preliminary results and conclusions; identify known or expected results, which should clearly support the claims of novelty.

It is expected that all abstracts will address these elements to be considered for publication or presentation. Interested authors will be notified of abstract acceptance. Conference papers will be peer-reviewed and published in proceedings.

The ASME Rail Transportation Division is offering a limited number of conference scholarships for students. Please see the JRC2019 website for details: https://www.asme.org/events/joint-rail-conference

Joint Rail Conference co-sponsoring & partnering organizations: