Only the longest-running Wheel/Rail Interaction Conference offers THREE industry-leading railroading events back-to-back in ONE location!

**MAY 17, 2021**

**RAIL TRANSIT SEMINAR**

The Rail Transit Seminar is devoted to examining wheel/rail, vehicle/track interaction on rail transit systems. This cross-disciplinary seminar will include presentations from experts in vehicle/track dynamics, noise and vibration, wheel/rail profile design and maintenance, and friction management. Join a unique group of transit professionals, researchers and suppliers at this seminar to examine recent developments in research and technology, participate in lively discussion and gain a better understanding of the complex interaction at the rail transit wheel/rail interface.

**MAY 18, 2021**

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“Principles of Wheel/Rail Interaction” course is an intensive, full-day course that will provide in-depth examination of the primary aspects of wheel/rail, vehicle/track interaction. Drawing from both theory and practical application, the course will cover contact mechanics, vehicle suspension, wheel set curving, track geometry, friction management, wheel/rail profiles and more—all the elements that are required to promote a more complete understanding of vehicle/track dynamics and wheel/rail interaction.

**MAY 19-20, 2021**

**HEAVY HAUL SEMINAR**

The Heavy Haul Seminar is devoted to examining wheel/rail, vehicle/track interaction on rail freight and shared-track passenger systems. We bring together track and mechanical users, researchers and suppliers in a positive, educational setting like no other in the industry. The latest information on new and existing technology, and the ways in which it is being used to improve wheel/rail interaction on freight and passenger railways will be presented by some of the best minds in railroading.

See reverse side for Speakers and Topics

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SPEAKERS AND TOPICS

RAIL TRANSIT SEMINAR • MAY 17

Session 1
TBD

Session 2
TBD

Using Friction Management to Improve System Performance and Reduce Life Cycle Cost on the Canada Line
Kelvin Chiddick, Chiddick Consulting
James Cardno, SNC-Lavelin
Derek Flann, SNC-Lavelin

Improving Rail Grinding Specifications and QA/QC Procedures for Transit
Mark Reimer, Advanced Rail Management Corp.

SPECIAL FOCUS — Addressing Wheel/Rail-Generated Noise and Vibration in Rail Transit
Rail Damper Trials — Noise Reduction Outcomes from Ottawa and Vancouver
Briony Croft, SLR Consulting (Canada)

Characterizing the Effect of Rail Hardness on Corrugation Formation, Grinding Cycles, and Noise
Peeter Vesik, British Columbia Rapid Transit

Vibro-Acoustic Inspection of Vienna’s Tram Network
Karoline Alten, Transportation Infrastructure Technologies at AIT Austrian Institute of Technology

Effects of a Conformal Frog Retrofit on Wayside Noise and Vibration on the Ottawa Trillium Line
Rashid Dorj, City of Ottawa
Harry Skoblenick, Bombardier Transportation

Controlling Grinding-Induced Corrugation to Maintain Lower Wayside Train Noise Levels
Shankar Rajaram, Sound Transit

PRINCIPLES COURSE • MAY 18

Wheel-Rail Contact Mechanics
Kevin Oldknow, Simon Fraser University,
Organizing Chair — Principles Course

Track Structures, Components and Geometry
Gary Wolf, Wolf Railway Consulting, LLC

Vehicle Types, Suspensions & Components
Elton Toma, NRC, Canada

Vehicle-Track Interaction & Dynamics
Rob Caldwell, NRC, Canada

Wheel-Rail Damage Mechanisms
Richard Stock, LINSINGER

Vehicle-Track Measurement Technologies
Matthew Dick, ENSCO, Inc.

Maintaining the Optimized Wheel Rail Interface
Eric Magel, NRC, Canada

Special Trackwork in Heavy Haul: Design, Field Testing and Maintenance
Brad Kerchof, (Retired) Norfolk Southern

HEAVY HAUL SEMINAR • MAY 19 - 20

How CSX Designed Optimal Rail Profile for Economics and Risk
Dan Hampton, CSX Transportation

Investigation into a Broken Wheel Derailment
Rob Johnston, Transportation Safety Board of Canada

Using Modern Railroad Data Analytics to Minimize Mixed Manifest Train Incident Risk
Kyle Mulligan, CP Rail

Wheel Truing Technology Development and Innovation
David Davis, Simmons Machine Tool Corporation
Brandon Teal, Simmons Machine Tool Corporation

Rail Milling in Heavy Haul Environments
Richard Stock, LINSINGER

Research into the Causes of Visually “Undetectable” Broken Spikes
Marcus Dersch, University of Illinois
Brad Kerchof, (Retired) Norfolk Southern

Monitoring and Managing W/R Interface Forces in Revenue Operation of QNS&L
Yan Liu, National Research Council of Canada
Dominique Siros, Rio Tinto, QNS&L Railway

Investigation by Vale S.A. into Truck Hunting and the Associated Damages to Truck Components and Heavy Haul Rolling Stock
Paul Bladon, Wayside Inspection Devices Inc.

The Role of Elasticity in Ballasted Tracks
Rudolf Schilder, Advanced Rail Track Solutions

Session 16
TBD

Real Results: Reduction of Train Accidents Based on the use of Friction Management
Leonardo Soares, Rumo Logistica S.A.

Adverse High Rail Profiles
Brad Kerchof, (Retired) Norfolk Southern

Dynamic Simulation of Locomotive Derailments on Crossover Track
Daoxing Chen, Transportation Safety Board of Canada

Attend one, two, or all three events. Discounts available for all railroaders! Visit www.wheel-rail-seminars.com or call 847.808.1818 for details.