

PROGRAMME

Friday, February 15th, 2019

- 10:15-10:30 Opening session
- 10:30-11:00 Invited Lecture
- Monitoring of structures: an important tool in data collection for diagnosis and prognosis
Prof. Túlio Bittencourt (USP)
- 11:00-12:30 PhD Presentations – Session 1
- Strengthening for improved fatigue capacity of railway bridges
Cláudio Horas
- A framework for infrastructure management systems based on risk assessment - application to railway bridges
João Fernandes
- An integrated procedure for assessing and upgrading the structural condition of in-service stone masonry railway arch bridges
Rúben Silva
- Prediction and mitigation of vibrations and re-radiated noise due to railway traffic
Aires Colaço
- Dynamic weighing in motion of railway vehicles
Araliya Mosleh
- 12:30-14:00 Lunch
- 14:00-14:30 Invited Lecture
- Identification of railway track quality and safety through the dynamic inertial response of railway vehicles
Prof. Roberto Spinola Barbosa (USP)
- 14:30-16:00 PhD Presentations – Session 2
- Development of auxetic lightweight composite panels for vibration and noise damping
Vitor Carneiro
- On-board system for condition monitoring of railway tracks
José Neto
- Optimizing energy efficiency for train operation constrained to scheduling
Agostinho Rocha
- Power electronics solutions for power quality improvement and energy management in railway systems
Mohamed Tanta
- Development of smart metering solutions for energy efficiency increasing in railways systems
Vitor Morais

16:00-16:30 Coffee-Break

16:30-17:00 Invited Lecture

Mapping, characterization and modeling of rock tunnels using 3D terrestrial laser scanning and discrete fracture networks
Prof. Marcos Massao Futai (USP)

17:00-18:00 PhD Presentations – Session 3

A highly automated inspection system for the defect monitoring on rail tunnels
Behzad Farahani

Geomechanics assessment of inert steel slag aggregate as alternative material for ballasted railway tracks
Bruno Delgado

Assessment of the long term dynamic behavior of innovative railway ballastless track solutions
Ana Ramos

Development of innovative railway precast sleepers and slab track modules
Luís Matos

18:00-18:15 Closure

18:15-19:00 Cocktail

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