

10TH INTERNATIONAL CONFERENCE ON
RAILWAY BOGIES AND
RUNNING GEARS

September 12 – 15, 2016
BUDAPEST, HUNGARY

PROGRAMME



SCIENTIFIC SOCIETY OF MECHANICAL ENGINEERS
DEPARTMENT OF ROLLING STOCK
BUDAPEST
2016

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Issued by the *Department of Rolling Stock* at the *GTE*, Budapest, 2016

Registration Time

at the Conference Centre of the Budapest University of Technology and Economics, Building A

Budapest, distr. XI. Egry József street 20 – 22, ground floor

11 September 2016: **16⁰⁰ - 20⁰⁰, Welcome Buffet**

12 September 2016: **7³⁰ - 15⁰⁰**

13 September 2016: **8⁰⁰ - 15⁰⁰**

14 September 2016: **8⁰⁰ - 13⁰⁰**

15 September 2016: **8⁰⁰ - 16⁰⁰**

You are welcome as a participant of our Conference. We hope that you will be enriched with a great deal of new information both in your special field and in human relations.

If any question would arise in connection with the Conference, please contact our professional organiser

Mr. Gábor TÓTH

at the registration desk.

The Organising Committee

PROGRAMME OF THE CONFERENCE

Official Languages:

English - Hungarian

Simultaneous interpreters will be provided

FIRST DAY

12 September, 2016 - 9⁰⁰

Opening Ceremony, Festive Addresses

9²⁵ **Lectures** Chairman: **I. ZOBORY** (Hungary)

9²⁵ - 9⁴⁵ **KRETTEK, O.** (Germany)
Running Behaviour Vehicle Development Versus Track Construction

9⁵⁰ - 10¹⁰ **SZÉCSEY, I.** (Hungary)
Siemens Bogie Technology

10¹⁵ - 10⁴⁵ **COFFEE BREAK**

10⁴⁵ **Lectures** Chairman : **O. KRETTEK** (Germany)

10⁴⁵ – 11⁰⁵ **MORIHORO, H. – CHO, E. – IWANAMI, K. – SUZUKI, F. - SHIMAMUNE, R. – ODA, S.** (Japan)
Application of a Double Helical Gear Driving Device to High Speed Railway Vehicle

11¹⁰ - 11³⁰ **MELNIK, R. – SOWINSKI, B.** (Poland)
Simulation Study of a Tractive Rail Vehicle with Differential Gears

11³⁵ - 11⁵⁵ **STEENBERGEN, M.** (The Netherlands)
Rail Grinding Techniques & The Rolling Contact Fatigue Lifecycle

12⁰⁰ - 12²⁰ **MYAMLIN, S.V. – BARANOVSKIY, D.** (Ukraine)
Development of New Bogies Freight Cars for Narrow-Gauge Railways.

12³⁰ - 12⁴⁰ CONFERENCE PHOTO (in front of Bldg. A)

12⁴⁰ - 14⁰⁰ LUNCH BREAK

14⁰⁰ Lectures Chairman: **S. STICHEL** (Sweden)

14⁰⁰ - 14²⁰ BRACCIALI, A. –MEGNA, G. (Italy)

Inside Frame Bogies & AIR Wheelset: A Winning Marriage

14²⁵ - 14⁴⁵ PORGES, O. (Switzerland)

On the Development and Design of New Vehicles for the Wuppertal Monorail

14⁵⁰ - 15¹⁰ SZÁNTÓ, F. (Australia)

Curving Resistance In Freight Trains On Grades

15¹⁵ - 15⁴⁰ COFFEE BREAK

15⁴⁰ Lectures Chairman: **CH. SCHINDLER** (Germany)

15⁴⁰ – 16⁰⁰ MATSUMOTO, A. – MICHITSUJI, Y. (Japan)

Flange-Climb Derailments of Freight Trains on Curved Tracks Due to Rolling

16⁰⁵ – 16²⁵ FRIDRICHOVSKY, T (Czech Republic)

Analysis of Occurrence of Torsional Oscillations in Wheelset Drives Used in Modern Railway Vehicles

16³⁰ – 16⁵⁰ WU, T. – FANG, G. (P.R. China)

On the Measurability of Rail Unevenness and Corrugation Via Bogie's Dynamic Response



18⁰⁰ - 22⁰⁰

CONFERENCE RECEPTION

in the **DANUBE HALL** of the **BME**,

Bldg. K, Floor 1, No. 2.

Budapest, distr.XI. Müegyetem rkp. 3.

The Reception is sponsored by the

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and the

SIEMENS (H)

SECOND DAY

13 September, 2016 - 9⁰⁰

9⁰⁰ *Lectures* Chairman: **A. CHUDZIKIEWICZ** (Poland)

9⁰⁰ - 9²⁰ **FERENCZ, P.** (Hungary)
Lifetime Extension Possibilities of Stadler Bogie Force Transmission Elements on the Basis of Test Results

9²⁵ - 9⁴⁵ **SZABÓ, A. – PARÁZSÓ, J.** (Hungary)
Determination of the Dynamical Effect of the Wheel Flattening by Means of Simulation Method

9⁵⁰ - 10¹⁰ **LI, Y. – ENBLOM, R. – STICHEL, S. – SHEN, W.**
(P.R. China + Sweden)
Prediction and Validation of Wheel Profile Wear on a Chinese High-Speed Train

10¹⁵ - 10⁴⁵ **COFFEE BREAK**

10⁴⁵ *Lectures* Chairman: **F. KOLONITS** (Hungary)

10⁴⁵ - 11⁰⁵ **LEKUE, J. – DÖRNER, F. - SCHINDLER, CH.** (Germany)
Determination of the Measurement Accuracy of the Prescale Pressure Measurement Film in the Wheel-Rail Contact

11¹⁰ - 11³⁰ **CHUDZIKIEWICZ, A.** (Poland)
Wear of Wheel and Rail Profiles Under Operating Conditions of Subway Vehicles

11³⁵ - 11⁵⁵ **FRIDBERG, A.M.** (Russia)
Wave-Like Contact Interaction of Rolling Elastic Bodies (Wheel/Rail)

12⁰⁰ - 12²⁰ **STASKIEWICZ, T. – FIRLIK, B.** (Poland)
Influence of Wheel Profile Geometry on Running Characteristics of Light Rail Vehicles

12²⁵ - 14⁰⁰ **LUNCH BREAK**

14⁰⁰ *Lectures* Chairman: **S. BRUNI** (ITALY)

14⁰⁰ - 14²⁰ **KRIPLANI, L.K. – VYAS, N. S.** (India)
Rolling radius function based optimization of rail/wheel

14²⁵ - 14⁴⁵ **RICHTER, W.-D.** (Germany)
Wheel and Rail Corrugation - What We Know and What We Ignore...

14⁵⁰ - 15¹⁰ **NERLICH, I.** (Switzerland)
Benefit of “track gentle rolling stock” expected track maintenance costs of new services in the future?

15¹⁵ - 15⁴⁵ COFFEE BREAK

15⁴⁵ Lectures Chairman: **O. POLACH** (Switzerland)

15⁴⁵ - 16⁰⁵ CSÉPKE, R. (Hungary)
Railway Rail/Wheel Contact in Curves of Small Radii

16¹⁰ - 16³⁰ SCHMID, R. (Austria)
Running Gears – An Infrastructure Manager’s View from the
Track Side



LATE AFTERNOON – EVENING PROGRAM

RAILWAY MUSEUM PARTY

sponsored by the

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and the

**NIPPON STEEL & SUMIKIN
RAILWAY TECHNOLOGY (J)**

Buses leave the **Conference Centre** at **17⁰⁰**

After the Party

buses return by cca. **22⁰⁰**

THIRD DAY

14 September, 2016 - 9⁰⁰

- 9⁰⁰ **Lectures** Elnök: **J. CSIBA** (Hungary)
- 9⁰⁰ - 9²⁰ **DOLCHINI, A. – KUKA, N. – VERARDI, R. - ARIAUDO, C.**
(Italy)
Closed Loop Simulation of Railway Vehicle Driveline
- 9²⁵ - 9⁴⁵ **MICHALEK, T. – ZELENKA, J. – SPALEK, P.**
(Czech Republik)
Dynamic Behaviour of Locomotive with Pendulum Traction Drive
- 9⁵⁰ – 10¹⁰ **KOLONITS, F.** (Hungary)
Initial Conditions for Load History of a Wheel-Hub/Wheel-Seat Contact Realized by Thermal Shrink Fit Joint
- 10¹⁵ - 10⁴⁵ **COFFEE BREAK**
- 10⁴⁵ **Lectures** Chairman: **N. S. VYAS** (India)
- 10⁴⁵ - 11⁰⁵ **QUESANDA GONZALEZ, A. – RODRIGUEZ FERNANDEZ, S. – ÁLVAREZ CALDAS, C. – SAN ROMÁN GARCIA, J.L.**
(Spain)
Uncertainty Determination In Structural Bogie Frame Finite Element Models
- 11¹⁰ – 11³⁰ **GIROTTI, A. – SANGIRARDI, M.** (Italy)
Assessment Procedures on Fatigue Test for Railway Bogies
- 11³⁵ – 11⁵⁵ **HORVÁTH, G.** (Hungary)
Testing of Railway Antislip Devices in Hungary
- 12⁰⁰ – 12²⁰ **CHVOJAN, J. – KEPKA, M.** (Czech Republik)
Strength and Fatigue Testing of Bogie Parts: from Two to Twenty-Two Loading Forces
- 12²⁵ - 14⁰⁰ **LUNCH BREAK**
- 14⁰⁰ **Lecture** Chairman: **ZOBORY, I.** (Magyarország)
- 14⁰⁰ – 14²⁰ **LUKÁCS, S.** (Hungary)
Establishment of the Maintenance Basis for the vehicles of the of the Budapest Metro Line No 4.
Introductory lecture to prepare the afternoon technical visit



AFTERNOON - EVENING PROGRAM:

1. Visiting the

METRO MAINTENANCE CENTRE

2. right after the visit:

CONFERENCE BANQUET

sponsored by the

KNORR-BREMSE

RAILWAY VEHICLE SYSTEMS HUNGARIA Ltd. (H)

Buses leave the Conference Centre at **14⁴⁵**

After the Banquet

buses return to Budapest hotels by cca. **22⁰⁰**

FOURTH DAY

14 September, 2016 - 9⁰⁰

- 9⁰⁰ Lectures** Chairman: **A. SZABÓ** (Hungary)
- 9⁰⁰ – 9²⁰ SCHÖLER, F. CORVES, B.** (Germany)
Multibody Simulation Based Design Load Calculation Using Representative Simulation Scenarios
- 9²⁵ - 9⁴⁵ CSIBA, J.** (Hungary)
Bogie Type Anniversary: The Bogie Type Y 25 Is Over 50 Years
- 9⁵⁰ - 10¹⁰ BIONDA, S. – BOCCIOLONE, M. – COLLINA, A. – DI GIALLEONARDO, E.** (Italy)
Rail Corrugation Growth On Sharp Curves Negotiated By A Vehicle Equipped With Resilient Wheels
- 10¹⁵ - 10⁴⁵ COFFEE BREAK**
- 10⁴⁵ Lectures** Chairman: **A. MATSUMOTO** (Japan)
- 10⁴⁵ – 11⁰⁵ YAMADA, H. – IWANAMI, K. – SHIMAMUNE, R. – TANAKA, T. – MYAMOTO, T.** (Japan)
Fundamental Study of Rotational Resistance of Shinkansen Bogie
- 11¹⁰ – 11³⁰ OZAKI, T. – NAKAI, T. – SHIMAKOWA, Y. – MATSUMOTO, K. – IWAMOTO, A. – SAITO, T. – YANO, K. – SATO, Y. – OHNO, H. – MORI, H.** (Japan)
Evaluation of a Steering Bogie about Running Resistance and Power Consumption
- 11³⁵ – 11⁵⁵ FINKE, SZ. – PIECHOWIAK, T.** (Poland)
Selection of Parameters for Bogie Simulation on the Basis of Experimental Research
- 12⁰⁰ - 12²⁰ ALFI, S. – MAZZOLA, L. – LIU, X. – ACCIALANZA, M.M. – BRUNI, S.** (Italy)
A System for the Condition Monitoring of Railway Bogies and of the Infrastructure
- 12²⁵ - 14⁰⁰ LUNCH BREAK**
- 14⁰⁰ Closing** Chairman: **I. ZOBORY** (Hungary)



14⁰⁰

CLOSING ADDRESS
Farewell Drink

PROGRAM OF THE POSTER SESSION

Posters will be exhibited near the Lecture Room
between 12 and 15 September 2016

Discussions can be realised in coffee breaks and every day
before the Afternoon Sessions between 13³⁰ and 14⁰⁰

MYAMLIN, S. (Ukraine)

Developing the Innovative Design of Cars for the Tourist Railway
Trains

CSÉPKE, R. (Hungary)

Railway Rail/Wheel Contact in Curves of Small Radii

KEPKA, M. (Czech Republic)

Competence Center of Rail Vehicles: Development and Testing of
Mechanical Parts of Drives

KEPKA, M. - CHVOJAN, J. (Czech Republic)

Strength and Fatigue Testing of Bogie Parts: From Two to Twenty
Two Loading Forces

STEENBERGEN, M. (The Netherlands)

Rail Grinding Techniques & The Rolling Contact Fatigue Lifecycle

SCHMID, R. (Austria)

Running Gears – An Infrastructure Managers View From the
Track Side

KRETTEK, O. (Germany)

AVENIO prevails



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MAP OF THE **BME CAMPUS**

SITUATION OF THE **CONFERENCE HALL**

AND THE **DANUBE HALL**

