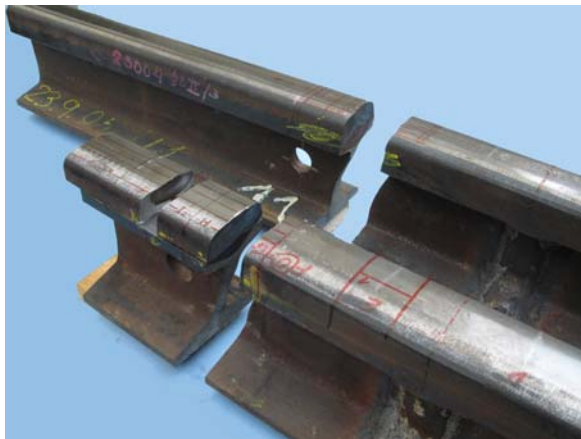


## Final Program

# International ESIS TC-24 “Integrity of Railway Structures” Workshop



**„From Rail-Wheel Contact to  
Rail Fracture  
– Light Rail Systems -  
Trams and Undergrounds“**

**Vienna University of Technology  
Vienna, Austria  
April 17-18, 2008**

## **This workshop will be organized jointly by the following institutions:**

**ESIS** - Austria,

**Vienna University of Technology:**

- TU WIEN - TVFA
- Institute of Mechanics & Mechatronics A2
- Institute of Railway Engineering, Traffic Economics and Ropeways

**Wiener Linien** GmbH & Co KG.

Workshop Moderator: H.P. Rossmanith H.P. (Austria)

The workshop will be **free of charge**.

A special dinner invitation and factory visit will be arranged by the sponsor *Wiener Linien*.

When you come by subway (lines U1, U2 and U4) or streetcar: take exit Karlsplatz, cross the park, in front of you you will find the white-washed Old Administration building dating back to 1815.

**Attention!** Don't use the main entrance. Please take the entrance at the left side of the main building, staircase Nr. 2, walk up to the third floor or just follow the signs. The workshop will be held in the seminary room of the Institute of Railway Engineering, Traffic Economics and Ropeways. **See the floor plan of Vienna University last page.**

Further information about the Vienna University of Technology can be obtained at our web site: <http://www.tuwien.ac.at> (see map of the TU buildings)

**Attention! Absolutely necessary!!**  
**Each workshop participant must register prior to**  
**April 15, 2008 by email to F. Loibnegger.**

E-mail: [friedrich.loibnegger@tuwien.ac.at](mailto:friedrich.loibnegger@tuwien.ac.at)

**Questions concerning the workshop program please direct to:**

H.P. Rossmanith

Institute of Mechanics, Vienna University of Technology

Wiedner Hauptstr. 8-10/325, A-1040 Vienna, Austria;

Fax: ++43-1-58801-325-98; Tel: ++43-1-58801-32555 or -32560, E-

E-mail: [hans.peter.rossmanith@tuwien.ac.at](mailto:hans.peter.rossmanith@tuwien.ac.at)

**For registration and general questions please contact:**

Friedrich. Loibnegger

TU WIEN - TVFA, Vienna University of Technology

Karlsplatz 13, A-1040 Vienna, Austria;

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and

Ms. Ruth Hierzer

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Tel.: +43-1-58801x23213

Fax: +43/1 58801 232 99

E-mail: [rhierzer@mail.tuwien.ac.at](mailto:rhierzer@mail.tuwien.ac.at)

<http://www.eiba.tuwien.ac.at>

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# Workshop Schedule

## Thursday, April 17, 2008

**Registration of Participants** 8:30 - 9:15

**Welcome** 9:15  
by a Representative of the Vienna University of Technology

**Introduction** 9:20  
by the head of the TU WIEN - TVFA *P. Linhardt*,  
by the head of the Institute for Railway Engineering,  
Traffic Economics and Ropeways **N. Ostermann**

### *Morning Session*

**Influencing RCF and Wear by Different Rail Steels  
and Contact Conditions** 9:30 - 10:15

Richard **Stock**  
Technologie: Forschung & Entwicklung  
Voestalpine Schienen GmbH  
Kerpelystraße 199  
A-8700 Leoben, Austria  
T. +43/50304/26-41 48 ; F. +43/50304/66-97  
M. +43/664/615 68 32  
E-mail: [richard.stock@voestalpine.com](mailto:richard.stock@voestalpine.com) ; [www.voestalpine.com](http://www.voestalpine.com)

**Cracks in Switch Rails (Risse in Weichenschienen)** 10:15 - 11:00

Grigori **Budnitzki** & K.-O. **Edel**  
BWG GmbH & Co. KG Entwicklung  
Uferstraße 97  
D-14774 Brandenburg-Kirchmöser, Germany  
Tel: +49 (0)3381/810527  
Fax: +49 (0)3381/810524  
E-mail: [g.budnitzki@bwg-wbg.de](mailto:g.budnitzki@bwg-wbg.de) ; Web: [www.bwg.cc](http://www.bwg.cc)

**Coffee break** 11:00 - 11:30

**High Pressure Torsion –  
A Useful Tool for Microstructural  
Investigations on Rail Steels**

**11:30 - 12:15**

Anton **Hohenwarter**

Erich Schmid Institut für Materialwissenschaft der  
Österreichischen Akademie der Wissenschaften und  
Department Materialphysik der Montanuniversität Leoben  
Jahnstraße 12

A - 8700 Leoben, Austria

Tel.: +43 (0) 3842 804 306

Fax : +43 (0) 3842 804 116

E-mail: [anton.hohenwarter@unileoben.ac.at](mailto:anton.hohenwarter@unileoben.ac.at)

**Lunch break (Nelsons)**

**12:15 – 13:30**

**Afternoon Session**

**Fracture Mechanics Analysis of Growth of Rolling Contact  
Fatigue Cracks in Rails (Bruchmechanische Analyse des  
Wachstums von Rollkontaktermüdungsrissen in  
Eisenbahnschienen)**

**13:30 - 14:15**

Thomas **Schnitzer**

Siemens AG Energy Sector, PG PE152

Huttenstr. 12

10553 Berlin, Germany

Tel.: +49 (30) 3461-1669

Fax: +49 (30) 3461-2517

E-mail: [thomas.schnitzer@siemens.com](mailto:thomas.schnitzer@siemens.com), [th.schnitzer@gmx.de](mailto:th.schnitzer@gmx.de).

**Wheel-Rail Contact Problems  
associated with Subways**

**14:15 - 15:00**

Paul **Mittermayr**

Büro für angewandte Mechanik und Mathematik Dr. Mittermayr Scientific Consulting  
GmbH Lambrechtgasse 4/2

A-1040 Vienna, Austria

Tel.: +43 1 9949950 10 / Fax: +43 1 9949950 99

Mobil: +43 699 12616116

E-mail: [kordula.mittermayr@bamm.at](mailto:kordula.mittermayr@bamm.at)

Internet: <http://www.bamm.at>

**Coffee break**

**15:00 - 15:15**

**Radverschleißprobleme bei einer Standseilbahn am Beispiel der Pitztaler Gletscherbahn (Wheel-Rail Contact and Wear with the Pitztal Railway) 15:15 - 16:00**

Roman Pongracz  
Pausingerg. 31  
1140 Vienna, Austria  
T: +43-1-9147896  
M: +43-664-73580693  
E-mail: [roman.pongracz@aon.at](mailto:roman.pongracz@aon.at)

**Excursion to the track system factory Simmering of the Wiener Linien (jointly starting from the Workshop venue “Karlsplatz” by a special tram; return transfer included) and Dinner. No formal dress required**

**17:00 - 22:00**

**Friday, April 18, 2008**

**Morning Session**

**Rail Grinding – An Effective Method  
to Control the Wheel-Rail Interface and  
Prevent Fatigue Damage**

**8:30 - 9:15**

Wolfgang **Schoech**  
SPENO INTERNATIONAL SA  
Parc Château-Banquet 26  
CP 16  
CH 1211 Genève 21, Switzerland  
Tél: +41 22 906 46 00  
Fax: +41 22 906 46 01  
Handy +41 79 200 7409).  
E-mail: [ws@speno.ch](mailto:ws@speno.ch)

**Fractal Analysis of Deformation Structures  
and Associated Noise for the Assessment  
of Material Degradation**

**9:15 - 10:00**

Jürgen **Schreiber**  
Dresden, Germany  
Mechanical Systems Fraunhofer Institute Dresden  
Tel.. +49 (0) 351 / 26-48 251  
E-mail: [juergen.schreiber@izfp-d.fraunhofer.de](mailto:juergen.schreiber@izfp-d.fraunhofer.de)

**Coffee break**

**10:00 - 10:15**

**Rolling Contact Fatigue  
in Head-Hardened Rails –  
A Vienna Subway Experience**

**10:15 - 11:00**

**Rossmann H.P\*., F. Loibnegger\* & E. Fischmeister\*\***  
\*. Vienna University of Technology  
\*\* Wiener Linien GmbH & Co KG  
Vienna, Austria

**Discussion, Closure and Farewell!**

**11:00 - 12:00**

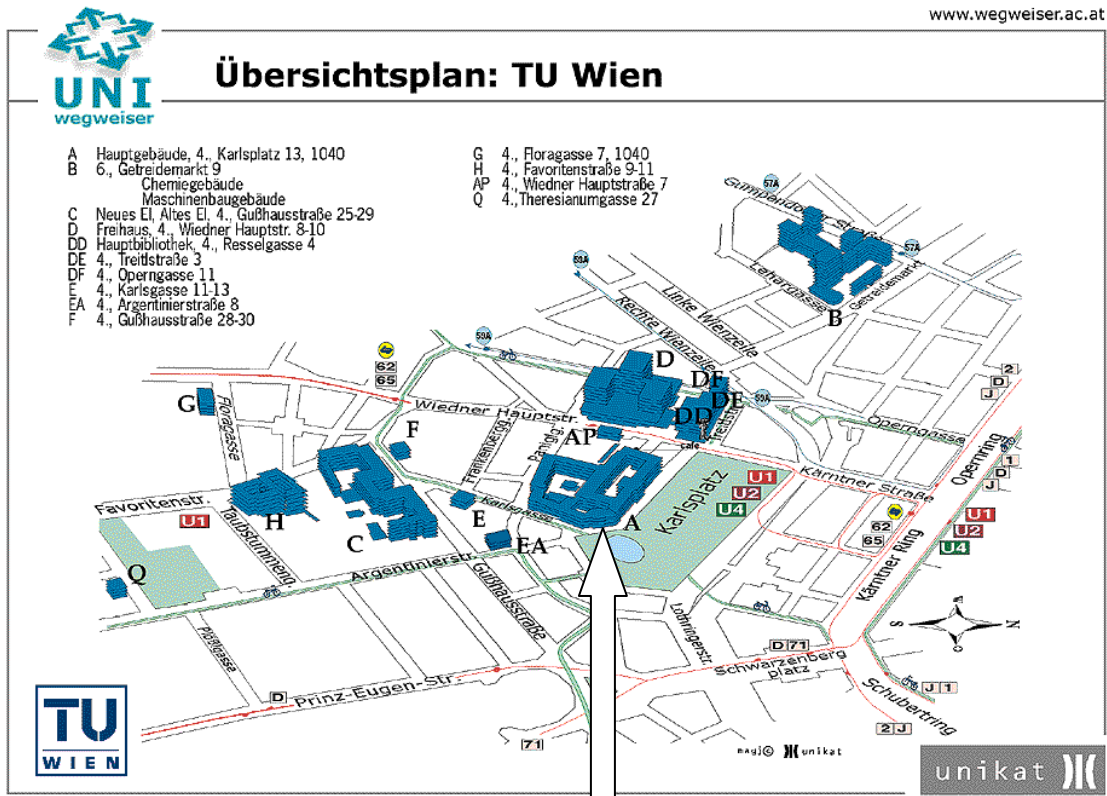
Accommodation: The attached file "TU Hotels" contains some hotels which have **special prices** (2007) for guests of the Vienna University of Technology.

<p>*Hotel Erzherzog Rainer ****  Wiedner Hauptstraße 27-29  1041 Wien  Tel 0043 1 50 111 0  Fax 0043 1 50 111 350  Email: <a href="mailto:rainer@schick-hotels.com">rainer@schick-hotels.com</a></p>	<p>2min walk to the TU</p>	<p>single room: 88 €  double room: 113 €</p>
<p>*Pension Shermin  Rilkeplatz 7  1040 Wien  Tel 0043 1 586 61 83 0  Fax 0043 1 586 61 83 10  Email: <a href="mailto:hotel@shermin-apartments.com">hotel@shermin-apartments.com</a></p>	<p>1 min walk to the TU</p>	<p>single room: 65 €  double room: 90 €</p>
<p>Pension Residenz***  Ebendorferstraße 10  1010 Wien  Tel 0043 1 406 47 86  Fax 0043 1 406 47 86 50  Email: <a href="mailto:info@residenz.cc">info@residenz.cc</a></p>	<p>15 min tram  or U2 Underground</p>	<p>single room: 60 €  double room: 90 €</p>
<p>Pension Bosch  Keilgasse 13  1030 Wien  Tel 0043 1 798 61 79  Fax 0043 1 799 17 18  Email: <a href="mailto:smile@hotelpensionbosch.com">smile@hotelpensionbosch.com</a></p>	<p>7 min tram</p>	<p>single room: 46 €  double room: 72 €</p>
<p>Hotel Gasthaus Pribitzer  Rennweg 82  1030 82  1030 Wien  Tel 0043 1 798 57 74  Fax 0043 1 799 26 82</p>	<p>10 min tram</p>	<p>single room: 41 €  double room: 52 €</p>

\*Hotels in our vicinity do give us spezial rates (do mention that you take part on an event of Technical Uni Vienna).



## Map of the Workshop Site and Floor Plan of Vienna University of Technology



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