

- 21st Congress and European Conference 2014
- 22nd Congress and European Conference 2015
- Quenching special issue of IFHTSE Journal
- IFHTSE conference programme 2014
- Conferences forward planning

INTERNATIONAL FEDERATION FOR HEAT TREATMENT AND SURFACE ENGINEERING

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IFHTSE 21st CONGRESS / 2014 EUROPEAN CONFERENCE 12-15 MAY Munich Germany

Conference website for programme/information/registration/accommodation etc.

www.HeatTreatmentConference-Munich2014.de



IFHTSE 22nd CONGRESS / 2015 EUROPEAN CONFERENCE 27-29 MAY Mestre/Venice Italy

Conference website: <u>www.aimnet.it/ht2015.htm</u> Exhibition enquiries: <u>marketing@aimnet.it</u>

Quenching: Special issue of IFHTSE Journal

As announced in Bulletin 2014/2, Volume 8 (2014) no. 1 of *International Heat Treatment and Surface Engineering* is a Special Issue on QUENCHING. The contents cover multicycle process developments – quenching-partitioning-quenching: cooling performance, quenchant selection, low pressure carburising and high pressure gas quenching. There is an introductory report on the IFHTSE Liquid Quenchants Database Project.



Imre Felde, Leader of the LQD Project

Quenching and quenchants - an expert update Guest Editor: Imre Felde

- 1 IFHTSE Editorial
- 2 Report on IFHTSE Liquid Quenchant Database Project I. Felde
- 8 Selection of oil quenchants for heat treating processes
- D. Scott MacKenzie
 Development of multi-cycle quenchingpartitioning-tempering process and its applications in engineering
- X. W. Zuo, N. L. Chen, F. Gao and Y. H. Rong Effect of thermal conductivity and viscosity on cooling performance of liquid quench media
 - G. Ramesh and K. Narayan Prabhu
- 29 Low pressure carburising and high pressure gas quenching G. Busch
- 35 Advantages of low pressure carburising and high pressure gas quenching technology in manufacturing G. Hiller
- 42 Simulation trends in quenching technology for automotive components I. Felde and C. Simsir

International *Heat Treatment and Surface Engineering*, contents of Volume 8 (014) issue no. 1

Imre Felde (University of Óbuda, Budapest Hungary), Leader of the LQD Project, says in his conclusions to the LQD Phase 1 Report:

The experiments carried out during Phase 1 showed that acceptable agreement between the temperatures recorded in laboratories at four continents by using the ISO 9950 method could be achieved. However, a certain deviation between the cooling curves can originate from the application of different instrumentation as well as inaccurate attention to the conditions used during the measurements.

Therefore, the following tasks are proposed:

- more accurately defined and strictly complied with conditions must be followed during the cooling curve acquisition of Petrofer oil quenchants. In this case, three different types of oils will be analysed at three given temperatures. Better or more similar results are expected by performing the sampling using strictly applied conditions
- performing a benchmark test of the inverse heat conduction algorithms applied by the contributors would be beneficial in order to indicate their performance. The test will be carried out on five cooling curves generated by a finite element method model of an ISO 9950 probe using five different hypothetical HTC(7) functions. The task of the partners will be to generate the thermal boundary condition funct ions [to reconstruct the HTC(7) functions]. The evaluation of inverse techniques will be obtained from the predicted heat transfer coefficients .

IFHTSE Conference programme 2014



21st Congress IFHTSE combined with European Conference on Heat Treatment and Surface Engineering 12-15 May - Munich, Germany www.heattreatmentconference-munich2014.de Steel in cars and trucks www.sct14.com 15-19 June - Braunschweig, Germany 5th International Conference on Thermal Process Modeling and Computer Simulation [Co-located with Aeromat 2014] 16-18 June - Orlando Florida, USA www.asminternational.org/content/Events/modelin Heat Treatment 2014 Moscow: Exhibition and Conference 10-12 September - Moscow, Russia www.htexporus.com/ 2nd International Conference on Energy and the Future of Heat Treatment and Surface Engineering 11-13 October - Beijing, China chts@chts.org.cn 25th National Conference on Heat Treatment with International Participation 25-27 November - Jihlava, Czech Republic www.asociacetz.cz

Other events 2014

2014 PM World Congress		
18-22 May - Orlando FL, USA	www.mpif.org/Meetings/Conference.asp?linkid=14	
41st Congress A3TS (French language)		
11-13 June - Reims, France	www.a3ts-congres.fr/	
Surface Modification Technology Series no. 28		
15-18 June - Tampere, Finland	www.tut.fi/smt28	
13th European Vacuum Conference / 7th European Topica	al Conference on Hard Coatings	
8-12 September - Aveiro, Portugal	www.evc13.com	
Euro PM		
21-24 September - Salzburg, Austria	http://pm2014.epma.com	
HK 2014		
22-24 October - Cologne, Germany	www.AWT-online.org	
25th National Conference on Heat Treatment with Internati	ional Participation	
25-27 November - Jihlava, Czech Republic	www.asociacetz.cz	

Conference diary – forward planning

2015

IFHTSE 22nrd Congress with European Conference Mestre Italy, May 2015 – see page 1

ASM HTS Conference and Expo Detroit MI USA, September 2015

HK 2015

Germany, October

Conference with the theme: 'Heat treatment and surface engineering for tribological performance'

Tallinn Estonia

2016

IFHTSE 23rd Congress

USA, location to be decided; date probably March/April/May 2016*

3rd Mediterranean Conference on heat treatment and surface engineering ('tool' theme?) Portorož Slovenia, Late May 2016*

European Conference

Prague, Czech Republic

HK 2016

Germany, October

2017

IFHTSE 24th Congress with European Conference

France

World Tribology Congress

Beijing China

*These plans are for discussion at the 43rd Assembly of the Governing Council of IFHTSE on 12 May 2014

