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IFHTSE MEMBERSHIP

IFHTSE is delighted to welcome the following:

New company member

Robert Bosch GmbH, Schwieberdingen, Germany

New university member

Department of Materials Engineering at the Tallinn University of Technology, Tallinn, Estonia
(TUT is handling the organization, and providing the location for, BALTMATTRIB this coming October - see page 4)

This Group is responsible, inter alia, for:

- General operational management
- Detailed planning
- Communications within IFHTSE and public information dissemination
- Compilation of formal Progress Reports



On left:
Felde, Lübben.

Below:
Canale,
MacKenzie
Narazaki,



LQD PROJECT

Progress Report 2 for this Project has recently been circulated to those most closely concerned. As stated in issue 2012/1 of this Bulletin, the group which will conduct Phase 1 of the Project is established. General management of the Project is in the hands of a Core Group consisting of:

- Project Leader
Dr Imre Felde, University of Óbuda, Budapest Hungary
- IFHTSE Secretariat support
Robert Wood
- Phase 1 Partnership representatives
Prof Lauralice Canale, University of São Paulo Brazil
Dr Thomas Lübben, IWT Bremen Germany
Prof Michiharu Narazaki, Utsunomiya University Japan
Dr Scott MacKenzie, Houghton International USA

Membership of the Group will change by rotation as at 31 December 2012.

The challenges presented by this Project are by no means underestimated, given the complex combinations of quenchant types, process conditions, materials and geometries. Initial discussions show, therefore, that the group will pursue the 'art of the possible'! What is possible, and this is the basis of the Project, is to take a given and manageable set of criteria and compare a selection of different quenchants, leading to measured

and recorded quenching capability, expressed diagrammatically as the heat transfer coefficient (HTC).

Once the above is happening, at some appropriate stage the Project can move on to make other really significant contributions to progress:

In terms of a systematic approach to the capabilities of:

- Salt baths and fluidised beds, for which there are practically no HTC diagrams and which do not lend themselves easily to laboratory investigation
- Vegetable oils and fluids with additions of nano-size additive particles, which are more suitable for laboratory investigation, there is no systematic database of quenching intensities

Investigation of insufficiently understood phenomena:

- Critical heat flux densities q_{cr1} and q_{cr2} - why are they important?; how are they evaluated? Experiments suggest that q_{cr1} – on which film boiling depends – has considerable significance for distortion
- Wetting kinematics on immersion – there is not sufficient knowledge to enable this aspect to be used industrially

The communications plan for 2012 envisages:

- 29 February- circulation of Progress Report 2
- March – discussion at IFHTSE Executive Committee meeting in Strasbourg
- September – discussion at IFHTSE Executive Committee and Open Report 1 at the 6th International Conference on Quenching and Control of Distortion / 4th International Conference on Distortion Engineering, Chicago II USA
- October – Open Report 2 for IFHTSE 20th Congress Beijing China

Leader: *The LQD Project Leader, Imre Felde, has left the Bay Zoltan Foundation and is now with the University of Óbuda in Budapest.*

His new email: imre.felde@gmail.com

TOM BELL YOUNG AUTHOR AWARD

We are very pleased to report that the Tom Bell Young Author Award will once again be offered in 2012, as part of the 20th Congress, Beijing, China, 23-25 October.

First introduced in 1992, IFHTSE's Young Author Award was renamed in 2008 in honour of Prof Tom Bell (University of Birmingham England and Xi'an Jiao Tong University China).

The IFHTSE Young Author Award is intended to encourage the full participation of younger and promising engineers and scientists in IFHTSE Congresses and other conferences.

The Award is made for a paper presented by a young author in a main oral session of an IFHTSE Congress and deemed by the judges at the time to be the best of the papers fulfilling the Award criteria.

The objective of the Award, in addition to publicly acknowledging an excellent contribution, is to reward the winner by supporting his or her attendance at the next IFHTSE Congress or other IFHTSE conference by means of free registration and, subject to the availability of external funding, assistance with travel and accommodation costs.

The winning papers have usually been published in the relevant Congress proceedings or in the journal *International Heat Treatment and Surface Engineering*.

The paper by the 2011 winner (Dr Masaki Tanaka of Kyushi University 'Brittle-to-ductile transition in high-nitrogen austenitic stainless steels' is scheduled for *ISIJ International* 2012 Vol. 52 No. 5 (in English).

Contact the Secretariat (robert.wood@ifhtse.org) for details of procedures, eligibility, definition of 'young' etc.

The award is sponsored by Linde Gas



CONFERENCES A

IFHTSE Main programme 2012

2012

	Abstracts	Acceptance	Full papers
<p>European Conference on Heat Treatment and Surface engineering 'Combined treatments to improve surface properties'</p> <p style="text-align: center;">REGISTRATION OPEN</p> <p>22-23 March - Strasbourg, France</p> <p>(www.a3ts.org)</p>	passed	see website	see website
<p>1st International Conference on Energy and the Future of Heat Treatment and Surface Engineering</p> <p style="text-align: center;">REGISTRATION OPEN</p> <p>25-27 June - Bangkok, Thailand</p> <p>(www.mtec.or.th/EFhtse2012/)</p>	20-Mar-12	31-Mar-12	18-May-12
<p>6th International Conf. Quenching and Control of Distortion / 4th International Conf. on Distortion Engineering</p> <p style="text-align: center;">REGISTRATION OPEN</p> <p>10-13 September – Chicago II, USA</p> <p>(www.asminternational.org/qcd)</p>	passed	12-Mar-12	18-Jun-12
<p>9th Tooling Conference / 4th International Conference on Heat Treatment of Tools and Dies</p> <p>11-14 September – Leoben, Austria</p> <p>(www.tool2012.at)</p>	05-Mar-12	23-Apr-12	18-Jun-12
<p>20th Congress IFHTSE</p> <p>23-25 October - Beijing, China</p> <p>(http://www.20iftse.org)</p>	01-May-12	Jun-12	01-Sep-12

CONFERENCES B

Other important events 2012

HK 2012

10-12 October 2012 Wiesbaden, Germany

(www.awt-online.org)

Languages: German, English

BALTMATTRIB - 21st International Baltic Conference: Engineering materials and tribology

18-19 October - Tallinn, Estonia

(www.ttu.ee/baltrimtrib2012)

Language: English

24th National Conference on Heat Treatment with International Participation

27-29 November – Jihlava, Czech Republic

(www.asociacetz.cz)

Languages: Czech, Slovak, English

BALTMATTRIB 2012 The 21st International Conference continues the tradition of the previous regular meetings by addressing the core fundamentals as well as timely topics on the leading edges of materials engineering and tribology.

Contributions on the following topics are especially welcome:

- advanced materials and materials engineering
- powder materials and powder metallurgy
- coatings and surface engineering

24th National Conference on Heat Treatment with International Participation, Jihlava

Main Topics:

- phase transformations and diffusion processes.
- heat treated materials, microstructure and properties relationships, influence of semifinished product and forming
- metallography in heat treatment - new trends
- heat treatment of non-ferrous alloys and advanced materials.
- surface technology - CVD, PVD
- surface heat treatment - laser, plasma, electron beam, induction heating.
- furnace equipment and systems for the heat treatment.
- environmental aspects

CONFERENCES C

2013 onwards

2013

- **2nd Mediterranean Conference on Heat Treatment and Surface Engineering / Challenges for heat treatment and surface engineering**
Croatia
- **European Conference on Heat Treatment and Surface Engineering**
Switzerland
- **ASM Heat Treating Society 27th Conference and Exposition**
September 16-18 Indianapolis, Indiana, USA

2014

- **21st Congress IFHTSE / incorporating European Conference on Heat Treatment and Surface Engineering**
Munich, Germany

