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CONFERENCES

This year

- European conference Strasbourg France (March)
- Energy conference Bangkok Thailand (June)
- Quenching and distortion / Distortion engineering Chicago IL USA (September)
- 20th Congress Beijing (October)

***** Contact details on page 4 *****

Under discussion:

International Heat Treatment and Surface Engineering Show, Chennai India (2012/2013)

2013 onwards

Tooling conferences

Efforts are being made to rationalize the future of the series on heat treatment and surface engineering in tools and dies in the context of the European TOOL and other series for optimum industrial benefit

Contact: Reinhold Schneider (reinhold.schneider@fh-wels.at)

2nd Mediterranean Conference on Heat Treatment and Surface Engineering / Challenges for heat treatment and surface engineering

This conference is scheduled for Croatia 2013

European conference series

Scheduled for Switzerland in 2013; the 2014 event will be merged with the IFHTSE 21st Congress

HK Wiesbaden

HK 2012

This long-established event takes place this year, in its usual location in Wiesbaden Germany, on 10-12 October. *This has always been a German-language conference but this year presentations in English are also acceptable* (details from awt.ev@t-online.de; www.awt-online.org).

•The AWT, the Association for Heat Treatment and Materials Technology was founded 1948 and is a scientific technical association with the aim of advancing the theoretical and practical knowledge of material science especially on heat treatment of materials.

•Together with the German State of Bremen the AWT is founder of the Institute for Materials Science (IWT), an interdisciplinary research institute for materials science, process engineering and manufacturing technologies.

• Present membership of AWT is 267 companies and almost 500 individuals

HK 2012 Wiesbaden: English-language input welcomed

LIQUID QUENCHANTS DATABASE UPDATE

The main action over the turn of the year 2011/2012 has been establishing the composition of the Phase 1 Partnership. Apart from some formalities, this action is now largely complete.

Dunaújváros College	Hungary
Burgdorf	Germany
CNIITMASH	Russia
Houghton International	USA
Idemitsu Kosan	Japan
Intensive Technologies Ltd	Ukraine
IWT, Bremen	Germany
KSHT	Korea
NIT – Karnataka	India
Petrofer Chemie	Germany
QRC, Zagreb	Croatia
Swerea IVF	Sweden
University of Sao Paolo	Brazil
Utsunomiya University	Japan
Fuchs Europe Schmierstoffe GmbH	Germany

Probable composition of the LQD Phase 1 Partnership

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GLOBAL 21 PROJECT UPDATE

Now working with the publishers of *Industrial Heating*, G21 accepts input any time. Use the questionnaire in the panel opposite - solely as a guideline - you do not need to answer every question. Input of fact or opinion on, or usefully related to, any of the subjects is welcomed.

Input to date has resulted in:

- A series of complete papers which have been published in the journal *International heat treatment and surface engineering* (listed on the next page)
- A series of Workshops (briefly reviewed on the next page)

1. What do you consider to be the most important developments in the field of heat treatment and surface engineering in the last decade? – from the viewpoints of, e.g.:
 - Materials science
 - Process
 - Technology
 - Plant, equipment, instrumentation
2. What do you consider to be the most urgent problems to be tackled in the field over the next 10-20 years?
 - In science
 - In technology
 - In the engineering industry
3. What do you expect to see as breakthroughs in the next two decades?
 - In the basic science
 - In process development
 - In plant, equipment, instrumentation
 - In modelling and simulation
 - Other
4. What radically new technologies do you expect to emerge in the near future and in what field of application?
5. Quantify the impact of any radically new developments? - on:
 - Energy policy and management
 - Environmental effects
 - Sustainable industrial growth
6. Identify specific development trends in your own field of interest (please specify that field)?
7. Do you have strong views on any of the following?
 - National and international funding for research and development
 - Education, training, human resources, mobility of engineers and technicians

Global 21 guideline questionnaire

1. Introduction
2. Heat treatment in China: present and future
3. Energy and environment
4. Manufacturing in the global economy
5. Modelling based design of surface engineered systems
6. Introduction to furnace atmospheres
7. Thermal processing and past, present and future development of automotive sheet steels
8. Training in heat treatment and surface engineering
9. Influence of materials science on heat treatment and surface engineering
10. Thermal spray coatings: a technology review
11. Survey of the heat treatment and surface engineering industry in Argentina
12. Synthesis update
13. Advances in tool steels and their heat treatment – Part 1
14. Development of compound layer during nitriding and nitrocarburising; current understanding and future challenges
15. Progress in surface heat treatment using electron beam surface hardening
16. Advances in tool steels and their heat treatment - Part 2: Hot work tool steels and plastic mould steels

G21 Papers published 2007-2011 in International heat treatment and surface engineering

No. 17 in the series '*Heat treatment and surface engineering in the metals industry in Thailand*' (Pearce et al.) appears in the 2012 no.1 issue of the Journal:

Abstract: Manufacturing and the metallurgical industries in Thailand have developed rapidly over the last 30–40 years. For example, the Thai automotive industry has a production capacity of two million vehicles and is now the thirteenth largest in the world. Nearly all large manufacturing plants in the auto- and electronics sectors are joint ventures with multinational companies; the levels of equipment, tooling and technology in these plants, established on purpose built industrial estates,

are world class. However, the engineering and parts manufacturing sector in general consists mainly of smaller companies which cannot afford the same levels of investment. In striving to meet increasing competition, these smaller companies encounter problems in productivity, quality, cost reduction, energy efficiency and environmental performance. Against this background the status and future development of heat treatment and surface engineering processes across manufacturing industry in Thailand is reviewed. The increased contributions to improvements in heat treatment and surface engineering practice and understanding required from education and training, R&D and technical bodies such as The National Metal and Materials Technology Centre and IFHTSE are considered. It is concluded that, as for other Thai industrial sectors, there should be a 'master plan' for in heat treatment and surface engineering in Thailand

G21 Workshops

- Brisbane Australia (IFHSTE 16th Congress, October 2007): 'Heat treatment and surface engineering in the light of energy and environment'
- Kobe Japan (IFHTSE 17th Congress October 2008): 'Education and training needs and the potential for some degree of international uniformity in syllabuses, qualification and assessment' The Kobe Workshop emphasized the importance of education and training for efficient and reliable technological development. Their importance does not diminish even in a period of economic downturn.
- Sharm El-Sheik Egypt (1st Mediterranean Conference on Heat Treatment and Surface Engineering December 2009): Automotive industry; Education and training
- Rio de Janeiro Brazil (IFHTSE 18th Congress July 2010) Human resources development
- Glasgow Scotland (IFHTSE 19th Congress October 2011) 'Surface engineering: limits in engineering applications'; 'Technology and knowledge transfer in surface engineering, supported by international programmes'
- A further Workshop will be planned for the 20th Congress in Beijing, October 2012.

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CONFERENCE PROGRAMME

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 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 www.mtec.or.th/EFhtse2012/</p>	31-Jan-12	31-Mar-12	18-May-12
<p>6th International Conf. Quenching and Control of Distortion / 4th International Conf. on Distortion Engineering REGISTRATION OPEN</p> <p>10-13 September – Chicago II, USA www.asminternational.org/qcd</p>	06-Feb-12	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 www.tool2012.at</p>	05-Mar-12	23-Apr-12	18-Jun-12
<p>20th Congress IFHTSE</p> <p>23-25 October - Beijing, China http://www.20ifhtse.org</p>	01-May-12	Jun-12	01-Sep-12

