

INTERNATIONAL FEDERATION
FOR HEAT TREATMENT AND SURFACE ENGINEERING

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Bulletin 2012 / 4 : 1 April 2012

CQI-9 / RQP-1

RQP1 is a French proposal for an alternative to the American CQI-9 qualitative specifications for heat treatment of components for automotive manufacture. The proposal has been developed for discussion by a special committee of CETIM (national technical centre of the French engineering industry) located in Senlis, North of Paris, under the chairmanship of Dr Patrick Jacquot (Bodycote, and a member of the IFHTSE Executive Committee). The main objective is a modified version of CQI-9, better adapted to the French automotive industry and if possible to the European automotive industry. CQI-9 is based on American AMS 2750 D procedures. An exchange of opinion on CQI-9 has been published in International Heat Treatment and Surface Engineering:

- 'US Automotive Industry Action Group: CQI-9 updating' (2009, issue no. 3)
- 'CQI-9 Why bother with it?' (2010, issue no. 2) The CETIM committee has also suggested collaboration with the German heat treatment association AWT Working Group 25 'Quality in Heat Treatment'

The A3TS 2012 Congress 'Les investissements d'avenir dans le traitement des matériaux' – 'Future investment in materials processing' – will include a first report from the committee on RQP-1 (Grenoble, 6-8 June 2012; French language). a3ts@a3ts.org

JOURNAL: JOINT EDITORS



Dr Paul Stratton



Prof JIN Nengyun

Brief CVs on next page



The Journal International Heat Treatment and Surface Engineering has two Joint Editors, one appointed by IFHTSE and IOM3, the other by the Chinese Society for Heat Treatment and Shanghai Jiao Tong University. From the launch in 2007, these posts were held by Tom Bell (Universities of Birmingham and Xi'an) and CHEN Shipu (SJTU), respectively. After Bell's untimely death in 2008, Brian Birch (with Bodycote at the time) took his place. In 2011, Chen retired and was replaced by JIN Nengyun (SJTU and Max Planck Stuttgart). March 2012 saw the replacement of Brian Birch by Paul Stratton (MatScribe UK and recently Linde Gas).

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Paul Stratton was awarded his Bachelor of Engineering in Metallurgy and Materials Science by the University of Liverpool in 1969. For the next 9 years he was employed by Renold, a manufacturer of power transmission products, at first in research roles, then as Works Metallurgist focusing on raw material evaluation, heat treatment and failure analysis. In 1978 he joined BOC Gases which was later acquired by Linde. At first he worked in research developing the nitrogen/methanol carburising system. Later he turned to sales support in the UK and then, after a short spell as manager of the Advanced Technology department, to managing the heat treatment technical sales support team in the UK. Eventually Paul became manager of the heat treatment technical support worldwide looking after teams in all the world's major markets including the USA, Japan, China, India, UK, and Australia. Part of this role was to initiate, manage and support heat treatment developments involving the use of industrial gases across the globe. In 2007 he was awarded a Doctorate of Engineering by the University of Liverpool in recognition of his contribution to heat treatment science. He is a Fellow of IFHTSF

JIN Nengyun began her tertiary education studying physics at Beijing University in 1964. From 1970 to 1978 she worked in a factory producing electrical machinery in Xi'an, and then returned to postgraduate studies at Beijing University (1978-79) followed by research in the Cavendish Laboratory at the University of Cambridge, England (1979-84). She received her PhD from the University of Cambridge in1983 for the work on mechanisms of cyclic deformation of fcc single crystals. Since then she has been:

- Lecturer and associate professor in the Department of Materials Science, SJTU
- Visiting scientist at Max-Planck-Institut für Metallforschung, Stuttgart, Germany
- Research associate in the Department of Materials, University of Oxford, England
- Research scientist at Max-Planck
- Guest professor, University of Science and Technology of China, Hefei, China
- Special guest professor, Shanghai Jiaotong University

CONFERENCES

Tools / tooling conferences

As reported in earlier issues of this Bulletin, effort has been put into rationalising the conference series on tools and tooling. Immediate success in this is demonstrated by the fact that the 4th in the IFHTSE series and the 9th in the more broadly based European Tooling Conference series have been merged for 2012 in the event scheduled for Leoben, Austria, September. Also, a formal agreement has been signed in March by the interested parties to the effect that the merged scheduling will continue with respect to events planned in Europe. The Agreement allows for IFHTSE, alone or in collaboration, to plan tooling conferences outside Europe.

European general series

The most recent event in the series 'European Conference on Heat Treatment and Surface Engineering' was held in Strasbourg, France on 22-23 March 2012. It is hoped to include a report in International Heat Treatment and Surface Engineering issue no. 2 for 2012. In discussion at Strasbourg it was reported that the next in the series is now firming up: Luzern, Switzerland, 25-26 April 2013 (or the week earlier). It is being organised by SVW in the 60th anniversary year of that organisation. The main theme will be 'precision parts' at all scales. The programme may include a small exhibition and plant visit opportunities; 'short course' lectures for students are also being considered. The provision of German and French language facilities in addition to English is under review. Beyond 2013, the series foresees:

2014 - Munich Germany (probably Spring, with the IFHTSE 21st Congress)

2015 - Italy

2016 - France

Diary 2012 onwards

See pages 3-4 for detail and contacts

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Proceedings of the IFHTSE 18th Congress 2010

The Journal of ASTM International (JAI) special issue STP 1532 (ISBN: 978-0-8031-7518-1), contains 45 papers presented at our 18th Congress, held in Rio de Janeiro, Brazil 26 – 30 July 2010. The publication is sponsored by ASTM Committee D-2 on Petroleum Products and Lubricants and IFHTSE. The Guest Editor is Lauralice Canale, EESC University of São Paulo, Brazil (IFHTSE Fellow). www.astm.org

JOB OPPORTUNITY (UK)

Project engineer, thermodynamics and heat treatment

Permastore, based in Suffolk UK, not far from London, is a market-leading manufacturer of Glass-Fused-to-Steel Tanks and Silos - about 300,000 installations in over 110 countries. The core of the product is the Glass-Fused-to-Steel (GFS) panel. The manufacturing process is technically complex and relies heavily on process consistency and control. In support of the Company's policy of Continuous Improvement there is a need to build on the detailed technical knowledge of the heat treatment processes that take place in the vitreous enamelling furnace. Permastore wants to enhance its knowledge and understanding of heat treatment processes by the application of thermodynamic theory and principles. The aim is for a distinct project to extend the Company's knowledge base and thereby to drive increased quality and throughput. This will require external support from suitable technical and/or academic partners.

Applications are urgently invited individuals with experience in thermodynamic theory to coordinate all tasks associated with the project which will involve in-house study and sub-contracted specialist expertise. Ideally the candidate will have a good first degree which includes the study of heat and materials, and will preferably hold a postgraduate qualification.

Contact: candidates@permastore.com

by 13 April 2012 Quote: IFHTSE Bulletin

CONFERENCE DIARY 2012

1st International Conference on Energy and the Future of Heat Treatment and Surface Engineering

25-27 June - Bangkok, Thailand (www.mtec.or.th/EFhtse2012/)

6th International Conf. Quenching and Control of Distortion / 4th International Conf. on Distortion Engineering 10-13 September - Chicago II, USA (www.asminternational.org/qcd)

9th Tooling Conference / 4th International Conference on Heat Treatment of Tools and Dies

11-14 September - Leoben, Austria (www.tool2012.at)

HK 2012

10-12 October 2012 Wiesbaden, Germany (www.awt-online.org)

BALTMATTRIB - 21st International Baltic Conference: Engineering materials and tribology 18-19 October - Tallinn, Estonia (www.ttu.ee/baltmattrib2012)



🌉 20th Congress IFHTSE

23-25 October - Beijing, China (www.20ifhtse.org)

24th National Conference on Heat Treatment with International Participation

27-29 November - Jihlava, Czech Republic (www.asociacetz.cz)

2013



European Conference on Heat Treatment and Surface Engineering

25-26 April* - Luzern, Switzerland (*or 18-19)



2nd Mediterranean Conference on Heat Treatment and Surface Engineering

Croatia

ASM Heat Treating Society 27th Conference and Exposition

16-18 September Indianapolis, Indiana, USA

2014



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

See next page for more detail on the energy conference in Bangkok ----June 2012......

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1st International Conference on Energy and the Future of Heat Treatment and Surface Engineering



The Emerald Hotel, Bangkok, THAILAND

Main sessions

Selection of topics covered in papers submitted:

- Surface engineering using friction-stir processing
- PreNitLPC® economic option for vacuum carburizing
- Design and technological development of 9 % chromium creep-resistant steels for TPP and NPP equipment
- Erosion-corrosion in coal based power plants and possible solutions – a Review
- New ecological fluid bed nitrocarburizing technology for improving steel properties
- Energy-efficient and resource-saving technologies of thermochemical treatment of steels
- Duplex procedures for steel heat treatment
- Effect of high power diode laser surface alloying of tool steels
- Protective atmosphere induction heating
- Modification of steel surfaces using laser energy

Sponsors and exhibitors include:

Thai Parkerizing, NanoShield & Royal Ace Co Ltd, CSM Instruments and Thai Tohken Thermo

CSM Instruments has been leader in the development of instruments for surface mechanical properties characterization for over 30 years in both research and industrial fields.

NanoShield & Royal Ace Co. Ltd was the first company in Thailand to offer PVD ion plating as a wear resistant layer on the surface of cutting tools, molds and dies. The coatings are products of proprietary techniques and equipment.

Thai Parkerizing is a leading company in the surface treatment and heat treatment industry. The focus is on surface chemistry, and metal surface modification to customer specifications

Plant visit

There is a plant visit opportunity on Wednesday 27 June to: **Thai Tohken Thermo Co. Ltd.** This is located in Amata Nakorn Industrial Estate, 700/314

from central Bangkok (1 – 1.5 hours).

Established in 1995 **Thai Tohken Thermo** is a leader in heat treatment in Thailand, The range of services includes:

gas carburizing, gas carbonitriding, gas soft-nitriding, gas nitriding by sulphurisation, PVD, low-temperature nitrocarburizing, vacuum heat-treatment, vacuum carburizing, press tempering, and shot blasting.

Location



The Emerald Hotel, located in the heart of Bangkok on Ratchadapisek Road, is a 4-star international standard hotel, blending Thai elegance with modern comforts. With 605 well-appointed rooms including 65 suites.

With direct access to the Huay Kwang Underground Train Station (MRT) and connecting to the interchange station of Sukhumvit Skytrain (BTS), the hotel is well placed for travel within Bangkok.

The hotel is within 30 minutes away from the **Suvarnabhumi Airport**, 10 minutes from the Makkasan Airport Rail Link Station (the newest transportation to Suvarnabhumi Airport), a few minutes by walk to MRT Subway Station, and 10 minutes to the famous Chatuchak Market. Several embassies, banks, and the Huay Kwang Market, are within walking distance of the hotel.

Conference: www.mtec.or.th/efhtse2012 Hotel: /www.emeraldhotel.com/main.php

MRT::www.bangkokmetro.co.th/index.aspx?Lang=En

BTS: www.bts.co.th/en/index.asp

Suvarnabhumi Airport : www.suvarnabhumiairport.com/

About Thailand: www.tourismthailand.org/

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