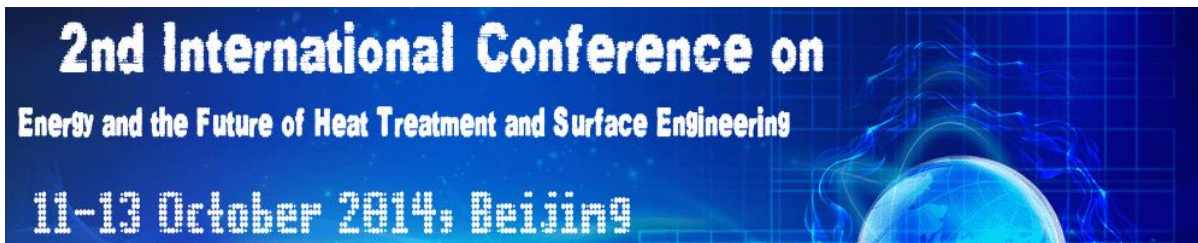




- 2nd International Conference on Energy and the Future of Heat Treatment and Surface Engineering
- Conference programme



International Federation for Heat Treatment and Surface Engineering  
Chinese Heat Treatment Society



This Conference is organised for IFHTSE by its China member the Chinese Heat Treatment Society. The Conference is built around two, closely related, tracks:

- Energy management in the wide and growing range of heat treatment and surface engineering processes
- The role of those critical processes in clean energy generation and supply systems: upgraded conventional as well as new and alternative methods

<http://2ndefhtse.csp.escience.cn/>

*Energy is expensive and supply reliability can be a problem! Heat treatment and surface engineering not only need energy, the processes also contribute to energy sourcing, generation and distribution.*

The President of CHTS (ZHAO Zhenye, China) and the President of IFHTSE (Reinhold Schneider, Austria) invite you to contribute to the programme with up-to-date industrial and research papers on your area of expertise

#### SCOPE AND THEMES

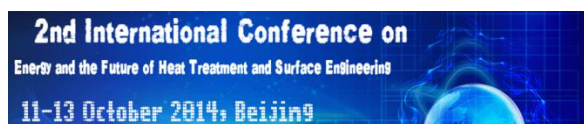
The conference will address these main themes

- Energy management in heat treatment and surface engineering processes (*especially energy reduction through plant, equipment and process change*)
- Heat treatment and surface engineering in the manufacture of clean mechanical energy generation and supply systems

*Contributions are invited, emphasising relevance to the above, on subjects such as:*

- Thermo-chemical treatment (carburizing, nitriding, ...)
- Design and construction of industrial heat treatment equipment
- Equipment for measurement and process control
- Quenching technology, equipment and quenchants
- Distortion
- Environmental aspects of heat treatment and surface engineering
- Modeling and simulation of heat treatment and surface engineering related aspects
- Surface hardening (induction, laser, ...)
- Coating technology and coatings (PVD, CVD, thermal spray, ...)
- Wear and wear protection
- Tribology and tribological testing methods





- 10-Oct-14 Registration
- 11-Oct-14 Plenary sessions; Sessions
- 12-Oct-14 Sessions
- 13-Oct-14 Tour

Title and short abstracts urgently to: [chts@chts](mailto:chts@chts)

#### PUBLICATION PLAN

Publication language: English. The papers presented at the Conference will be supplied to participants as hard copy/CD and, by agreement with authors, selected papers may be published in, e.g., SCI journals: *Surface and Coating Technology*, *Surface Engineering*, EI journals: *Physics Procedia*; *International Heat Treatment and Surface Engineering*

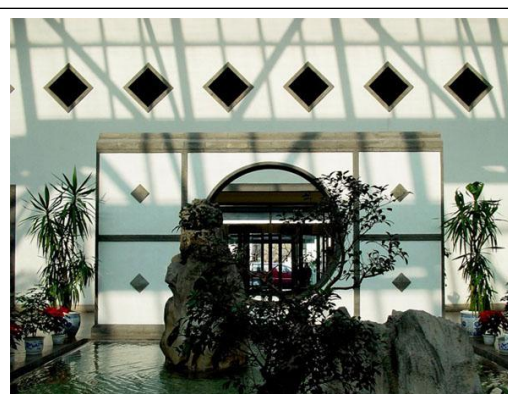
#### ORGANISATION

Conference Language: English  
Organisation and administration of the conference is in the hands of CHTS, assisted by:

- International Advisory Committee
- Programme Committee
- Local Organising Committee

Conference Secretariat: [chts@chts.org.cn](mailto:chts@chts.org.cn)  
(Prof SHAO Zhoujun)

IFHTSE contact: [robert.wood@ifhtse.org](mailto:robert.wood@ifhtse.org)  
(Robert Wood, Secretary General)



#### CONFERENCE LOCATION

Beijing, the capital of China, is globally known as a fast-growing, dynamic international metropolis with a 3,000 year history!

The Conference Hotel is located in the Fragrant Hill Park of Beijing's Xishan scenic area. The 4-star Fragrant Hill Hotel was designed by the world-famous architect I. M. Pei. It represents a fusion of Chinese classical garden architectural art and environmental art. October is the best time of the year to enjoy the beautiful views of autumn foliage.

Visits to nearby places of interest will be arranged as part of the programme.

[http://www.btghotels.com/jl\\_bj\\_xiangshan/](http://www.btghotels.com/jl_bj_xiangshan/)

#### BACKGROUND TO THE 'ENERGY' SERIES

IFHTSE began to make contributions to energy and environmental studies 40 years ago. A Technical Committee 'Safety and protection of the environment' was formed in 1973 and, until its dissolution in 1982, encouraged submissions of themed papers to appropriate conferences. From 1982 to 1992, the Technical Committee 'Energy saving in heat treatment' generated input to various conferences and its work led to the **IFHTSE 4th Seminar held in Beijing in 1993**.

The IFHTSE 'Global 21 Project' quickly and predictably identified energy and the environment as the main 'external' drivers for the future of heat treatment and surface engineering. The processes are energy-hungry and like other similar parts of industry have been subject to a great deal of uninformed

opinion as well as expert scrutiny. Actually, most companies are really interested in the use of clean practices, low waste and the development of environmentally benign processes. The answers are all, to a greater or lesser extent, a question of energy management. A great deal of progress has been made and of course more can and will be done. It is unfortunate that insufficient public recognition is given to the successes and the impressive scientific and technical knowledge and expertise that have been deployed to date by the heat treatment and surface engineering industries.

It should also be remembered that heat treatment and surface engineering processes represent absolutely critical stages in the design and manufacture of engineering components and systems, and that all advances in the field contribute to the better performance of industry and its products in general. New challenges are posed by the design and manufacture of not only conventional power generation systems but also in the development of alternative systems and sources, especially the need for enhanced reliability and extremely low maintenance e.g. in wind-power and tidal generators.



*1st International Conference on Energy and the Future of Heat Treatment and Surface Engineering, Bangkok Thailand June 2012. Left Stan Lynch Defence Science and Technology Organisation, Australia; Right IFHTSE President 2012 Prof Xu Kewei opening the event*

IFHTSE's Romanian member ATTIS held a 'pilot' meeting (**Reduction of energy consumption in heat and thermo chemical treatment technologies and installations, Poiana Braşov, Romania 4-5 November 2010**) with a programme which offered a wide view of the subject from contributors representing organisations in Austria, Germany, Hungary, Israel, Poland, Russia, Serbia, UK and USA as well as the host country. This led to the '**1st International Conference on Energy and the Future of Heat Treatment and Surface Engineering**' held in Bangkok Thailand, 25-27 June 2012.

## IFHTSE Conference programme 2014

<b>Heat Treatment 2014 Moscow: Exhibition and Conference</b>	
10-12 September - Moscow, Russia	<a href="http://www.htexporus.com/">www.htexporus.com/</a>
<b>2nd International Conference on Energy and the Future of Heat Treatment and Surface Engineering</b>	
11-13 October - Beijing, China	<a href="http://2ndefhtse.csp.science.cn/">http://2ndefhtse.csp.science.cn/</a>
<b>25th National Conference on Heat Treatment with International Participation</b>	
25-27 November - Jihlava, Czech Republic	<a href="http://www.asociacetz.cz">www.asociacetz.cz</a>

## Conferences and exhibitions 2015 onwards

### IFHTSE Congress

- 2015 IFHTSE 22nd Congress with European Conference**  
Italy, Mestre/Venice, 20-22 May 2015 ([www.aimnet.it/ht2015.htm](http://www.aimnet.it/ht2015.htm))
- 2016 IFHTSE 23rd Congress**  
*USA, location to be decided; date probably March/April/May 2016*
- 2017 IFHTSE 24th Congress with European Conference**  
*France, location to be decided; date probably March/April/May 2017*
- 2018 and beyond:**  
*Proposal: **Moscow in 2018 or 2019**. Support in principle from the relevant Moscow city authorities had already been offered*

### European Heat Treatment Conference Series

- 2015 – Venice Italy, 20-22 May 2015** with IFHTSE Congress
- 2016 Prague, Czech Republic, 11-13 May 2016**  
(This will also be the **3rd International Conference on Heat Treatment and Surface Engineering in Automotive Applications**)
- 2017 France (Bordeaux?)** with IFHTSE Congress

### Automotive

- 2016 3rd International Conference on Heat Treatment and Surface Engineering in Automotive Applications (With European Conference)**  
Prague Czech Republic 11-13 May 2016

### Distortion Engineering / Quenching

- 2015 International Conference on Distortion Engineering**  
Bremen Germany 23-25 September 2015  
*This represents a revival of the original 'Bremen series' and discussions are being held to ensure the optimum rationalisation with the 'Quenching and Control of Distortion' series*

### Tribology

- 2015 'Heat treatment and surface engineering for tribological performance'**  
Tallinn, Estonia, October 2015

### Other notable events 2015

- HK 2015 HärtereiKongress**  
Cologne Germany, 22-24 October 2015

- ASM HTS Conference and Expo**  
Detroit MI USA, September 2015

Ask [robert.wood@ifhtse.org](mailto:robert.wood@ifhtse.org) for latest information on websites and contact data