



ifhtse.org

International Federation for  
Heat Treatment and Surface Engineering

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# The 28<sup>th</sup> IFHTSE Congress in Yokohama is coming soon!



The preparations for the 28<sup>th</sup> IFHTSE Congress in Yokohama's fancy prestigious "Pacifico" convention centre are on the home straight. The programme

<https://jsht.or.jp/ifhtse2023/IFHTSE2023Program.html>

runs from the welcome party Monday November 13 through to the factory tour/excursions on Friday 17. It is packed with 107 oral presentations in as many as five or four parallel sessions and 67 poster presentations. Wednesday afternoon, a panel of leading international experts will debate about the challenges and trends the field faces.

The **Tom Bell Young Author Award** will be given for the best paper from a young author presented at the Congress. It consists in the invitation for free participation at the next IFHTSE Congress, including travel and accommodation.

Two more young authors will receive the "**IFHTSE Congress Scholarship**" which covers the attendance fee at the next IFHTSE Congress in Cleveland, OH, USA.

More details: <https://www.ifhtse.org/about-us/awards/>

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## Plenary lectures:

Jian LU, *City University of Hong Kong Shenzhen Research Institute, China*

**Recent development of Surface Modification: from Nanostructure to Supra-Nanostructure**



Marcel A.J. Somers, *Technical University of Denmark, IFHTSE Executive Committee member*

**Nitriding and nitrocarburizing; an interwoven braid of science and innovation**



## Keynote lectures:

Imre Felde, *Obuda University, Hungary, IFHTSE Treasurer*

**Biomimetic methods and AI technics assisting Heat Treatment processes**



Roger Lumley,, *AW Bell, Australia, and La Trobe University, Australia*

**A study on the homogeneity of plastic deformation and its importance to tensile ductility in Al-Si-Cu-Mg (C355) investment castings.**



Massimo Pellizzari, *University of Trento, Italy, IFHTSE Vice President*

**Heat Treatment for Additive Manufacturing**



Toshihiro Tsuchiyama, *Kyusyu University, Japan*

**Microstructure control of a medium manganese steel by combined interrupted quenching and intercritical annealing**



Rainer Fechte-Heinen, *IWT and University of Bremen, Germany*

**Quenching and Distortion**



Koji Takahashi, *Yokohama National University, Japan*

**Effects of laser peening on the very high cycle fatigue strength of additively manufactured maraging steel**



See all the details on the 28<sup>th</sup> Congress at <https://jsht.or.jp/ifhtse2023/index.html> !

# IFHTSE Medal for Prof. Michel Jeandin

The Executive Committee has decided to award the IFHTSE Medal to Professor Michel Jeandin of MINES ParisTech, MAT-Centre des Matériaux in France.

The citation reads:

“IN REGOGNITION OF HIS LIFE-TIME CONTRIBUTIONS TO MATERIALS SCIENCE AND THE DISSEMINATION OF KNOWLEDGE, ESPECIALLY IN SURFACE MODIFICATION TECHNOLOGIES SUCH AS THE DEVELOPMENT OF COLD SPRAY TECHNOLOGY AND NEXT-GENERATION SURFACE COATINGS”

Prof. Jeandin has made seminal contributions to the field of Surface Engineering, especially in the areas of Thermal Spray Coatings and in Cold Spray applications.

Michel Jeandin graduated engineer from Lyon Central School (France) in 1977 and defended a PhD thesis at Paris Mining School in 1981 on the subject “*The liquid phase sintering of super-alloys*”.

During his post-doctoral position at the Paris Mining School, he was in charge of studies of high-temperature materials used for aircraft engine applications.



In 1983 he became R/D engineer in the corrosion department of the company Framatome, dedicated to nuclear reactors. Subsequently he returned to the Paris Mining School as an assistant research group leader in the powder metallurgy sector and advanced proceses. In 1989 he was a visiting scientist at the joint research center - Ispra (Italy) of the Commission of the European Communities. Likewise in 1991, he was a visiting scientist at the Imperial College, dept. of materials, in London.

From 1992 to 1995, in addition to research and teaching activities, he initiated and then ran a centre for plasma spraying processes at Mines Paris Tech. From 1995 to 2016, he was Director of the Center for Spray Processing using a Controlled Atmosphere Plasma Spray system, under the umbrella of Paris Mining School, the French Atomic Research Agency (CEA) and the University of Evry.

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Until 2021 he was Research Professor at Mines Paris Tech in the field of Surface Processing, Coating and Tribology. He is officially retired since 2021, but he started a company in surface engineering (CPAMAL; <https://www.cpamal.com>) by developing an artistic approach to the use of cold spray to create works of art.

Michel Jeandin's main contribution was thermal spraying, which is the basis of his worldwide reputation. In particular, this relates to the cold spray process, as he was a pioneer and had deep and continuous involvement in the study of the process from its very beginnings some 25 years ago.

The work done by Michel Jeandin led to more than 400 publications, most of which in the field of surface engineering and heat treatments. Among them, no less than 177 were published in refereed international journals and 5 consisted of invited chapters of reference books (e.g. for cold spray and laser shock processes). Moreover, 20 patents and one registered trademark have also been credited to Michel Jeandin.

## 5th International Conference on Heat Treatment and Surface Engineering of Tools and Dies (HTSE-TD) held in hybrid mode

The 5<sup>th</sup> HTSE-TD held in Hangzhou, China, marked a comeback in this series of IFHTSE conferences: The 4<sup>th</sup> event, also organised by our member Chinese Heat



Treatment Association CHTA, early in 2021 fell in the hot phase of the pandemic, and had therefore to be held strictly online only. Now in April this year, CHTA could gather

more than 260 representatives attending in person.



*IFHTSE Executive Committee member Mufu Yan presiding the opening ceremony*

All reports were presented with simultaneous translation and subtitles in English.

The international participants, who were still subject to some remaining travel restrictions, could follow all presentations online, and so the online meeting “hall” had as many as nearly 10000 entries.



*Welcome address of IFHTSE Secretary General Stefan Hock*

## Surface Engineering pioneer Xu Binshi †



IFHTSE Fellow Xu Binshi passed away this year.

He was long engaged in the research of maintenance and remanufacturing engineering, and was a pioneer of surface engineering in China.

He covered widespread fields such as plasma spraying, brush plating, thermal barrier coatings, replacement materials, lubrication, anti-wear, and anti-corrosion layers.

He won numerous awards and prizes and was appointed academician of the Chinese Academy of Engineering in 1995.

The citation of his 2004 IFHTSE Fellowship read:

“IN RECOGNITION OF THE EXCEPTIONAL FORESIGHT DEMONSTRATED BY HIS EARLY RECOGNITION OF THE CRITICAL IMPORTANCE OF SURFACE ENGINEERING IN WHAT HAS PROVED TO BE THE SPECTACULAR INDUSTRIAL AND ECONOMIC DEVELOPMENT OF CHINA.”

# Forthcoming Conferences

All member associations are invited to submit their conferences in English language to be featured here!

<b>2023</b>	<b>OCT</b>	17-19	<b>Heat Treat 2023</b>	Detroit	<b>USA</b>	<a href="https://www.asminternational.org/web/heat-treat">https://www.asminternational.org/web/heat-treat</a>	
<b>2023</b>	<b>NOV</b>	13-16	<b>28th IFHTSE Congress</b>	Yokohama	<b>Japan</b>	<a href="https://jsht.or.jp/ifhtse2023/">https://jsht.or.jp/ifhtse2023/</a>	
<b>2024</b>	<b>APRIL</b>	17-19	<b>4th Mediterranean Conference on Heat Treatment and Surface Engineering (MCHTSE 2024)</b>	Lecce	<b>Italy</b>	<a href="https://www.aimnet.it/en/g/manifestazione.php?id=788&amp;idc=4">https://www.aimnet.it/en/g/manifestazione.php?id=788&amp;idc=4</a>	
<b>2024</b>	<b>APRIL</b>	17-19	<b>5th International Conference on Thermal Process Modeling and Simulation (5th ICTPMS)</b>	Lecce	<b>Italy</b>	<a href="https://www.aimnet.it/en/g/manifestazione.php?id=789&amp;idc=4">https://www.aimnet.it/en/g/manifestazione.php?id=789&amp;idc=4</a>	
<b>2024</b>	<b>APRIL</b>	26-26	<b>2nd Bosphorus International Heat Treatment Symposium</b>	Istanbul	<b>Turkey</b>	<a href="https://www.bhtsheat.com/en">https://www.bhtsheat.com/en</a>	
<b>2024</b>	<b>SEP OCT</b>	30-3	<b>29th IFHTSE Congress</b>	Cleveland	<b>USA</b>		
<b>2025</b>	<b>MAY</b>	6-8	<b>3rd QDE - International Conference on Quenching and Distortion Engineering</b>	Vancouver	<b>Canada</b>		