



INTERNATIONAL FEDERATION OF HEAT TREATMENT AND SURFACE ENGINEERING

HeatTreat 2023 is heating up!



HeatTreat 2023 is October 17-19 in Detroit, Michigan. It is co-located with IMAT 2023 and the Motion+Power Technology Expo. (Courtesy: Shutterstock)

HeatTreat 2023 is October 17-19 in Detroit, Michigan. It is co-located with IMAT 2023 and the Motion+Power Technology Expo and is expected to cover many topics of interest. This is the 32nd ASM Heat Treating Society Conference and Exhibition.

At press time, there are about 125 papers from international heat-treating professionals.

Core programming from ASM Affiliate Societies, including the Heat Treating Society, will serve as the backbone of IMAT technical sessions. More than 600 academic and industry presentations from leading scientists, researchers, and industry experts will cover topics including additive manufacturing, materials behavior and characterization, phase stability, and reaction kinetics.

There are numerous student/emerging professionals initiatives, including free college student registration, the Fluxtrol Student Research Competition, and the ASM Heat Treating Society Strong Bar Student Competition. This is an opportunity for young professionals and students to meet international heat-treating experts. Several courses by ASM HTS or AGMA will be available.

The technical program is available at www.asminternational.org/heat-treat/technical.

28TH IFHTSE CONGRESS

November 13-16, 2023 | Yokohama, Japan

The 28th IFHTSE Congress is sponsored by the Japanese Society for Heat Treatment. It will be November 13-16 in Yokohama, Japan. This

wide-ranging conference offers participants the opportunity to network and hear papers on a wide ranging series of topics, including thermal processing of steel, surface hardening additive manufacturing, and modeling and simulation of industrial processes.

The technical program can be found at jsht.or.jp/ifhtse2023/IFHTSE2023Program.html.

The technical program contains 107 oral presentations in four parallel sessions, with 67 poster presentations. On Wednesday afternoon of the conference, a panel of leading international experts will discuss the challenges and trends in heat treating and surface engineering.

The Tom Bell Young Author Award will be given for the best paper from a young author presented at the Congress. The recipient will be invited to participate for free 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, Ohio.

More information at www.ifhtse.org/about-us/awards.

Plenary lectures include:

»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 inter-critical 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.”

More information on the 28th Congress at jsht.or.jp/ifhtse2023/index.html.

IFHTSE MEDAL FOR PROF. MICHEL JEANDIN

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

The citation reads:

“In recognition 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.”

Jeandin has made seminal contributions to the field of surface engineering, especially in the areas of thermal spray coatings and in cold spray applications. Jeandin graduated as an engineer from Lyon Central School (France) in 1977 and defended a Ph.D. thesis at Paris Mining School in 1981 on the subject, “The liquid phase sintering of superalloys.”

Jeandin’s main contribution was thermal spraying, which is the

basis of his worldwide reputation. 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 about 25 years ago. The work done by Jeandin led to more than 400 publications, most of which were in the field of surface engineering and heat treatments. Among them, no less than 177 were published in refereed international journals, and five 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 Jeandin.

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.”

SPOTLIGHT ON MEMBERS

The Research Institute of Sweden

RISE Research Institutes of Sweden is Sweden’s research institute and innovation partner. Through international collaboration with industry, academia, and the public sector, RISE works to ensure the competitiveness of the Swedish business community on an international level and contribute to a sustainable society. With almost 3,300 employees, RISE engages in and supports all types of innovation processes. RISE is an independent, state-owned research institute, which offers unique expertise and more than 130 testbeds and demonstration environments for future-proof technologies, products, and services.

IFHTSE is a federation of organizations not individuals. There are three groups of members: scientific or technical societies and associations, universities and registered research institutes, and companies.



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