



INTERNATIONAL FEDERATION OF HEAT TREATMENT AND SURFACE ENGINEERING

4th International Conference on HTSE of Tools and Dies successfully held online

This first online global IFHTSE conference was hosted by member China Heat Treatment Industry Association (CHTA) and co-organized by Harbin Institute of Technology and Metalworking Dept. CHTA President Li Xinya opened the conference mentioning that the conference was originally planned to be held in Hangzhou in October 2020 but was rescheduled and moved online due to the pandemic.

This event had flawless video and audio quality, as well as a chat function that was available so comments and questions could be posed. The number of registered participants was more than 370, but in the virtual conference room, the number of registered and non-registered participants rose to an astounding 16,300 by the end of the conference.

The conference was novel not only in presentation and participation but also in documentation: The recorded talks were collected as a kind of video proceedings volume and are available on the IFHTSE website for further reference and still wider attention.

Here is the link: www.ifhtse.org/events/conference-proceedings/Recorded-Talks-4th-HTSE_TD.php

IFHTSE EMBARKS ON VISION 2040

After the extensive work done on VISION 2020, examining the trends and technologies for 2020, a new examination of the upcoming trends and technologies in surface technology and heat treatment has begun.

The current topics include:

» **ECO-HTSE:** Heat treatment and surface engineering using safer and cleaner practices, better energy efficiency and limited environmental impact processes. Patrick Jacquot, Bodycote FR.

» **HTSE 4.0:** HTSE and the 4th Industrial Revolution; Artificial Intelligence in HT operations; IoT (Internet of Things) and Big Data assisted Heat Treatment. Rafael Colas, Autonomous University of Nuevo León, Mexico; Imre Felde, University of Obuda, Budapest, Hungary.

» **Quenching:** Liquid and Gas Quenching, Aqueous based quenchants. Environmental aspects of Quenching. Distortion and residual stress control. Eva Troell, RISE/ivf, Sweden; D. Scott MacKenzie, Quaker Houghton, Inc., USA.

» **HTSE for Additive Manufacturing:** Additive manufacturing heat treatment and surface engineering. Massimo Pellizzari, Università degli Studi di Trento, Italy; Rafael Colas, Autonomous University of Nuevo León, Mexico; Marcel Somers, Technical University of Denmark.

» **HTSE for Tools and Dies:** Heat Treatment and Surface Engineering

of tools and Dies for improved properties, reduced wear and lower residual stresses. Reinhold Schneider, University of Applied Sciences, Wels, Austria; Massimo Pellizzari, Università degli Studi di Trento, Italy.

» **Education in HTSE:** Future needs of industry in HTSE; Metallurgy v. Materials Science; Selling HTSE; industrial v. academic; generalist v. specialist. Marcel Somers, Technical University of Denmark; D. Scott MacKenzie, Quaker Houghton, Inc., USA.

» **Surface Engineering – Higher surface functionality:** Surface heat treatment, thermochemical treatment of steels and alloys, surface engineering and related remanufacturing. Masahiro Okumiya, Toyota



The Heat Treatment and Surface Engineering of Tools and Dies conference was a virtual event.

Technological Institute, Japan; Larisa Petrova, Moscow Automobile and Road Construction State Technical University (MADI), Russia; Kewei Xu, Xi'an University, PRC.

MEMBERS IN THE NEWS

IFHTSE Medal for Prof. John G. Speer

The Executive Committee awarded the IFHTSE Medal to Professor John G. Speer of the Colorado School of Mines in Golden, Colorado. His citation reads:

“For his life-time achievement in physical metallurgy, development, and heat treatment of advanced steel concepts from theory to practical application, with particular focus on his leading role in the development of the quenching and portioning process.”

Speer is the John Henry Moore Distinguished Professor of Physical Metallurgy at Colorado School of Mines, and Director of the Advanced Steel Processing and Products Research Center (ASPPRC). He received



John G. Speer



Imre Felde



Rob Goldstein

a B.S. degree from Lehigh University in Metallurgy and Materials Engineering in 1980 and a D.Phil. in Physical Metallurgy from the University of Oxford, U.K., in 1983. He served in various positions at the Homer Research Laboratories of Bethlehem Steel Corporation from 1983 to 1997, where he was involved in product research, customer and operations support, and research management. He became a Professor in the Department of Metallurgical and Materials Engineering at Colorado School of Mines in 1997 and has also served as Mines' Associate Vice President for Research from 2008 until he became Director of ASPPRC in 2013.

With the medal for Speer, IFHTSE follows the tradition to honor excellent work in the field of physical metallurgy for heat treatment. Previous awardees of the IFHTSE in the physical metallurgy of heat treatment were Prof. G. Krauss (2007), Prof. T. Maki (2008), and Prof. H. K. Bhadeshia (2015).

Imre Felde

A recent interview was conducted by Sigma Technology regarding the relationship between Obuda University and Sigma Technology Hungary. Dr. Felde is the Vice Rector for Industrial Relations at Obuda University, Budapest. The focus of the interview was digital training and online learning. Read the entire interview at <https://sigmatechnology.se/news/obuda-university-elevates-online-learning-together-with-sigma-technology/>

Rob Goldstein

Goldstein is Executive Director of Product Development and Strategic Planning of IFHTSE's member company Fluxtrol. Recently, a survey by the magazine "The Monty" counts him among "The 30 Most Influential People in The North American Heat Treating Industry." He also was awarded ASM Fellow in September 2020.

IFHTSE 2021 EVENTS

Due to the pandemic, many conferences planned for 2021 have either been delayed or canceled. Please watch this space for updates on current conference planning.

APRIL 27-28

European Conference on Heat Treatment and 2nd QDE – International Conference on Quenching and Distortion Engineering
Online event | Germany | www.echt-qde-2021.de

SEPTEMBER 5-9

6th International Conference on Steels in Cars and Trucks
Milan, Italy | www.sct2020.com

SEPTEMBER 8-10

4th Mediterranean Conference on HTSE
Istanbul, Turkey | mchtse2020.com

SEPTEMBER 13-16

International Materials Applications & Technologies
St. Louis, MO, USA | www.asminternational.org/web/imat

SEPTEMBER 29-OCTOBER 1

14th HTS International Exhibition and Conference
Mumbai, India | www.htsindiaexpo.com

OCTOBER 26-28

HK 2021

HK is the largest materials technology industry meeting in Europe
Cologne, Germany | www.hk-awt.de

APRIL 2022

12th Tooling Conference

Sweden

SEPTEMBER 2022

27th IFHTSE Congress / European Conference on Heat Treatment
Salzburg, Austria

NOVEMBER 13-16, 2022

28th IFHTSE Congress

Yokohama, Japan

For details on IFHTSE events, go to www.ifhtse.org/events



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ONLINE www.ifhtse.org | EMAIL info@ifhtse.org