



INTERNATIONAL FEDERATION OF HEAT TREATMENT AND SURFACE ENGINEERING

Alessandra Palombi wins Aichelin Young Speaker Award

Alessandra Palombi from the Department of Industrial Engineering of the University of Rome “Tor Vergata” was given the Aichelin Young Speaker Award at the 4th Mediterranean Conference on Heat Treatment and Surface Engineering in Lecce, Italy, in combination with the 5th International Conference on Thermal Process Modeling and Simulation.

Her talk on “Low temperature plasma assisted carburizing of 3D printed 316 L stainless steel” convinced the jury regarding the award. The award, sponsored with 1,500 euros by the Austria-based furnace manufacturer Aichelin, is given for the best talk by a speaker younger than 35 at an IFHTSE conference in Europe. The next Aichelin Young Speaker Award will be given at the Motion in Heat Treatment — Heat Treatment in Motion conference in Prague, June 4-6, 2025.

HANDBOOK ON QUENCHANTS AND QUENCHING TECHNOLOGY

ASM International, an IFHTSE member, recently released the latest volume in its ASM Handbook series, “Volume 4F Quenchants and Quenching Technology.” This is a comprehensive update of the best-selling “Handbook of Quenchants and Quenching Technology” (ASM International, 1993).



Volume 4F discusses the design of quenching systems with emphasis on the method of agitation. It explains how to evaluate initial designs, assess manufacturing feasibility, and determine the root cause of quench-induced failures. It covers a wide range of quenching processes, including induction, spray, gas, pulse, and intensive quenching and addresses related issues such as residual stress, distortion, and cracking in different types of

components. It also discusses the use of computational fluid dynamics and other modeling tools.

The editors include IFHTSE Fellow Lauralice C.F. Canale and former IFHTSE President and IFHTSE Medalist George Totten. Six IFHTSE awardees and officer holders are among the 33 contributors and reviewers. They include:

» **Imre Felde:** IFHTSE treasurer and winner of the Tom Bell Young Author Award.

» **Cemil Hakan Gür:** IFHTSE fellow.

» **Thomas Lübben:** IFHTSE fellow.

» **D. Scott MacKenzie:** Former IFHTSE president.



Alessandra Palombi is from the Department of Industrial Engineering of the University of Rome.

» **Valery Rudnev:** IFHTSE fellow.

» **Eva Troell:** Former IFHTSE president.

This volume is available through ASM International.

» **More info:** dl.asminternational.org/handbooks/edited-volume/194/Quenchants-and-Quenching-Technology

CONFERENCE UPDATES

*29th World IFHTSE Congress
September 30- October 3, 2024 | Cleveland, Ohio*

The ASM Heat Treating Society (HTS) and the International Federation for Heat Treatment and Surface Engineering (IFHTSE) present the highly anticipated 29th IFHTSE World Congress, a premier global event dedicated to advancing the fields of heat treatment and surface engineering. It is co-located with ASM’s Annual Meeting, IMAT 2024.

The 2024 IFHTSE World Congress revolves around the theme “Innovations in Heat Treatment and Surface Engineering for a Sustainable Future.” Emphasizing the critical role of these technologies in shaping a sustainable world, the event will explore the latest



The 29th IFHTSE World Congress, a premier global event dedicated to advancing the fields of heat treatment and surface engineering, will be held Sept. 30 to Oct. 3 in Cleveland, Ohio. (Courtesy: Shutterstock)

developments, breakthroughs, and practices that can enhance the efficiency, performance, and environmental impact of heat treatment and surface engineering processes. In addition, traditional heat-treating topics will be offered.

» **More info:** www.asminternational.org/ifhtse-congress

29th IFHTSE World Congress: Future of Heat-Treating Workshop

As part of the event, a special workshop on the Future of Heat Treating will be Monday, September 30, 2024, 3-5 p.m. This session will delve into three critical areas of heat treating and surface engineering: Data/IoT, Sustainability, and Education. Led by subject matter experts and facilitators from IFHTSE, participants will engage in round-table discussions, shaping a strategic plan for the global heat-treat community's needs over the next three to five years. With an interactive format and opportunities for networking, this workshop promises insightful exchanges and actionable outcomes. Reserve your spot

now and be part of shaping the future of heat treating. There is no additional fee to participate, however, pre-registration is required.

Third International Conference on Quenching and Distortion Engineering

May 6-8, 2025 | Vancouver, Canada

The Third International Conference on Quenching and Distortion Engineering will be in conjunction with AeroMat 2025. This is a continuation of the successful Distortion Engineering conference series and the Quenching and Distortion conference series. The first QDE was in Chicago, Illinois, in 2012 and has occurred at approximately five-year intervals. There is a strong focus on the effects of residual stress during manufacturing and methods to control distortion and residual stress. The call for papers is expected in the next few months.

Motion in Heat Treatment – Heat Treatment in Motion

June 4-6, 2025 | Prague, Czech Republic

The Motion in Heat Treatment — Heat Treatment in Motion is the fifth in its series and sponsored by AZTK (ASOCIACE PRO TEPELNÉ ZPRACOVÁNÍ KOVU). It will be at the Kaiserstein Palace. This event follows the 3rd conference in Prague in 2016 and the 4th conference in Spartanburg, South Carolina. While the previous focus of the event was primarily on automotive applications, the focus has been widened to all transport applications including automotive, rail, and aircraft and marine applications of heat-treated and surface-engineered components. The event is combined with the European Conference on Heat Treatment.

IMPORTANT DATES

» **Abstract submission:** November 15, 2024.

» **Full paper submission:** March 15, 2025.

» **Submission of presentations:** May 15, 2025

30th IFHTSE World Congress

August 18-21, 2025 | Suzhou, China

This event, sponsored by the Chinese Heat Treatment Society (CHTS), follows the 25th World Congress in Xi'an in 2018. More details are forthcoming as available.

IMPORTANT DATES

» **Deadline for abstract submission:** February 28, 2025.

» **Notice of acceptance:** March 10, 2025.



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