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INTERNATIONAL FEDERATION FOR  
HEAT TREATMENT  
AND SURFACE ENGINEERING

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## Welcome from the new IFHTSE President



*Dear members and  
friends of our  
Federation,*

I would like to thank Patrick Jacquot, Bodycote, Past President 2015-2017, for his service to the IFHTSE. He has several accomplishments under his tenure to be proud of, specifically registration of IFHTSE in Switzerland, and the growth of IFHTSE with the addition of two new members, The China Heat Treatment Association and MISAD (Metal Heat Treater

Industries Association from Turkey).

I would also like to thank Stefan Hock for his hard work coordinating registration of IFHTSE, as well as his patience dealing with the various bureaucracies with regards to banking and registration.

I would like to thank Imre Felde for his hard work on the improved website, and the incorporation of the Liquid Quenchant Database.

Lastly, I would like to thank the previous past president of IFHTSE, Prof. Reinhold Schneider, Univ of Applied Sciences, Upper Austria, for his advice and wisdom.

## **MISSION OF IFHTSE**

The mission of the IFHTSE is:

1. Act as an international organization of Heat Treating and Surface Engineering societies, institutes and corporate members to coordinate, plan global events and conferences.
2. Educate through international conferences, personal relationships and networking. Using an interdisciplinary approach, foster the transfer of knowledge. Mentor young engineers, researchers and practitioners, by providing opportunities for advancing the knowledge base of Heat Treatment and Surface Engineering.
3. Encouraging the cooperation and participation across national borders by individuals and members, by providing an international platform of conferences sponsored by member societies.
4. Recognize established researchers, engineers or practitioners for their contribution to the science and art of Heat Treatment and Surface Engineering. Recognize, foster and mentor new researchers, engineers and practitioners for their contributions to Heat Treatment and Surface Engineering through awards and other mechanisms.

Lastly, while not part of the official mission statement, I think that an important ingredient of the mission of IFHTSE, is to communicate the passion each of us has for heat treatment and surface engineering to new members.

## **GOALS FOR IFHTSE**

During my tenure as President, I have three primary goals for the organization: First, to increase the number of academic and corporate members; Second, to increase the participation of younger industrial and academic scientists and engineers; and Third, to increase the visibility of IFHTSE world-wide.

### **Increased Academic and Corporate Members**

At the present time membership in IFHTSE consists of academic societies, industrial trade groups and corporate members. My personal goal is to increase the number of members (societies and institutes) by 20%. My second goal is to increase the number of corporate members by 50%. To achieve these goals will require some hard work, but I feel that these goals are attainable.

To achieve these goals, we will need to develop marketing materials and incentives for new corporate and academic members. These marketing materials would include the creation of printed brochures that can be given to prospective academic and industrial members. We also need to increase our presence on social media, including LinkedIn, Facebook, Twitter, etc. Imre Felde has done an excellent job on revising and enhancing the present website, but we must do more. A Facebook page has been initiated, and it is in its infancy. Please contribute pictures and comments. Imre and I have established a LinkedIn group that we hope will increase visibility. If you have not yet joined the LinkedIn group, I hope you will consider joining. This can act as an excellent forum to ask questions to the group thereby encouraging and mentoring younger engineers. I hope to establish in the very near future a

committee tasked with creating marketing materials such as brochures for prospective members.

The webpage ([www.ifhtse.org](http://www.ifhtse.org)) is much improved, and offers the Liquid Quenchant Database. Please contribute cooling curves as this is the only central database of cooling curves from a variety of vendors and researchers under a single umbrella. If you have any photographs or other items of note, such as job promotions, events, or other items of interest, please let myself or Stefan know.

In addition, we wish to create a repository of papers of our members. Please consider contributing to the cache of papers and research reports. This can and should be a valuable resource for members (corporate and academic) and individuals.

We should consider new industries for our focus on expanding membership. New technologies such as Additive Manufacturing need either Heat Treatment or other Thermal Processing to achieve properties and reduce residual stresses. Surface engineering of parts is critical to achieve necessary properties for wear resistance or corrosion protection. .

### Increased Participation by Younger Engineers, Researchers and Scientists

Heat treating is a mature industry. Unfortunately, with the change from a Metallurgy to Material Science, there has been a decrease in the number of people knowledgeable in heat treatment and surface engineering. We must strive to increase the participation of younger people if we are to remain a viable organization. This is not just an IFHTSE problem, but a world-wide issue. We need to increase participation of younger people in our member societies as well as in IFHTSE. I am not sure how to increase young people participation, but I hope that we can have some discussions on how to involve younger people in heat treatment and surface engineering.

### Increased visibility of IFHTSE world-wide

IFHTSE has been Euro-Centric. The predominance of member societies are from Europe. We have done a good job of expanding our visibility to Asia with members from China, Korea and Japan. However, we need to do more in expanding our membership in the Americas and Asia. South Africa, South America, and Southeast Asia are an untapped potential source of new members.

### **ABOUT ME**

I have been attending IFHTSE conferences since approximately 1998, with the Congress being held in Budapest, Hungary. I have been a member of the Executive Committee since 2015. I completed my B.S. Metallurgical Engineering at The Ohio State University in 1982; M.S. Metallurgical Engineering in 1993 from the University of Missouri – Rolla, and my Ph.D. Metallurgical Engineering from the University of Missouri – Rolla in 2000. My dissertation was on “Quench Rate and Aging Effects on Al-Zn-Mg-Cu Aluminum Alloys.” I was awarded ASM Fellow in 2007. I am presently Research Scientist – Metallurgy, Houghton International, Inc., Valley Forge PA, responsible for sales and technical support of heat treating customers globally. Previous to Houghton, I worked at Boeing as Associate Technical Fellow, responsible for failure analysis. Also served as a manufacturing engineer, responsible for aluminum and steel heat treating processes and equipment. I have numerous publications and books, mainly in the field of heat treating and quenching. I am an active member in ASM (American Society of Metals) and have served as chairman, co-

chairman or participated on the organizing committee of numerous heat treating conferences.

I am married to Patricia, with two children (Ian and Victoria). I enjoy playing bridge, amateur radio and having a good cigar.

### CONCLUSIONS

IFHTSE is strong, as is the heat treatment and surface engineering industry. To remain strong, we must grow – both from new members and from the influx of younger people in the industry. Together, I hope we can accomplish these goals.

Should you have any questions or comments, please do not hesitate to contact me.



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## New IFHTSE Vice President

With the beginning of the new year, Dr. Eva Troell of Swerea AB, Mölndal, Sweden, holds the position of IFHTSE Vice President. She has been involved in the heat treatment and materials technology for more than 25 years.

Eva has a Master's degree in materials technology from the Royal institute of Technology in Stockholm. At Swerea IVF she is responsible for the heat treatment area. She works as a senior researcher and project manager. Some main areas of interest are quenching as well as nitriding processes.



She was one of the originators for the initiation and start up of the Swedish Heat Treatment Centre which has been active since 2006. The Heat Treatment

Centre is a network for heat-treatment research and development. Member companies are Scania, Volvo, Atlas Copco Secoroc, Curtis Wright, Gnutti Powertrain, EFD Induction, GKN Driveline, Teknoheat, AGA, Bodycote, Parker Hannifin, Ovako, Sandvik Mining, SKF, StressTech, Swepart, Sarlin Furnaces and LEAX Group.

Swerea IVF is the developer and owner of the ivf SmartQuench system, which is used for inspection and quality assurance of quenchant.

IFHTSE welcomes Eva Troell on the board of directors!

## IWT Bremen admitted to renowned scientific community

Our member institute IWT in Bremen, Germany, is now a member of the Leibniz-Association. The research institutions connected in this community, covering a wide range in scope across science and scholarship, are as many as 93, employing nearly ten thousand researchers. The focus is on applied basic research and knowledge transfer to policy-makers, academia, business and the public.



*Welcoming IWT in the Leibniz community (from left): IWT Director Hans-Werner Zoch, Senator Eva Quante-Brandt, Leibniz President Matthias Kleiner, AWT President Winfried Gräfen*

The high standard of scientific excellence required for this admission is assured by a profound and exhaustive evaluation which in the case of IWT started in 2015, comprised extensive paperwork and culminated in a two-day assessment



by a commission of twelve leading experts. All Leibniz institutes are thoroughly re-assessed every five years. A huge effort for the entire staff of IWT, but it gives IWT a thoroughly enhanced standing: funds not only from the state (Land) of Bremen but also from federal sources of Germany and access to a great network with lots of opportunities for exchange and cooperation. IWT now takes an influential position among decision-makers and the public opinion. IWT has always been a lighthouse for our community and the technology of Heat Treatment and Surface Engineering. Now this light shines even brighter.

IWT has been a stronghold of IFHTSE throughout the existence of our Federation and even before. The foundation dates back to the 40ties, with our German member association AWT being one of the donators. The first director Otto Schaaber initiated the first truly multinational discussion on heat treatment








*To celebrate this success of IWT, the state of Bremen organised a solemn reception with 200 guests in the grand historic town hall. For the musical accompaniment, a brass ensemble was chosen – not by chance: Hans-Werner Zoch himself masters the trumpet impeccably.*

as early as 1955, which subsequently lead to regular international conferences and, to form a responsible body to hold them, the foundation of IFHTSE in 1972. All IWT directors have served as

IFHTSE presidents: Otto Schaaber 1975-76, Hans-Peter Mayr, who is also an IFHTSE fellow, 1996-97, and Hans-Werner Zoch 2010-11. For more than ten years, IWT has pursued an extensive research programme, directed by IFHTSE fellow Thomas Lübben, on Distortion Engineering. The respective conference series was merged with IFHTSE's series on Quenching and Control of Distortion, leading to the QDE series with the first event due in November this year in Nagoya, Japan.

It is with gratitude and deep respect that IFHTSE congratulates Hans-Werner Zoch and the whole team of IWT on this great achievement!

# Forthcoming Conferences

<b>2018</b>	April	12-13	<b>Nitriding and Nitrocarburizing – European Conference on Heat Treatment</b>	Friedrichshafen	<b>Germany</b>	<a href="https://www.echt2018.de/">https://www.echt2018.de/</a>	
<b>2018</b>	JUNE	5-7	<b>4th International Conference on HTSE in Automotive Applications</b>	Greenville-Spartanburg SC	<b>USA</b>	<a href="http://www.asminternational.org/web/thermal-processing-in-motion/">www.asminternational.org/web/thermal-processing-in-motion/</a>	
<b>2018</b>	SEP	11-14	<b>25th IFHTSE Congress</b>	Xi'an	<b>China</b>	<a href="http://www.25ifhtse.org">www.25ifhtse.org</a>	
<b>2018</b>	OCT	16-18	<b>Härterei-Kongress [languages: German/English]</b>	Cologne	<b>Germany</b>	<a href="http://www.awt-online.org/haertereikongress.html">http://www.awt-online.org/haertereikongress.html</a>	
<b>2018</b>	NOV	27-29	<b>International Conference on Quenching and Distortion Engineering</b>	Nagoya	<b>Japan</b>	<a href="http://www.qde2018.jp/">http://www.qde2018.jp/</a>	
<b>2019</b>	MAY	12-16	<b>Tooling 2019</b>	Aachen	<b>Germany</b>	<a href="https://tooling2019.com/">https://tooling2019.com/</a>	
<b>2019</b>	MAY-JUNE		<b>European Conference on Heat Treatment</b>		<b>Italy</b>		
<b>2019</b>	SEP	18-20	<b>26th IFHTSE Congress</b>	Moscow	<b>Russia</b>		
<b>2019</b>	OCT	15-17	<b>Heat Treat 2019</b>		<b>USA</b>		
<b>2019</b>	OCT	23-25	<b>HK 2019 [languages: German/English]</b>	Cologne	<b>Germany</b>	<a href="http://www.awt-online.org/haertereikongress.html">http://www.awt-online.org/haertereikongress.html</a>	
<b>2019</b>	NOV		<b>4th Mediterranean Conference on Heat Treatment and Surface Engineering</b>	Istanbul	<b>Turkey</b>		