



2018



25th Congress of International Federation for Heat Treatment and Surface Engineering

11-14 September 2018 | Xi'an China
Organized by



Chinese Heat Treatment Society
www.chts.org.cn

Welcome

The 25th IFHTSE Congress will take place in Xi'an, China from 11 to 14 September 2018.

The organizer Chinese Heat Treatment Society (CHTS) was found in 1963. As one of the oldest professional organizations in China, CHTS has been keeping a long-history friendship and frequent cooperation with other organizations on heat treatment for more than 50 years. Over 1000 CHTS Group Members and 3000 CHTS Personal Members find advanced technologies here and also meet their new partners or customers from around the world with CHTS.

The long-history friendship between CHTS and the IFHTSE has already led to successful cooperation on several significant events, such as the 3rd international congress on heat treatment of materials which was held in Shanghai in 1983, the 14th IFHTSE congress (Shanghai, 2004), the 20th IFHTSE congress (Beijing, 2012) and 2nd International Conferences on Energy and the Future of Heat Treatment and Surface Engineering (Beijing, 2014).

Now, our combined efforts resources will be focused on the organization of a congress that will deal with tradition and innovation in heat treatment and surface engineering. The 25th IFHTSE congress will be a good opportunity for the delegates from a wide range of industrial and academic backgrounds to discuss and disseminate the recent progress, innovations and developments in the field of Heat Treatment and Surface Engineering.

We are looking forward to see you in Xi'an!

Committee

Co-chairman:

Prof. Zhou Yu [China] Academician of CAE, President of Chinese Heat Treatment Society
Dr Scott Mackenzie [USA] President of IFHTSE

Executive chairman:

Prof. Xu Kewei [China] Past President of IFHTSE 2012-13

International Advisory Committee:

Prof. Arkadiy K. Tikhonov [Russia] CNIITMASH
Prof. Dr. CUI Kun [China] Academician of CAE, Huazhong University of Science and Technology
Prof. Dr. DING Chuanxian [China] Academician of CAE, Shanghai Institute of Microsystem and Information Technology (SIMIT)
Dr. Eva Troell [Sweden] IVF, IFHTSE Executive Committee
Dr. FU Hengzhi [China] Academician of CAE, Northwestern Polytechnical University
Dr. George Totten [USA] Texas A&M, formerly IFHTSE Executive Committee
Prof. Dr. Hans-Werner Zoch [Germany] IWT Bemem, Past President of IFHTSE 2010-11
Dr. Imre Felde [Hungary] Treasurer of IFHTSE, Óbuda University
Dr. Larisa Petrova [Russia] MADI University, IFHTSE Executive Committee

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Prof. Leontin Druga [Romania] ATTIS
 Prof. Dr. LI Helin [China] Academician of CAE, CNPC Tubular Goods Research Institute (TGRI)
 Prof. Dr. LI Peigen [China] President of Chinese Mechanical Engineering Society, Academician of CAE
 Prof. Dr. LI Yinghong [China] Air Force Engineering University, Academician of CAS
 Prof. Dr. LU Ke [China] Institute of Metal Research (IMR), Chinese Academy of Sciences, Academician of CAS
 Prof. Masahiro Okumiya [Japan] Toyota Technological Institute, IFHTSE Executive Committee
 Dr. Massimo Pellizari [Italy] University of Trento, IFHTSE Executive Committee
 Prof. Dr. PAN Jiansheng [China] Shanghai Jiao Tong University, Academician of CAE
 Dr. Patrick Jacquot [France] Bodycote (Belgium, France, Italy) President of IFHTSE 2016-17
 Prof. Reinhold Schneider [Austria] TU Upper Austria Wels, Past President of IFHTSE 2014-15
 Simon Blatern [UK] Bodycote, IFHTSE Executive Committee
 Prof. Sohn Myung Jin [Korea] President of Korean Society for Heat Treatment
 Dr. Stefan Hock [Italy] IFHTSE Secretary-general
 Prof. Wang Decheng [China] President of China Academy of Machinery Science and Technology (CAM)
 Prof. Dr. WANG Guodong [China] Academician of CAE, Northeastern University
 Prof. Dr. WANG Yide [China] Academician of CAE, Taiyuan Iron & Steel (Group) Co., Ltd.
 Prof. Dr. WEI Bingbo [China] Academician of CAS, Northwestern Polytechnical University
 Prof. Dr. XU Binshi [China] Academician of CAE
 Prof. Dr. XU Huibin [China] Academician of CAE, Beihang University
 Prof. Dr. XUE Qunji [China] Academician of CAE, Lanzhou Institute of Chemical Physics (LICP)
 Prof. Yoshinao Mishima [Japan] Tokyo Institute of Technology
 Prof. Dr. ZHAO Liancheng [China] Academician of CAE, Harbin Institute of Technology
 Prof. Dr. ZHAO Zhenye [China] Academician of CAE, AVIC Beijing Institute of Aeronautical Materials
 Prof. Dr. ZHOU Kesong [China] Academician of CAE, Guangzhou Research Institute of Non-ferrous Metals
 Dr. Zoltán Kolozsváry [Romania] SC Plasmaterm SA, Past President of IFHTSE 1998-99

Symposiums

The congress mainly addresses the following topics, yet other contributions regarding new heat treatment and surface engineering developments are also welcome:

1. Solid-State Transformation and Solidification

Chair:

Prof. Shang Chengjia (University of Science and Technology, cjshang@ustb.edu.cn)

2. Advanced Materials and Heat Treatment

Chairs:

Prof. Yujin Wang (Harbin Institute of Technology, wangyuj@hit.edu.cn)

Prof. Kefu Yao (Tsinghua University, kfyao@tsinghua.edu.cn)

3. Chemical-thermo Treatment

Chair:

Prof. Mufu Yan (Harbin Institute of Technology, yanmufu@hit.edu.cn)

Prof. Cheng Zhao (Qingdao University of Science and Technology, c-zhao@126.com)

4. Technology and Equipment of Low Pressure Carburizing and High Pressure Gas Quenching

Chairs:

Dr. Klaus Löser (ALD Vacuum Technologies GmbH, Dr.Klaus.Looser@ald-vt.de)

Mr. Yedong Liu (SECO/WARWICK Group, Yedong.Liu@secowarwick.com)

Mr. Tony Wu (Bodycote AGI NAA, Bodycote (Wuxi) Technology Co. Ltd, Tony.wu@bodycote.com)

5. Induction Heat Treatment

Chair:

Prof. Chongyun Meng (Standard Research Institute, China North Industries Group Corporation, mcym@techinfo.gov.cn)

6. Multi-field Coupled Heat Treatment

Chair:

Prof. Lei Wang (Northeastern University, wanglei@mail.neu.edu.cn)

7. Quenchant, Quenching and Distortion Control

Chairs:

Dr. George E. Totten (Portland State University, getotten@gmail.com)

Dr. Nailu Chen (Shanghai Jiaotong University, nlchen@sjtu.edu.cn)

8. Non-ferrous Metals, Cu, Al, Mg, Ti alloy, and etc

Chairs:

Prof. Ping Liu (Shanghai University of Science and Technology, liuping@usst.edu.cn)

Prof. Li Zhou (Central South University, lizhou6931@csu.edu.cn)

Prof. Niinomi mitsuo (Tohoku University)

9. Heat Treatment and Surface Engineering for Key Parts and Components Industries

Chair:

Prof. Genshu Zhou (Xi'an Jiaotong University, zhousg@mail.xjtu.edu.cn)

10. Heat Treatment and Surface Engineering in the Nuclear Power Application

Chairs:

Prof. Yucheng Wu (Taiyuan University of Technology, wyc@tyut.edu.cn)

Prof. Shigeharu Ukai (Hokkaido University)

Prof. Suo Jinping (Huazhong University of Science and Technology, jinpingsuo@hust.edu.cn)

Prof. Yuan Wang (Sichuan University, wyuan@scu.edu.cn)

11. Heat Treatment and Surface Engineering in Energy Industry

Chair:

Prof. Huo Chunyong (CNPC Tubular Goods Research Institute, huochunyong@cnpc.com.cn)

Prof. Xiaonong Cheng (Jiangsu University, xncheng@ujs.edu.cn)

12. Sensors and Equipment for Heat Treatment and Surface Engineering

Chairs:

Mr. Wenming Zhu (Jiangsu Fengdong Thermal Technology Co. Ltd, zhu.wenming@fengdong.com)

Prof. Ruguan Li (Chongqing Research Institute of Materials Ltd, 2471587660@qq.com)

13. Information and Intelligent Control System

Chair:

Dr. Jianhua Xiang (Jiangsu Fengdong Thermal Technology Co. Ltd, xiang.jianhua@fengdong.com)

14. High Energy Beam Surface Engineering and Additive Manufacturing

Chairs:

Prof. Jianhua Yao (Zhejiang University of Technology, laser@zjut.edu.cn)

Prof. Chuan Dong (Dalian University of Technology, dong@dlut.edu.cn)

Assoc Prof. Jing Shi (University of Cincinnati, jing.shi@uc.edu)

15. New Technologies for Hard and Superhard Thin Films

Chairs:

Prof. Chengming Li (University of Science and Technology Beijing, chengmli@mater.ustb.edu.cn)

Prof. Fei Ma (Xi'an Jiaotong University, mafei@mail.xjtu.edu.cn)

Prof. Anirudha V. Sumant (Argonne National Laboratory, USA, sumant@anl.gov)

Prof. Haitao Ye (Aston University, UK, H.YE@aston.ac.uk)

16. High-power Impulse Magnetron Sputtering, HiPIMS

Chair:

Prof. Yuan Xia (Institute of Mechanics, Chinese Academy of Science, xia@imech.ac.cn)

17. Plasma Electrolysis and Discharge Deposition (Technology)

Chairs:

Prof. Wenbin Xue (Beijing Normal University, xuwb@bnu.edu.cn)

Prof. Yuan Xia (Institute of Mechanics, Chinese Academy of Science, xia@imech.ac.cn)

Prof. A.L.Yerokhin (Hull University, Aleksey.Yerokhin@manchester.ac.uk)

18. Functional Surfaces and Coatings

Chairs:

Prof. Jia-Hu Ouyang (Harbin Institute of Technology, ouyangjh@hit.edu.cn)

Prof. Bailing Jiang (Xi'an University of Science and Technology, jiangbail@vip.163.com)

Prof. Dr. Wim G. Sloof (Delft University of Technology, The Netherlands, W.G.Sloof@tudelft.nl)

19. Spray

Chairs:

Prof. Changjiu Li (Xi'an Jiaotong University, licj@mail.xjtu.edu.cn)

Prof. Bolin Zha (Air Force Engineering University)

20. Surface Integrity and Anti-fatigue Manufacturing

Chairs:

Prof. Yukui Gao (Tongji University, yukuigao@tongji.edu.cn)

Prof. Martin Levesque (CREPEC, Département de Génie Mécanique, École Polytechnique de Montréal, Canada, martin.levesque@polymtl.ca)

Prof. Volker Schulze (Karlsruhe Institute of Technology, Germany, volker.schulze@kit.edu)

21. Frictional and Wear

Chairs:

Prof. Ruiming Ren (Dalian Jiaotong University, rmren@djtu.edu.cn)

Prof. Minhao Zhu (Southwestern Jiaotong University, zhuminhao@home.swjtu.edu.cn)

Prof. You Wang (Harbin Institute of Technology, wangyou@hit.edu.cn)

22. Modelling and Simulation

Chairs:

Prof. Jianfeng Gu (Shanghai Jiaotong University, gujf@sjtu.edu.cn)

Prof. Wei Shi (Tsinghua University, shiw@mail.tsinghua.edu.cn)

23. Remanufacturing

Chairs:

Prof. Sheng Zhu (State Key Laboratory of Remanufacturing)

Prof. Jun Dai (Xi'an University, 632784070@qq.com)

24. Characterization and Evaluation of Residual Stress

Chairs:

Prof. Chuanhai Jiang (Shanghai Jiaotong University, chjiang@sjtu.edu.cn)

Prof. Vincent Ji (Paris-Sud University, vincent.ji@u-psud.fr)

Prof. Yngqng Xu (Northwestern Polytechnical University, yqyangnwpu.edu.cn)

25. Failure Analysis

Chair:

Prof. Yaorong Feng (CNPC Tubular Goods Research Institute, fengchun003@cnpc.com.cn)

Prof. Zhen-Guo Yang, Department of Materials Science, Fudan University, zgyang@fudan.edu.cn

26. Heat Treatment Technology of Advanced High Strength Steel for Automotive

Chair:

Prof. Chengjia Shang (University of Science and Technology Beijing, cjshang@ustb.edu.cn)

27. Microstructure and Properties

Chairs:

Prof. Wei Xu (Northeastern University, xuwei@ral.neu.edu.cn)

Assistant Prof. Hao Chen (Tsinghua, University, hao.chen@mail.tsinghua.edu.cn)

Young Author Award

Tom Bell young author award.

This award honors the authors of a paper of exceptional merit presented at the congress, and covers the travel, accommodation and congress registration to the next IFHTSE congress. The award is only for authors up to the age of 35 who apply for the award during the abstract submission process.

25 IFHTSE Congress young researchers scholarship (25YRS).

For outstanding young professionals and students, the 25th IFHTSE Congress offers 20-30 of scholarships for oral presentations and 10 for poster presentations. The scholarship is only for participants up to the age of 38 who apply during the abstract submission process. The winners will get both the certificate and a monetary prize.

Important Date

Submission of abstracts:	28	February, 2018
Notification on acceptance of abstracts:	31	March, 2018
Submission of full paper:	31	May, 2018
Early bird registration	30	June, 2018

Registration

CHTS member/ author/early bird	600 USD
Full registration fee	700 USD
Student	450 USD
Accompany person	300 USD

* Congress registration includes: Access to plenary, scientific, technical sessions, and poster presentation area. Over the two days lunches (2 in all), dinners (2 in all), coffee breaks and Banquet. CD/USB Key of congress articles and program. Tour on 14 September, 2018.

* Accompany person registration includes: Over the two days lunches (2 in all), dinners (2 in all), coffee breaks, Banquet and 2 days city tour.

* All the speakers who make an oral or poster presentation must be registered for the Congress before June 30, 2018.