

- 26th IFHTSE Congress in Moscow
- IFHTSE Medal
- Two new IFHTSE Fellows
- New IFHTSE Vice President elected
- New Executive Committee members



ROMIT President Prof. Arkady Tichonov, IFHTSE Fellow, opening the Congress. Right: IFHTSE President Dr. Scott MacKenzie

IFHTSE member association ROMIT, the Russian Society of Metal Science and Heat Treatment, organised this Congress after a long break: the last time such event took place in the USSR in 1990 in Moscow.

The Congress gathered scientists and industrial experts from Russia and foreign countries: Germany, Japan, USA, Sweden, Austria, Italy, Slovenia, Poland, Slovakia, Denmark, Czech Republic, France, China, South Korea, Croatia, Switzerland, Hungary, Lebanon, and Kazakhstan.

Keynotes

Among the keynote plenary speakers of the Congress were

- Prof. Marcel A.J. Somers (Denmark) giving the Lakhtin's memorial lecture (see also IFHTSE bulletin 2019-04): "Thermochemical surface engineering of stainless steels with interstitials; symbiosis of science, technology and innovation",
- Dr. Stefan Hock (Italy), IFHTSE Secretary General "Case Hardening Steels: Challenging the invisible and outsmarting the unavoidable. An approach integrated along the process chain to new potentials in a mature technology", and
- Prof. Rolf Zenker with co-author Dr. Anja Buchwalder (both of Germany) "The electron beam can do more than surface hardening".

IFHTSE Medal

At the Congress, Prof. Marcel Somers of the University of Lyngby, Denmark was awarded the IFHTSE Medal.

Few people can count themselves among the holders of this highest award of IFHTSE for scientific excellence: altogether, it has been given to only six persons before Marcel Somers.

In his laudation, Prof. Reinhold Schneider pointed out that Marcel Somers has

- worked on gas-based surface treatment of stainless steel, revealing the true nature of this unstable solid solution (expanded Austenite), which was before confusingly called "S-phase",
- became a world leading scientist in this area and dominates the corresponding literature until today,



- has provided a new base for the understanding of martensite formation at cryogenic temperatures,
- has (co-)authored about 300 contributions to journals, conferences and chapters in books
- is co-inventor of twelve patents which have all found industrial implementation, and led to the forming of the company Expanite.

Two new IFHTSE Fellows

Rolf Zenker

The IFHTSE Fellowship was awarded to Prof. Rolf Zenker of the Technical University of Freiberg, Germany, “In recognition of being the leading expert worldwide for thermal electron beam technologies and his outstanding scientific achievements in the field of surface modification by rapid heat treatments, thus becoming the reference person of the international community in the matter.”



Oleg Bannykh

Prof. Oleg Bannykh (who could not be present) was awarded with the IFHTSE Fellowship “In recognition of his significant research on fundamentals of phase transformations and structure of alloys, especially nitrogen-alloyed martensitic



and austenitic steels; his contribution to the development of new classes of high-strength steels with special properties; and his service as IFHTSE President in 1984-1986”.

A Fellow of IFHTSE is an individual who has made outstanding, globally recognised and significant contributions to the development of heat treatment and/or surface engineering.

Tom Bell Young Author Award

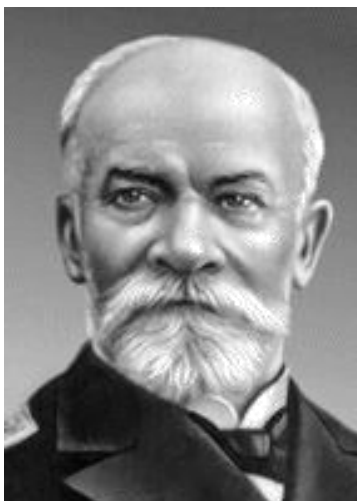
The Tom Bell Young Author Award, sponsored by LINDE GAS, was won by Mrs. Riyana Ableyeva of the Moscow State University of Technology Stankin for her paper “Investigation of structure and properties from aluminum matrix composite materials produced by selective laser melting”.

This award is for the best paper from an author under 35 years of age. She had to compete with thirteen other candidates.

The material content of the award is her free travel to and participation at the next IFHTSE Congress in Yokohama, Japan, November 23-25, 2021.



Historical note



ROMIT dedicated this Congress to the 180th birth anniversary of Dmitry K. Chernov, an outstanding Russian engineer and scientist in the field of physical metallurgy. He is known for his discovery in 1868 of critical points of steels corresponding to certain temperatures of their structural transformations. The discovery of this phenomenon created the foundation of iron-carbon phase diagram, and it gave a start for the development of scientific metallography. On the occasion, ROMIT President Prof. Arkady Tikhonov gave a keynote speech titled “The 180th Birth Anniversary of

D.K. Chernov and the influence of his discovery of iron polymorphism on the global development of metal heat treatment processes”.



A glimpse into a session: Slovenia’s Prof. Bojan Podgornik giving his talk on “Deep cryogenic treatment of high speed steels”

New IFHTSE Vice President elected

Prof. Masahiro Okumiya has been elected IFHTSE Vice President at the 48th Governing Council Assembly the day before the Congress. He has already been a member of the Executive Committee since 2016, and had been suggested for this new function by the Japanese Society for Heat Treatment.

Masahiro Okumiya got his Ph.D. in 1994, in Materials Science and Engineering at



Nagoya National University. He has been working in Toyota Technological Institute since 1985. In 1996, he was a visiting researcher in BAM (Federal Institute for Materials Research and Testing, Berlin Germany). Now he studies about surface heat treatment, especially gas carburizing, nitriding and high temperature nitriding. Among the awards he received there are the ASM International Award for Best Paper, Best paper of The Japan Institute of Metals, Best Paper of The Japan Society for Heat Treatment and Best poster presentation of IFHTSE2014.

IFHTSE's scheme for the presidential functions is that the election of a new Vice President is valid for altogether six years: he comes into office with the new year after the election, and two years later takes the function of President. After two years in this function, he will serve as Past President.

New Executive Committee members

In the same Governing Council Assembly, two new members of the Executive Committee have been appointed.

Marcel Somers (see also pages 2 and 3 above)

He was born in 1960, in Vlissingen, The Netherlands. and received his M.Sc. degree in physical metallurgy (1985) and his Doctor's degree (1989) from Delft University of Technology (NL). In 89/90 he was with Philips Center for Materials, Technology and Innovation as section leader in advanced materials characterization. He returned to Delft University of Technology as assistant professor in physical chemistry of the solid state in 1990 and was appointed full professor of physical metallurgy at the Technical University of Denmark in 1997.



A red thread through Somers' scientific work is gas-metal interactions in surface engineering and gaseous corrosion along with microstructure characterization with light and electron microscopy, X-ray diffraction, particularly residual stress determination, spectroscopy and thermal analysis. Furthermore, his interests encompass martensitic transformations at cryogenic temperatures and thermodynamics and diffusion modelling. His work is of fundamental character with a technological importance and spin-off for industrial application. In 2000 he established a university group in Materials and Surface Engineering, which he has headed since and currently counts 65 members.

Marcel Somers is an enthusiastic educator in physical metallurgy, materials characterization and surface engineering and has co-authored about 300 contributions in international journals, conference proceedings and chapters in books. He is co-editor of the comprehensive book "Thermochemical Surface Engineering of Steels". Moreover, he is co-inventor of 12 patents, all of which have been implemented in industrial applications, and co-founder of the industrial spin-outs Expanite and TRD Surfaces. He was awarded the Brandsma prize (1989); ASM European Lecturer (1999); Reinholdt W. Jorck prize (2001); DTU's innovation prize (2007); Alex Foss gold medal for rewarding contributions to engineering sciences (2014) and is Fellow of ASM International (2016). He is an elected member of the Danish Society for Technical Sciences (ATV) since 1999 and was chairman of the Danish Research Council for Technology and Production Sciences (FTP) from 2007 to 2009.

Rafael Colas

He got his B.Eng. (Met.) in 1978 from Universidad Autónoma Metropolitana, in Mexico City, and his M.Met. and Ph.D. from University of Sheffield, England, in 1980 and 1984. He held the post of Lecturer at the Faculty of Engineering of Universidad Nacional Autónoma de México from 1984 to 1987. He was appointed Research Manager at Hylsa, S.A. de



C.V., a major Mexican integrated steelworks in Monterrey from 1987 to 1992. In July 1992 he was appointed Professor at the Faculty of Mechanical and Electrical Engineering of Universidad Autónoma de Nuevo León. He has carried out research stays in universities of Colombia, Chile, Hungary, England and Canada, and spent a sabbatical leave as Professor at University of Ghent, Belgium during 2001-02. He directed the Centre for Innovation, Research and Development in Engineering and Technology of Universidad Autónoma de Nuevo León during 2010-13. He was President of the Monterrey Chapter of the Mexican Foundrymen's Society during 2002-03 and of the Mexican Chapter of the Association for Iron and Steel Technology from 2014 to 2016. He has been invited to participate in assessment committees for research centres in México, Spain and Latin-America.

He was distinguished as one of the Best Students in Mexico (Los Mejores Estudiantes de México) in 1978, and as Distinguished Lecturer at the 1995 Meeting of the Materials Research Centre of Ontario, Canada. He has received the award TECNOS, organized by the Government of the State of Nuevo León in 1994, 1996, 1998 and 2000. He was admitted to the Mexican Academy of Engineering in 1985, and to the Mexican Academy of Sciences in 2000. He was recognized as Fellow of ASM International in 2004, and as Fellow of the International Federation for Heat Treatment and Surface Engineering in 2018.

He is author of more than 180 papers published in indexed journals, and more than 370 papers published in non-indexed journals and in proceedings of national and international events. He co-edited the Encyclopedia of Iron, Steel and Their Alloys, published by CRC Press in 2016. He has supervised the research work of more to 120 students that have obtained their under-and post-graduate degrees. He has been invited as external examiner of Ph.D. thesis of students of American, Australian, Belgian, Canadian, Chilean, English and Italian universities. He has participated in more than 60 research projects supported by different companies, universities and non-profit organizations.

All member associations are invited to submit their conferences in English language to be featured here!

Forthcoming Conferences

2019	NOV	26-28	27th National Conference on Heat Treatment [languages: Czech/English]	Jihlava	Czech Republic	www.htconference.cz	
2020	MAR	5-7	6th Asian Conference on Heat Treatment and Surface Engineering	Chennai	India	http://6achtse.org	
2020	MAR	25-27	European Conference on Heat Treatment	Antwerp	Belgium	https://www.a3ts.org/echt2020/call-for-papers/	
2020	JUN	3-5	4th Mediterranean Conference on HTSE	Istanbul	Turkey	http://mchtse2020.com	
2020	JUN	14-18	6th International Conference on Steels in Cars and Trucks	Milan	Italy	https://www.sct-2020.com/	
2020	SEP	14-17	International Materials Applications & Technologies	Cleveland	USA		
2020	SEP	16-18	5th International Conference on Thermal Process Modelling and Simulation (ICTPMS)	Cavtat-Dubrovnik	Croatia		
2020	OCT	20-22	Härterei-Kongress [languages: German/English]	Cologne	Germany	http://www.awt-online.org/haertereikongress.html	
2020	OCT	28-30	4th Int'l Conference on HTSE of Tools and Dies	Hangzhou	China	http://www.htse-td.com/htse-td/index.shtml	
2021	APR	26-28	European Conference on Heat Treatment and 2nd QDE - International Conference on Quenching and Distortion Engineering	Berlin	Germany		
2021	OCT	26-28	Härterei-Kongress [languages: German/English]	Cologne	Germany	http://www.awt-online.org/haertereikongress.html	
2021	NOV	23-25	27th IFHTSE Congress	Yokohama	Japan		
2022			28th IFHTSE Congress and European Conference on Heat Treatment	Salzburg	Austria		