

Conference Program

August 19th

The opening ceremony				
	08:00-08:15	Zhouhua JIANG, Northeastern University		
Plenary reports (08:15-09:05; Banquet Hall, 2nd floor)				
Chair: Pro. Zhouhua JIANG				
1	08:15-08:40	Stephen YUE	McGill University	Machine learning applied to the hot rolling of steel
2	08:40-09:05	Han DONG	Shanghai University	Exploration of performance limit of iron and steel materials
Group photo of all attendees (09:05-09:25; Hotel Parking Lot)				
Keynote reports (09:25-12:20; Banquet Hall, 2nd floor)				
Chair: Pro. Jing LI				
3	9:25-9:50	Xiaoming LIU	Northeastern University	Research progress of new electromagnetic metallurgy technologies in continuous casting process
4	9:50-10:15	Dai TANG	Georgia Institute of Technology	Nitrogen control in producing 3rd AHSS steel
5	10:15-10:40	Jong-Jin PAK	Hanyang University	Inclusion thermodynamics for high-Mn and high-Al advanced high strength steels
6	10:40-11:05	Hiroshi FUKAYA	Japan Steel Works	Measurement of the Al deoxidation equilibrium and its application in the operation for high cleanliness steels
7	11:05-11:30	In-Ho JUNG	Seoul National University	Thermodynamic and viscosity database for ESR slags: Design of ESR slag chemistry
8	11:30-11:55	Lev MEDOVAR	Paton Electric Welding Institute	About place of desulphurization at ESR
9	11:55-12:20	Ueda SHIGERU	Tohoku University	Physical properties of slag to promote reaction and separation of slag and metal

13:30-15:35; Banquet Hall, 2nd floor				
Chair: Prof. Lev MEDOVAR				
Plenary reports				
10	13:30-13:55	Menghuai MU	University of Leoben	Advanced process simulation of solidification and remelting
11	13:55-14:20	Olexandr VELYCHKO	Ukrainian State University	Technologies of gas-oxygen refining - multifunctional opportunities for smelting stainless steel and ferroalloys
Keynote reports				
12	14:20-14:45	Zengbao JIAO	Hong Kong Polytechnic University	Control of continuous and discontinuous precipitation in advanced high-strength steels
13	14:45-15:10	Deepoo KUMAR	IIT Bombay	Exchange of metals between slag pool and steel droplet during ESR refining process
14	15:10-15:35	V Kurup Charles SIYASIYA	University of Pretoria	Influence of quench and partition heat treatment on the transformation kinetics of high aluminum steel
Tea break (15:35-15:50)				
Meeting reports (15:50-17:30; Banquet Hall, 2nd floor)				
Chair: Prof. Jong-Jin PAK				
15	15:50-16:15	Jung-wook CHO	Pohang University of Science and Technology	Surface modification of high-Mn steel to reduce hot crack susceptibility by formation of functionally graded interlayers
16	16:15-16:40	Seshadri SEETHARAMAN	KTH Royal Institute of Technology	Mo, Cr and V alloying in special steels
17	16:40-17:05	Lidong TENG	ABB Metallurgy	Effect of electromagnetic stirring on stainless steel smelting process in an electric arc furnace
18	17:05-17:30	Chengbin SHI	University of Science and Technology Beijing	Active element variation and inclusion evolution during electroslag remelting of a heat-resistant steel for ultra-supercritical power plants

August 20th

Plenary reports (08:00-09:40; Banquet Hall, 2nd floor)				
Chair: Prof. Rong ZHU				
1	08:00-08:25	Zhouhua JIANG	Northeastern University	The latest research progress of electroslag remelting technology
2	08:25-08:50	Jing LI	University of Science and Technology Beijing	In-situ transformation technology of eutectic carbides in high carbon martensitic stainless steel
3	08:50-09:15	Guangqiang LI	Wuhan University of Science and Technology	Study on the purification of electrolytic manganese metal by electroslag remelting
4	09:15-09:40	Jinguo LI	Institute of metals, Chinese Academy of Sciences	Research on preparation technology of high purity homogeneous superalloy
Tea break (09:40-10:00)				
Parallel reports (10:00-11:45; Banquet Hall, 2nd floor)				
Chair: Prof. Ximin Zang				
5	10:00-10:15	Lichun ZHENG	Northeastern University	Effect of Surface-active Element Te on the Microstructure and Mechanical Properties of M42 High Speed Steel
6	10:15-10:30	Dong HOU	Suzhou University	Production practice and quality control of electroslag remelting and vacuum arc remelting
7	10:30-10:45	Meng SUN	Northeastern University	Sources of calcium oxide-containing inclusions in aluminum deoxidized gear steels: the role of ferrosilicon
8	10:45-11:00	Weichao JIAO	Northeastern University	Effect of solidification pressure and microalloying on solidification microstructure of M42 high speed steel
9	11:00-11:15	Xuehui LIU	Fushun Special Steel Co., Ltd	Distribution and influence of Mn element in shallow layer of VAR steel ingots containing Mn
10	11:15-11:30	Shouxing YANG	Northeastern University	Cleanliness control of pressurized electroslag remelting high nitrogen

				stainless steel
11	11:30-11:45	Yushuo LI	Northeastern University	Homogenization and hot deformation behavior of refractory nickel-based superalloy GH4975

Plenary reports (13:30-15:10; Banquet Hall, 2nd floor)
Chair: Prof. Yanwu DONG

12	13:30-13:55	Yunbo ZHONG	Shanghai University	Research progress and thinking of magnetic control electroslag remelting technology
13	13:55-14:20	Zhicheng ZHANG	Daye Special Steel Co., Ltd.	Digital and intelligent co-construction helps the high-quality development of Daye Special Steel and Special Metallurgy products
14	14:20-14:45	Teng YU	Fushun Special Steel Co., Ltd	Types, causes and control of metallurgical defects in superalloys during vacuum arc remelting
15	14:45-15:10	Candong ZHOU	Baowu Special Metallurgy Co., Ltd.	Research and development of special stainless steel in Baowu Special Metallurgy

Parallel reports (15:10-16:10; Banquet Hall, 2nd floor)
Chair: Dr. Chengbin SHI

16	15:10-15:25	Wanming LI	University of Science and Technology Liaoning	Cooling rate calibration and carbide formation mechanism in electroslag remelting process of tool and die steel
17	15:25-15:40	Xiaobo ZHANG	Northeastern University	Molecular dynamics simulation study of Ce ₂ O ₃ on the structure of CaO-Al ₂ O ₃ slag melt
18	15:40-15:55	Zhiwei CHEN	BAOWU Special Metallurgy Aeronautical Research Science & Technology Co., Ltd.	Research on the production process of high-performance special high-silicon stainless steel
19	15:55-16:10	Jiajun CUI	Northeastern University	Influence of electromagnetic stirring on grain structure in

				vacuum arc remelting process
Tea break (16:10-16:30)				
Parallel reports (16:30-18:00; Banquet Hall, 2nd floor)				
Chair: Dr. Lizhong CHANG				
20	16:30-16:45	Guangdi ZHAO	University of Science and Technology Liaoning	In situ observation of solidification characteristics of a nickel-based deformed superalloy at different cooling rates
21	16:45-17:00	Kean YAO	Northeastern University	Effects of rare earth treatment on cleanliness, microstructure and properties of 1J85 soft magnetic alloy
22	17:00-17:15	Wei LIANG	University of Science and Technology Beijing	Research on carbide formation and transformation in M35 high speed steel
23	17:15-17:30	Pengchong LU	Northeastern University	New process for purifying high nitrogen stainless bearing steel by "Three-step Method"
24	17:30-17:45	Hongbing QIAN	Inductotherm Industrial (Shanghai) Co. Ltd.	Analysis of the reasons for improving the shrinkage cavities of master alloy ingots by ingot die preheating
25	17:45-18:00	Yunchao LI	Northeastern University	Effect of quenching conditions on microstructure and properties of spring steel
Closing ceremony				
Chair: Prof. Rong ZHU				