

# **14th Japan-China Symposium on Science and Technology of Iron and Steelmaking**

**Toward the strongest countries for iron and steelmaking technology**

4-6 September 2016 at Sendai Metropolitan Hotel, Sendai, Japan

## Tentative Schedule

4 September 2016

17:30-20:00 **Registration**

18:00-20:00 **Welcome party**

5 September 2016

8:00 **Registration**

9:00 **Opening remarks**

Tetsuya Nagasaka, Tohoku University, Japan

Xinhua Wang, University of Science and Technology Beijing, China

9:10-10:50

Chairperson Tetsuya Nagasaka, Tohoku University

Chairperson Xinhua Wang, University of Science and Technology Beijing

9:10 **Progress and Future Prospects of Steelmaking Technologies in JFE Steel [Keynote]**

Yuji Miki, JFE Steel, Japan

9:35 **SGJT-Newly Constructed Integrated Steelworks in Bohai Gulf**

Guosen Zhu, Shougang Jingtang United Iron and Steel Company, China

10:00 **Gas Permeability in Blast Furnace under Low Carbon Rate Operation**

Shigeru Ueda, Tohoku University, Japan

10:25 **Current Status and Future Prospects of Chinese Ironmaking Industry**

Tao Jiang, Central South University, China

10:50-11:10 **Coffee break**

11:10-12:00

Chairperson Shigeru Ueda, Tohoku University

Chairperson Jian Yang, Baosteel Group Corporation

11:10 **Improvement of Sintering Speed by Adding Return Fine to Granulated Raw Materials before Charging Sintering Machine**

Masaru Matsumura, Nippon Steel Sumitomo Metal, Japan

11:35 **Comprehensive Evaluation and Optimization of Raw Materials used for Blast Furnace Ironmaking**

Tao Jiang, Central South University, China

12:00-13:30 **Lunch**

13:30-15:10

Chairperson Masaru Matsumura, Nippon Steel Sumitomo Metal

Chairperson Tao Jiang, Central South University

13:30 **Energy Saving of the Ironmaking Process based on the Oxygen Blast Furnace**

Koichi Takahashi, JFE Steel, Japan

13:55 **Optimization of Interface Material Flow Operation of BF-BOF Section**

Xiuping Li, Central Iron & Steel Research Institute, China

14:20 **Exergy Analysis of Chemical Vapor Infiltration (CVI) Ironmaking System**

Tomohiro Akiyama, Takahiro Nomura, Hokkaido University, Japan

14:45 **Green Development: The Future Direction of Chinese Steel Industry**

Fangqin Shangguan, Central Iron & Steel Research Institute, China

15:10-15:30 **Coffee break**

Chairperson Takahiro Miki, Tohoku University

Chairperson Yunbo Zhong, Shanghai University

15:30 **Water Model Evaluation for Slag-Metal Stirring Performance in the BOF Type Hot Metal Pretreatment Furnace**

Keita Ouchi, Kobe Steel, Japan

15:55 **Optimized Control of Liquid Ferruginous Mass Flow in Converter-Secondary Refining-Continuous Casting Process**

Anjun Xu, University of Science and Technology Beijing, China

16:20 **Oxidation States and Coordination Structures of Iron Ions in Silicate Slags**

Miyuki Hayashi, Tokyo Institute of Technology, Japan

16:45 **The Correlation between Structure and Property of Molten Slag and its Application in Mould Fluxes**

Qifeng Shu, University of Science and Technology Beijing, China

17:10 **Closing remarks for first day and announcement**

18:00 **Banquet**

6 September 2016

Chairperson Miyuki Hayashi, Tokyo Institute of Technology  
Chairperson Qifeng Shu, University of Science and Technology Beijing

9:00 **Separation of Iron Oxide and Phosphorus Oxide from Steelmaking Slag by Solid Phase Precipitation**

Takahiro Miki, Tohoku University, Japan

9:25 **Study on the Application of Electromagnetic Field in Ferrometallurgy Processes**

Yunbo Zhong, Shanghai University, China

9:50 **The Behavior of Non-Metallic Inclusions in Steel during Hot Deformation and the Effects of Deformed Inclusions on Local Ductility**

Kenichi Yamamoto, Nippon Steel Sumitomo Metal, Japan

10:15 **Control of Al<sub>2</sub>O<sub>3</sub> Content in Inclusions in Spring Steels through Slag Refining**

Lifeng Zhang, University of Science and Technology Beijing, China

10:40-11:00 **Coffee break**

Chairperson Kenichi Yamamoto, Nippon Steel Sumitomo Metal  
Chairperson Lifeng Zhang, University of Science and Technology Beijing

11:00 **Role of Nucleation Point on Initial Solidification**

Hisao Esaka, National Defense Academy, Japan

11:25 **Development on Thin Slab Casting and Direct Rolling Process in China**

Xinping Mao, Wuhan Iron and Steel (Group) Corporation, China

11:50-13:30 **Lunch**

Chairperson Ichiro Daigo, The University of Tokyo  
Chairperson Xinping Mao, Wuhan Iron and Steel (Group) Corporation

13:30 **Development of Electric Arc Furnaces for Uniform Melting**

Yoshikazu Tanaka, Daido Steel, Japan

13:55 **Continuous Casting Technology and Slab Quality Control for High Manganese Steel**

Jian Yang, Bao Steel Group Corporation, China

14:20 **Dynamic Material Flow Analysis of Nickel and Chromium Associated with Steel Material using MATRACE model**

Tetsuya Nagasaka, Tohoku University, Japan

14:45 **An Investigation on Initial Solidification of Molten Steel near the Mold Corner by using Mold Simulator**

Wanlin Wang, Central South University, China

15:10-15:30 **Coffee break**

Chairperson Hisao Esaka, National Defense Academy

Chairperson Wanlin Wang, Central South University

15:30 **Impurity Contamination in Steel by Repeated Recycling**

Ichiro Daigo, The University of Tokyo, Japan

15:55 **Retention Characteristics of Ultra-Low Carbon Steel Slab Corner Shape and its Influence on Edge Defects of Steel Strip**

Minglin Wang, Central Iron & Steel Research Institute, China

16:20 **Closing remarks**

Kazuya Kunitomo, Kyusyu University, Japan