部分技术分会重点报告(截止日期 2024 年 5 月 24 日,按照姓氏排序)

- 1. Paulo Santos Assis, UFOP: Federal University of Ouro Preto, Brazil *Presentation title: to be determined*
- 2. Junfang Bao, China BaoWu Steel Group Corporation Limited, China

Presentation title: Current status and prospects of Baowu coking technology

3. Frank Barbaro, University of Wollongong, Australia

Presentation title: to be determined

4. Geoff Brooks, Swinburne University of Technology, Australia

Presentation title: to be determined

5. Moo-Eob Choi, POSCO, Korea

Presentation title: to be determined

6. Hao Chen, Tsinghua University, China

Presentation title: Flash annealing of advanced high strength steels

7. Mansheng Chu, Northeastern University, China

Presentation title: Research progress of hydrogen-based shaft furnace technology

8. Jung-Wook Cho, POSTECH, Korea

Presentation title: Solidification of Fe-Cu alloy to enhance both the mechanical strength and electric conductivity by controlling heterogeneity structure

9. Alberto Conejo, University of Science and Technology Beijing, China

Presentation title: H2 Reduction and Carbidization of Fe2O3 with Pure CH4

10. Nikhil Dhawan, IIT Roorkee, India

Presentation title: Hydrogen reduction of low grade iron ores

11. Hongbiao Dong, University of Leicester, UK

Presentation title: Data-Analytic Framework for Implementing Industry 4.0 in Steelmaking

12. Tadashi Furuhara, Tohoku University, Japan

Presentation title: Fundamental principles for alloy design of surface hardened steels by nitriding

13. Min Gan, Central South University, China

Presentation title: Key Technologies for Producing High Purity And High Value Iron-Based Materials by The Hydrogen Reduction Method 14. Si Gao, Kyoto University, Japan

Presentation title: Strain localization behavior in a 304 type stainless steel having fine microstructures

15. Wen-Tong Geng, Zhejiang Normal University, China

Presentation title: Mystery resolved: The composition of bcc Cu alloy precipitates in bcc Fe

16. B. P. Gautham, TCS Research, Tata Consultancy Services, India

Presentation title: Accelerating product development to intelligent operations in the steel industry with emerging digital technologies

17. Hiroto Goto, JFE Steel Corporation, Japan

Presentation title: Influence of thickness profile after sizing press on width profile at head and tail portions of slab

18. Peimin Guo, Central Iron & Steel Research Institute, China

Presentation title: Difficulties and Countermeasures of Pure Hydrogen Reduction Technology

19. Lei Guo, University of Science and Technology Beijing, China

Presentation title: Hydrogen-based reduction characteristics of iron ore fines and related industrialization progress

20. Muxing Guo, Katholieke Universiteit Leuven, Belgium

Presentation title: Interactions Between Alumina Inclusions at the Liquid Iron/Argon Gas Interface: Role of Contact Line Undulation

21. Defu Guo, Hunan LY Steel, China

Presentation title: Research and practice on high efficiency production technology of wide strip hot rolling for many varieties quality steel in Hunan LY Steel

22. Govind S. Gupta, Indian Institute of Science, India

Presentation title: Modelling of hydrogen reduction of iron oxides in a shaft furnace

23. Danilo Guzela, USIMINAS, Brazil

Presentation title: Best Practices to Minimize Center Line Segregation of Sour Service Steel Plates

24. Zhanli Guo, Sente Software Ltd., UK

Presentation title: AGE HARDENING OF MARAGING STEELS – PHYSICALLY-BASED MODELLING VS MACHINE LEARNING

25. Miyuki Hayashi, Tokyo Institute of Technology, Japan

Presentation title: Relationship between structures and thermophysical and thermochemical properties on silicate melts containing fluoride

26. Xing Han, HBIS Materials Technology Research Institute, China

Presentation title: Comprehensive utilization technology of vanadium titanium magnetite based on hydrogen metallurgy

27. Liangyuan Hao, HBIS Group, China

Presentation title: Research on utilization technology of hydrogen metallurgy raw materials

28. Yoonuk Heo, Pohang University of Science and Technology, Korea

Presentation title: Grain boundary precipitation and brittle fracture behaviors in austenitic Fe-Mn-AI-C lightweight steels

29. Heung Nam Han, Seoul National University, Korea

Presentation title: Hole Expansion Failure of Steel Sheets

30. Chang-Ching Ho, KATEC R &D COPORATION, Taiwan, China

Presentation title: The net-zero carbon emissions approach and practice of steel industry

31. Tom Honeyands, Newcastle University, Australia

Presentation title: Laboratory Electric Smelting of Australian Hematite Goethite Hydrogen DRI

32. Jun Hong, Nanjing Iron and Steel, China

Presentation title: Research progress in the production of large thickness steel by continuous casting slab

33. Jose Maria Ibabe, CEIT, Spain

Presentation title: Microalloying with Nb: metallurgical process for sustainable industrial solutions

34. Kazuhiko IWAI, Hokkaido University, Japan

Presentation title: Application of electromagnetic fields to high temperature process

35. Kazuhira Ichikawa, JFE Steel Corporation, Japan

Presentation title: CO2 Reduction Technology in the Blast Furnace Process for Achieving Carbon Neutrality

36. Shuhei Irie, JFE Steel Corporation, Japan

Presentation title: Estimation of Changes in Content and Characteristics of Mold Flux during Continuous Casting

37. Sohn IL, Yonsei University, Korea

Presentation title: Is artificial intelligence really intelligent in steel processing?

38. Xiaofang Jiang, China BaoWu Steel Group Corporation Limited, China

Presentation title: to be determined

39. Zhengyi Jiang, University of Wollongong, Australia

Presentation title: to be determined

40. Zengbao Jiao, The Hong Kong Polytechnic University (PolyU), Hong Kong, China

Presentation title: Synergistic alloying effects and nanoscale co-precipitation in ultrahighstrength maraging steels

41. Feng Jin, SINOSTEEL MECC, China

Presentation title: Technology & Engineering of Hydrogen-Based Shaft Furnace Direct Reduction

42. Namhyun Kang, Pusan National University, Korea

Presentation title: Ti/N ratio and Nb in shipbuilding steels and their coarse-grained heat affected zone

43. Youn-Bae Kang, Pohang University of Science and Technology, Korea

Presentation title: Evolution of Oxide Inclusions in Ti-added Al-killed Ultra-Low C Steel

44. Yonghee Kim, Hyundai Steel, Korea

Presentation title: Decarbonizing ironmaking process and technologies at Hyundai Steel

45. Dohun Kim, POSCO, Korea

Presentation title: to be determined

46. Peter Langenberg, IWT-Solutions AG, Germany

Presentation title: Opportunities provided by application of modern fine grain steel for steel structure in offshore wind facing the >15MW class of turbines

47. Joonho LEE, Korea University, Korea

Presentation title: Inclusion Control in front of Solid-Liquid Interface

48. Guangqiang Li, Wuhan University of Science and Technology, China

Presentation title: Hydrogen reduction of Oolitic high-phosphorus iron ore and phosphorus removal by melting separation

49. Kejiang Li, University of Science and Technology Beijing (USTB), China

Presentation title: Thermodynamic Strategy for Hydrogen-Based Direct Reduction Shaft

Furnace to Achieve a Higher Efficiency

50. Menglong Li, HBIS Group, China

Presentation title: Standard system and technical path design of low carbon emission steel in HBIS

51. Xiaobing Li, HBIS Group, China

Presentation title: Production Practice of Key Technologies for Zero Reforming of Coke Oven Gas at Zhangxuan Technology

52. Jian Li, China Baowu Group. China

Presentation title: Technical route and Progress of Hydrogen Metallurgy in China BAOWU

53. Chengjun Liu, Northeastern University, China

Presentation title: to be determined

54. Zhengjian Liu, University of Science and Technology Beijing, China

Presentation title: Progress of blast furnace ironmaking technology in China

55. Liming Lu, CSIRO, Australia

Presentation title: to be determined

56. Xionggang Lu, Shanghai University, China

Presentation title: Basic Theoretical Research on Hydrogen Metallurgy

57. Haiwen LUO, University of Science and Technology Beijing, China

Presentation title: Revisit of bake hardening mechanism: Influence of baking on tensile properties of press hardening steels

58. Hiroyuki Matsuura, Tokyo University, Japan

Presentation title: In-site observation of non-metallic inclusions during the solidification of molten steel

59. Dipak Mazumdar, Indian Institute Of Technology Kanpur, India

Presentation title: Process Modelling In Steelmaking: Past, Present And Future

60. Jiayi Ma, Shougang Group, China

Presentation title: New 6 Stands Tandem Mill for high Silicon Steel Rolling -- Idea and Practice

61. Suvorov Mikhail, NLMK, Russia

Presentation title: Minimum possible coke rate for normal BF operation

62. Goro Miyamoto, Tohoku University, Japan

Presentation title: Quantitative characterization and prediction of solute segregation at α -Fe grain boundary

63. Matthias Militzer, University of British Columbia, Canada

Presentation title: Microstructure Design of Green Steel

64. Kota MORIYA, JFE Steel Corporation, Japan

Presentation title: Utilization of Carbon Recycling for Carbon Neutralization of Direct Reduction Process

65. Masoud Moshtaghi, LUT University, Finland

Presentation title: Design of Hydrogen Embrittlement Resistant High Strength Steels

66. S S Mohanty, Essar Minmet Limited, India

Presentation title: to be determined

67. Samik Nag, Tata Steel Limited, India

Presentation title: Tata Steel's efforts towards Net Zero

68. Ricardo Nolasco, CBMM, Brazil

Presentation title: Challenges on Microstructure Control during Seamless Pipe Production

69. Ko-ichiro OHNO, Kyushu University, Japan

Presentation title: Effect of hydrogen-reduced microstructure on softening behavior of iron ore agglomerates under high temperature loading conditions

70. Dauter Oliveira, Vale, Brazil

Presentation title: Performance of Vale's briquette under rich H2 in Blast Furnace and Direct Reduction

71. Jian Pan, Central South University, China

Presentation title: to be determined

72. Joohyun Park, Hanyang University, Korea

Presentation title: Reoxidation of molten steel in secondary refining and continuous casting processes: Influence on steel cleanliness

73. Chunsu Park, DONGKUK STEEL R&D Center, Korea

Presentation title: Development of digitalization and intelligence of long products rolling

74. Jitendra Patel, International Metallurgy Ltd., UK

Presentation title: Supporting the transition to a low-carbon economy with the development and application of low-emission high strength structural steels

75. Sudipta Patra, IIT BHU, India

Present Affiliation: Assistant Professor, Metallurgical Engineering, IIT(BHU), Varanasi, India

76. Jian Pan, Central South University, China

Presentation title: to be determined

77. Martin Pei, SSAB AB, Sweden

Presentation title: Transformation to Fossil Free Steel with the HYBRIT Technology

78. Manish M Pande, IIT Bombay, Mumbai, India

Presentation title: Deoxidizer-oxygen equilibria in steel in the high concentration range

79. Yana Qie, North China University of Science and Technology, China

Presentation title: Formation of Primary Slag and Carburizing behavior of Metal Iron in Cohesive zone of Hydrogen-rich Blast Furnace

80. Radhakanta Rana, Tata Steel, The Netherlands

Presentation title: Novel Bainitic Steels for Hot Rolled Applications

81. Gour Gopal Roy, IIT Kharagpur, India

Presentation title: Inclusion evolution of LCAK steel using mischmetal

82. Indradev Samajdar, Indian Institute of Technology Bombay, India

Presentation title: Controlled Thermomechanical Processing of Steel and Elastic-Plastic Strain Gradients

83. Yansong Shen, University of New South Wales, Australia

Presentation title: Modelling of multiphase reacting flows and net zero steel industry innovations

84. Fengman Shen, Northeastern University, China

Presentation title: H-C-O system mass balance and chemical equilibrium diagram and fundamental thermodynamic theory study of carbon deposition in the system

85. Douglas Stalheim, DGS Metallurgical Solutions, Inc., USA

Presentation title: Key Contributing Metallurgical Componets to Successful, Cost Effective Production of Steel Products and their Applications

86. Marcos Stuart, CBMM, Brazil

Presentation title: Examples of niobium microalloyed steels toward the future of carbon neutrality

87. John Speer, Colorado School of Mines, USA

Presentation title: Nb in Microalloyed Automotive Bar and Forging Steels

88. Sang-Han Son, POSCO, Korea

Presentation title: Characteristics of bio-carbon and its utilization in ironmaking process

89. Toshihiro Tsuchiyama, Kyushu University, Japan

Presentation title: Strengthening of ferritic steels by alloying element through grain boundary segregation

90. Pelo Uranga, CEIT, Spain

Presentation title: Impact of diverse Direct Strip Processing Mill Layouts on the Hot Rolling Metallurgy of Nb Microalloyed Steels

91. Basov Vadim, NLMK, Russia

Presentation title: Influence of MgO in slag and slag basicity CaO/SiO□ and (CaO+MgO)/SiO□ on NLMK BF6 and BF7 operation

92. Geoff Wang, The University of Queensland, Australia

Presentation title: Insight into the heat and mass transfer of iron ore reduction in hydrogen shaft furnace

93. Wanlin Wang, Central South University, China

Presentation title: Strategy for the optimization of continuous casting mold technology

94. Jie Wang, Masteel, China

Presentation title: Product development and application of Masteel heavy hot-rolled Hsections

95. Menghuai Wu, Montanuniversitaet Leoben, Austria

Presentation title: Advanced Modeling of Macrosegregation in Continuous Casting with the Effect of Electromagnetic Stirring (EMS)

96. Zhangwei Wang, Central South University,, China

Presentation title: Strong and ductile lightweight compositionally complex steels via dualnanoprecipitation

97. Zhenjia Xie, University of Science and Technology Beijing, China

Presentation title: Breaking cryogenic temperature strength-ductility trade-off via deformation omega phase transition and nano-twinning in low carbon low alloy bainitic steel

98. Jian Xu, Chongqing University, China

Presentation title: Synergistic Enhancement and Morphological Transformation Induced by Hydrogen in the Gaseous Interfacial Reduction of Iron Oxide

99. Takuya YAMAMOTO, Osaka Metropolitan University, Japan

Presentation title: Numerical investigation and automatic design of metallurgical process with an aid of simulation and optimization methodology

100. Jer-Ren Yang, National Taiwan University, Taiwan, China

Presentation title: Overview of the striking features of microstructure in steels

101. Yongxiang Yang, Technische Universiteit Delft, TU Delft, The Netherlands

Presentation title: Hydrogen Metallurgy in European Steelmaking Industry: Challenges and Opportunities

102. Zhinan Yang, Yanshan University, China

Presentation title: Accelerating nano-bainite transformation based on microstructure control

103. Jian Yang, Shanghai University, China

Presentation title: Oxide Metallurgy Technology for Improving Weldability of HSLA Steel Plates

104. Congcong Yang, Central South University, China

Presentation title: Hydrogen-based direct reduction behavior of iron ore pellets with iron grades ranging from 59%-68%

105. Deguchi Yoshihiro, The University of Tokushima, Japan

Presentation title: to be determined

106. Aibing Yu, Monash University, Australia

Presentation title: Development of Hydrogen Blast Furnace for Ironmaking

107. Guo Yuan, Northeastern University, China

Presentation title: to be determined

108. Jianliang Zhang, University of Science and Technology Beijing, China

Presentation title: Progress and Prospect of Low-carbon Ironmaking Technology and Hydrogen Metallurgy Process

109. Fuming Zhang, Shougang Group Co., Ltd., China

Presentation title: Research on Some Problems of Modern Blast Furnace Hydrogen Metallurgical Technology 110.Lifeng Zhang, North China University of Technology, China

Presentation title: Prediction on the Three Dimensional Spatial Distribution of the Number Density, Size and Composition of Non-metallic Inclusions in Steel Continuous Casting Products

111. Yongjie Zhang, Tohoku University, Japan

Presentation title: Interphase Precipitation of Nano-sized Alloy Carbides in Low Carbon Microalloyed Steels

112. Wei Zhang, Wuhan University of Science and Technology, China

Presentation title: Mathematical model and industrial validation of blast furnace ironmaking with hydrogen injecting process

113. Yu Zhang, Shasteel Group, China

Presentation title: A novel strategy to fabricate thick ultra large-heat input butt weld joint by synergetic use of wire, arc and steel plate

114. Yuyou ZHAI, Primetals Technologies, Austria

Presentation title: THROUGH-PROCESS OPTIMIZATION

115.Zhilong Zhao, MCC Capital Engineering & Research Incorporation Limited (CERI), China

Presentation title: CERI's Innovation and Engineering Practice in Green & Low Carbon Hydrogen Metallurgy Technology

116. Frank (Shaoliang) Zhong, World Steel Association

Presentation title: Global Steel Decarbonization Progress and Development of Hydrogen-based Steelmaking Technologies

117. Miaoyong Zhu, Northeastern University, China

Presentation title: Prediction and Control of Surface Fluctuation in Slab Continuous Casting Mold Based on AI and Metallurgical Big Data

118. Deqing Zhu, Central South University, China

Presentation title: Impact of Basicity on Hydrogen-Rich Gas-Based Direct Reduction of Fired Pellets

119. Jianwei Zhu, Ansteel, China

Presentation title: Research and Pilot Plant building of Hydrogen-based Iron Ore Direct Reduction with Fluidized Bed in Ansteel, China

120. Qingshan Zhu, Institute of Process Engineering, Chinese Academy of Sciences, China Presentation title: Fluidized Bed Hydrogen Direct Reduction: History and Perspective

121. Wenhao Zhou, Xiangtan Iron and Steel, China

Presentation title: New Progress in Key Technology Development and Engineering Application of Low Temperature Steel Plate in XISC

122. Zulfiadi Zulhan, Institut Teknologi Bandung, Indonesia

Presentation title: Reconsidering Hydrogen Plasma Reactor as a Sustainable Solution for Green Steel Production