THE ISIJ ORGANIZATION (as of April, 2015)

Academic Society

Board of Academic Society

- Editorial Board of Journals
- ISIJ Meeting Committee
- Division of High-Temperature Processes
- Division of Environmental, Energy and Social Engineering
- Division of Instrumentation, Control and Systems Engineering
- Division of Processing for Quality Products
- Division of Microstructure and Properties of Materials
- Division of Process Evaluation and Material Characterization

Academic Society

- Board of Academic Society
  - Editorial Board of Journals
    - Screening Subcommittee of Tawara and Sawamura Awards
  - ISIJ Meeting Committee
  - Organizing Committee for Asia Steel 2015

· Division of High-Temperature Processes

Steering Committee

Forum

*Resources and Energy
*Iron-making Process
*Refining
*Solidification and Structure Formation
*Novel Processing
*Thermo-physical and -dynamic Properties of High Temperature Materials
*Young Scientist Forum

Research Group

* Slag Formation with High Speed Lime Dissolution
* Fundamental Technology for Ultra-Fine Ore Sintering
* Reduction of Macro-segregation by Controlling Solid-liquid Coexisting States
* Thermodynamics of Transition and Tramp Elements in Steel for Advanced Sustainable Steelmaking
* Sustainable Iron and Steel Making System Based on Material Recycling Technologies (SMART)

· Division of Environmental, Energy and Social Engineering

Steering Committee

Forum

* Green Energy
* Slag to Urban Phosphate Ore (StoUP)
*Green Material
*New Functions of Iron- and Steel-making Slags
* Reflecting and Diffusing “Social Value of TETSU”
* Effective Use of Unutilized Energy in Steelworks
*Social Cooperation

Research Group

*Sustainable Iron and Steel Making System Based on Material Recycling Technologies

(SMART)

・Division of Instrumentation, Control and Systems Engineering

Steering Committee
Screening Subcommittee of Instrumentation, Control and System Engineering Awards

Forum

*Next-generation Sensing for High-productivity High-quality Processes
*Cooperative Control System with Human Operation
*System Technologies for Pursuing an Ideal Picture of Steel Industries in the Next Generation - System Modeling Technologies Based on Data for Steel Industries -
*Young Scientist Forum

Research Group

・Division of Processing for Quality Products

Steering Committee

Forum

*Basic Forum of Processing for Quality Products
*Sheet and Foil
*Bar and Wire Engineering and Cutting Engineering
*Joining, Casting and Forging for Reliable Steel Structure
*Pipe and Tubes
*Young Scientist Forum

Research Group

* Hot Rolling Rolls
* Steel Informatics(材料部会と合同)
* Sophistication of Steel Sheet Forming Technology with the Aid of Advanced Multiaxial Stress Tests
*Development of Viscous Flow Processing in Iron Based Metallic Glasses

・Division of Microstructure and Properties of Materials

Steering Committee
Forum Chairmen Meeting
Organizing Committee for GALVATECH 2017

Forum

*Creation and Nanoscale Analysis of Next-generation Hot-dip Galvanized Steel Sheet Coatings
*Fundamentals of the Behaviour of Light Elements in Steels and their Effects on Mechanical Properties
*Analysis and Evaluation of Hydrogen Embrittlement
*Microstructural Evolution Using Micro-segregation and its Control in Process
*Mathematical Modeling and Simulation of Corrosion Processes
*Young Scientist Forum

Autonomous Forum

*High-performance of Fe-group Alloys due to Optimization of Microstructure
*Structural and Functional Titanium Materials for Enhancing Energy Development
*Development of Steel Material Utilizing Alloying and Impurity Elements
*Fundamental Understanding of Microstructure of High Cr Steel Weld and its Applications
*Stabilities and Material Properties of Austenite Phase
*Analysis of Factors which Promote Biological Steel Corrosion
*Characterization and Control of Microscopic Texture of Materials
* Microstructures and Mechanical Properties in Stainless Steels
* Fundamentals of Martensile and Bainite Transformations in Steel
*Microstructure and Fracture Toughness of Bainitic Steels

Research Group

* Comprehensive Understanding of Hydrogen-passive Surface on Steels for Prevention of Hydrogen Embrittlement
*Steel Informatics(創形部会と合同)
* Fundamental Factors and Characteristics Evaluation of Hydrogen Embrittlement

· **Division of Process Evaluation and Material Characterization**

Steering Committee

ISIJ Meeting Subcommittee

Publicity Subcommittee

Forum Chairmen Meeting

Forum

*Monitoring and Analysis Technologies on Steel and Steel Process Using Advanced Laser Diagnostics

*Biofouling/Biofilm Evaluation and Characterization

*Hydrogen Analysis in Iron and Steel

*Research on Heterostructure Analysis of Steel-related Materials

*Characterization of Relationship between Chemical State of Constituent Elements and Properties of Materials

*Fabrication of Visualized Archives to Master Sophisticated Techniques in Steel Analyses

Autonomous Forum

*Development of Rapid and Highly Sensitive Analytical Methods in Steel Making Process using Portable Chemical Analyzers Coupled with Separation and Preconcentration Techniques

Research Group

*Characterization of Microstructure in Steels by Compact Neutron Source

* Fundamental Factors and Characteristics Evaluation of Hydrogen Embrittlement