

# 2nd circular of 11<sup>th</sup> Korea-China Joint Symposium on Advanced Steel Technology

August 28-30, 2019  
HOTEL NANTA, Jeju, Korea

## OBJECTIVE

The symposium is intended to bring together scientists and engineers from Korea and China to have an insight into the latest developments in steel science and technologies, and provides a forum for exchange of ideas and opinions in the area of innovative, creative and challenging processes.

## THEME

The theme of the symposium covers a broad spectrum in relation to

- High temperature physical chemistry
- Ironmaking
- Steelmaking (Solidification & Continuous Casting)
- Sustainable and environmental processing
- Product metallurgy fundamentals

As the symposium emphasizes the exchange of ideas and cross-fertilization among participants, it is encouraged not only to present a completed work, but also to bring up ideas which are not proved, but challenging, ongoing works which seek a peer advice, and technical or theoretical difficulties encountered during a particular research in progress.

## VENUE and ACCOMMODATION

### HOTEL NANTA

- Address: 56-26, Seondolmokdong-gil, Jeju-si, Jeju-do, Korea
- Tel: +82 64 727 0602
- Website: <http://www.hotelnanta.com/en/>



## Transportation from/to Jeju International Airport

### Hotel shuttle Bus

For predetermined arrival schedule, a shuttle bus will take you from the airport to Hotel Nanta. Detailed information for the shuttle bus will be announced.

### Individual transportations

#### Taxi

There are taxi stands at Jeju International Airport.

It will cost approximately 12,000 KRW from airport to HOTEL NANTA by a taxi (about 20 minutes)

#### Rent a Car

Attendee can also rent a car at the airport. Please inquire of the tourist information center about details

## SYMPOSIUM SCHEDULE AND KEY DATES

- **Wednesday, August 28, 2019**

Registration will begin at Hotel from 15:00

Welcome dinner will be served from 18:30

- **Thursday, August 29, 2019**

The symposium runs from 8:30 to 16:30

The symposium performance will start from 17:00

The symposium banquet will start at the hotel from 18:30

- **Friday, August 30, 2019**

The symposium runs from 8:30 to 12:00

Post symposium tour in the afternoon (Detailed information is attached.)

- **Key Dates**

Registration: 30 June 2019

Attendance form should be sent to Ms. Sohee Kim, Korea Institute of Metals & Materials, Korea

E-mail address: [eml@kim.or.kr](mailto:eml@kim.or.kr)

Manuscript submission: 12 July 2019 (extended)

Manuscript should be sent to Prof. Yongsug Chung, Korea Polytechnic University, Korea

E-mail address: [ychung@kpu.ac.kr](mailto:ychung@kpu.ac.kr)

## PRESENTATION

- Keynote lecture: 30 minutes

- Contributed paper: 20 minutes

- Equipment: A multi-media beam projector with a computer will be available

## FEES AND EXPENSES

- Registration Fees: **KRW 500,000 for a regular participant (accompanying person: KRW 200,000) and KRW 300,000 for a student participant.**

- Payment methods: CASH (Korean Won) or CREDIT CARD at symposium site
- The registration fee for the participants includes; symposium proceeding, meals (welcome dinner on Aug. 28, breakfast, lunch and symposium banquet on Aug. 29, breakfast and lunch on Aug. 30), coffee during formal sessions and post symposium tour
- Accommodation Fee: **KRW 80,000 per night (VAT included) for Deluxe room in HOTEL NANTA, which shall be paid by attendants**

## **ORGANIZING COMMITTEE**

### **Symposium Chair**

Prof. Jong Jin PAK (Hanyang University)

Prof. Xin Hua WANG (University of Science and Technology Beijing)

### **Local organizing committee**

Yongsug CHUNG (Korea Polytechnic University)

Youn-Bae KANG (Pohang University of Science and Technology)

Youngjo KANG (Dong-A University)

Joonho LEE (Korea University)

Joo Hyun PARK (Hanyang University)

Il SOHN (Yonsei University)

Kyung-Woo YI (Seoul National University)

## **POST SYMPOSIUM TOUR**

### **- A Course: Sungsan Ilchulbong (UNESCO World Natural Heritage)**

Songsan Ilchulbong Peak, which is 180m above sea level, erupted underwater in the ocean about 5,000 years ago, which makes it a very rare case among the many craters in Jeju Island.

### **- B Course: Saryeoni Forest**

Saryeoni Forest Path is a forest walking trail that starts from Bijarim-ro and goes through Mulchat Oreum Volcanic Cone and Saryeoni Oreum Volcanic Cone. Its starting point is located at National Road No. 1112, which is thick with Japanese cedars. A variety of species of trees grow in the forest, such as Konara Oak, Red-Leaved Hornbeam, Japanese Snowbell, Hinoki Cypress, Japanese cedar and average altitude is 550m.



<Sungsan Ilchulbong>



< Saryeoni Forest >

## Tentative Schedule of the 11th Korea-China Joint Symposium on Advanced Steel Technology

date	time	events
28-Aug Wed.	15:00	registration
	18:00	welcome dinner
29-Aug Thu.	8:00	welcome address and congratulatory comment
	8:10	(KN) Progress and Outlook on Ironmaking Technology of Shougang in Recent Year / Fuming Zhang
	8:40	(KN) Dissolution and precipitation kinetics in Nb-microalloyed steel /Young-Kook Lee
	9:10	The State-of-Art of Niobium Microalloying Technology / Aimin Guo
	9:30	Development of intellegent width prediction and control in hot and cold rolling lines / Seung Min Hur
	9:50	coffee break
	10:10	Consecutive improvement and progress of enviromental protection technologies in ironmaking process / Yonglong Jin
	10:30	Cost Evaluation based on the Integrated Model in Ironmaking Process / Jonghwun Jung
	10:50	EAF operation with 100% DRI / Alberto N. Conejo
	11:10	Study for the evolution of Reoxidation products in Ti-added Al Killed Ultra Low Carbon Steel / Wan-Yi Kim
	11:30	Improvement of HAZ toughness of steel plate after large heat input welding by use of inclusion control technology / Jian Yang
	11:50	group photo
	12:00	lunch
	13:10	Strategy to Control Line Defects on Low Carbon Steel Cold-Rolled Thin Plates / Lifeng Zhang
	13:30	Dissolution of alumina inclusion in RH slag containing FetO / Youn-Bae Kang
	13:50	New Technology for Thin Slab Surface Crack Control during Continuous Casting of Microalloyed Steel / Miaoyong Zhu
	14:10	Application of thermodynamic database to smart factory: Steelmaking process / In-Ho Jung
	14:30	Numerical Simulation on Formation and Influence Factors of "W-Shaped" Solidification End-Point along the Width Direction of Casting Slab for Heavy Reduction Technology / Min Jiang
	14:50	coffee break
	15:10	Novel technology and application for preventing slab transverse corner crack of micro-alloyed steel / Minglin Wang
	15:30	Prevention of transverse corner cracks of slabs in continuous casting by control of slab's corner temperature / Eun-Kyu Lee
	15:50	Chemical activation of steel-making slag for the application of wastewater treatment / Zuotai Zhang
	16:10	Ferro-alloy Production from Spent Petroleum Catalysts by Reductive Smelting and Selective Oxidation Processes / Jong-Jin Pak
16:30	free time	
17:00	NANTA performance	
18:30	banquet	
30-Aug Fri	8:10	(KN) Study of Thin Slab Continuous Casting Quality Control / Wanlin Wang
	8:40	(KN) Enhancement of Mechanical Strength of Additively Manufactured 316L Stainless Steel by Dispersed Oxide Inclusions / Jung-Wook Cho
	9:10	Research on Improving Central Defects of Billet by External Vibration strike / Chang Shen
	9:30	Investigation into the Initial Solidification of Steel Grades Using a Differential Scanning Calorimetry / Sung Suk Jung
	9:50	coffee break
	10:10	Validity of the Deep learning Algorithm for development of the 3rd Gen Q&P (Quench and Partitioning) steel ; Partitioning prediction by ANN and quantitative generation of the martensitic structure by GAN / Nam Hoon Goo
	10:30	Introduction to Shagang's Castrip production line / Hualong Li
	10:50	Phase diagram and experimental investigation of CoCrMnNi-Fe connecting high-alloyed steels and high-entropy alloys / Nokeun Park
	11:10	Wrinkling behavior of spring arm under stamping process for high strength steels / Zhihong Tian
	11:30	Deformation mechanisms and mechanical properties of Fe-Mn-C-(Al) TWIP steels / Jin Kyung Kim
	11:50	closing remark
12:00	post symposium tour	