



## Overview

- Data:** July 19 (Fri.) – 21 (Sun.), 2019
- Venue:** Enrichee Gloria Plaza Hotel in Qingdao, China
- Theme:** Innovative Circulating Fluidized Bed Boiler Technology
- Hosted by:** Tsinghua University, China & Pusan National University, Korea
- Supported by:** National Natural Science Foundation of China (NSFC), National Research Foundation of Korea (NRF), China Electricity Council, Chongqing University, Korea Southern Power Company, Gemeng International Co., LTD, Jinneng Electricity Group Co., LTD
- Language:** English & Chinese

## Program at a Glance

Data	July 19 (Fri.)	July 20 (Sat.)	July 21 (Sun.)		
08:00 ~ 08:30	Break	Opening ceremony (5)	Break		
08:30 ~ 09:00		Plenary Lecture (1)	Young Scholar Forum on Fluidization in 2 <sup>nd</sup> CFBB I (6)	Technical Tour for attendees from Co.	
09:00 ~ 10:05	Invited Speech I (3)	CFBB Steering Committee Meeting			
10:05 ~ 10:30	Registration	Coffee Break (Video display)	Coffee Break		
10:30 ~ 11:30		Invited Speech II (4)	Young Scholar Forum on Fluidization in 2 <sup>nd</sup> CFBB II (4)		
12:00 ~ 13:30	Lunch Break				
13:30 ~ 15:15	Registration	Invited Speech III (5)	Technical Tour		
15:15 ~ 15:35		Coffee Break			
15:35 ~ 17:15		Invited Speech IV (5)			
17:15 ~ 18:00		Poster Session			
18:00 ~ 19:00	Break	Buffet	Buffet		
19:00 ~ 19:30	Welcome Reception	Award Ceremony	Break		
19:30 ~ 21:30		Violin Concert			



## Scientific Program

### Plenary Lecture & Invited Speech (Room: Yirui Hall, 3rd floor)

Saturday, July 20, 2019		
08:30 ~ 12:00		
Chair: Prof. Hairui Yang / Tsinghua University, China		
Paper Code & Time	Contents	Speaker
Plenary Lecture 08:30 ~ 09:00	Developments in FBC of solid fuels	Bo Leckner (Chalmers Univ., Sweden)
CFBB-01 09:00 ~ 09:25	International collaboration strategy between PNU-KOSPO CFBC Research Center and China	Chung hwan Jeon (Pusan National Univ., Korea)
CFBB-02 09:25 ~ 09:45	Operation optimization of secondary air in a 300 MW CFB Boiler	Leming Cheng (Zhejiang Univ., China)
CFBB-03 09:45 ~ 10:05	Combustion efficiency and emission characteristics in a 0.1 MW <sub>th</sub> Oxy-CFBC system	Jihong Moon (Institute of Energy Research, Korea)
10:05 ~ 10:30	Coffee Break	
CFBB-04 10:30 ~ 10:50	R&D on Oxy-CFB at Southeast University, China through pilot study	Lunbo Duan (Southeast Univ., China)
CFBB-05 10:50 ~ 11:10	A study on the hydrodynamics of a circulating fluidized bed boiler: improved prediction of axial solid volume fraction in 1D simulation	Uendo Lee (Univ. of Science and Technology, Korea)
CFBB-06 11:10 ~ 11:30	The characteristics of NO and N <sub>2</sub> O emissions during O <sub>2</sub> /RFG combustion with high oxygen concentration in a 1MW <sub>th</sub> pilot-scale Oxy-fuel circulating fluidized bed	Shiyuan Li (IET, CAS, China)
CFBB-07 11:30 ~ 11:50	Update status and prospect of biomass and waste fired power generation in China	Man Zhang (Tsinghua Univ., China)
12:00 ~ 13:30	Lunch Break	Room xxx



13:30 ~ 17:10		Chair: Prof. Xiaofeng Lu / Chongqing University, China
CFBB-08 13:30 ~ 13:55	Attrition of limestone during fluidized bed calcium looping cycles for CO <sub>2</sub> capture	Fabrizio Scala (Univ. of Naples Federico II, Italy)
CFBB-09 13:55 ~ 14:15	Research on optimization of desulfurization control for CFB unit	MingMing Gao (North China Electric Power Univ., China)
CFBB-10 14:15 ~ 14:35	IHI's CFB business with environmental friendliness	Shuzo Watanabe (IHI, Japan)
CFBB-11 14:35 ~ 14:55	Characteristics of wood-pellet co-firing in a 550MW <sub>e</sub> Samcheok CFB boiler	Seok-Gi Ahn (Korea Southern Power Co., Korea)
CFBB-12 14:55 ~ 15:15	A design scheme of 660MW ultra-supercritical CFB boiler	Fengjun Wang (Harbin Boiler Co., Ltd., China)
15:15 ~ 15:35	Coffee Break	
CFBB-13 15:35 ~ 15:55	Design and research of 660MW advanced ultra-supercritical circulating fluidized bed technology	Jiayi Lu (Dongfang Boiler Group Co., Ltd., China)
CFBB-14 15:55 ~ 16:15	Development and innovation of supercritical CFB boiler technology of shanghai boiler Co. Ltd.	Feng Xiao (Shanghai Boiler Co., Ltd., China)
CFBB-15 16:15 ~ 16:35	CFB boiler bottom ash cooling and handling system	Chase Xue (Qingdao Songling Power Environmental Equipment Co., Ltd., China)
CFBB-16 16:35 ~ 16:55	The new type of coal water slurry-fired CFB and its application in clean district heating	Huazhong Zhan (Qingdao Clear Environment Group Co., Ltd., China)
CFBB-17 16:55 ~ 17:15	The application of the comprehensive anti-abrasion technology with alloy cladding and cladding plus in CFB Boiler industry	Xuemin Qi (Harbin Keneng Cladding Technology Co., Ltd, China)



## Youth Forum on Fluidization in 2<sup>nd</sup> CFBB (Room: Meeting Room No. 1, 4th floor)

DAY 3 – JULY 21 (SUN), 2019		
08:30 ~ 11:30	Chair: Dr. Jianbo Li / Chongqing University, China	
Paper Code & Time	Contents	Speaker
CFBB-18 08:30 ~ 08:45	Operation characteristics of a bubbling fluidized bed heat exchanger with internal solid circulation for a 550MW <sub>e</sub> ultra-supercritical CFB boiler	Dongfang Li (Pusan National Univ., Korea)
CFBB-19 08:45 ~ 09:00	Numerical study on gas-solid flow characteristics in fine particle bubbling fluidized beds	Yangfan Song (Chongqing Univ., China)
CFBB-20 09:00 ~ 09:15	Applications of ultrafine limestone sorbents for the desulfurization process in CFB boilers	Runxia Cai (Tsinghua Univ., China)
CFBB-21 09:15 ~ 09:30	Study on performance evaluation of CFB unit for deep peak-regulating	Hongfu Zhang (North China Electric Power Univ., China)
CFBB-22 09:30 ~ 09:45	Research and design of denitrification based on fuzzy neural network	Xin Wei (Shanxi Univ., China)
CFBB-23 09:45 ~ 10:00	Correlating flue gas composition with deposit mineralogy on probes during Zhundong lignite combustion in a circulating fluidized bed	Zhuo Liu (Chongqing Univ., China)
10:00 ~ 10:30	Coffee Break	
CFBB-24 10:30 ~ 10:45	Simulation on the coal volatile-N species distribution in a CFB Boiler	Xiwei Ke (Tsinghua Univ., China)
CFBB-25 10:45 ~ 11:00	Study on denitrification of circulating fluidized bed boiler based on deep peak shaving	Yuanyuan Zhang (North China Electric Power Univ., China)
CFBB-26 11:00 ~ 11:15	Investigation on the operating characteristics of a 350 MW <sub>e</sub> supercritical CFB boiler with a polygonal furnace	Zhao Yang (IET, CAS, China)
CFBB-27 11:15 ~ 11:30	Study on thermal expansion and deformation characteristics of water wall in a supercritical CFB boiler	Xuchen Fan (Chongqing Univ., China)



# The 2<sup>nd</sup> International Conference on Circulating Fluidized Bed Boiler

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