

Registration Day Oct 2, 2016 (Sunday)	
12:30-13:00	Tau Yuan Airport Service, 國航 CA185 (11:45am)&海南 HU7987(12:05am)
16:00-19:00	Registration: Just Sleep @ NTU (No.83, Sec,4, Roosevelt Road, Taipei, Taiwan)
17:00-19:00	Welcome Reception: 義饗食堂 Just Italian, Just Sleep @ NTU (National Taiwan University)
Day 1 (Monday) Oct 3, 2016	
08:20-12:00	Registration: GIS NTU Convention Center, 蘇格拉底廳
GIS NTU Convention, 蘇格拉底廳	
09:00-09:20	OPEN CEREMONY
Introduction: Hsiao Kang Ma, Organizer, ICCEU2016	
Greetings:	Prof. Jia-Yush Yen, Dean, Engineering College, National Taiwan University Prof. Yao-Joe Yang, Chairman, Mechanical Engi. Dept. National Taiwan University Prof. Chung K. Law, Chairman, International Organising Committee Dr. Wu Daohong, Chairman, Institute of Engineering Thermophysics/ China Energy Conservation Committee
09:20-12:00	Plenary Lecture Session: Oct 3, 2016 (Monday)
Session-Chair: Prof. Hsiao Kang Ma, Organizer, ICCEU2016	
09:20-10:05	Plenary Lecture#1
On low-temperature flames Prof. Chung K. Law, Princeton University, USA	
10:05-10:25	Coffee Break
10:25-11:10	Plenary Lecture#2
Electric field effects on flame behavior Prof. Suk-Ho Chung, Professor Emeritus in KAUST, Saudi Arabia	
11:10-11:55	Plenary Lecture#3
Fine particulate matters from coal combustion: formation and control Prof. Qiang Yao, Tsinghua University, China	
12:00-13:00	Lunch
GIS NTU Convention, 達文西廳	
13:00-15:00	Session 1: Computational Combustion(I) Oct 3, 2016 (Monday)
Session-Chair: Prof. Maozhao Xie, Dalian University of Technology, China	
13:00-13:20	260087 :
Large eddy simulation of methane-air premixed turbulent combustion in porous media Meng Yue, Maozhao Xie, Hongsheng Liu, and Ming Dong <i>School of Energy and Power Engineering, Dalian University of Technology, Dalian, China</i>	
13:20-13:40	260092 :
Simulation on Turbulence Characteristics in Three-dimensional Randomly and Regularly Packed Bed Jiang Linsong, Liu Hongsheng*, Xie Maozhao <i>School of Energy and Power Engineering, Dalian University of Technology, 116024, Dalian, China</i>	

13:40-14:00 260135 :

Numerical investigation on convective heat transfer in the entrance region of hydrocarbon fuel under supercritical pressures

Hang Pu, Sufen Li*, Ming Dong, Yan Shang, Si Jiao

Key Laboratory of Ocean Energy Utilization and Energy Conservation of Ministry of Education, Dalian University of Technology, 116024 Dalian, P.R. China

14:00-14:20 260027 :

Study on reduction of Carbon-bearing Chromite Pellets by Regenerative Rotary Hearth Furnace process

Ren Zhong-shan, Wu Dao-hong, Yan Xing-fang, Xu Gang, Cao Zhi-cheng, Xue Xun

Beijing comprehensive utilization of low-grade iron ore, engineering and technology research center, Beijing Shenwu Environment & Energy Technology Co.,Ltd, Beijing, China

14:20-14:40 260064 :

Nickel Recovery from Low-grade Nickel Laterite Ores by Regenerative Rotary Hearth Furnace Coal-based Direct Reduction Technology

Song Wen-chen, Wu Dao-hong, Wang Jing-jing, Li Hong-ke, Cao Zhi-cheng, Xue Xun

Beijing comprehensive utilization of low-grade iron ore, engineering and technology research center, Beijing Shenwu Environment & Energy Technology Co.,Ltd, Beijing, China

14:40-15:00 260112 :

Effect of Soret Diffusion on Lean Hydrogen/Air Flames at Normal and Elevated Pressure and Temperature

Z. Zhou, F.E. Hernandez-Perez, Y. Shoshin, J.A. van Oijen, L.P.H. de Goey

Dept. of Mech. Eng., Eindhoven University of Technology, 5600MB Eindhoven, The Netherlands

15:00-15:20 Coffee Break

15:20-17:00 Session 2: Combustion Fundamentals(I) Oct 3, 2016 (Monday)

Session-Chair: Prof. S.S. Shy, National Central University, Taiwan

15:20-15:40 260050 :

Emission Characteristics of Laminar Premixed Biogas-hydrogen Impingement Flame

Zhilong Wei¹, Haisheng Zhen¹, Chunwah Leung^{1*}, Chunshun Cheung¹, Zuohua Huang²

¹*Depart. of Mechanical Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong, China*

²*State Key Laboratory of Multiphase Flow in Power Engineering, Xi'an Jiaotong University, Xi'an, China*

15:40-16:00 260111 :

Effect of Lewis number on the lean limit flames in a tube

Z. Zhou, F.E. Hernandez-Perez, Y. Shoshin, J.A. van Oijen and L.P.H. de Goey

Dept. of Mech. Eng., Eindhoven University of Tech., P.O. Box 513, 5600MB Eindhoven, The Netherlands

16:00-16:20 260014 :

A Minimum Ignition Energy Transition on Spark Ignition of Lean Iso-octane/Air Mixtures at 373 K

L.J. Jiang, M.T. Nguyen, S.Y. Huang, S.S. Shy*

Department of Mechanical Engineering, National Central University, Zhong-li, Taiwan

16:20-16:40 260016 :

The Assessment of Vibrational Non-equilibrium Effect on Detonation

SHI Lisong^{1*}, SHEN Hua², WEN Chihyung³

¹*Department of Mechanical Engineering, The Hong Kong Polytechnic University, Hong Kong*

²*Applied Mathematics & Computational Sci., King Abdullah Uni. of Science and Technology, Saudi Arabia*

³*Department of Mechanical Engineering, The Hong Kong Polytechnic University, Hong Kong*

18:30-20:30 Board Meeting

台北市上海鄉村濟南店, 濟南路二段 37 號, Tel:(02)2322-3333 (捷運忠孝新生站)

18:30 Taipei Night at 台北市上海鄉村濟南店

GIS NTU Convention, 拉斐爾廳

13:00-15:00 Session 3: Internal Combustion Engine/Clean Fuel Technology Oct 3, 2016 (Monday)

Session-Chair: Prof. Tong Zhu, Tongji University

13:00-13:20 260042 :

Engine performance, combustion and emission characteristics of a diesel engine burning biogas/diesel dual fuel

Quan Zhou, C.W. Leung

Department of Mechanical Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

13:20-13:40 260045 :

Numerical simulation study on characteristics of combustion process for a micro gas turbine combustion chamber under part load condition

Chao Zong, Tong Zhu*

School of Mechanical Engineering, Tongji University, Shanghai, China

13:40-14:00 260052 :

Study of Performance and Emissions of Diesel Engine Fueled with Blends of Diesel-Biodiesel- Ethanol- Methanol, Based on a Constant Fuel Oxygen Content

Meisam Ahmadi Ghadikolaei^{1*}, Chun Shun Cheung¹ and Ka-Fu Yung²

¹*Dept. of Mechanical Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong.*

²*Dept. of Applied Biology and Chemical Tech. The Hong Kong Polytechnic Uni., Hung Hom, Hong Kong.*

14:00-14:20 260028 :

Research on the Fixed-bed Hydrogenation of Low-temperature Coal Tar

Chenyang Yan; Daohong Wu; Yuanbao Zhu; Meimei Xu; Shaochun Du; Xuejun Shi

Beijing Shenwu Environmental & Energy Technology Co., Ltd., Beijing, China

14:20-14:40 260053 :

Permeation Resistance and Activation Energy of Hydrogen Through Palladium Membranes in Binary and Ternary Gas Mixtures

Chien Nan Lin^a, Wei-Hsin Chen^a, Yen-Hsun Chi^b, Yu-Li Lin^b

^a*Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan 701, Taiwan*

^b*Green Energy and Environmental Laboratories, Industrial Tech. Research Institute, Hsinchu 300, Taiwan*

14:40-15:00 260034 :

Study on denitration characteristics of SCR denitration regenerator

Zhang Yongliang, Wu Daohong, Han Xiqiang, Wang Dongfang

Beijing Shenwu Environment & Energy Technology Co., Lt., Beijing, China

15:00-15:20 Coffee Break

15:20-17:00 Session 4: Alternative Fuels(I) Oct 3, 2016 (Monday)

Session-Chair: Prof. Shuhn-Shyurng Hou, Kun Shan University, Taiwan

15:20-15:40 260049 :

Liquid Biofuel as an Alternative Fuel for an Oil Furnace

Wei-Cheng Huang¹, Shuhn-Shyurng Hou^{1,*}, Ta-Hui Lin^{2,3,*}

¹Department of Mechanical Engineering, Kun Shan University, Tainan 71070, Taiwan

²Department of Mechanical Engineering, National Cheng Kung University, Tainan 70101, Taiwan

³Research Center for Energy Tech. and Strategy, National Cheng Kung University, Tainan 70101, Taiwan

15:40-16:00 260071 :

MSW Derived Syngas Cleaning Mode Selection to Meet Various Utilization Purposes

Ming Chen, Dezhen Chen, Hangqin Yu

Thermal & Environmental Engineering Institute, Tongji University, Shanghai, 200092, China

16:00-16:20 260114 :

The Combustion Characteristics of Bio-oil Produced from Pinewood RDF

Shou Yin Yang*, Ying Yi Lin, Yu Hsuan Yeh, Min Sheng Wu

Department of Power Mechanical Engineering, National Formosa University, Taiwan

16:20-16:40 260037 :

Application and Research on Regenerative High Temperature Air Combustion Technology on Sewage Sludge Pyrolysis

Huihui Wang, Daohong Wu, Yuxin Ba*, Lei Xiao, Xiaofei Wu, Yiman Jia, Anqiang Zhang, Jinfeng Tao, Beijing Shenwu Environment & Energy Technology Co., Ltd., Beijing, China

18:30-20:30 Board Meeting

台北市上海鄉村濟南店, 濟南路二段 37 號, Tel:(02)2322-3333 (捷運忠孝新生站)

18:30 Taipei Night at 台北市上海鄉村濟南店

GIS NTU Convention, 尼采廳

13:00-15:00 Session 5: Atomization and Sprays (I) Oct 3, 2016 (Monday)

Session-Chair: Prof. Peng Zhang, Hong Kong Polytechnic University, Kowloon, Hong Kong

13:00-13:20 260056 :

Ligament Characterization of Atomizing Non-Newtonian liquid sheets

Yue Zhao, Li-jun Yang

School of Astronautics, Beijing University of Aeronautics and Astronautics, Beijing, 100191, China

13:20-13:40 260057 :

Prediction of droplets size from the breakup of the viscous plane sheet

Ran Yi, Li-jun Yang and Li-zi Qin

School of Astronautics, Beijing University of Aeronautics and Astronautics, Beijing, 100191, China

13:40-14:00 260058 :

Linear temporal instability of unrelaxed viscoelastic sheets

Luo Xie, Li-jun Yang, Qing-Fei Fu

School of Astronautics, Beijing University of Aeronautics and Astronautics, Beijing, 100191, China

14:00-14:20 260059 :

Instability of an air-assisted viscous liquid sheet in the presence of acoustic oscillations

Bo-qi Jia, Li-jun Yang,*and Qing-Fei Fu

School of Astronautics, Beijing University of Aeronautics and Astronautics Beijing, China

14:20-14:40 260101 :

On the role of droplet bouncing in modeling impinging sprays under elevated pressures

Zhenyu Zhang, Yicheng Chi, Peng Zhang

Department of Mechanical Engineering, the Hong Kong Polytechnic University, Kowloon, Hong Kong

14:40-15:00 260134 :

Homogeneous nucleation and flash boiling model of single droplet

Xi Xi, Hong Liu*, Hongchao Yin, Ming Jia

Key Laboratory of Ocean Energy Utilization and Energy Conservation, Dalian University of Technology, 116023 Dalian, P.R. China.

15:00-15:20 Coffee Break

15:20-17:00 Session 6: Design of Combustion Systems Oct 3, 2016 (Monday)

Session-Chair: Dr. Weina Liu, Beijing Shenwu Environment and Energy Technology Co

15:20-15:40 260019 :

Performance and Emissions of a Direct-injection Diesel Engine Fueled with Biodiesel-n-butanol Blends

L. Wei¹, C.S. Cheung¹, Z. Ning²

¹*Dept. of Mechanical Eng., The Hong Kong Polytechnic University, Hung Hom., Hong Kong, PR China*

²*School of Energy & Environment, City University of Hong Kong, Kowloon, Hong Kong, PR China*

15:40-16:00 260026 :

Numerical Analysis for Coal Combustion in Raceway of Oxygen Blast Furnace

Yuanxiang Lu, Zeyi Jiang*, Lu Bai, Peng Jin, Xinxin Zhang

School of Mechanical Engineering, University of Science and Technology Beijing, Beijing 100083, China

16:00-16:20 260093 :

Numerical Simulation on the Combustion Performances of Adjustable Fuel Feeding Combustor under Off-Design Conditions for a Micro-Gas Turbine

Chang Xing, Penghua Qiu, Li Liu, Wenkai Shen, Yajin Lv, Shaohua Wu, Yukun Qin

School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China

16:20-16:40 260032 :

New Technology of Regenerative Calcium Carbide Production

Shunli Zhang, Weina Liu*, Xiaonan Zhao, Bingchuan Lu, Jiaoyang Zhang, Xiuqiang Xu, Bin Dong, Qihai Guo, Li Ding, Xun Xue, Daohong Wu

Beijing Shenwu Environment and Energy Technology Co., Ltd., Changping District, Beijing, China

16:40-17:00 260068 :

Numerical investigation of combustion assisted thermal spray process: a study on spray gun geometrical parameters

Hamed Jafari¹, Sobhan Emami¹, Yasser Mahmoudi²

¹*Department of Mechanical Engineering, Najafabad Branch, Islamic Azad University, Najafabad, Iran.*

²*Department of Engineering, University of Cambridge, Cambridge, CB2 1PZ, United Kingdom.*

18:30-20:30 Board Meeting

台北市上海鄉村濟南店, 濟南路二段 37 號, Tel:(02)2322-3333 (捷運忠孝新生站)

18:30 Taipei Night at 台北市上海鄉村濟南店

Day 2 (Tuesday) Oct 4, 2016

GIS NTU Convention, 米開朗基羅廳

09:00-10:20 Session 7: Solid Fuels and Biomass(I) Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Dezhen Chen, Tongji University, Shanghai, 200092; , PR China

09:00-09:20 260015 :

Morphological characteristics of enhanced waste polyethylene/polypropylene pyrolysis processes for oil production

Adili Batuer, Chen Dezhen, Hai Wang

Thermal & Environmental Engineering Institute, Tongji University, Shanghai, 200092, China

09:20-09:40 260063 :

Distribution of nitrogen in different pyrolysis products of meat and bone meal

Yuheng Feng^{1,2*}, Guotao Yu^{1,2}, Lu Wan¹, Shengjie Wang¹, Dezhen Chen^{1,2}

¹*Thermal & Environmental Engineering Institute, Tongji University, Shanghai, 200092; , PR China*

²*School of Mechanical Engineering, Tongji University, Shanghai, 200092, PR China*

09:40-10:00 260105 :

Combustion characteristics of miscanthus floridulus biochar with pulverized coal

Hsien-Tsung Lin¹, Guan-Bang Chen², Yueh-Heng Li¹ and Yei-Chin Chao¹

¹*Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan 701, Taiwan*

²*Research Center for Energy Technology and Strategy, National Cheng Kung University, Tainan 701, Taiwan*

10:00-10:20 260116 :

Experimental Studies on Open Top Downdraft Biomass Gasifier

Gnanendra P.M, Rajan N.K.S

CGPL, Department of Aerospace Engineering, Indian Institute of Science, India

10:20-10:40 Coffee Break

10:40-12:00 Session 8: Solid Fuels and Biomass(II) Oct 4, 2016 (Tuesday)

Session-Chair: Dr. Zhang Yongliang, Beijing Shenwu Environment & Energy Technology Co.

10:40-11:00 260033 :

Experimental and Numerical Study on the SNCR Denitration Process in Regenerative Fired-gas Boiler

Han Xiqiang, Wu Daohong, Wang Dongfang, Guo Kehong, Zhang Yongliang

Beijing Shenwu Environment & Energy Technology Co.,Ltd, Beijing 102200, China

11:00-11:20 260036 :

Double Regenerative Coal-making Gas Boiler Performance Test Research

Zhang Yongliang, Wu Daohong, Han Xiqiang, Zhong Guiquan, Wang Dongfang

Beijing Shenwu Environment & Energy Technology Co., Ltd., Beijing, China

11:20-11:40 260051 :

Property Variation of Bamboo Pretreated by Enzyme for Solid Fuel Production

Wei-Hsin Chen^{1*}, Yen-Shih Chu¹ and Wen-Jhy Lee²

¹*Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan 701, Taiwan*

²*Department of Environmental Engineering, National Cheng Kung University, Tainan 701, Taiwan*

11:40-12:00 260113 :

CFD Analysis of NZE (Near-Zero Emission) Combustion System with Forced Internal

Recirculation

Ba Hieu Nguyen¹, Minjun Kwon², Sewon Kim², Chang Yeop Lee², Jae Hyun Park¹

¹Gyeongsang National University, South Korea

²Korea Institute of Industrial Technology, South Korea

12:00-13:00 Lunch

13:00-14:20 Plenary Lecture Session: Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Jing-Tang Yang, National Taiwan University, Taiwan

13:00-13:40 Plenary Lecture#4

Toward comprehensive combustion limit theory

Prof. Kaoru Maruta, Tohoku University, Japan

13:40-14:20 Plenary Lecture#5

Development of Torrefaction for Upgrading Biomass into Solid Fuel

Prof. Wei Hsin Chen, National Chung Keng University, Taiwan

14:30-17:10 Session 9: Fire Protection & Combustion Fundamentals Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Jean-Michel Most, Université de Poitiers, FRANCE

14:30-14:50 260060 :

Development of a new laboratory scale burnthrough apparatus for aeronautical composites

Jean-Michel Most*, Sachin Dahikar and Michel Champion

CNRS Institut Pprime, ISAE-ENSMA, Université de Poitiers, ISAE-ENSMA, BP 40109, F-86961 – FUTUROSCOPE Cedex, FRANCE

14:50-15:10 260065 :

Chemical Kinetics of Light Hydrocarbons Surrogate Fuel for In-situ Combustion

Guidong Ju, Lijun Wu

School of Mechanical Engineering, Tongji University, Shanghai 201804, China

15:10-15:30 Coffee Break

15:30-15:50 260076 :

A Numerical Study on the Effect of Velocity Profiles on the Structure of a Partially Premixed Laminar Flame

Yu Jin Lim¹, Gianfranco Scribano¹, Ying-Hao Liao² and Manh-Vu Tran³

¹*University of Nottingham Malaysia Campus, Jalan Broga, Semenyih 43500, Selangor Darul Ehsan, Malaysia*

²*National Chiao Tung University, 1001 University Rd., Hsinchu 300, Taiwan*

³*Monash Uni. Malaysia, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor Darul Ehsan, Malaysia*

15:50-16:10 260099 :

Flame Propagation through Microchannels with Narrowing

Taisia Miroshnichenko, Sergey Minaev

Far Eastern Federal University, Sukhanova str., 8, 690950, Vladivostok, Russia

16:10-16:30 260020 :

Atmospheric Pressure Gasification Technology of Inferior Coal

Dehong Xia*, Hongbin Wu

Dept. of Thermal Science & Energy Engineering, University of Science and Technology Beijing, China

18:30-20:30 Banquet

GIS NTU Convention, 達文西廳

09:00-10:20 Session 10: Gasification Technology Oct 4, 2016 (Tuesday)

Session-Chair: Dr. Yau-Pin Chyou, Institute of Nuclear Energy Research

09:00-09:20 260018 :

Effect of pyrolysis atmosphere on coal char structure and gasification reactivity

Yifan Chen*, Rui Zhang

School of Energy and Power Engineering, Nanjing University of Science and Technology, Nanjing, PR China

09:20-09:40 260022 :

Study on Pyrolysis Mechanism and Oil Extracting from Oil Shale Particles

Yu Wen, Dehong Xia, Jialin Li

Dept. of Thermal Science & Energy Engineering, University of Science and Technology Beijing, China

09:40-10:00 260038 :

Study on Sludge Pyrolysis Technology in Regenerative High Temperature Air Combustion Heat Source

Wu Xiaofei^{1,2}, Song Minjie², Ba Yuxin^{2,3*}, Wang Huihui², Xiao Lei², Zhang Anqiang², Jia Yiman², Bao Xinxin¹, Wu Daohong²

¹*School of Chemical Engineering, China University of Petroleum, Beijing 102249, China;*

²*Beijing Shenwu Environment & Energy Technology Co.,Ltd., Beijing 102200, China;*

³*China University of Mining & Technology, Beijing 100083, China*

10:00-10:20 260021 :

Gasification of Solid Fuels in a Fluidized-Bed Reactor

Hung-Te Hsu, Shr-Chiang Lin and Yau-Pin Chyou*

Institute of Nuclear Energy Research, Atomic Energy Council, Jiaan Village, Taoyuan City, Taiwan

10:20-10:40 Coffee Break

10:40-12:00 Session 11: Energy Efficiency Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Dehong Xia, University of Science and Technology Beijing, China

10:40-11:00 260039 :

Regenerative radiant tube temperature control research

Wu Daohong, Chen Wanli, Wang Dongfang, Geng Shijing

Beijing Shenwu Environment & Energy Technology Co., Ltd, Changping, Beijing, China

11:00-11:20 260085 :

A Controller Optimization Method Applied on Combustion Control System

Jyun-Sian Li¹, Chen-Kai Hsu¹, Wu-Chi Ho²

¹*Green Energy and Environment Research Lab., Industrial Technology Research Institute*

Hsinchu, Taiwan, R.O.C.

²*Institute of Management of Technology, National Chiao Tung University Hsinchu, Taiwan R.O.C.*

11:20-11:40 260030 :

Study on gas-based direct reduction of vanadium-titanium oxide pellet

Deng Jun, Wu Dao hong, Xue Xun, Cao Zhicheng, Feng Luxing, Tang Jingkun

Beijing Shenwu Environment & Energy Technology Co., Ltd, Changping, Beijing, China

11:40-12:00 260107 :

Influence of gas combustion upon swirled flow parameters

Konstantin Shtym, Tatiana Soloveva*

Far Eastern Federal University, Suhanova Str., 8, 690950, Vladivostok, Russia

12:00-13:00 Lunch

14:30-16:10 Session 12: Carbon Utilization and Energy Conversion Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Hsiao-Kang Ma, National Taiwan University, Taiwan

14:30-14:50 260043 :

Supercritical CO₂ Brayton Cycle Turbine Blade Analysis

Hsiao-Wei Chiang, Feng Ren Chiou and Bo Hong Lin

National Tsing Hua University, Hsinchu, Taiwan

14:50-15:10 260142 :

Investigation of Thermoelectric Power Generation Applied in a Geothermal System

Bo-Jiun Yang, Chun-Tin Hseih and Hsiao-Kang Ma

Department of Mechanical Engineering, National Taiwan University, 10617 Taiwan

15:10-15:30 Coffee Break

15:30-15:50 260073 :

Modeling of Melting and Combustion of Aluminum Nanoparticles

A.V. Fedorov, A. V. Shulgin Khristianovich

Institute of Theoretical and Applied Mechanics SB RAS, Institutskaya str., 4/1, Novosibirsk, 630090, Russia

18:30-20:30 Banquet

GIS NTU Convention, 拉斐爾廳

09:00-10:20 Session 13: Alternative Fuels(II) Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Ching-Hua Wang, National Taiwan University, Taiwan

09:00-09:20 260103 :

Flame characteristics in the co-incineration of methane and syngas on the impinging burner

Chih-Pin Chiu, Yu-Ching Tsai, Jing-Tang Yang*

Department of Mechanical Engineering, National Taiwan University, Taipei, 10617, Taiwan

09:20-09:40 260024 :

Low-temperature oxidation of 1,2,4-trimethylbenzene under stoichiometric condition

Jun-Jie Weng¹, Dan-Yu¹, Yue-Xi Liu^{1,2}, Bing-Yin Wang^{1,2}, Li-Li Xing³, Li-Dong Zhang³, Zhen-Yu Tian^{1,2,*}

¹ *Institute of Engineering Thermophysics, Chinese Academy of Sciences, Beijing, China*

² *University of Chinese Academy of Sciences, Beijing, China*

³ *University of Science and Technology of China, Hefei, Anhui, China*

09:40-10:00 260025 :

Experimental and kinetic investigation of low-temperature 1,3,5- trimethylbenzene oxidation

Guan-Fu Pan^{1,2}, Bing-Yin Wang^{1,2}, Yue-Xi Liu^{1,2}, Jun-Jie Weng¹, Zhen-Yu Tian^{1,2,*}

¹ *Institute of Engineering Thermophysics, Chinese Academy of Sciences, Beijing, China*

² *University of Chinese Academy of Sciences, Beijing, China*

10:00-10:20 260102 :

Effective Reduction of Nitrogen Oxides (NO_x) in Hydrogen Fueled Engines

G. Sakthinathan^{1*}, S. A. Anand Kumar¹, K. Jeyachandran²

¹*Department of Production Technology, MIT Campus, Anna University, India.*

²*Department of Mechanical Engineering, CEG Campus, Anna University, India*

10:20-10:40 Coffee Break

10:40-12:00 Session 14: Special Review Sessions (I) Oct 4, 2016 (Tuesday)

Session-Chair: Prof. Chung K. Law, Princeton University, USA

Co-Chair: Prof. Qiang Yao, Tsinghua University, China

10:40-11:00 260067 :

Emission behaviors of MSW pyrolysis derived volatile/char coupled combustion

Song Fan, Genli Xu, Dezhen Chen* and Yuheng Feng

Thermal & Environmental Engineering Institute, Tongji University, Shanghai, 200092, China

11:00-11:20 260130 :

On combustion of isopropanol droplets in normal-gravity and microgravity conditions with additive nanoparticles of aluminum oxide

Hsuan-Wei, Tsai*, Chi-Yao, Chao, Kuo-Long, Pan

National Taiwan University, Taipei, Taiwan

11:20-11:40 260139 :

Comparison on Performance and Particulate Matter Emissions of a Diesel Engine Fueled with Biodiesel with Fumigation LPG and Biodiesel Blended with Butanol

C.S. Cheung¹, L. Wei¹, Chun Guan^{1,2}, Z. Ning³, P.K. Wong⁴

¹*Dept. of Mechanical Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong, China*

²*Key Laboratory for Power Machinery and Engineering of M. O. E, Shanghai Jiaotong University, P.R.China*

³*School of Energy and Environment, City University of Hong Kong, Kowloon, Hong Kong, P.R.China*

⁴*Department of Electromechanical Engineering, University of Macau, Macau, P.R.China*

11:40-12:00 260151 :

Energy and Exergy Analysis of Various Engine Combustion Regimes under A Wide Range of Loads and Speeds

Ming Jia¹, Yaopeng Li¹, Hong Liu¹, Maozhao Xie¹, Rolf D. Reitz²

¹ *School of Energy and Power Engineering, Dalian University of Technology, P.R. China*

² *Engine Research Center, University of Wisconsin–Madison, Madison, WI 53706, USA*

12:00-13:00 Lunch

14:30-16:30 Session 15: Special Review Sessions (II) Oct 4 2016 (Tuesday)

Session-Chair: Prof. Chung K. Law, Princeton University, USA

Co-Chair: Prof. Qiang Yao, Tsinghua University, China

14:30-14:50 260086 :

Application of Regenerative High Temperature Air Combustion Technology on Fast Pyrolysis of Pulverized Low-Rank Coal

Cengceng Geng , Shuimiao Chen , Pei Pei , Hongwei Zhang, Yanbing Zhao, Lei Mei, Baolin Sun, Lei Xiao, Xun Xue, Zuping Sun, Chaoxing Jiang, Daohong Wu

Beijing Shenwu Environmental & Energy Technology Co., Ltd, Beijing, China

14:50-15:10 260096 :

Multichannel model of filtrational gas combustion

Dedir Sirotkin, Sergey Minaev

Far Eastern Federal University, Sukhanova str., 8, 690950, Vladivostok, Russia

15:10-15:30 Coffee Break

15:30-15:50 260152 :

Investigation of Thermodynamical and Chemical Parameters in Rotating Detonation Engine

Mohammed Niyasdeen, Sejong Oh, Jeong-Yeol Choi*

Pusan National University, Busan 609-735, Republic of Korea

15:50-16:10 260157 :

Comparison Study of the H₂/O₂ Reaction Mechanisms on Unsteady Shock-Induced Combustion

Pradeep Kumar Pavalavanni, Kui-Soon KIM, Sejong OH, Jeong-Yeol CHOI

Pusan National University, Busan 609-735, Republic of Korea

16:10-16:30 260159 :

Numerical Analysis and Experimental Verification on a Bubbling Fluidized-Bed Gasifier with Woodchip as Feedstock

Yu-Der Lin¹, Kevin Chan¹, Po-Chuang Chen², Yau-Pin Chyou^{2,*}, and Tsung-Leo Jiang¹

¹*National Cheng Kung University, Tainan City, Taiwan, ROC*

²*Institute of Nuclear Energy Research, Atomic Energy Council, Taoyuan City, Taiwan, ROC*

18:30-20:00 Banquet

Day 3 (Wednesday) Oct 5,2016

09:00-12:00 Technical Tour, Bus leave at 09:15in front of Just Sleep @ NTU

Bali Incinerator Plant, New Taipei City

12:30-14:00 Lunch in Tamshi Fisherman's Wharf(淡水漁人碼頭)

淡水海宴海鮮餐廳，新北市淡水區中正路1段87巷10號

14:00-17:00 City Tour