**AGENDA**

**25th May, 2014（SUN）Registration for whole day**

1、Address: Tianjin Saixiang Hotel 1st floor Hall, Meiyuan Road No.8, Huayuan Industrial Park, New Technology Industrial District, Tianjin;

2、Meal：Tianjin Saixiang Hotel1st floor Cafe，buffet.

**26th May, 2014（MON）**

**I、Opening Ceremony：**

1、Time：8:40—8:50

2、Place：Tianjin Saixiang Hotel 3rd floor Banquet hall I

3、Chair：Xianguo Li

4、Agenda Schedule：

8：40—8：45，Xianguo Li, IGEC-IX Introduction& Opening Address

8：45—8：50，Vice President, Tianjin University, Leader Speech

**II、Academic Presentation:**

1、Time：8:50—12:10

2、Place：Tianjin Saixiang Hotel 3rd floor Banquet hall I；

3、Agenda Schedule：Invited Keynotes & Special Session

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **Invited Keynotes, Session chair: Xianguo Li** |
| **8:50-9:20** | Chunde YAO | Status of Methanol as Alternative Fuel for Engines in China | Tianjin University |
| **9:20-9:50** | Zhongchao TAN | Technical Challenges to Air Emission Control for Coal Fired Facilities in China | University of Waterloo |
| **9:50-10:20** | Huamin ZHANG | Research Development and Challenge of Flow Battery Technology | Chinese Academy of Science |
| **10:20-10:50** | **Group Photo & Coffee Break** |
| **Air Emission Control, Reduction and Mitigation**Session chair: Zhongchao Tan & Huamin Zhang |
| **10:50-11:10** | Shuai Deng, R.K. Zhao, S. Haussener, L. Zhao | Recent Advances in CO2 Capture Technologies’ Integration with Renewable Energy Sources | Tianjin University；Laboratory of Renewable Energy Science and Engineering (Switzerland) |
| **11:10-11:30** | Jie Sun, Qibin Liu | Effect of Recirculation Vapor Quality on Performance of a Direct Steam Generation Solar Field | Institue of Engineering Thermophysics, Chinese Academy of Sciences |
| **11:30-11:50** | Raheleh Givehchi, Zhongchao Tan, Chao Yan, Qinghai Li | The effect of electrostatic forces on granular filtration efficiency for nanoaerosol particles | University of Waterloo, Tsinghua University |
| **Energy Saving for Automobiles** |
| **11:50-12:10** | Rui Xiong, Hongwen He | Adaptive Battery State-of-Charge and Capacity Dual Estimator With Multi-scale Extended Kalman Filters | Beijing Institute of Technology |

**III、Topic Session Discussion: 13：30—17：50**

**The First Group：Energy Storage**

**Renewable and Clean Energy Technologies**

Place：Tianjin Saixiang Hotel 3rd floor Banquet hall I

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **Energy Storage**Session chair: Tong Zhang & Shixue Wang |
| **13:30-13:50** | Sijie Zhang, Rui Zhao, Junjie Gu, Jie Liu | Electrochemical Behavior of the Charging Li-ion Batteries with Different Electrolyte Salt Concentrations | Carleton University (Canada) |
| **13:50-14:10** | Rui Zhao, Sijie Zhang, Jie Liu, Junjie Gu | Effects of Salt Concentration on the Electrochemical and Thermal Behaviors of Lithium Ion Cells | Carleton University (Canada) |
| **14:10-14:30** | Qiong Zheng, Xiangkun Ma, Xianfeng Li, Guiling Ning, Feng Xing, Huamin Zhang | A Three-dimensional Model for Thermal Analysis in a Vanadium Flow Battery | Dalian Institute of Chemical Physics, Chinese Academy of Sciences |
| **14:30-14:50** | Chenglong Luo, JieJi, Jihai Xiong, Min Fan, Chongwei Han | Parametric study of building-integrated dual-function solar collector under water heating mode with natural circulation | Jiangxi Academy of Sciences; University of Science and Technology of China |
| **14:50-15:10** | Hongfei Zheng, Jing Dai, Zehui Chang, Yuehong Su, Huifang Kang, Yanyan Ma | Performance of a Shell-Encapsulated Evacuated-Tube Solar Collector Incorporated with a Compound Curved Surface Concentrator | Beijing Institute of Technology; Inner Mongolia University of Technology; University of Nottingham (UK) |
| **15:10-15:30** | **Coffee Break** |
| **Invited Keynotes, Session chair: Xianguo Li** |
| **15:30-16:00** | Tong ZHANG | Fuel Cell Vehicle Power-train Technology Platform Research and Development | Tongji University |
| **16:00-16:30** | Ibrahim DINCER | Performance Assessment of Green Energy Systems | University of Ontario Institute Technology |
| **Renewable and Clean Energy Technologies**Session chair: Yejun Han & Jianbo Zhang |
| **16:30-16:50** | Kao-Feng Yarn, Win-Jet Luo, Yi-Hua Kuo, Guan-Chen Cheng, Chun-Nan Chen | Performance Analysis of Direct Methanol Fuel Cells by Coating Different Proportions of Catalysts onto Fuel Channels | Far East University of Technology(Taiwan);National Chin-Yi University of Technology (Taiwan) |
| **16:50-17:10** | Edmore Ranganai  | A Test Study On The Efficacy of Four Times Series Models Involving Short Memory, Long Memory And Harmonic Phenomena in Modelling And Forecasting Solar Radiation Data | University of South Africa (South Africa) |
| **17:10-17:30** | Dilan ALP | The Solar Energy Potential Of South Eastern Anatolia Region In Turkey And The Potential Use Of Degree | University of Şırnak |
| **17:30-17:50** | Kao-Feng Yarn, Chi-Wun Lu, Win-Jet Luo, Wei-Jyum Liao, Jhih-Hua Lin, Chun-Nan Chen | Hygroscopic Efficiency Analysis of Desiccant Coating Heat Exchangers with Different Solid Desiccants | Far East University of Technology(Taiwan);National Chin-Yi University of Technology (Taiwan) |

**The Second Group：Biofuels, Biomass and Bioenergy I**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall I

Session chair: Zhongchao Tan & Shicheng Zhang

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **13:30-13:50** | Dongqin Ran, Tong Xue, Zufeng Yuan, Jiangtao Li, Zhaoxia Hu, Shouwen Chen | The Application of Sulfonated Poly(arylene ether sulfones) Membranes in the Dual-Chamber Microbial Fuel Cells | Nanjing University of Science & Technology |
| **13:50-14:10** | Ziyuan Zhou, Weian Zhang, Jianxin Jiang | Distribution and Characterization of Liquid Products from Soybean Oil Hydrocracking by a Commercial Petroleum Catalyst | Beijing Forestry University |
| **14:10-14:30** | Min Song, Mei Tang, Shifeng Lv, Xia Wang, Baosheng Jin, Zhaoping Zhong, Yaji Huang | The Effect of Different Components on Adsorption Capability of Municipal Solid Waste Based Carbon | Southeast University |
| **14:30-14:50** | Sy-Ruen Huang, Chih-Hung Chung, Hoang-JyhLeu, Chow-Yen-Desmond Sim, Chiu-Yue Lin | Using Banana Pseudostem Sap as an Electrolyte in Batteries | Feng Chia University, Taiwan |
| **14:50-15:10** | M.A. Hazrat, M.G. Rasul, M.M.K. Khan | Prospective Use of Antioxidants in 2nd Generation Biodiesel for Diesel Engines in Australia | Central Queensland University (Australia) |
| **15:10-15:30** | **Coffee Break** |
| **15:30-15:50** | T. A. Abdullah, H.A. Zaidi | Effect of Copper oxide, Zinc oxide and Calcium oxide on the conversion of Bio-ethanol to hydrocarbons over HZSM-5 catalyst | University School of Chemical Technology Guru Gobind Singh Indraprastha (India) |
| **15:50-16:10** | Izirwan Izhab, Nor Aishah Saidina Amin, Mohd Asmadi | Dry Reforming of Methane over Oil Palm Shell Activated Carbon and ZSM-5 Supported Cobalt Catalyst | Universiti Teknologi Malaysia (Malaysia); Universiti Malaysia Pahang (Malaysia) |
| **16:10-16:30** | T.M. Yunus khan, Abdelaziz Emad Atabani, Irfan Anjum Badruddin, Ahmed Badrudin | Comparison of Ceiba Pentandra, Nigella Sativa and Their Blends as Prospective Biodiesel Fuels for IC Engines | University of Malaya (Malayisa); Erciyes University (Turkey) |
| **16:30-16:50** | S. Begum, M G Rasul, D. Akbar | Energy and Exergy Analysis of a Large Scale Biomass Gasification Process | Central Queensland University (Australia) |
| **16:50-17:10** | Tingting Zhang, Changjun Li, Xiao Yang, Zhongchao Tan, Shicheng Zhang, Jianmin Chen | Separation of Solid Phase Products from Hydrothermal Liquefaction of Rice Straw | Fudan University, University of Waterloo |

**The Third Group：****Renewable and Clean Energy Technologies**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall II

Session chair: Yong Hao & Xianglong Luo

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **13:30-13:50** | Hong Yang, He Wang, Chuanke Chen, Dingyue Cao | The mechanical analysis and experimental verification of screen-printed front | Xi’an Jiaotong University |
| **13:50-14:10** | Yean-Der Kuan, Min-Shiang Huang, Fong-Hao Wu, Min-Feng Sung | Design and Fabrication a Direct Methanol Fuel Cell with the Thermo Actuation Bubble Removal Mechanism | National Chin-Yi University of Technology (Taiwan) |
| **14:10-14:30** | Masoud Rokni | Repowering of an Existing Power Plant by Means of Gas Turbines and Solid Oxide Fuel Cell | Technical University of Denmark (Denmark) |
| **14:30-14:50** | Oyku Bilgin | Geothermal Energy Sources in Sirnak Region-Turkey | Sirnak University (Turkey) |
| **14:50-15:10** | Hui Hong, Xiufeng Liu | Proposal and Analysis of Mid-Temperature Solar Thermochemical Hybridization Power System For Improving Off-Design Performance | Institute of Engineering Thermophysics, Chinese Academy of Sciences; University of Chinese Academy of Sciences |
| **15:10-15:30** | **Coffee Break** |
| Session chair: Zhiguo Qu & Masoud Rokni |
| **15:30-15:50** | Haifeng Lv, Peng Wu, Feng Xu, Ran Xu, Hui Wu, Tao Peng, Shichun Mu | Nanohybrid Carbon/ceramics Materials as Highly Efficient Metal Supports for Oxygen Reduction | Wuhan University of Technology |
| **15:50-16:10** | Shaobo Deng, Qing Cao, Li e Jin, Cungui Zhong | Synthesis of a Novel Humic Acid-based Polycarboxylic Dispersant for Coal Water Slurry | Taiyuan University of Technology |
| **16:10-16:30** | Hao Deng, Kui Jiao, Yan Yin, Qing Du | Modeling for Passive Alkaline Membrane Direct Methanol Fuel Cell | Tianjin University |
| **16:30-16:50** | Hao Huang, Kui Jiao, Yan Yin, Qing Du | Start-up of High Temperature PEMFC | Tianjin University |
| **16:50-17:10** | Guobin Zhang, Zhiqiang Niu, Kui Jiao, Yan Yin, Qing Du | Structure Optimization of Segmented Thermoelectric Generator | Tianjin University |
| **17:10-17:30** | B.P. Numbi, X. Xia | A Model Predictive Control Approach for Operation Efficiency in a Vertical Shaft Impact Crushing Process | University of Pretoria (South Africa) |

**27th May, 2014（TUE）**

**I、Topic Session Discussion: 8:30—12:10**

**The First Group：Renewable and Clean Energy Technologies**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall I

Session chair: Yejun Han & Yong Hao

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **8:30-8:50** | Zongsheng Zhu, Zhao Yang, Fang Wang, Feng Zhao | Investigation on Intermittent Heat Pump Drying Process of Green Soybean | Tianjin University |
| **8:50-9:10** | Si Huang, Xianghui Su, Sunsheng Yang | Numerical and Experimental Research on Multi-stage Pump as Turbine System | South China University of Technology |
| **9:10-9:30** | Ming Yang, Gang Pei | Influence of the Proportion of Diffuse Radiation on CPC Reception Performance | University of Science and Technology of China |
| **9:30-9:50** | Ziwei Chen, Xianglong Luo, Ying Chen, Songping Mo | Simulation and Optimization of Liquid-Vapor Separation Condenser in an Organic Rankine Cycle | Guangdong University of Technology |
| **9:50-10:10** | Hang Zhou, Yuehong Su, Saffa Riffat | Numerical modelling and experimental validation of a low concentrating photovoltaic system under distributed operating conditions | Institute of Sustainable Energy Technology (UK) |
| **10:10-10:30** | **Coffee Break** |
| **Session chair: Hang Guo & Shichun Mu**  |
| **10:30-10:50** | Yong Hao, Sossina M. Haile | Solar Thermal Dissociation of CO2: Better Efficiencies | Institute of Engineering Thermophysics, Chinese Academy of Sciences; California Institute of Technology (USA) |
| **10:50-11:10** | Bin Liu, Peng Li, Tao Dang, Cheng Li  | Chimney Effect of Solar Hybrid-double Wall with PCM of Na2CO3•10H2O | Tianjin University of Commerce |
| **11:10-11:30** | Hui Wang, Zhiguo Qu, W. Zhang, L. Zhou, Q.N. Yu | Effective Thermal Conductivity of MOF-5 Powder Bed under a Hydrogen Atmosphere | Xi'an Jiaotong University |
| **11:30-11:50** | Steve Hsueh Ming Wang, Lei Yao, Jing Shi, Benjamin Koo | Sustainable Design of a Smart Grid Photovoltaics System for Subartic Regions | University of Alaska; North Dakota State University |

**The Second Group: Wind Energy**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall II

Session chair: Diangui Huang & Jing Shi

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **8:30-8:50** | Deyuan Li, Wenwei Mo, Lei Xu, Yushen Fang, Zhiqiang Lu, Xiaohui Yan | The Aeroelastic Damping Analysis of Flexible Blades of Horizontal Axis Wind Turbine Based on Nonlinear Aeroelastic Coupling Response | Guangdong University of Technology; University of Electronic Science and Technology of China |
| **8:50-9:10** | Xiaojing Sun, Ziyin Cao, Yueqing Zhuang, Diangui Huang, Yang Cao, Guoqing Wu  | An axial symmetry Augmented Wind Wheel and Its Optimized Design | University of Shanghai for Sci. and Tech.; Shanghai Key Laboratory of power energy in multiphase flow and heat transfer; Shanghai University; Nantong University |
| **9:10-9:30** | Ying She | Battery Sizing For Residential Wind Turbine Systems Connected To The Grid | Nanchang Hangkong University |
| **9:30-9:50** | Xiong Liu, Cheng Lu, Gangqiang Li, Hongche Guo, Zhongjie Guan | Effects of the Aerodynamic Damping on the Tower Load of Offshore Horizontal Axis Wind Turbines | University of Wollongong (Australia); Shantou University; Jinan Railway Vehicles Equipment Co. LTD |
| **9:50-10:10** | Ergin Erdem, Ying She, Jing Shi, Steve Hsueh Ming Wang | Vector Auto Regressive Models with Exogenous Variables for Predicting Wind Speed | North Dakota State University (USA) |
| **10:10-10:30** | **Coffee Break** |
| **10:30-10:50** | Xiaojing Sun, Yajun Chen, Guoqing Wu, Diangui Huang | Research on the Aerodynamic Characteristics of A Hybrid Lift/drag-based Vertical Axis Wind Turbine | University of Shanghai for Sci. and Tech.; Shanghai Key Laboratory of power energy in multiphase flow and heat transfer; Nantong University |
| **10:50-11:10** | W. T. Chong, W. K. Muzammil, A. Fazlizan, H. Taheri, M. Gwani, S.C. Poh | Eco-GreenergyTM: The Future of Small Hybrid Wind-Solar Energy Generation System | University of Malaya (Malaysia); University Malaysia Sabah (Malaysia) |
| **11:10-11:30** | Maryam Daneshmand- Mehr, Sepehr Ghazinoory, Mohammad R. Arasti, Hami Yousefdehi | Technology Roadmapping for Wind Turbine Industry: Case of the Iran | Payam-e-Noor University (Iran) |
| **11:30-11:50** | W.T. Chong, K.H. Wong, A. Fazlizan, L.F. Sim | Numerical Simulation of Transient Flow on Vertical Axis Wind Turbine with the Power-augmented Stator Vanes | University of Malaya (Malaysia); Qatar University (Qatar) |
| **11:50-12:10** | Asma Aziz, Amanullah MTO, Alex Stojsevski | Automatic Generation Control of Wind Energy System | Deakin University (Australia) |

**The Third Group：Biofuels, Biomass and Bioenergy I**

**Biofuels, Biomass and Bioenergy II**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall III

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **Biofuels, Biomass and Bioenergy I**Session chair: Zhongchao Tan & Shicheng Zhang |
| **8:30-8:50** | Jian Zhang, Xuanjun Wang | Comparison of Thermal Stability and Thermal Dynamics of Zanthoxylum Bungeanum Seed Oil Biodiesel and Diesel | Xi'an Research Institute of Hi-Tech |
| **8:50-9:10** | Manoj Raut, Prabir Basu | Effect of Torrefaction Pretreatment on Gasification of Biomass | Dalhousie University (Canada) |
| **9:10-9:30** | Teng-Chien Chen, Ricky priambodo, Aharon Gedanken, Jiunn-Der Liao | The Novel Technology for Bio-diesel Production from Cooking and Waste Cooking Oil by Heterogeneous Catalysts and Microwave Irradiation | National Cheng Kung University (Taiwan); Bar-Ilan University (Isarel) |
| **9:30-9:50** | Deepika Jothinathan, Richard Thilagaraj Wilson | Production of Bioelectricity in MFC by Pseudomonas Fragi DRR-2 (Psychrophilic) Isolated from Goat Rumen Fluid | SRM University (India) |
| **9:50-10:10** | S. Jayaraj, B. Deepanraj, V. Sivasubramanian | Study on the Effect of pH on Biogas Production from Food Waste by Anaerobic Digestion | National Institute of Technology Calicut (India) |
| **10:10-10:30** | **Coffee Break** |
| **Biofuels, Biomass and Bioenergy II**Session chair: Animesh Dutta & Simon Jayaraj |
| **10:30-10:50** | Na Zhang, Zhao Yang, Aiqiang Chen, Songsong Zhao | Energy Consumption Analysis of Fruit and Vegetable Hot Water Treatment Equipment | Tianjin University |
| **10:50-11:10** | Harpreet Kambo, Animesh Dutta | Hydrothermal Torrefaction/Carbonization (HTC): An innovative process for Low Quality Lignocellulosic Biomass Conversion to Biochar for replacing Coal | University of Guelph (Canada) |
| **11:10-11:30** | Xin Wang, Mingfa Yao, Haifeng Liu, Hu Wang, Zunqing Zheng | Development of a reduced n-butanol/ biodiesel oxidation mechanism for RCCI engines | Tianjin University |
| **11:30-11:50** | Liansheng Liu, Xiang Gou, Cong Du | Experimental and Numerical Studies on Residential Heating Equipment Burning Biomass Briquettes | Hebei University of Technology |

**II、Topic Session Discussion: 13:30—16:50**

**The First Group：Renewable and Clean Energy Technologies**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall I

Session chair: Shichun Mu & Jianwei Guo

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **13:30-13:50** | Kai Zhu, Yang Yang, Yabo Wang, Jie Wei, Zhuo Cui | Research on Heat Dissipation Performance of Radiator in Cooling High Heat-flux Component | Tianjin University of Commerce; Tianjin University |
| **13:50-14:10** | Songping Mo, Ying Chen, Xianglong Luo, Jun Li | Experimental Investigation of Supercooling Reduction and Freezing Point Depression of Ethylene Glycol Solution Based Nanofluid | Guangdong University of Technology |
| **14:10-14:30** | Chao Wang, Cong Chen, Yuting Wu, Chongfang Ma | Numerical Investigation on Molten Salt Mixed Convection In Bottom-heated Horizontal Square Tube | Beijing University of Technology |
| **14:30-14:50** | Cong Ding, Xiaoli Xi, Yuanhui Cheng, Xianfeng Li, Huamin Zhang | The Side-Chain Effect on the Morphology and Electrochemical Properties of Perfluorosulfonic Acid Ionomers for Vanadium Flow Battery | Institute of Chemical Physics, Chinese Academy of Sciences; University of Chinese Academy of Sciences |
| **14:50-15:10** | Tianming Zhong, Ying Chen, Wenpu Le, Wenxian Zheng, Xianglong Luo | Thermodynamic Performance of Parallel Flow Microchannel Condenser with Liquid-Vapor Separation | Guangdong University of technology |
| **15:10-15:30** | **Coffee Break** |
| **15:30-15:50** | Xinzhuang Fan, Guanjie Wei, Jianguo Liu, Chuanwei Yan | Investigation On The Electrospun Carbon Nanofibers As The Electrode Material For Vanadium Flow Battery | Institute of Metal Research, Chinese Academy of Sciences |
| **15:50-16:10** | Zufeng Yuan, Ying Ling, Shouwen Chen, Zhaoxia Hu | Preparation and Properties of Novel Side-chain Type Sulfonated Poly (arylene ether sulfone ) Membranes for Fuel Cell Applications | Nanjing University of Science & Technology |
| **16:10-16:30** | He Qi, Shixue Wang | The Effects of Humidification Temperature on the Performance of a Single PEM Fuel Cell Without an External Cooling Controller | Tianjin University |
| **16:30-16:50** | Xiangbo Feng, Zhiguo Qu | Methane Premixed Combustion over Catalytically Stabilized Zirconia Foam Burner | Xi’an Jiaotong University |

**The Second Group：****Biofuels, Biomass and Bioenergy II**

 **Renewable and Clean Energy Technologies**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall II

Session chair: Animesh Dutta & Zhiguo Qu

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **13:30-13:50** | Hwai Chyuan Ong, T.M.I. Mahlia, H.H. Masjuki, W.T. Chong | Techno-economic and sensitivity analysis of Jatropha Curcas and CalophyllumInophyllum biodiesel production | University of Malaya (Malaysia); Universiti Tenaga Nasional (Malaysia); Syiah Kuala University (Indonesia) |
| **13:50-14:10** | A. K. Azad, M. G. Rasul, M. M. K. Khan, Subhash C. Sharma | Review of Non-edible Biofuel Resources in Australia for Second Generation (2G) Biofuel Conversion | Central Queensland University (Australia) |
| **14:10-14:30** | Yean-Ling Pang, Steven Lim, Hwai-Chyuan Ong, Wen-Tong Chong | One-step Preparation for Iron-doped TiO2 Nanotubes: Characterizations, Sonocatalytic Activities and Reaction Kinetic Studies | University of Malaya (Malaysia) |
| **14:30-14:50** | A. K. Azad, M. G. Rasul, M. M. K. Khan, Subhash C. Sharma | Review of Biodiesel Production from Microalgae: A Novel Source of Green Energy | Central Queensland University (Australia) |
| **14:50-15:10** | Tianhang Hu, Jianwei Guo | Synthesis and Characterization of FexCoy Bimetallic Nanoparticles on Polyaniline Covered Carbon Nanotube (FexCoy-PANI/CNT) for Oxygen Reduction Reaction | Tsinghua University |
| **15:10-15:30** | **Coffee Break** |
| **Session chair:** Yejun Han & Jianbo Zhang |
| **15:30-15:50** | Jianhua Fang, Wei Li, Xiaoxia Guo, Yan Yin | Synthesis and Properties of Novel Multiblock Copolyimides Consisting of Benzimidazole-groups-containing Sulfonated Polyimide Hydrophilic Blocks and Non-sulfonated Polyimide Hydrophobic Blocks as Proton Exchange Membranes | Shanghai Jiao Tong University; Tianjin University |
| **15:50-16:10** | Jing Shan, Rui Lin, Xin Cui, Xuwei Lin, Jianxin Ma | Effects of Dynamic Driving Cycle on the Performance Degradation of PEM Fuel Cell by Segmented Fuel Cell | Tongji University |
| **16:10-16:30** | Asefi Bahare, Hongzhi Ma, Fengying Zhang | Research Statuson Energy Recovery From Food Waste | University of Science and Technology Beijing |
| **16:30-16:50** | Ying Wang, X. J. Sun, H. J. Zhang, G. Q. Wu, Y. Cao, D. G. Huang | Effect of interaction between vortices and blades on performance of H-Darrieus vertical-axis hydro turbine | University of Shanghai for Science and Technology |

**The Third Group：Energy Management in Engines and Vehicles**

**Engine Combustion with High Efficiency and Low Emissions**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall III

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **Energy Management in Engines and Vehicles**Session chair: Chunde Yao & Hui Xie |
| **13:30-13:50** | S. Sichilalu, X. Xia | Optimal energy scheduling of grid connected PV-Diesel hybrid system to power heat pump water heater | University of Pretoria (South Africa) |
| **13:50-14:10** | W.T. Chong, A. Fazlizan, S.Y. Yip, S.C. Poh, W.P. Hew | Performance and Environmental Evaluation of an On-site Waste-to-energy Conversion System by Using Exhaust Air Energy Recovery Turbine Generator | University of Malaya (Malaysia) |
| **14:10-14:30** | Guopeng Yu, Gequn Shu, Hua Tian, Haiqiao Wei, Xingyu Liang | Techno-economical Evaluations of an Organic Rankine Cycle (ORC) Driven by Exhaust Energy of a Heavy-Duty (HD) Diesel under Various Operating Conditions | Tianjin University |
| **14:30-14:50** | Hua Tian, ZhiYong Huang, GeQun Shu, Na Jiang, HaiQiao Wei, XingYu Liang | Thermal and Economic Analysis on a Combined Diesel Engine-Organic Rankine Cycle (DE-ORC) System Used in Coolant Heat Recovery of DE | Tianjin University |
| **14:50-15:10** | Chengyu Zhang, Gequn Shu, Hua Tian, Haiqiao Wei, Xiaoning Li, Xuan Wang | Theoretical analysis of Engine’s waste heat recovery system based on CO2 Brayton and Organic Rankine Cycle | Tianjin University |
| **15:10-15:30** | **Coffee Break** |
| **Engine Combustion with High Efficiency and Low Emissions**Session chair: Hui Xie & Mingfa Yao |
| **15:30-15:50** | Konming Zhang, Zebing Jin, Fan Zhang, Ke Wang, Qijun Tang, Jingping Liu | Research on the Generic Trends of Engine Performances in a Heavy Duty SI LNG Engine and Application in Simulation based Performance Development | Beijing Green Energy Cooperation; HunanUniversity |
| **15:50-16:10** | Xiang Gou, Zifang Wang, Wei Ji, Liansheng Liu, Jinxiang Wu, Enyu Wang | Numerical Simulation Research on Cornstalk Reburning in a Pulverized Coal Combustor | Hebei University of Technology |
| **16:10-16:30** | Konming Zhang, Shixi Liang, Zebing Jin, Ke Wang, Fan Zhang, Cheng Liao, Jingping Liu | A High Efficiency Low Emission Thermodynamics Cycle for Prime Movers based on Timed Constant Volume Combustion | Beijing Green Energy Cooperation; Hunan University |
| **16:30-16:50** | Arun Prasath., K A. Ramesh | A Low Pressure Direct Gas Injection System for a Four Stroke LPG – Diesel Dual Fuel Engine | Indian Institute of Technology Madras (India) |

**28th May, 2014（WED）**

**I、Topic Session Discussion: 8:30—10:50**

**The First Group：Green Building**

Place：Tianjin Saixiang Hotel 3rd floor Conference hall I

Session chair: Guangcai Gong & Xianguo Li

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Author** | **Title** | **Affiliation** |
| **8:30-8:50** | Xinshu Zhang, Guangcai Gong, Chunwen Xu, Jingyuan Huang, Zehua Liu | The Cooling Load Calculation of a Large System in an Environmental Control System at a Subway Station Installed with Platform Screen Doors | Hunan University; Shanghai City Construction Technology co., LTD; University of South China |
| **8:50-9:10** | Junlan Yang, Lina Zhao, Guowei Miao, Muchao Yao | Study On The Influence Of Envelope Insulation Materials On The Building Energy Consumption | Tianjin Institute of Urban Construction |
| **9:10-9:30** | Shengchun Liu, Pengxiao Wang | Numerical Simulation and Flammability Analysis on R32 Leakage of Indoor Air-conditioning | Tianjin University of Commerce; Ministry of Education |
| **9:30-9:50** | Qian Wang, Changying Zhao | Thermal Performance of Using a PCM Shutter in Buildings | Shanghai Jiao Tong University |
| **9:50-10:10** | O.M. Popoola, J. Munda, A. Mpanda, P. Mlonzi | Modelling of Residential Lighting Load Profile Using Adaptive Neuro Fuzzy Inference System (ANFIS) | Tshwane University of Technology (South Africa) |
| **10:10-10:30** | Ditiro Setlhaolo, Xiaohua Xia, Qifeng Cheng | Optimal appliance scheduling for household energy management | University of Pretoria (South Africa) |
| **10:30-10:50** | Nan Wang, Xiaohua Xia | Indoor Human Thermal Comfort Optimal Control with Solar Air Collector Driven Desiccant Cooling System | University of Pretoria (South Africa) |

**II、Poster Presentation:**

1、Time：26th-28th May, 2014

2、Place：Tianjin Saixiang Hotel 1st floor

**Poster Presentations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Poster No.** | **Presenter** | **Titles** | **Presenter Affiliations** |
| **1** | Rui Wu, Yongxiu He  | Renewable Energy Regulatory Policies in China Based on System Dynamics | North China Electric Power University |
| **2** | Xi Chen, Guangcai Gong  | Optimization of Neutral Network for a biomass-fired boiler steam system using Improved Immune Algorithm | Hunan University; Hunan Institute of Science and Technology |
| **3** | Chenguang Wang, Guangcai Gong, Yingxing Wu | Research on the Relationship Between Solar Cell Power Output and The Thermal Environment with Dimensionless Method | Hunan University |
| **4** | Mingyang Liu, Jianbo Zhang, Jun Huang, Cheng Wang, Jianlong Wang | Degradation Characteristics of Membrane Electrode Assembly under Drive Cycle Test Protocol | Tsinghua University |
| **5** | Si-Jia Hao, Tong-Le Liu, Cheng Wang, Jian-Long Wang | A Method to Fabricate Highly Ordered 8 mol.% Yttria-Stablized Zirconia Nano-Array Electrodes for Solid Oxide Electrolysis Cell | Tsinghua University |
| **6** | Jun Huang, Cheng Wang, Jianbo Zhang | A Partially impregnated Agglomerate Model for the PEM Fuel Cell Cathode Catalyst Layer | Tsinghua University |
| **7** | Jie Sun, Qibin Liu | Effect of Recirculation Vapor Quality on Performance of a Direct Steam Generation Solar Field | Institue of Engineering Thermophysics, Chinese Academy of Sciences |
| **8** | Steven Lim, Yean-Ling Pang, Hwai-Chyuan Ong, Wen-Tong Chong | Kinetics and Thermodynamics Investigation of Supercritical Reactive Extraction for Jatrophacurcas L. Seeds in Biodiesel Production | University of Malaya (Malaysia) |
| **9** | Oyku Bilgin | Natural Zeolite Mineralsas Storage of Solar Energy | Sirnak University (Turkey) |
| **10** | Yulie Gong， Chao Luo，Qionghui Xu, Zhengneng Lu, Yuan Yao | The Geothermal Energy Conversion between Flash-Binary and Double Flash Power System | Chinese Academy of Sciences |
| **11** | Xuan Wang, Gequn Shu, Hua Tian, Haiqiao Wei | Design and Performance Analysis of a Combined Waste Heat Recovery System with Different Working Fluids for a Large Marine Diesel Engine | Tianjin University |
| **12** | YuLin Wang, ShiXue Wang | A New Gas Concentration Distribution Method of Proton Exchange Membrane Fuel Cell | Tianjin University |
| **13** | Laihui Tong, Haifeng Liu, Mingfa Yao, Zunqing Zheng | Study of pathways to maximize engine efficiency for future engines | Tianjin University |
| **14** | Xianguo Li, Yanzhou Qin, Qing Du, Mingzhe Fan, YafeiChang, Yan Yin | Operating Pressure Optimization of A PEMFC Power System | SKLE, Tianjin University |
| **15** | Abdelaziz Emad Atabani, M. Mofijur, H.H. Masjuki, Irfan Anjum Badruddin, W.T. Chong, S.F. Cheng, S.W. Gouk | A study of biodiesel production, characterization and engine performance of Manketti (Ricinodendronrautonemii) methyl ester and its blends as a potential biodiesel | University of Malaya (Malaysia); Erciyes University (Turkey) |
| **16** | Chun-hua Qi, Hou-jun Feng, Qingchun Lv, Ke Xu, Ming Zhang | CFD Simulation and Experimental Investigation on Liquid Flow Outside Evaporation Tubes and Its Influence on Heat Transfer | Institute of Seawater Desalination & Multipurpose Utilization, SOA, Tianjin |
| **17** | Yinqi Shen, Sogol Roohparvar, Xianguo Li | Measurement and Prediction of Compressive Behavior of Membrane Electrode Assembly in Proton Exchange Membrane Fuel Cell | University of Waterloo |
| **18** | Liangxu Liu, Hailong Li, Jun Zhao, Li Zhao, Jinyue Yan | Analysis on MEA capture CO2 systemEnergy consumption Characteristics under the Impact of Operating parameters changed and Energy-saving potential pathways Explore  | Tianjin University |
| **19** | Li LI, Jianjun Wang | Examining the Effects of Electrification in Improving the CO2 Emission Intensity of Beijing from 1996 to 2012 | Beijing Information Science & Technology University; North China Electric Power University |
| **20** | Shanshan Qin, Ru Hou, Lin Shen, Jianzhou Wang | Wind Speeds Interval Forecasts Using Back Propagation Neural Network Optimized By Cuckoo Search Optimization Algorithm | Lanzhou University |
| **21** | Swarna K.S.V., GM Shafiullah, Amanullah MT Oo, Alex Stojcevski | Economic And Environmental Analysis Of Hybrid Power System For A Semi-Arid Region | Deakin University |

**III、End of the meeting, all participants return.**