



東亞研究大學協會
東アシア研究國大學協會
동아시아연구중심대학협의회
The Association of East Asian Research Universities



國立臺灣大學
National Taiwan University



能源國家型科技計畫辦公室
National Science and Technology Program - Energy

ACTIVITY REPORT

The 4th AEARU Energy and Environmental Workshop

National Taiwan University

March 29–30, 2012

R100 Conference Hall, Institute of Applied Mechanics, National Taiwan University,
Taiwan

Organized by

National Taiwan University

National Science and Technology Program - Energy

Sponsored by

Office of International Affairs, National Taiwan University

National Science Council, Taiwan

The Association of East Asian Research Universities

Overview

The 4th AEARU Energy and Environmental Workshop was held by National Taiwan University on March 29–30, 2012. The event was held in cooperation with the Association of East Asian Research Universities (AEARU), the International Affairs Office of National Taiwan University, the National Science and Technology Program – Energy (NSTPE) and the National Science Council (NSC) of Taiwan. The workshop was held at R100 Conference Hall, Institute of Applied Mechanics, National Taiwan University in Taipei.

4 main topics were chose for 2 days workshop, that is, “strategy of energy technology”, “energy technology”, “energy conservation and carbon reduction”, “talent cultivation”. With the purpose of promote mutual ideas and information as before, this event provide an international academic exchange platform for AEARU

members and create opportunity for all of the attendees to discuss with professional and expert after every presentation.

Objectives

1. To enhance the investigation of energy and environmental latest issues, information exchange between AEARU members should be uphold and will increase in depth and scope.
2. Encourage collaboration between AEARU members in related fields.
3. Create opportunity and provide a platform for East Asian researchers/scholars to exchange information and knowledge of energy and environmental latest issues.

Keynote Speeches

- Day1. At “Taiwan Energy Situation and Solutions”, Professor Chen introduced current energy situation in Taiwan, addressed what challenges Taiwan was facing and explained solutions that local experts proposed to deal with these challenges.
- Day2. At “Greenhouse Gases Emission via Natural Processes and Their Energy Potential in Taiwan”, Prof. Yang introduced the unique conditions of Taiwan’s geological environment and the greatly potential possibility to develop sustainable energy from the endowed gift from Mother Nature.

Session Topics

With the rapid development of global economic in recent years, our demand of energy keeps increasing. At the same time, the Earth environment and climate were changed and getting worse within these few years as a result of increasing in GHG gas emission. Besides, Asia as an important emerging markets leading in the world's rapid development, the expansion of energy demand is difficult to estimate. So, improve

energy efficiency, develop of renewable energy technology and search for renewable energy source become the most important global issues.

With the theme of environmental care and sustainable energy development as a precondition, 4 main topics were chose and arrange for 6 sessions (oral presentation) held in 2 days workshop. Besides, the host organizers arrange 50 minutes poster session in each day also.

In response to the theme of workshop, we invite papers from postdoctoral, graduate students and researchers for 4 main plenary as mentioned above. Total numbers of papers collected were 68; there were 32 papers for oral presentation and 27 for poster presentation.

Sessions Topics as listed below :

1. Strategy of Energy Technology : 6 papers were collected and 5 papers accepted for oral presentation.
2. Energy Conservation and Carbon Reduction : 29 papers were collected and 26 papers were accepted. 11 papers for oral presentation, 15 papers for poster presentation.
3. Talent Cultivation : 4 papers were collected and 3 papers accepted. 2 papers for poster presentation, 1 paper for oral presentation.
4. Energy Technology : 29 papers were collected and 25 papers were accepted. 15 papers for oral presentation and 10 for poster presentation.

Table 1 : Distribution of papers submitted and the ratio of presentation type in each topic

	Strategy of Energy Technology	Energy Conservation and Carbon Reduction	Talent Cultivation	Energy Technology	Total
Papers Collected	6	29	4	29	68
Oral Presentation	5	11	1	15	32
Poster Presentation	-	15	2	10	27
Exact Number of Papers Presented	5	26	3	25	59

Table 2 : Distribution of domestic and overseas papers presented in 4 main topics

	Strategy of Energy Technology	Energy Conservation and Carbon Reduction	Talent Cultivation	Energy Technology	Total
Domestic	2	18	3	19	42
Oversea(China, Japan, Korea)	3	8	-	6	17
Exact Number of Papers Presented	5	26	3	25	59

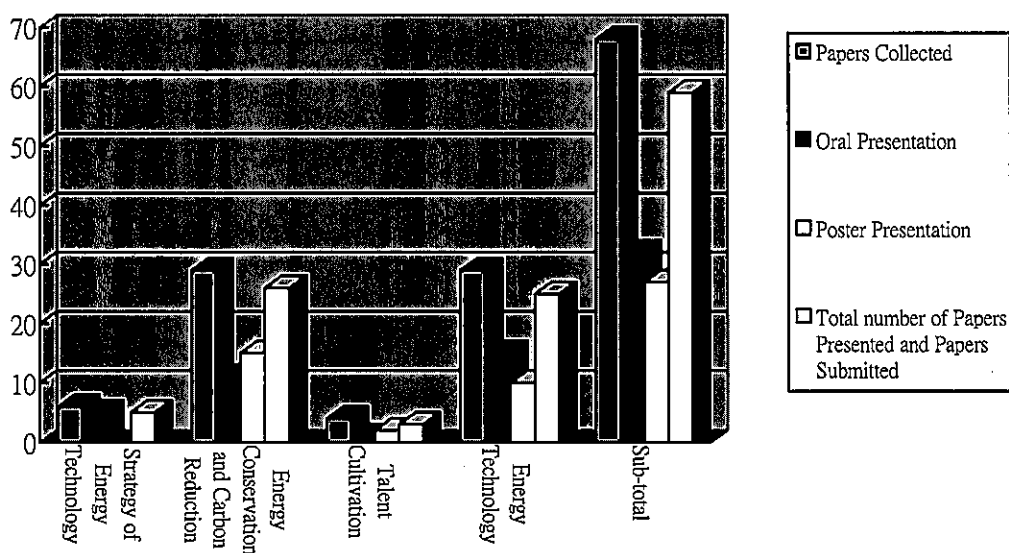


Fig. 1 Distribution of papers submitted and the ratio of presentation type in each topic

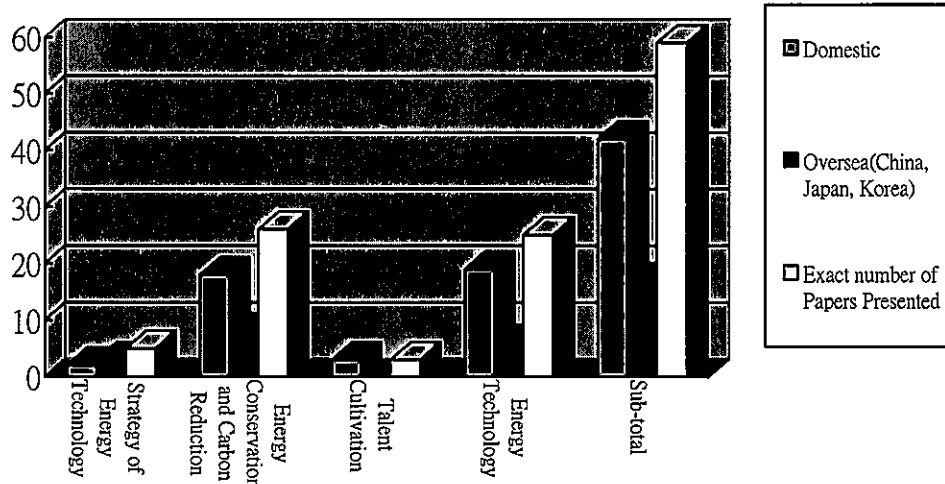


Fig. 2 Distribution of domestic and overseas presented papers in 4 main topics

From Table 1 and Fig. 1 we found that the “Energy Conservation and Carbon Reduction”, “Energy Technology” these two plenary had very high percentage in total papers submitted, accounted for 85% in total. “Strategy of Energy Technology” accounted for 8.8% and “Talent Cultivation” accounted for only 6.2% in total.

Furthermore, the published articles for “Energy Conservation and Carbon Reduction” and “Energy Technology” accounted for 86.44% in total papers accepted. “Strategy of Energy Technology” accounted for only 8.47% and “Talent Cultivation” accounted for 5.09% of total articles.

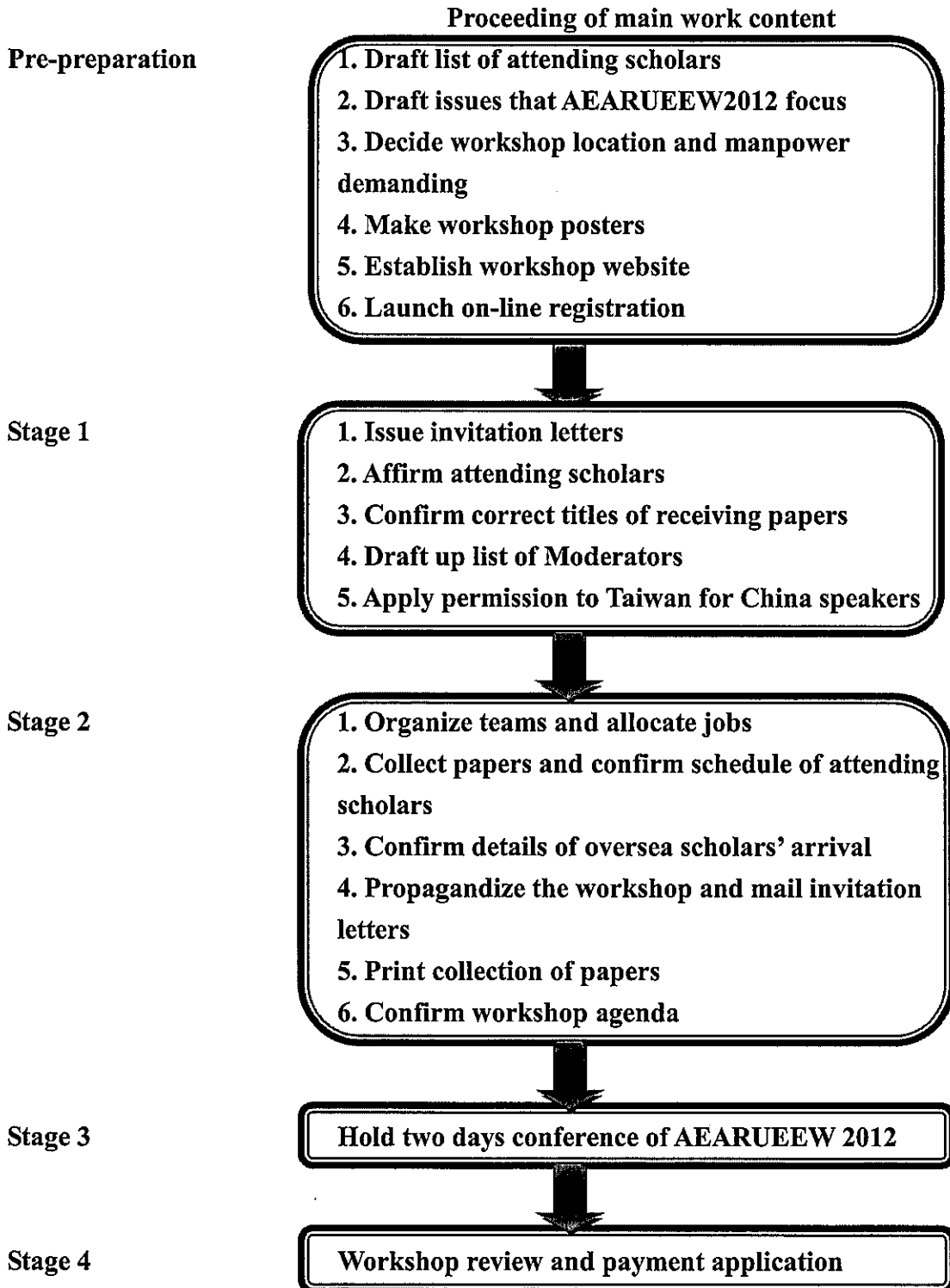
Over three quarters of the total submitted papers fall on “Energy Conservation and Carbon Reduction” and “Energy Technology” these two regions. In conversely, the proportion of “Strategy of Energy Technology” and “Talent Cultivation” were less than a quarter which far behind with the two plenary mentioned above (please refer to Table 2 and Fig. 2). After calculation and analyzed of the data, we conclude that the AEARU members universities pay more attention in practical side such as technology, research and development in energy and renewable energy field.

Analysis according to the geographical perspective, we found that the total numbers of domestic published articles were 42, accounted for approximately 71.

18%. The published papers from oversea were 17, accounted for approximately 28.81%. Followed by the details analysis in 4 plenary, there were 5 published articles for “Strategy of Energy Technology” and 3 papers were from oversea. Surprisingly, there were no papers from AEARU members for “Talent Cultivation” besides of Taiwan; also, shows that Taiwan takes “Talent Cultivation” as a very important part in sustainable management of energy field. For “Energy Conservation and Carbon Reduction”, “Energy Technology” these two plenary, 14 over 51 (total) published articles were from oversea, accounted for 27.45%.

Work Contents and Scope

1. Workshop planning and proceeding



2. Scheduled Progress

Date	Content
December, 2011	Finalize the image poster
	Complete workshop website (call for papers and on-line registration start launching)
	Arrange activities to propagate AEARUEEW 2012
January, 2012	Print out posters and mail to organizations to post up
	Reserve workshop venue and accommodation for attendee
	Confirm scholar list and contact information
	Write an invitation to invite scholars to participate in the workshop
February, 2012	Confirm speech topics of plenary speakers
	Associate with speakers who hasn't replied timely
	Invite moderators and mail them formal invitation letters
	Confirm presence of moderators, oversea speakers as well as Taiwan speakers
	Collect papers and put them to be composed
	Affirm and announce final agenda
	Print collection of papers
March 29-30, 2012	Two days conference of AEARUEEW 2012

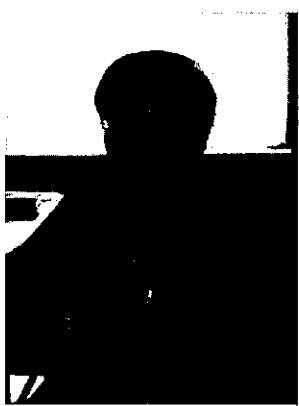
3. Expenditure settlement

	Expenditure List	Debit	Credit
1.	Workshop 2 days expenses (including venue rental, location arrangement and decoration, luncheon and coffee break, etc.)	81,800	
2.	Expenses – invite of 17 oversea speakers (accommodation, meals, Transportation and Entry Permit)	179,616	
3.	Stationery, brochures and souvenirs	68,884	
4.	Wages (part time workers)	38,522	
5.	Others (all of the expenses occur in preparing stage, including ID card, pen, photocopied and etc.)	2,796	
	Total Expenses	371,618	
	Office of International Affair, NTU		247,250
	AEARU secretariat		97,968
	National Science Council		26,400
	Total expenditure/income	<u>371,618</u>	<u>371,618</u>


Keynote Speeches and Agenda

1. Keynote Speakers' CV

(1) Professor Falin Chen

Speaker	Falin Chen		
Title	Taiwan Energy Situation and Solutions		
Time	29th Mar. (Thur.) 9:30 – 10:10		
Venue	R100, International Conference Hall, Institute of Applied Mechanics, National Taiwan University		
Brief Introduction	2008-present	University Chair Professor, National Taiwan University	
	2009-present	Executive Director, National Science & Technology Program for Energy, National Science Council	
	2008-present	Director, Energy Research Center, NTU	
	1994-present	Professor, Institute of Applied Mechanics, NTU	

(2) Professor Tsanyao Frank Yang

Speaker	Tsanyao Frank Yang		
Title	Greenhouse Gases Emission via Natural Processes and Their Energy Potential in Taiwan		
Time	30th Mar. (Fri.) 9:30 – 10:10		
Venue	R100, International Conference Hall, Institute of Applied Mechanics, National Taiwan University		
Professional Experience	2005/8-present	Professor, Department of Geosciences, NTU	
	2005/1-2006/12	Adjunct Research Fellow, National Center for Research on Earthquake Engineering, NARL (Taiwan)	
	1995/8-2005/7	Associate Professor of Geosciences, NTU	
	1998-1999	Visiting Scholar, Earth and Planetary Sciences, Osaka Univ., Japan	
	1993-1995	Instructor, Geology, NTU	
	1993-1994	Post-Doctoral researcher, Woods Hole Oceanography Institution, USA.	

2. Agenda

28 March (Wednesday)		
18:30 – 21:00	Welcome Reception (La Mode Café, Howard Civil Service International House)	
29 March (Thursday)		
08:30 – 09:00	Registration (R100, International Conference Hall, Institute of Applied Mechanics, NTU)	
OPENING SESSION		
09:00 – 09:30	Host	Si-Chen Lee, President, National Taiwan University
09:30 – 10:10	Keynote Speaker	Taiwan Energy Situation and Solutions Falın Chen, University Chair Professor, National Taiwan University
10:10 – 10:30	Coffee Break	
SESSION 1: STRATEGY OF ENERGY TECHNOLOGIES		10:30–12:00
Moderator: Bin-June Huang , Professor of Mechanical Engineering Department, NTU		
1-1 10:30 – 10:45	Taiwan's Recent Efforts to Promote Renewable Energy Development: Policy Measures, Legal Measures, Challenges, and Solutions in the Post-Fukushima Era <i>Anton Ming-Zhi Gao & Yi-Yuan Su</i> Institute of Law for Science and Technology, National Tsing Hua University, Taiwan	
1-2 10:45 – 11:00	Technology Scenarios for Green Innovation and Low Carbon Society <i>Toshihiro Inoue</i> Department of Mechanical Engineering, School of Engineering, The University of Tokyo, Japan	
1-3 11:00 – 11:15	The Household Demand and Willingness to Pay for Electric Vehicles in Shanghai <i>Changhe Li, Libo Wu & Yang Zhou</i> Centre for Energy Economics and Strategy Studies, Fudan University, China	
1-4 11:15 – 11:30	Development of Zero-Energy House in NTU <i>BJ Huang, RH Yen, TF Hou, YH Chuang, TL Lin, KR Lin, YH Yeh, PC Hsu, MY Yeh, YY Hsieh, CT Liu, JF Yeh, LT Wu, PL Chong & JC Wang</i> New Energy Center, Department of Mechanical Engineering, National Taiwan University, Taiwan	
1-5 11:30 – 11:45	Elasticity of Urban Residential Demand for Electricity: A Case Study in Beijing <i>Jin Yana & Zhang Shiqiu</i> Institute of Environment and Economy (IoEE), College of Environmental Sciences and Engineering, Peking University, China	
1-6 11:45 – 12:00	U.S. Interlocal Collaboration on Energy Efficiency, Sustainability and Climate Protection <i>Ssu-Hsien Chen</i> Postdoctoral Fellowship, The Institute of Law for Science and Technology (ILST), National Tsing Hua University, Taiwan	
12:00 – 13:20	Lunch (R111 & 113, Institute of Applied Mechanics, NTU)	
SESSION 2A: ENERGY SAVING & CARBON REDUCTION		13:20–14:50
Moderator: Chin Pan , University Chair Professor, National Tsing Hua University		
2A-1 13:20 – 13:35	Vacuum Insulation Panel – The Essential Technology for Saving Building Energy <i>Jongmin Kim & Tae-Ho Song</i> Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology, Korea	

2A-2 13:35 – 13:50	An Adaptive Secondary Voltage Control for Smart Grid Using Synchrophasor Measurements <i>Yi-Ting Chou & Chih-Wen Liu</i> Department of Electrical Engineering, National Taiwan University, Taiwan
2A-3 13:50 – 14:05	Evaluation of Black Carbon Aerosol from Energy Combustion on Its Radioactive Forcing Effect <i>Zi-Juan Lan, Xiao-Feng Huang & Min Hu</i> School of Environment and Energy, Peking University Shenzhen Graduate School, China
2A-4 14:05 – 14:20	Distributed Real-Time Simulation Modeling and Analysis of a Micro-Grid with Renewable Energy Sources <i>L. Y. Lu, J. H. Liu & C. C. Chu</i> Department of Electrical Engineering, National Tsing Hua University, Taiwan
2A-5 14:20 – 14:35	Numerical Simulation for the Aerodynamic Loading of a Wind Turbine under Gusting Condition <i>Chun-Yu Yang, Yan-Cheng Chen & Jen-Shiang Kouh</i> Department of Electrical Engineering, Institute of Industrial Engineering, National Taiwan University, Taiwan
2A-6 14:35 – 14:50	Flow and Heat Transfer Studies for Helical Heat Exchanger <i>Wei-Cheng Lin, Yuh-Ming Ferng & Ching-Chang Chieng</i> Department of Engineering and System Science, National Tsing Hua University, Taiwan
14:50 – 15:40	Coffee Break & Poster Session (1)*
SESSION 2B : ENERGY SAVING & CARBON REDUCTION 15:40 – 17:10 Moderators: Jyh-Chen Chen, Dean, College of Engineering, National Central University	
2B-1 15:40 – 15:55	Research on Comprehensive Utilization of CO ₂ from Exhaust Gas in the Metallurgical Industry <i>Zhou Zhou, Bingsheng Xu, Hongxin Zhao & Zhangfu Yuan</i> Department of Energy and Resources Engineering, College of Engineering, Peking University, China
2B-2 15:55 – 16:10	Two-Stage Anaerobic Co-Digestion of Sewage Sludge and Rice Straw for the Sequential Production of Hydrogen and Methane <i>Mijung Kim, Saori Matsuo, Yingnan Yang & Zhenya Zhang</i> Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan
2B-3 16:10 – 16:25	Oxy-Combustion of a CH ₄ /H ₂ Jet in Hot Coflow <i>Zhenfeng Mei, Feifei Wang, Pengfei Li & Jianchun Mi</i> Department of Energy and Resources Engineering, College of Engineering, Peking University, China
2B-4 16:25 – 16:40	Waste Activated Sludge Pretreatment by TiO ₂ Photocatalysis <i>Chunguang Liu, Yingnan Yang, Qinghong Wang, Yingxin Zhao, Jie Chen & Zhenya Zhang</i> Graduate School of Life and Environmental Science, University of Tsukuba, Japan
2B-5 16:40 – 16:55	Short Term Analysis on AP1000 Containment Cooling System Response under LOCA Conditions <i>Zhen-Yu Hung, Yen-Shu Chen, Yuh-Ming Ferng & Bau-Shei Pei</i> Institute of Nuclear Engineering and Science, National Tsing Hua University, Taiwan
2B-6 16:55 – 17:10	Characteristic Analysis and Energy Evaluation for the Photovoltaic-assisted Generation System in the Closed Plant Factory <i>Jui-Jen Chou, Jen-Cheng Wang, Tzu-Shiang Lin, Yu-Ting Liang, Yu-Li Su, Kun-Chang Kuo, Jyh-Cherng Shieh & Joe-Air Jiang</i> Department of Bio-Industrial Mechatronics Engineering, National Taiwan University, Taiwan
19:00 – 21:00	Conference Dinner (14F, Howard Civil Service International House)

30 March (Friday)

08:30 – 09:30	Registration (R100, International Conference Hall, Institute of Applied Mechanics, NTU)	
09:30– 10:10	Keynote Speaker	Greenhouse Gases Emission via Natural Processes and Their Energy Potential in Taiwan Tsan-Yao Yang, Professor, Department of Geosciences, NTU
10:10– 10:30	Coffee Break	
SESSION 3 : TALENT CULTIVATION		10:30 – 11:45
Moderator: Ching-Hua Luo, Vice President for Academic Affairs, National Taiwan University		
3-1 10:30 – 10:45	Shale Gas Prospects of South China <i>Haibin Li & Dong Jia</i> Institute of Energy Sciences, Department of Earth Sciences, Nanjing University, China	
3-2 10:45 – 11:00	To Establish The Resource Center for Talent Training Model in Biomass Energy Technology - A Case Study of Taiwan <i>Chen-Yeon Chu, Ya-Ling Liu, Hsin-Hui Tsai & Chiu-Yue Lin</i> Green Energy Development Center, Feng Chia University, Taiwan	
3-3 11:00 – 11:15	Measurement of Online Energy Education Mechanism during Crisis Event <i>Deng Zhe & Ji XiaoCong</i> School of Public Policy and Management, Tsinghua University, China	
3-4 11:15 – 11:30	Napier Grass as a Potent Inducer of Cellulase Production in Filamentous Fungi <i>Samuel C. Chang, Zhi-Ming Shen, Wen-Chuan Ma, Jiun-Ly Chir, Yu-Kuei Cheng, Su-May Yu & Tuan-Hua David Ho</i> Biotechnology Center in Southern Taiwan, Academia Sinica, Taiwan	
3-5 11:30 – 11:45	Application of Stand-alone Solar PV Systems in Remote Area (Ali Tribe) <i>Bin-Juine Huang, Po-Chien Hsu, Wei-Min Tseng & Yin-Chen Huang</i> New Energy Center, Department of Mechanical Engineering, National Taiwan University, Taiwan	
11:45 – 13:20	Lunch (R111 & 113, Institute of Applied Mechanics, NTU)	
SESSION 4A : ENERGY TECHNOLOGIES		13:20 – 14:50
Moderator: Jia-Yush Yen, Dean of College of Engineering, National Taiwan University		
4A-1 13:20 – 13:35	A Novel Solar BIPV Using One-Axis 3-Position Sun Tracker <i>Bin-Juine Huang, Yin-Chen Huang & Guan-Yu Chen</i> New Energy Center, Department of Mechanical Engineering, National Taiwan University, Taiwan	
4A-2 13:35 – 13:50	Self-Organized 3-D Nanostructures for Photon Harvesting <i>Qingfeng Lin, Rui Yu, Kwong-Lung Ching, Siu-Fung Leung, Diaz Arcrossito & Zhiyong Fan</i> Department of Electronic and Computer Engineering, Hong Kong University of Science and Technology, China	
4A-3 13:50 – 14:05	High-Efficiency Low Color Temperature Organic Light Emitting Diodes with Solution-Processed Emissive Layer <i>Wei-Ben Wang, Jwo-Huei Jou, Yung-Cheng Jou, Yu-Lin Cheng & Cheng-Wei Lin</i> Department of Chemistry, National Tsing Hua University, Taiwan	

4A-4 14:05 – 14:20	Metabolic Engineering of <i>Jatropha Curcas</i> to Produce Bio-industrial Oils <i>Chin-Hui Shen, Wan-Ying Wu, Zhi-Yu Tsai, Hang Lin & Kai-Wun Yeh</i> Institute of Plant Biology, National Taiwan University, Taiwan
4A-5 14:20 – 14:35	Dependence of Load Capacity on Rotational Speed of Axial Active Magnetic Bearing for Power Industry <i>Ding Chao, Yang Xiaoyong, Wang Jie & Yu Suyuan</i> Institute of Nuclear and New Energy Technology, Tsinghua University, China
4A-6 14:35 – 14:50	Surface Modification of Graphene-Supported Platinum for Enhancing Its Catalytic Activity on Oxygen Reduction <i>Tai-Feng Hung, Bei Wang, Chi-Wen Tsai, Meng-Hsiu Tu, Guo-Xiu Wang, Ru-Shi Liu, Din Ping Tsai, Der-Shiuh Shy & Xue-Kun Xing</i> Department of Chemistry, National Taiwan University, Taiwan
14:50 – 15:40	Coffee Break & <u>Poster Session (2)*</u>
SESSION 4B : ENERGY TECHNOLOGIES 15:40– 17:10 Moderator: <u>Shiang-Tai Lin</u> , Professor of Chemical Engineering Department, National Taiwan University	
4B-1 15:40 – 15:55	Simple Block Model for Dissolution Process of Hydrogen into Polymer Material <i>Shinobu Sekine & Toshihiro Kawakatsu</i> Department of Physics, Tohoku University, Japan
4B-2 15:55 – 16:10	Fabrication of Si Thin Foil for Photovoltaic <i>Shu-Chia Shiu, Keng-Lam Pun, Tzu-Ching Lin, Hong-Jhang Syu, Jiun-Jie Chao & Ching-Fuh Lin</i> Graduate Institute of Photonics and Optoelectronics, National Taiwan University, Taiwan
4B-3 16:10 – 16:25	Autoclaving Treatment of Wastepaper <i>Chia-Chi Chang, Y.C. Wang, Z.S. Hung, S.W. Chiang, J.L. Shie, Y.S. Li, Y.H. Chen, C.F Ho & C.Y. Chang</i> Graduate Institute of Environmental Engineering, National Taiwan University, Taiwan
4B-4 16:25 – 16:40	Influence of Reactants Condition on Moderate or Intense Low-Oxygen Dilution (MILD) Combustion in a Recuperative Furnace <i>Feifei Wang, Jianchun Mi, Zhenfeng Mei & Pengfei Li</i> State Key Laboratory of Turbulence & Complex Systems, Department of Energy & Resources Engineering, College of Engineering, Peking University, China
4B-5 16:40 – 16:55	Recycling of Kerf Loss Silicon from Cutting Slurry Waste for Solar Cell Applications <i>Chia-Fu Yang & Chung-Wen Lan</i> Department of Chemical Engineering, National Taiwan University, Taiwan
4B-6 16:55 – 17:10	Band Gap Engineering on Conjugated Polymers for High Efficiency Organic Solar Cells <i>Ying-Chieh Hung & Shiang-Tai Lin</i> Department of Chemical Engineering, National Taiwan University, Taiwan
CLOSING SESSION	
17:10– 17:20	Closing Remark Cheng-Liang Chen Professor, Department of Chemical Engineering, National Taiwan University

*POSTER SESSION 1 : ENERGY SAVING & CARBON REDUCTION		14:50 – 15:40
P1-1	Energy Balance and GHG Emissions of Cassava-based Fuel Ethanol Within Different Planting Models <i>Beibei Liu, Feng Wang & Jun Bi</i> State Key Laboratory of Pollution Control & Resource Reuse, School of Environment, Nanjing University, China	
P1-2	The CO ₂ Reduction Effects and Climate Benefit of Beijing 2008 Summer Olympics Green Practice <i>Dan Wu, Shiqiu Zhang, Jianhua Xu, Tong Zhu & Yuyang Zhou</i> College of Environmental Sciences and Engineering, Peking University, China	
P1-3	Past Penguin and Seal Response to Climate Change in Antarctica <i>Tao Huang, Liguang Sun & Yuhong Wang</i> Institute of Polar Environment, School of Earth & Space Sciences, University of Science & Technology of China, China	
P1-4	Numerical Simulation on CO ₂ Sequestration in Saline Formations with Natural or Hydraulic Fractures: Based on Shen Hua CCS Project <i>Xuan Liu & Bin Gong</i> Energy & Resources Simulation Lab, Department of Energy & Resources Engineering, College of Engineering, Peking University, China	
P1-5	Optimal Patent Licensing Strategy under Vertical Cross-Ownership <i>Pu-Ti Su</i> National Science & Technology Program-Energy, National Taiwan University, Taiwan	
P1-6	The Standard, Testing, and Certification of Small Wind Turbines in Taiwan <i>Yuan-Kung Wu, Huei-Jeng Lin, & Chih-Hao Lin</i> Department of Electrical Engineering and Institute of Industrial Engineering, National Taiwan University, Taiwan	
P1-7	Detection of Preferential Groundwater Flow Pathways in the Fractured Rock for Radioactive Waste Disposal <i>Tsai-Ping Lee, Yeeping Chia, Mao-Hua Teng, Li Chung, Chen-Wuing Liu & Tai-Tien Wang</i> Department of Geosciences, National Taiwan University, Taiwan	
P1-8	Synthesis of Industrial Energy Systems Through Total Site Integration <i>Chih-Yao Lin & Cheng-Liang Chen</i> Department of Chemical Engineering, National Taiwan University, Taiwan	
P1-9	Visualizing Technology Evolution and Detecting Hot Topics in Smart Grid Technology <i>Dar-Zen Chen and Ssu-Han Chen</i> Department of Mechanical Engineering & Institute of Industrial Engineering, National Taiwan University, Taiwan	
P1-10	Enhanced Recovery of Light-soaked Micromorph Solar Cells as Compared with Single Junction Amorphous Solar Cells <i>T.-M. Chao, H.-C. Sun, Y.-J. Yang, C. W. Liu, W.-Y. Lin, C.-C. Bi & C.-H. Yeh</i> Department of Electrical Engineering & Graduate Institute of Electronics Engineering, National Taiwan University, Taiwan	
P1-11	Synthesis and Design of Chilled Water Networks <i>Jui-Yuan Lee, Tong-Lin Wen & Cheng-Liang Chen</i> Department of Chemical Engineering, National Taiwan University, Taiwan	
P1-12	Silica Geothermometer on Temperature Evaluation of Reservoir in the Chingshui Geothermal Field <i>Chia-Mei Liu, Sheng-Rong Song & Yi-Chia Lu</i> Institute of Geosciences, National Taiwan University, Taiwan	
P1-13	Porewater Geochemistry Study and Numerical Simulation of Cored Sediments in Gas Hydrate Potential Area Offshore SW Taiwan <i>Pei-Chuan Chuang, Andrew W. Dale, Klaus Wallmann, Matthias Haeckel, Tsanyao Frank Yang, Nai-Chen Chen, Hsiao-Chi Chen, Hsuan-Wen Chen, Saulwood Lin, Chih-Hsien Sun, Chen-Feng You, Yunshuen Wang and San-Hsiung Chung</i> Department of Geosciences, National Taiwan University, Taiwan	
P1-14	Effects of Light Quality and Intensity on Biogas Upgrading and Biogas Slurry Purification by <i>Chlorella vulgaris</i> <i>Zheng Zheng, Cheng Yan, Xiao-Ying Yang, Bo Li, Dong Wang, Jun-Cheng Qian, Er Nie</i> Department of Environmental Science and Engineering, Fudan University, China	
P1-15	TiO ₂ : Rh-LHC Photocatalyst to Reduce CO ₂ into Hydrocarbons <i>Chien-Wei Lee, Jeffrey C. S. Wu, Rea Antoniou Kourouniotti, Mercedes Maroto-Valer, Erik Murchie & Sasha Ruban</i> Department of Chemical Engineering, National Taiwan University, Taiwan	
P1-16	Photocatalytic Separate Evolution of Hydrogen and Oxygen Over Highly Ordered Nanorods, Mesoporous, and Bulk TiO ₂ thin Films <i>Chao-Wei Huang, Yu-Te Liao, Chi-Hung Liao, Kevin Chia-Wen Wu & Jeffrey C. S.</i>	

	Department of Chemical Engineering, National Taiwan University, Taiwan
P1-17	In the Reaction Sites Enhancing Cathodic Efficiency in μ -Pemfcs by Thinkness Controlled Nafion® Covering Microribs supported Mwcnts <i>Chung-Nan Wang, Hsien-Chih Peng, Yi-Shiuan Wu, Tsung-Kuang Yeh, Rong-Long Pan, & Fan-Gang Tseng</i> Department of Engineering and System Science, National Tsing Hua University, Taiwan
*POSTER SESSION 2 : ENERGY TECHNOLOGIES 14:50 – 15:40	
P2-1	Synergetic Effect of HEDP, HPMA and PAA on Calciumcarbonate Scaling <i>Zhanhui Shen, Jinju Geng, Ke Xu & Hongqiang Ren</i> State Key Laboratory of Pollution Control & Resource Reuse, School of the Environment, Nanjing University, China
P2-2	Investigation of Clean Particles in a Tube Flow with a Rotating Insert <i>Lei Chen, Zhenhai Pan & Hao Wang</i> Department of Energy & Resources Engineering, College of Engineering, Peking University, China
P2-3	Combustion Properties of Biomass Pyrolysis Oil <i>Dong Zhang, Tan Long, and Xifeng Zhu</i> Key Laboratory for Biomass Clean Energy of Anhui Province, University of Science and Technology of China, China
P2-4	Separation of an Acetone-Methanol Azeotropic Mixture by Using an Extractive Divided-Wall Column with Water as Entrainer <i>Paul Hen-Chia Hsu, Yi-Chang Wu & I-Lung Chen</i> Department of Chemical Engineering, National Taiwan University, Taiwan
P2-5	Recovery of Lactic Acid From Fermentation Broth by Reactive Distillation <i>Chien-Yuan Su, Cheng-Ching Yu & Jeffrey D. Ward</i> Department of Chemical Engineering, National Taiwan University, Taiwan
P2-6	Multi-Band Gap Sensitized ZnO Photoelectrode of Water Splitting: Electron Transfer Mechanism by X-ray Absorption Spectroscopy <i>Chih Kai Chen, Hao Ming Chen, Chun Che Lin, Ru-Shi Liu, Heesun Yang, Wen-Sheng Chang, Kuei-Hsien Chen, Ting-Shan Chan, Jyh-Fu Lee, and Din Ping Tsai</i> Department of Chemistry, National Taiwan University, Taiwan
P2-7	Influence of Inter Facial Phases on Thermal Conduction of the Direct Bonded Cu/Al ₂ O ₃ Interface <i>Shao-Kuan Lee & Wei-Hsing Tuan</i> Department of Material Science and Engineering, National Taiwan University, Taiwan
P2-8	Film Inhomogeneity Analysis of Cu(In, Ga)Se ₂ And Silicon For Efficiency Consistency Between Module and Cell <i>S.-W. Tan, W.-W. Hsu, W. -S. Ho & C. W. Liu</i> Graduate Institute of Electronics Engineering and Department of Electronics Engineering, National Taiwan University, Taiwan
P2-9	Criticality Calculations on HTR-10 Using MCNP5 and SCALE6 <i>Meng-Jen Wang, Jinn-Jer Peir & Jenq-Horng Liang</i> Institute of Nuclear Engineering and Science, National Tsing Hua University, Taiwan
P2-10	MAAP 5 Simulating Sever Accidents in the Lungmen Nuclear Power Plant <i>Shih-Ying Wu & Yuh-Ming Ferng</i> Department of Engineering & System Science, National Tsing Hua University, Taiwan
P2-11	Safety Assessment of FPGA Based RPS System for Lungmen NPP <i>Jun-Jen Lu, Hwai-Pwu Chou & Kin-Wah Wong</i> Department of Engineering & System Science, National Tsing Hua University, Taiwan
P2-12	Electrode and Electrolyte Materials of Lithium Ion Batteries for Energy Storage <i>Linchao Zhang & Chunhua Chen</i> Department of Materials Science & Engineering, University of Science & Technology of China, China
P2-13	Crown Ether Functionalized Polysiloxane Resin as Potential Adsorbent for the Treatment of Radioactive Liquid Waste <i>Gang Ye, Feifei Bai, Jichao Wei, Jianchen Wang and Jing Chen</i> Institute of Nuclear & New Energy Technology, Tsinghua University, China
P2-14	Multilayered Polyelectrolyte Complex Membranes for Pervaporation <i>Wei-Che Wu, Kuang-Liang Liu, Da-Ming Wang</i> Department of Chemical Engineering, National Taiwan University, Taiwan
P2-15	The Effects of Knowledge, Values, and Sense of Moral Obligation on Global Warming Mitigation <i>Ruey-Ling Chu, Shu-Wen Yang & Feng-Chun Hsiung</i> Institute of Ethnology, Academia Sinica, Taiwan
P2-16	Extracting the Evolutional Gap between Science and Technology Front - A Case Study of Smart Grid <i>Mu-Hsuan Huang & Chen-Ching Chang</i> Department of Library and Information, National Taiwan University, Taiwan

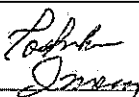

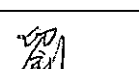
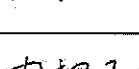
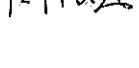
Appendix 1

Attendee's Signatures List

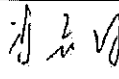

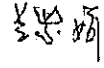
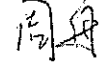
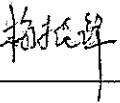

1. VIP


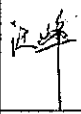
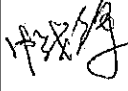
	VIP	Signature
Host	Si-Chen Lee	
Keynote speaker	Falin Chen	
Keynote speaker	Tsanyao Frank Yang	
Moderator	BJ Huang	
Moderator	Chin Pan	
Moderator	Jyh-Chen Chen	
Moderator	Ching-Hua Lwo	
Moderator	Jia-Yush Yen	
Moderator	Shiang-Tai Lin	

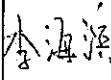


2. Japan and Korea

Name	Nationality	University	Signature
Toshihiro Inoue	Japan	Department of Mechanical Engineering, School of Engineering, The University of Tokyo	
Mijung Kim	Japan	Graduate School of Life and Environmental Sciences, University of Tsukuba	
Chunguang Liu	Japan	Graduate School of Life and Environmental Science, University of Tsukuba	
Shinobu Sekine	Japan	Department of Physics, Tohoku University	
Jongmin Kim	Korea	Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology	


3. China

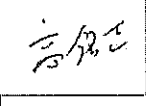
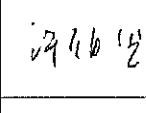
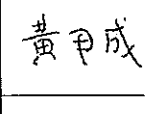
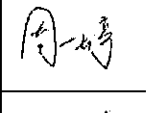
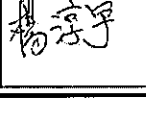
Name	Nationality	Univerity	Signature
Changhe Li	China	Centre for Energy Economics and Strategy Studies, Fudan University	
Jin Yana	China	Institute of Environment and Economy (IoEE), College of Environmental Sciences and Engineering, Peking University	
Zi-Juan Lan	China	Key Laboratory for Urban Habitat Environmental Science and Technology, School of Environment and Energy, Peking University	
Zhou Zhou	China	Department of Energy & Resources Engineering, College of Engineering, Peking University	
Zhenfeng Mei	China	Department of Energy & Resources Engineering, College of Engineering, Peking University	
Feifei Wang	China	State Key Laboratory of Turbulence & Complex Systems, Department of Energy & Resources Engineering, College of Engineering, Peking University	

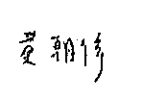
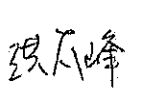
Name	Nationality	Univerity	Signature
Cheng Yan	China	Department of Environmental Science and Engineering, Fudan University	
Yuyang ZHOU	China	College of Environmental Sciences and Engineering, Peking University	
Xuan Liu	China	Energy & Resources Simulation Lab, Department of Energy & Resources Engineering, College of Engineering, Peking University	
Lei Chen	China	COE Laboratory Of Heat And Mass Transport At Micro-Nano Scale Department of Energy & Resources Engineering, College of Engineering, Peking University	
Feng WANG	China	State Key Laboratory of Pollution Control & Resource Reuse, School of Environment, Nanjing University	
Zhanhui Shen	China	State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University	

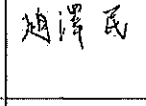
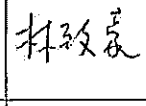
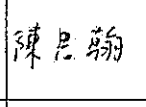
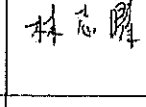
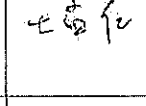
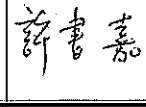
Hatbin Li	China	Institute of Energy Sciences and Department of Earth Sciences, Nanjing University	
Deng Zhe	China	School of Public Policy and Management, Tsinghua University	
Ding Chao	China	Institute of Nuclear and New Energy Technology, Tsinghua University	
Qingfeng Lin	China	Department of Electronic and Computer Engineering, Hong Kong University of Science and Technology	

4. Taiwan

Name	Nationality	Univerity	Signature
Wei-Ben Wang	Taiwan	Department of Chemistry, National Tsing Hua University	
Samuel C. Chang	Taiwan	Biotechnology Center in Southern Taiwan, Academia Sinica	
Prof. Chen-Yeon Chu	Taiwan	Green Energy Development Center, Feng Chia University	
Wei-Cheng Lin	Taiwan	Department of Engineering and System Science, National Tsing Hua University	
L. Y. Lu	Taiwan	Department of Electrical Engineering, National Tsing Hua University	
Zhen-Yu Hung	Taiwan	Institute of Nuclear Engineering and Science, National Tsing Hua University Hsinchu	

Name	Nationality	Univerity	Signature
Anton Ming-Zhi Gao	Taiwan	Institute of Law for Science and Technology, National Taiwan University	
Po-Chien Hsu	Taiwan	New Energy Center, Department of Mechanical Engineering, National Taiwan University	
Yin-Chen Huang	Taiwan	New Energy Center, Department of Mechanical Engineering, National Taiwan University	
Yi-Ting Chou	Taiwan	Department of Mechanical Engineering, National Taiwan University	
Chun-Yu Yang	Taiwan	Department of Engineering Science and Ocean Engineering, National Taiwan University	

Name	Nationality	Univerity	Signature
Jui-Yuan Lee	Taiwan	Department of Chemical Engineering, National Taiwan University	
Chien-Wei Lee	Taiwan	Department of Chemical Engineering, National Taiwan University	
Chao-Wei Huang	Taiwan	Department of Chemical Engineering, National Taiwan University	
Paul Hen-Chia Hsu	Taiwan	Department of Chemical Engineering, National Taiwan University	
Chien-Yuan Su	Taiwan	Department of Chemical Engineering, National Taiwan University	
Chin-Hui Shen	Taiwan	Institute of Plant Biology, National Taiwan University	
Chia-Chi Chang	Taiwan	Graduate Institute of Environmental Engineering, National Taiwan University	
Tai-Feng Hung	Taiwan	Department of Chemistry, National Taiwan University	

Name	Nationality	Univerity	Signature
T.-M. Chao	Taiwan	Department of Electrical Engineering and Graduate Institute of Electronics Engineering, National Taiwan University	
Chih-Hao Lin	Taiwan	Department of Electrical Engineering and Institute of Industrial Engineering, National Taiwan University	
Ssu-Han Chen	Taiwan	Department of Mechanical Engineering and Institute of Industrial Engineering, National Taiwan University	
Chih-Yao Lin	Taiwan	Department of Chemical Engineering, National Taiwan University	
Mong-Jen Wang	Taiwan	Institute of Nuclear Engineering and Science, National Tsing Hua University	
Shu-Chia Shlu	Taiwan	Graduate Institute of Photonics and Optoelectronics, National Taiwan University	

Name	Nationality	Univerity	Signature
Pu-Ti Su	Taiwan	National Science & Technology Program-Energy, National Taiwan University	蘇其提
Tsai-Ping Lee	Taiwan	Department of Geosciences, National Taiwan University	李存平
Chia-Mei Liu	Taiwan	Institute of Geosciences, National Taiwan University	劉佳敏
Pei-Chuan Chuang	Taiwan	Department of Geosciences, National Taiwan University	莊佩娟
Shao-Kuan Lee	Taiwan	Department of Material Science and Engineering, National Taiwan University	李劭寬
Chen-Ching Chang	Taiwan	Department of Library and Information Science, National Taiwan University	張政廷

Name	Nationality	Univerity	Signature
Ruey-Ling Chu	Taiwan	Department of Psychology, National Taiwan University	朱瑞玲
Chung-Nan Wang	Taiwan	Department of Engineering and System Science, National Tsing Hua University	王中寧
Wei-Che Wu	Taiwan	Department of Chemical Engineering, National Taiwan University	伍緯奇
Feng-Chun Hsiung	Taiwan	Department of Psychology, National Taiwan University	熊鳳春
Jun-Jen Lu	Taiwan	Department of Engineering and System Science, National Tsing Hua University	盧中君
Yuh-Ming Ferng	Taiwan	Department of Engineering and System Science, Institute of Nuclear Engineering and Scienc, National Tsing Hua University	吳思穎

5. On-Site Registration

Organization	Title	Signature
National Cheng Kung University	Ph.D. Student	
南科中研院生質能源組	博士生	黃政慧
大安安工		王中平
機械系	副教授	張國清
顯博	監	翁
台大生機系	研勞助理	楊政瑄
台大化工所	學生	李若祥
一附民衆		劉金達
台大電子所	博	許宇臻
台大電子所	博	楊哲育
台大電子所	碩士	張錦昇

Organization	Title	Signature
台大能源中心	Ph.D. doc	曾國鈞
松山社區大學		龔立群(社)
台大光電中心		Yueh-hu
台大法律系	碩士生	李沛元
Efficiency Ent.	MR.	Robert
台大能源研究中心	研究員	呂錫民
台大地質所	博士後	莊佩娟
文化中心與中國大排所	博士	吳俊德
台大地質系		楊中平
NCREE	Research Fellow	Vivian Wili
NCREE	Visiting Professor	Chun-Hua

Organization	Title	Signature
光電中心	研究生	Amudun
智慧能源研究中心	專任助理	王馨馨
台灣大學	學生	陳德進
台灣大學	學生	陳致宏
台大校友	校友	李弘文
台大	學生	吳柏亨
台大	學生	邱政祥
臺大	學生	鄭天倫
中研院南部王技中心	博士後研究	蔡昌廷
GITE, NTU	Student	陳世傑
NTU	student	游勝閣

Organization	Title	Signature
應力所	學生	吳正輝
能源中心	助理	郭振振
信科大	教授	蔡文田
環工所	學生	潘建元
化工所	學生	黃吳漢
水台大	學生	胡美娟
清華大學	教授	錢翠蒂
臺灣大學	學生	林育丞
臺灣大學	學生	陳展慧
成大生科所	PHD student	高隆融
中研院南部王技中心	post doc	蔡昌廷

Organization	Title	Signature
台大光電所	院長	林清富
台大工本所管組	碩士生	陳龍
國寶金業	MBA	R. beta
台大物理系	碩士生	Chung Kuo
台大法學院	碩士生	李祥全
台大光電中心	助理	羅宗信
'	助理	張馨文
銀光中心	研助	許明輝
DeSales Alumni		張
應力所	助理	江政融
台大光電所	博士生	王博昇

Organization	Title	Signature
台北	學生	洪晉文
台北(科發國際)	企業人士	SHEN 全
台大光電中心	助理	羅宗信
台大	學生	侯宗誠
中研院民族所	助理	楊海雲
清華大學	博士生	盧俊仁
台大 PSE	研究生	徐立文
台大 PSE	研究生	洪士記
能源研究中心	助理	張麗之
應力所	助理	江政融

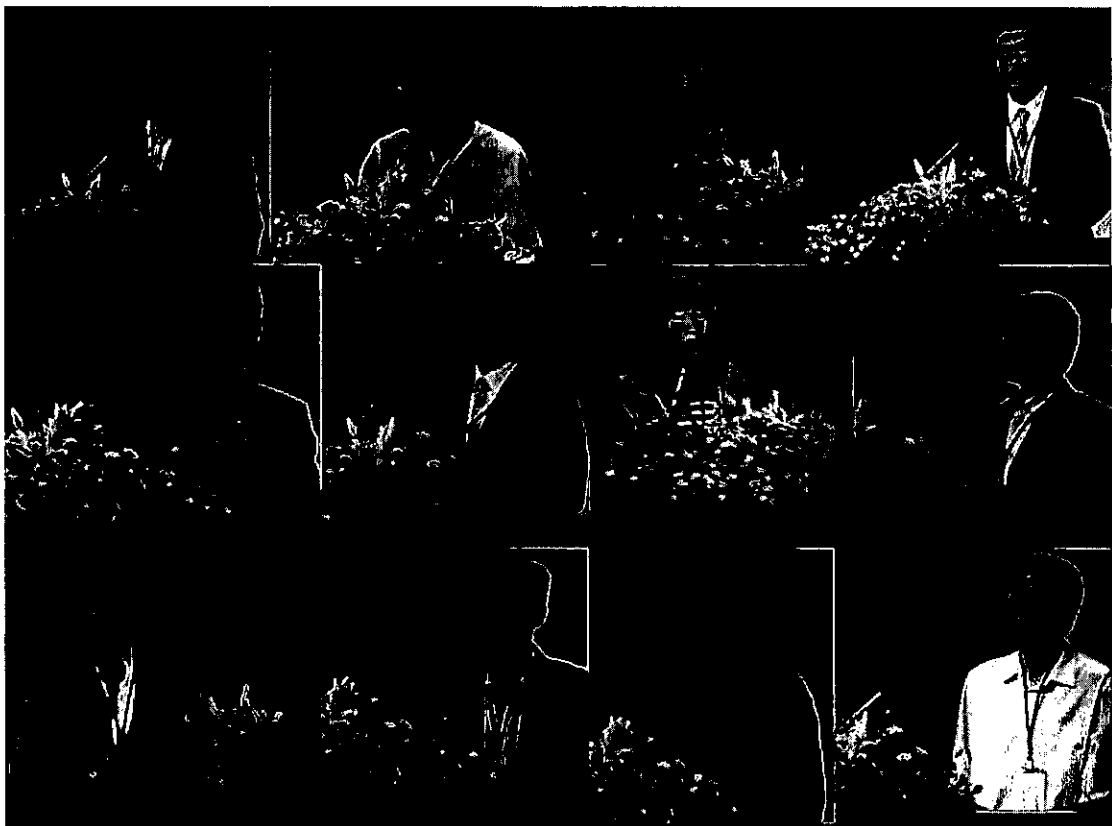
Organization	Title	Signature
台大能源中心		吳俞斌
'		徐文慧
'		謝瑞真
'		陳新謙
台大化學系		劉仁
台大化學		陳政如
台大能源中心		陳穎萱
台大能源中心		林雨倫
台大化工		陳笑學

Activities Photos

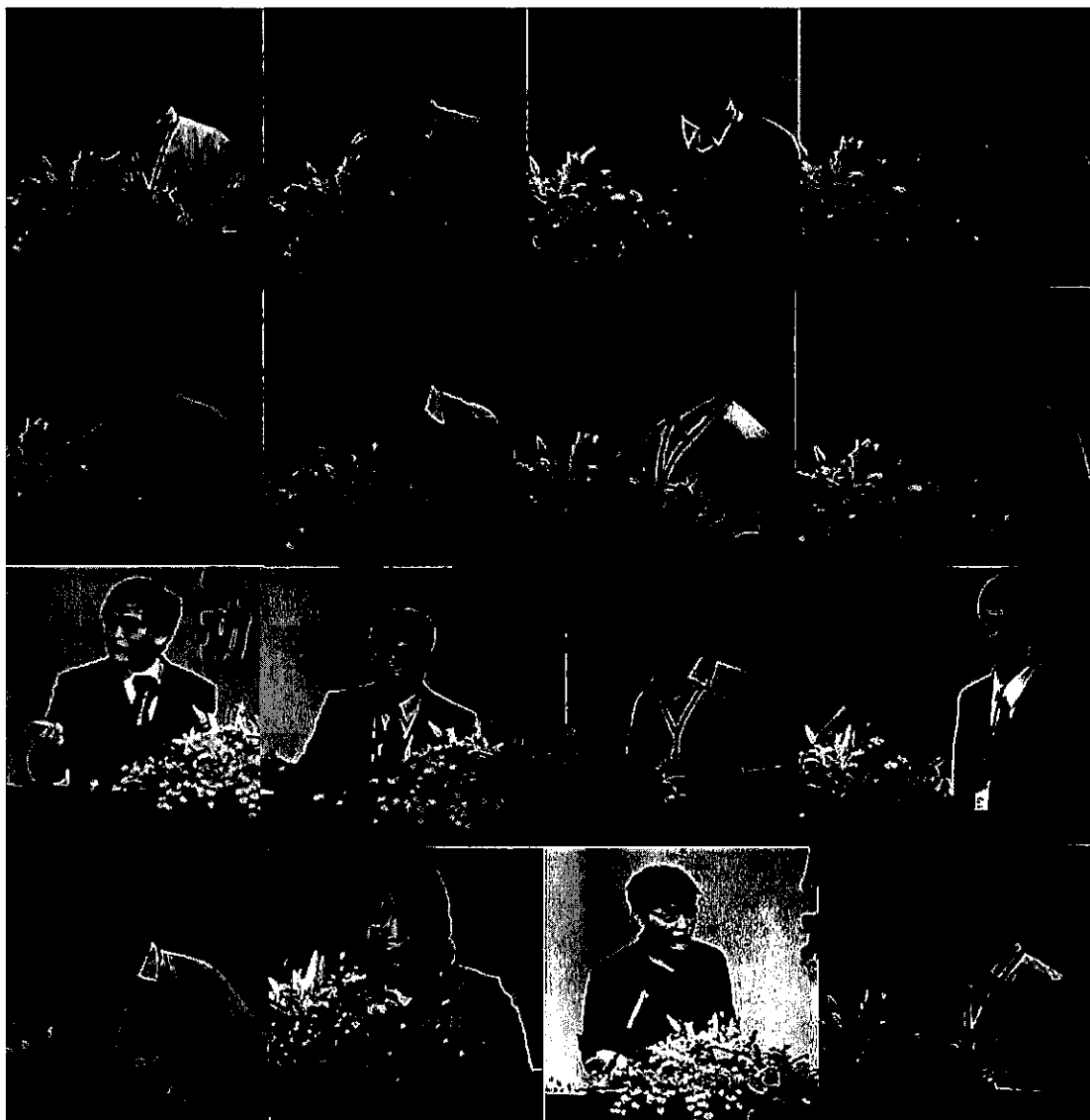
1. Chair, Keynote Speakers, Moderators



2. Oversea Speakers



3. Taiwan Speakers



4. Venue



5. March 29-30 Workshop

Registration



Service Center



Workshop Photos



Opening Remark by President Si-Chen Lee, Chair of AEARUEEW 2012

AEARUEEW 2012 officially began at 9a.m., March 29, accompanied by President Si-Chen Lee's opening remark. Dr. Lee, president of NTU, stated that each AEARU member university is a part of the global village and thus shall undertake the obligation and be responsible for solving problems related to global warming and energy shortage. Besides, the importance of energy saving and carbon reduction can't be emphasized too much. He also addressed that every attendee was welcomed to the workshop and sincerely wished the holding of this workshop would benefit every attendee a lot.



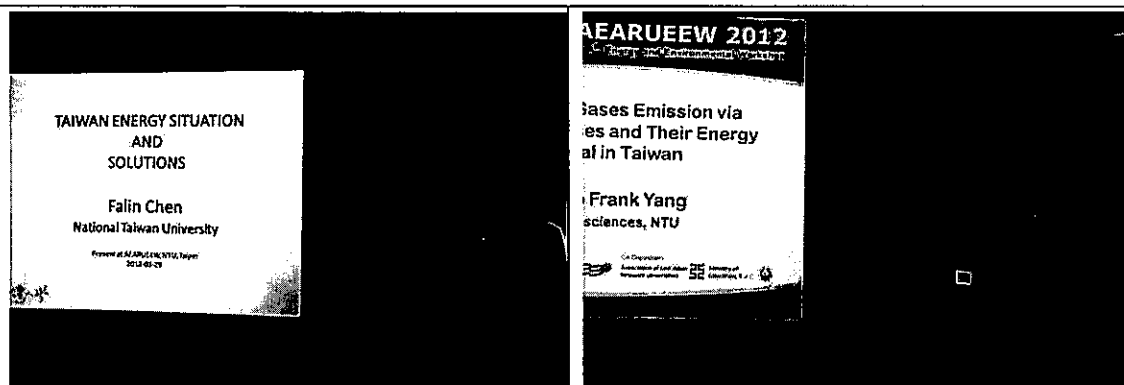
Keynote speeches

The keynote speeches were delivered by Prof. Falin Chen, Executive Director, National Science & Technology Program for Energy, and Prof. Tsanyao Frank Yang, Department of Geosciences, National Taiwan University.

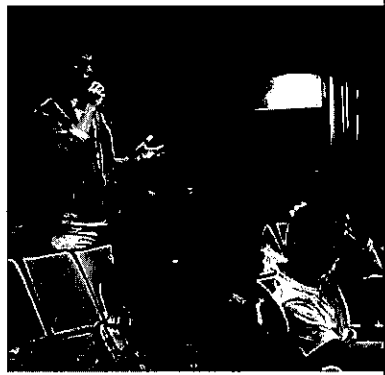
Day1. At “Taiwan Energy Situation and Solutions”, Professor Chen introduced current energy situation in Taiwan, addressed what challenges Taiwan was facing and explained solutions that local experts proposed to deal with these challenges.

Day2. At “Greenhouse Gases Emission via Natural Processes and Their Energy Potential in Taiwan”, Prof. Yang introduced the unique conditions of Taiwan’s geological environment and the greatly potential possibility to develop sustainable energy from the endowed gift from Mother Nature.

The two forty-minutes keynote speeches significantly help domestic and oversea attendees understand the current energy situation of Taiwan and acknowledge endeavors and resolutions Taiwan showed while facing the energy shortage and Greenhouse effect.



Q&A



Discussion



6. Poster Session

March, 29



March, 30

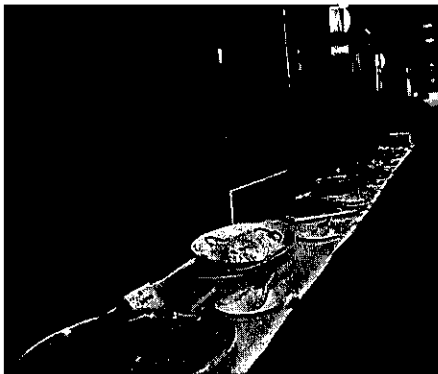


7. March, 29-30 Tea Time and Banquet

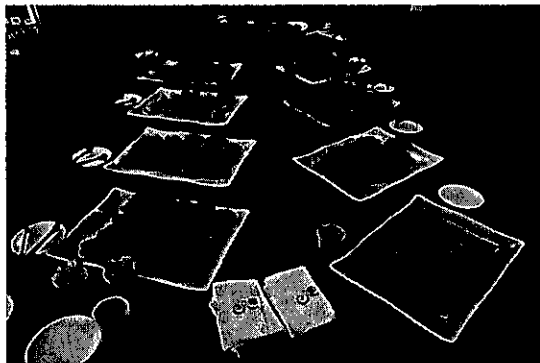
March, 29



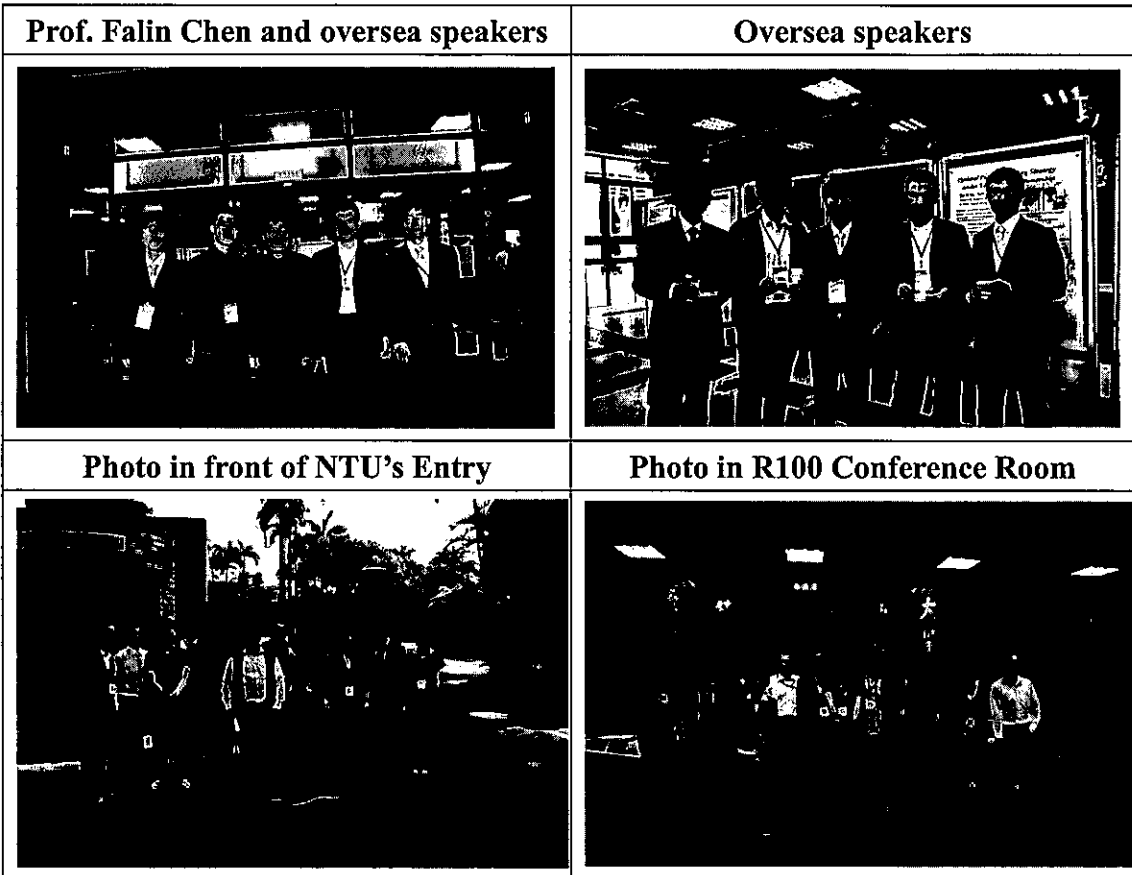
March, 29 Banquet



March, 30



8. Group photos



9.

Posters

AEARUEEW 2012
The 4th Energy and Environmental Workshop

March 29-30, 2012
International Conference Hall, Institute of Applied Mechanics,
National Taiwan University, Taipei, Taiwan

Chair: Prof. Falin Chen
Institute of Applied Mechanics, National Taiwan University
No. 1, Sec. 4, Roosevelt Rd., Taipei 106, Taiwan
Tel: +886-2-2311-2101 Fax: +886-2-2311-2175

Co-Chair: Prof. Falin Chen
Institute of Applied Mechanics, National Taiwan University
No. 1, Sec. 4, Roosevelt Rd., Taipei 106, Taiwan
Tel: +886-2-2311-2101 Fax: +886-2-2311-2175

Co-Chair: Prof. Falin Chen
Institute of Applied Mechanics, National Taiwan University
No. 1, Sec. 4, Roosevelt Rd., Taipei 106, Taiwan
Tel: +886-2-2311-2101 Fax: +886-2-2311-2175

AEARUEEW 2012
The 4th Energy and Environmental Workshop

March 29-30, 2012 (Thu.) ~ 30 (Fri.)
International Conference Hall, Institute of Applied Mechanics,
National Taiwan University, Taipei, Taiwan

Call for Papers

Important Dates
Reminding
Submission of Abstract
4/3 ~ 7/29, 2012
Notification of Acceptance
5/15, 2012
Registration
5/15, 2012
AEARUEEW 2012
3/29-30, 2012

Welcome to the Workshop

Co-Organizers: National Science & Technology Program - Energy Project Office, Ministry of Economic Affairs, National Science & Technology Program - Energy Project Office, Ministry of Economic Affairs, National Science & Technology Program - Energy Project Office, Ministry of Economic Affairs.

Banners



Signs	Signs	ID card
	<p>會議廳內禁止飲食 No Food or Drink Allowed Inside</p>	
Service Center	Registration	
Luncheon	Tea Break	

10. Official Documents

1-1 An official document to enquire AEARU Secretariat for its account



權 號：0101/540301/020/
保存年限：10年

聯 絡 人：吳佩欣

簽
裝

民國101年3月26日
於能源研究中心

訂

線

主旨：關於本所主辦東亞研究型大學聯盟(AEARU)第四屆能源與環境
研討會，AEARU國際秘書處經費即將撥款，惠請 提供帳號俾
便入帳。

說明：

- 一、旨揭研討會將於3月29日與30日在本校應用力學所國際會議廳
舉行，屆時將有來自數個AEARU會員大學之與會者共襄盛舉。
- 二、國外來臺與會研究生、博士後研究員之交通、住宿、影印等
項目將由AEARU國際秘書處支付，總金額為台幣97,968元整。
- 三、其中，交通費台幣3,830元已由能源研究中心同仁先行代墊；
住宿費台幣94,100元、影印費台幣38元，則須直接支付予廠
商。
- 四、承上，今國際秘書處由國立清華大學擔任，為節省外幣匯差
與額外手續費，該校將以臺幣撥款，以匯款前一日匯率計算
。

擬辦：

- 一、敬請 會計室提供計畫代碼。
- 二、敬請 出納組提供臺大帳號。

1-2 An official document to enquire AEARU Secretariat for its account



承辦單位

會辦單位

決行

Acab (新項)

會計室主任楊家寧
101.07.10

會計室主任劉中欽(印)

吳仲廷

主任 吳仲廷

1. 撥款請匯入：華南商業銀行台大分行；銀行代碼：0081544；戶名：國立台灣大學 401 專戶；帳號：15438000028。
2. 懇請業務單位於匯款人匯款後提供「匯款證明」及「繳費單」至出納組開立收據，俾憑報會計室收帳。

會計室主任 吳仲廷

總務處主任 鄭致強

總務處主任 張麗珍
總務處主任 鄭富書(印)

(01041)

2 An official document of part-time workers' employment

檔 號：0101/540301/020/
保存年限：10年

發 民國101年2月21日
於能源研究中心

聯絡人：吳佩欣

主旨：檢陳東亞研究型大學聯盟第四屆能源與環境國際研討會(AEARUEEW 2012)聘僱短期及臨時工讀生經費預算表，請查照並惠予撥款。

說明：

- 一、旨揭研討會將於今(101)年3月29日至30日，在本校應用力學館一樓國際會議廳舉行，為期兩天。
- 二、該研討會擬聘僱短期及臨時工讀生以協助聯繫追蹤、排定行程、申請台胞證、報帳等各項事務進行，檢陳「聘僱工讀生經費預算表」乙份，請查照。

擬辦：擬請國際事務處同意由「邁向頂尖大學計畫-推動國際交流(10R20032-2)」項下補助並惠予撥款。

公文流程：(順會) 能源研究中心→國際事務處

承辦單位	會辦單位	決行
能源研究中心	國際事務處	

承辦人：吳佩欣
2012.2.22

單位主管：吳佩欣

國際事務處 吳佩欣

同表補助

038-1000

擬由本處撥款計畫(10R20032-2)項下補助

22,240元整(實報實銷)，請於101年

3月30日前完成報帳，報帳時請附此表

無公文影本呈請處院簽具

國際事務處 吳佩欣

應力所
收文第00158號
101年3月6日



創號:1010011149

3 Venue reservation

臺灣大學應用力學研究所場地借用申請書

日期: 100年12月21日

- 1. 借用日期: 101年3月29日(星期四)至101年3月30日(星期五)
- 2. 會議名稱: 第四屆亞洲大學聯盟能源發展與氣候環境變遷研討會
- 3. 借用單位: 台大國際處 負責人: _____
- 聯絡人: 姜牙蘋 電話: 3366-9906 FAX: 3366-5670

4. 借用時段及費用:

- 100 國際會議廳 全日(16,000) 上午(10,000) 下午(10,000) 晚上(10,000)
- 400 會議廳 全日(6,000) 上午(3,000) 下午(3,000) 晚上(3,000)
- 階梯教室 全日(4,000) 上午(2,000) 下午(2,000) 晚上(2,000)
- 100 門廳 全日(5,000) 上午(2,500) 下午(2,500) 晚上(2,500)

5. 免費基本設備: 無線麥克風、有線麥克風、展示看板、延長線

- 6. 付費視聽設備: 單槍投影機 (全日 \$2,000×2) 單槍投影機 (半日 \$1,000×__)
- 網路連線服務 (\$1,500×2 處) (請填寫電腦網路連線申請書)

7. 會場附屬設施: 音控室(視聽設備服務費)、註冊台及茶水(垃圾處理費用) 共計\$1,000 (紙杯、咖啡、茶包等額外物品請自備、佈置會場器具、花籃亦請自行處理清運)

8. 假日借用場地, 需加收兩位值班人員之加班費 \$1,800×2; 晚上借用場地, 需加收兩位值班人員之加班費 \$1,200×2。

費用總計: 4 (16,000) + 6 (10,000) + 7 (2,000) + 8 (0) = 合計 34,000 元

備註:

- ◎借用事宜請洽詢 300 所辦公室李瑩蘭小姐。(借用手續辦理完成後, 將回傳申請書, 並請繳訂金)。
- ◎場地借用經確認後, 請於確定後二週內繳交場地費五成訂金, 以繳交訂金為憑。
- ◎若需製作紅布條(請自備), 最大尺寸: 長 570 cm * 寬 80 cm (室外紅布條兩端車邊線留綁繩約 150 cm, 演講廳內紅布條雷射切割即可, 尺寸同)。
- ◎校內停車時, 請於入校時抽取計時票, 並請記得於櫃台核章 (半價優惠)。
- ◎中午若有用餐可提供階梯教室 (使用時間中午 12:10 ~ 13:10)。
- ◎第 7、8 項由場地服務人員開立臨時工資收據。

申請書填妥後請傳真 02-23639290, 並電洽李瑩蘭小姐 02-33665617 再次確認

★本所全面禁止吸煙, 如用餐飲請在門廳內飲用。會議廳內嚴禁攜帶飲料、餐點進入, 敬請借用單位確切遵守, 若造成會場髒污, 借用單位願另付\$2,000 清潔費用。

借用人簽名: 姜牙蘋

Effectiveness and Conclusion

Effectiveness :

1. Successfully held the 4th Energy and Environment Workshop with 59 papers being published
2. Poster session:

In AEARUEEW 2012, 27 paper posters were displayed for two days and were divided into two categories, “Energy technologies” and “Energy Efficiency and Carbon Reduction technologies” With the assistance of poster sessions, domestic scholars and oversea scholars were provided a platform for to freely discussing and communicating with each other.
3. The devotions and endeavors of NTU and other member universities to the energy development and environment care are successfully manifested throughout this workshop.
4. It prompts the mutual exchanges in academy and technologies among members of AEARU, which fulfilled one of the targets of the AEARU.

Issues and Suggestions :

1. Excessively tight schedule:

For the schedule of workshop agenda is too tight, it’s a pity that campus and laboratory tours weren’t able to be arranged to oversea scholars to understand NTU more.
2. Expenditure usage:

Under limitations of expenditure usage, the cultural tour originally arranged for oversea scholars in Taipei city was not successfully carried out.

Conclusion :

According to the issues interested, the AEARUEEW 2012 was divided into four plenary sessions with 68 papers being accepted. After the workshop, it is inspiring to acknowledge that the scholars and researchers from the AEARU highly value the importance of development of energy technologies that a great amount of rich and significant research results are accumulated. However, talent cultivation of energy technologies and strategies shall be emphasized with the view to ensuring continuously sustainable energy development as well as passing down proper concepts of environmental care.

With the assistance from related units and organizations, the AEARUEEW 2012 successfully dropped the curtain at 17:10 p.m., March 30, 2012.