

Provision of equipment

Introduction of equipment by the JICA fund

Equipment	Specification	Installation site	Installation date
CHN analyzer	J-Science, JM-10	JGSEE/KMUTT	2014/9/1
Micro balance	AND, BM-20	JGSEE/KMUTT	2014/9/1
Rotary evaporator	Buchi, R-210/V-850	JGSEE/KMUTT	2014/9/1
TMA analyzer	Shimadzu, TMA-60	JGSEE/KMUTT	2014/9/1
Dryer	Yamato, DKN402	JGSEE/KMUTT	2014/9/1
Vacuum dryer	Yamato, ADP300	JGSEE/KMUTT	2014/9/1
Autoclave (0.5 L)	Nitto-Koatsu, Custom made	JGSEE/KMUTT	2014/9/1
Autoclave (0.5 L)	Nitto-Koatsu, Custom made	PTT-RTI	2014/9/1
Carbon fiber spinning machine	Musashino Kikai, Custom made	JKGSEE/KMUTT	2015/5/26
SEM with EDS analyzer	JEOL, JCM6000	JSEE/KMUTT	2015/5/26
Thermobalance	Shimadzu, TG50H	JGSEE/KMUTT	2015/5/26
Steam generator	Hirota, KJ-1505	JGSEE/KMUTT	2015/5/26
Atomic absorption spectrometer	Shimadzu, AA-7000G	JGSEE/KMUTT	2015/5/26
Sulfur/Carbon analyzer	Horiba, EMIA-220V2	JGSEE/KMUTT	2015/5/26
Drop tube furnace	Elec. Techno-System, Cusom made	JGSEE/KMUTT	2016/1/4

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Equipment	Specification	Installation site	Installation date
Testing machine	Shimadzu, EZ-SX 5N	JGSEE/ KMUTT	2016/5/25
GCMS	Shimadzu, GCMS-QP2010 SE	JGSEE/ KMUTT	2016/5/25
Thermobalance	Shimadzu, TG50H	JGSEE/ KMUTT	2016/5/25
Micro gaschromatograph	GL Science, 490AB-GC	JGSEE/ KMUTT	2016/5/25
Plasma asher	J-SCIENCE, JPA300	JGSEE/ KMUTT	2016/5/25
Semi-cont. extractor	Custom made	PTT-RTI	2017/9

- In total 23 equipment were introduced to JGSEE/KMUTT and PTT-RTI.**
- One big bench plant will be introduced to PTT-RTI this year**

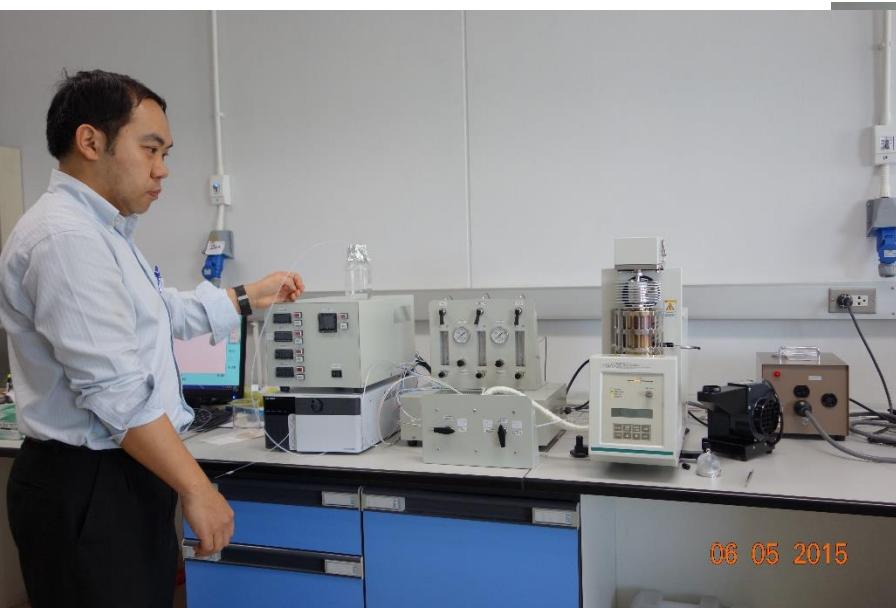
Installation of equipment at JGSEE (Sep.11-25, 2014)



Installation of autoclave at PTT-RTI (Sep.18-19, 2014)



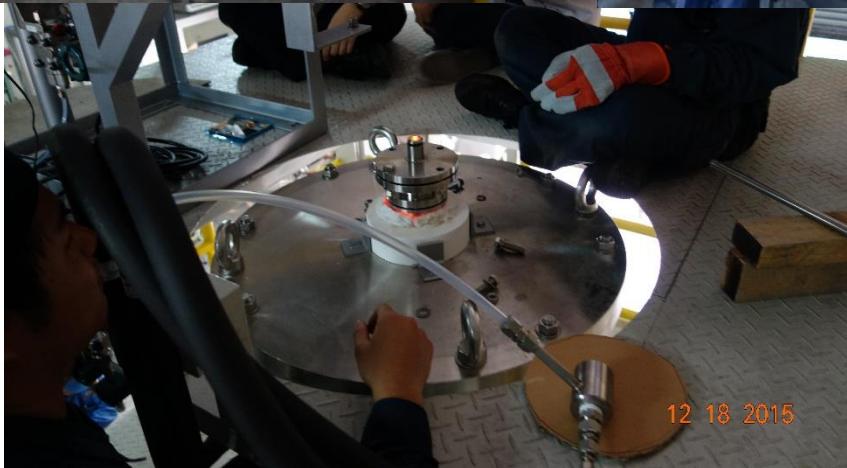
Installation of equipment at JGSEE (June 5-9, 2015)



Installation of equipment at JGSEE (June 5-9, 2015)



Setup of the Drop Tube Furnace (Jan., 2016)



Installation of equipment at JGSEE (May 18-26, 2015)



GC-MS



Plasma Asher



Set of thermal analysis equipment



Testing machine

CRIEPI members assisting the operation of DTF introduced (March 3-5, 2016)



Activities extending the SATREPS project

Activity assimilating the SATREPS output to ASEAN countries



Japan - Thailand SATREPS Workshop 2016

"Development of Clean and Efficient
Utilization of Low Rank Coals and
Biomass by Solvent Treatment"

1 March 2016
Sattabongkot room,
Pilot Plant Development and Training
Institute building,
KMUTT(Bangkhuntien campus)



Supported by a JST fund

Outline of the Workshop

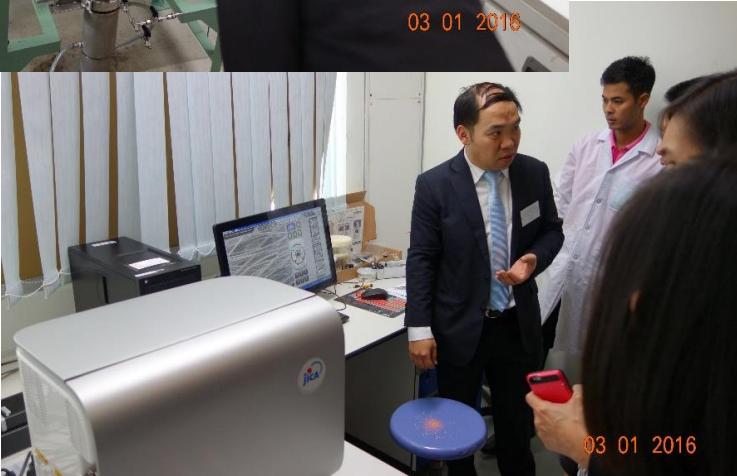
- Laboratory tour of JGSEE/KMUTT and poster presentations of the STREPS project
- Introduction of the SATREPS project
- Presentations of from 4 ASEAN countries

Participants from ASEAN countries

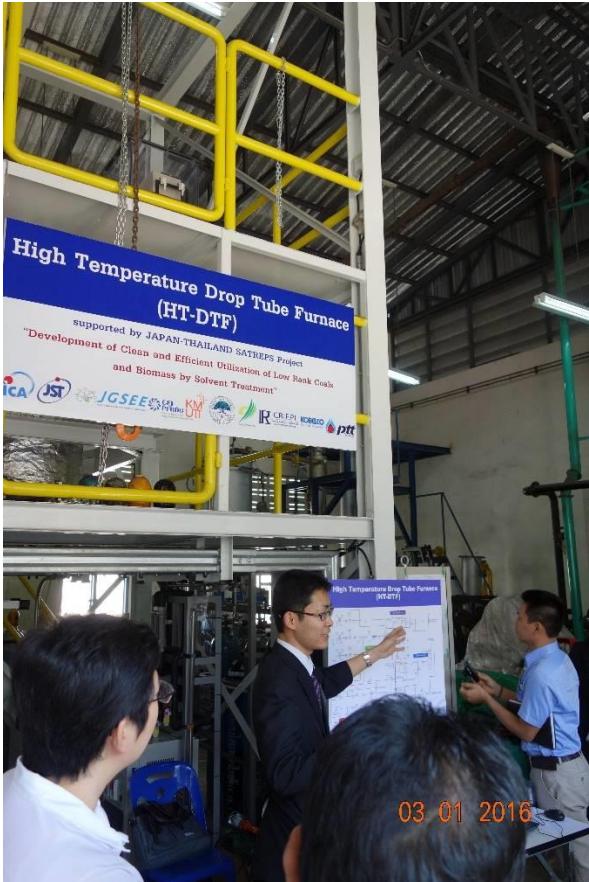
Name	University/Organization	Country
Dr. Lim Chee Ming	Universiti Brunei Darussalam	Brunei
Dr. Long Bun	Institute de Technologi Cambodia	Camobodia
Dr. V. K . Vijay	Indian Institute of Technology Dehli	India
Dr. Harwin Saptoadi	Universitas Gadjah Mada (UGM)	Indonesia
Iman K. Rekswardojo	Institut Teknologi Bandung, Indonesia	
Dr. Khamphone NANTHAVONG	Deputy head of NU Laos	Lao PDR
Mr. Boualy VONGVISITH	Renewable Energy and New Materials Institute, Ministry of Science and Technology, Laos	
Mr. Phonepasong Sithideth	Institute of Renewable Energy Promotion, Ministry of Energy and Mine, Laos	
Dr. Masjuki Hj. Hassan	Universiti Malaya (UM)	Malaysia
Dr. Hamdani Saidi	Universiti Teknologi Malaysia	
Dr. Nasrudin Abd Rahim	Universiti Malaya (UM)	
Dr. Hla Toe	Ascociate Professor	Myanmar
Dr. Rizalinda de Leon	University of the Philippines Diliman	Phillipines
Atty. Pete H. Maniego, Jr	National Renewable Energy Board	
Dr. Ereeese Macabebe	Ateneo de Manila University	
Dr. Liu Dac Hai	Vietnam National University–Hanoi	Vietnam
Dr. Le Chi Hiep	Vietnam National University–Ho Chi Minh City (VNU – HCM)	
Dr. Van Dinh Son Tho	Vietnam Japan International Institute for Science of Technology	

Other participants: 1 from India, 20 from Thailand, and 18 from Japan

Tour of JGSEE/KMUTT



Tour of JGSEE/KMUTT



Presentation of ASEAN participants



Prof. Harwin Saptoadi (from Indonesia)



Dr. Van Dinh Son Tho (from Vietnam)



Prof. Hamdani Saidi (from Malaysia)

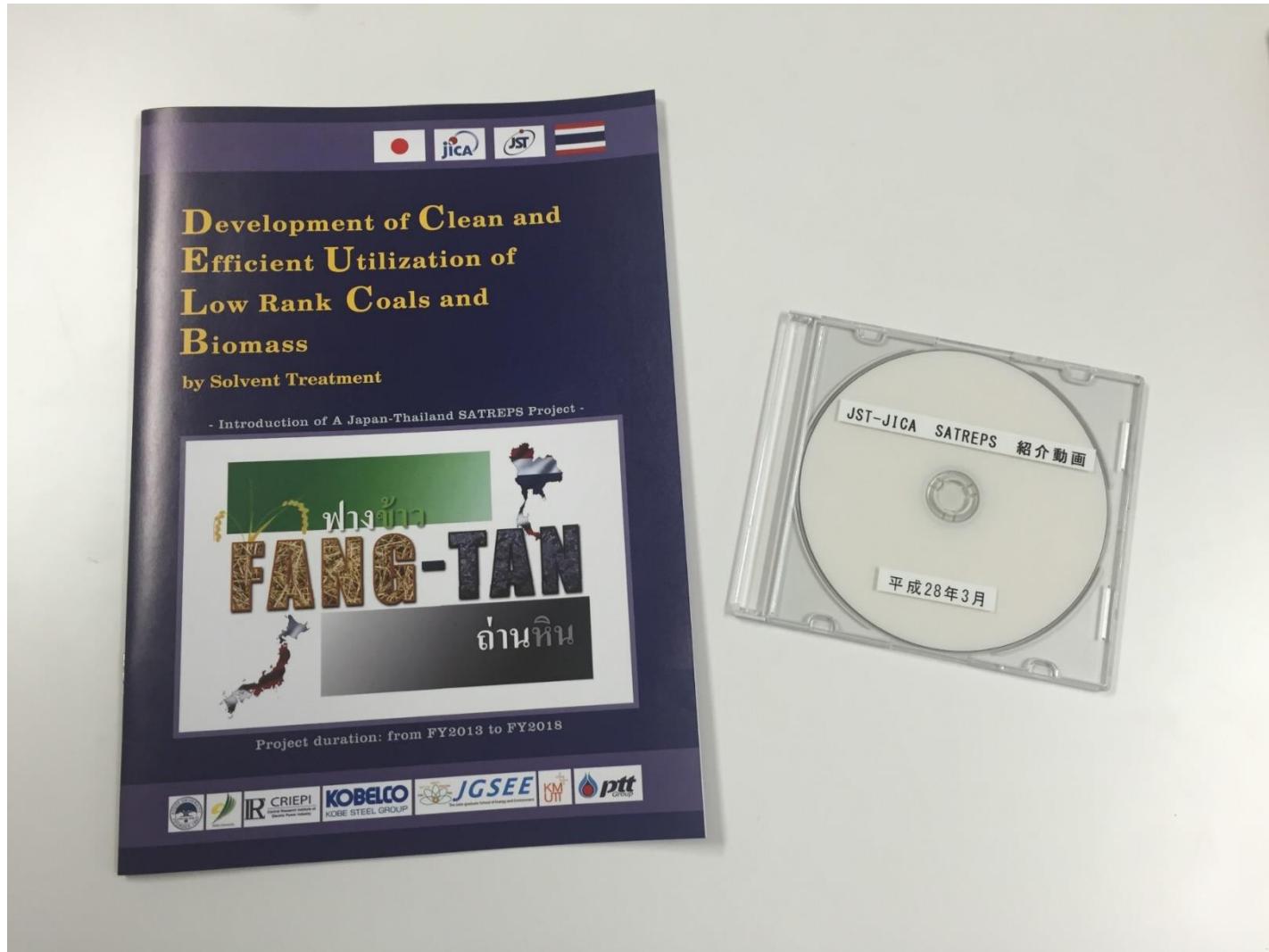


Dr. Atty. Pete H. Maniego (from the Philippines)¹⁶

Workshop scenes

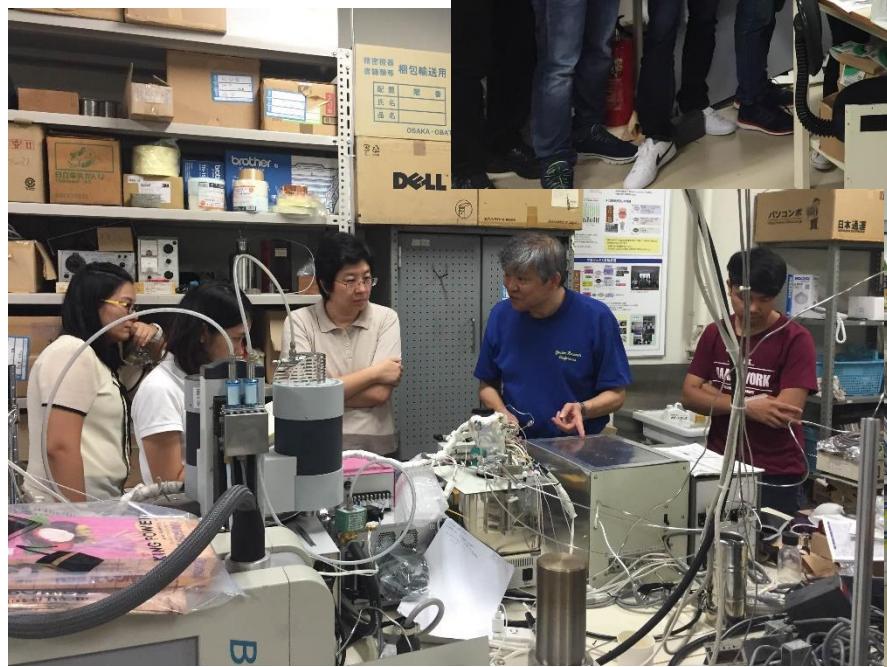
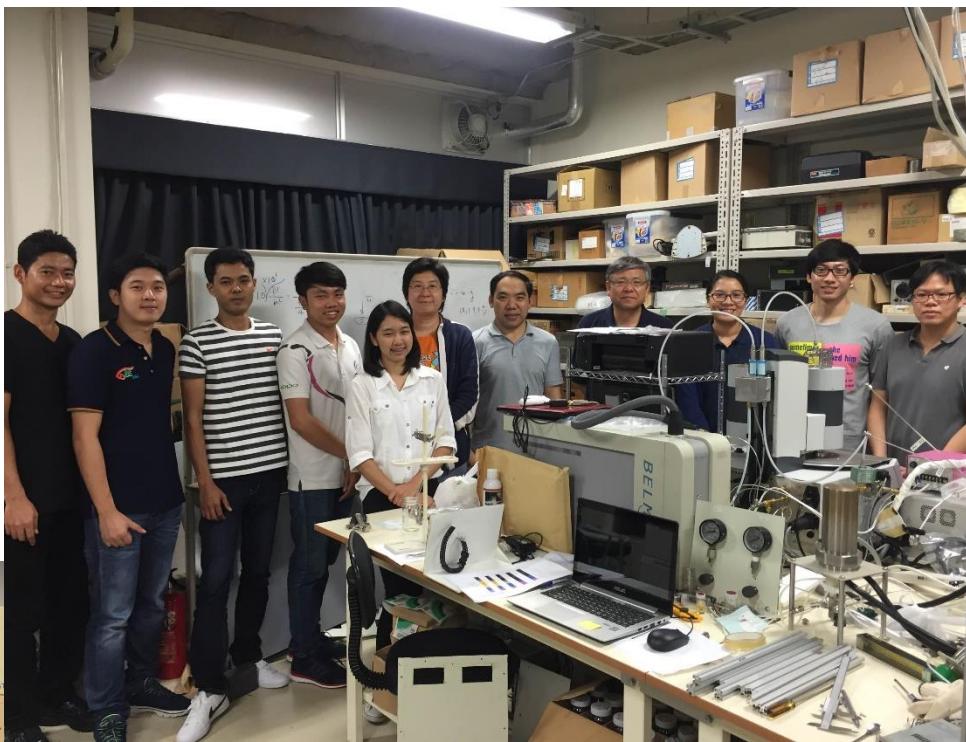


Pamphlet and video prepared for the Workshop



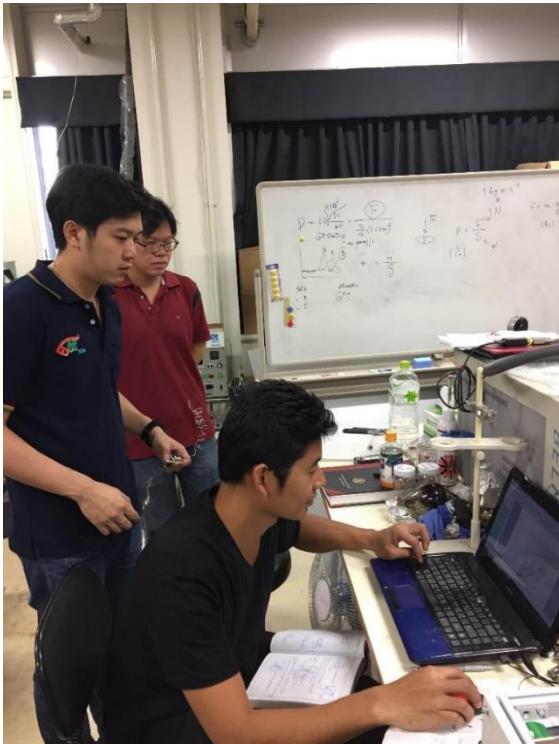
fang: rice straw, tan: charcoal

Training at Kyoto University Sep. – Oct., 2016



Training of 2 Thai students at Kyoto University

Sep. 9 – Oct. 18, 2016



supported by a KU fund 20

Training of 1 Laos researcher at Kyoto University

Jan. 9 – Feb. 7, 2017



Dr. Xayalak from Laos National University is using
a set of thermoanalysis equipment

supported by a JICA fund

Expected Outcome/Future of our Project

- Implementation of a new technology for utilizing low rank coals and biomass wastes in Thailand
- Human building in both Japan and Thailand for effective utilization of biomass waste/low rank coal

- JGSESS/KMUTT and PTT-RTI help dissimilation of the technologies developed to ASEAN countries
- JGSESS/KMUTT works as a center of biomass conversion technology development and human resource building in ASEAN countries

Japanese members will assist the activities through JASTIP (Japan ASEAN Science and Technology Innovation Platform) program .