

Assoc. Prof. Dr. Suneerat Fukuda

รศ.ดร. สุนีรัตน์ ฟูกุดะ

EDUCATIONAL BACKGROUND

Year A.D. 2002 Ph.D. (Chemical Engineering), Imperial College London, UK
Year A.D. 1998 M.Sc. (Chemical Engineering), Imperial College London, UK
Year A.D. 1996 B.Sc. (Chemical Technology), Chulalongkorn University, Thailand
(วท.บ. (เทคโนโลยีเคมี), มหาวิทยาลัยจุฬาลงกรณ์, ประเทศไทย, 2539)

MAJOR AREAS OF EXPERTISE

Solid fuel utilisation for energy: from basic science to engineering, including

- Bioenergy and biofuel production
- Clean coal technology
- Energy system engineering

RESEARCH FIELDS OF INTEREST

- Biomass gasification for heat and power
- Coal combustion, co-firing of coal and biomass in circulating fluidised bed
- Bio-oil production and upgrading
- Simulation of gasification and combustion systems
- Treatment and upgrading of synthesis gas and biogas
- Bioenergy system analysis and bioenergy policy

WORKING EXPERIENCES

Oct 2012 - present Associate Professor, Energy Division
Dec 2017 – Dec 2020 Director
Feb 2012 - 2018 Chairperson of Energy Division
July 2009 - Jan 2012 Assistant Chairperson of Energy Division
Nov 2008 - Sep 2012 Assistant Professor, Energy Division
May 2004 - Oct 2008 Lecturer, Energy Division
The Joint Graduate School of Energy and Environment (JGSEE),
King Mongkut's University of Technology Thonburi
June 2003 - April 2004 Lecturer, Faculty of Science and Technology,
Rachapat Bansomdej Chaophraya University

AWARD

- The winner of the RH Gummer Exhibition of Institute of Energy Prize, 2002, London
- Innovation Ambassador, National Innovation Agency (2009)
- Australian Leadership Awards Fellowship (2010)

PUBLICATIONS

International Journal

- Han, X., Liang, J., Fukuda, S., Zhu, L. and Wang, S. (2022) Sodium alginate–silica composite aerogels from rice husk ash for efficient absorption of organic pollutants. *Biomass and Bioenergy*. 159, 106424, <https://doi.org/10.1016/j.biombioe.2022.106424>. April 2022

- Somwangthanaroj, S. and Fukuda, S. (2020) CFD modeling of biomass grate combustion using a steady-state discrete particle model (DPM) approach. *Renewable Energy*. 148: pp. 363-373. April 2020
- Kittivech, T. and Fukuda, S. (2020) Investigating agglomeration tendency of co-gasification between high alkali biomass and woody biomass in a bubbling fluidized bed system. *Energies*. 13(1): pp. 56-70. January 2020
- Unchaisri, T., Fukuda, S., Phongphiphat, A., Saetia, S. and Sajjakulnukit, B. (2019) Experimental study on combustion characteristics in a CFB during co-firing of coal with biomass pellets in Thailand. *International Energy Journal*. 19(2): pp. 101-114. June 2019
- Kerkkaiwan, S. and Fukuda, S. (2019) Catalytic effect of rice straw-derived chars on the decomposition of naphthalene: The influence of steam activation and solvent treatment during char preparation. *Asia-Pacific Journal of Chemical Engineering*. 14(3). e2303, <https://doi.org/10.1002/apj.2303>.
- Konsomboon, S., Commandré, J.-M. and Fukuda, S. (2019) Torrefaction of various biomass feedstocks and its impact on the reduction of tar produced during pyrolysis. *Energy & Fuels*. 33(4): pp. 3257-3266. April 2019
- Kittivech, T. and Fukuda, S. (2019) Effect of bed material on bed agglomeration for palm empty fruit bunch (EFB) gasification in a bubbling fluidised bed system. *Energies*. 12(22), 4336; <https://doi.org/10.3390/en12224336>. November 2019
- Chobthiangtham, P. and Fukuda, S. (2015) Utilization of plastic waste to solve the problem in high-moisture biomass gasification. *International Journal of Environmental Science and Development*. 6(11): pp. 805-810. November 2015
- Fukuda, S. (2015) Pyrolysis investigation for bio-oil production from various biomass feedstocks in Thailand. *International Journal of Green Energy*. 12(3): pp. 215-224. Mar 2015
- Madhiyanon, T., Sathitruangsak, P., Sungworagarn, S., Fukuda, S. and Tia, S. (2013) Ash and deposit characteristics from oil-palm empty-fruit-bunch (EFB) firing with kaolin additive in a pilot-scale grate-fired combustor. *Fuel Processing Technology*. 115(0): pp. 182-191. November 2013
- Chovichien, N., Pipatmanomai, S. and Chungpaibulpatana, S. (2013) Comprehensive study of pressure-drop balance and performance of an L-valve in a circulating fluidized bed. *Chemical Engineering Communications*. 200(11): pp. 1483-1502. November 2013
- Chovichien, N., Pipatmanomai, S. and Chungpaibulpatana, S. (2013) Estimate of solids circulation rate through an L-valve in a CFB operating at elevated temperature. *Powder Technology*. 235(0): pp. 886-900. February 2013
- Madhiyanon, T., Sathitruangsak, P., Sungworagarn, S., Pipatmanomai, S. and Tia, S. (2012) A pilot-scale investigation of ash and deposition formation during oil-palm empty-fruit-bunch (EFB) combustion. *Fuel Processing Technology*. 96: pp. 250-264. April 2012
- Konsomboon, S., Pipatmanomai, S., Madhiyanon, T. and Tia, S. (2011) Effect of kaolin addition on ash characteristics of palm empty fruit bunch (EFB) upon combustion. *Applied Energy*. 88(1): pp. 298-305 January 2011
- Kaewluan, S. and Pipatmanomai, S. (2011) Gasification of high moisture rubber woodchip with rubber waste in a bubbling fluidized bed. *Fuel Processing Technology*. 92(3): pp. 671-677. March 2011
- Kaewluan, S. and Pipatmanomai, S. (2011) Potential of synthesis gas production from rubber wood chip gasification in a bubbling fluidised bed gasifier. *Energy Conversion and Management*. 52(1): pp. 75-84 January 2011

- Pipatmanomai, S., Kaewluan, S. and Vitidsant, T. (2009) Economic assessment of biogas-to-electricity generation system with H₂S removal by activated carbon in small pig farm. *Applied Energy*. 86(5): pp. 669-674 May 2009
- Pipatmanomai, S., Fungtammasan, B., and Bhattacharya, S. (2009) Characteristics and composition of lignites and boiler ashes and their relation to slagging: The case of Mae Moh PCC boilers. *Fuel*. 88(1): pp. 116-123 January 2009
- Sonobe, T., Worasuwanarak, N. and Pipatmanomai, S. (2008) Synergies in co-pyrolysis of Thai lignite and corncob. *Fuel Processing Technology*. 89(12): pp. 1371-1378. December 2008
- Gadde, B., Menke, C., Siemers, W. and Pipatmanomai, S. (2008) Technologies for energy use of rice straw: a review. *International Rice Research Notes*. 32(2): pp. 5-14. Jan-Jun 2008
- Pipatmanomai, S., Herod A.A., Morgan T.J., Paterson, N., Dugwell, D.R. and Kandiyoti, R. (2004) The Fate of volatiles from injectant coals and soot formation in the blast furnaces. *Energy & Fuels*. 18(1): pp. 68-76. Jan.-Feb., 2004

International Conference

- Suwanphitak, T., Fukuda, S. and Chaiwiwatworakul, P. (2020) Potential Assessment of Greenhouse Gas Reduction from Efficient Energy use in Pattaya Hotels, Thailand. In *7th ICSTR-International Conference on Science & Technology Research*. 22-23 December 2020.
- Somwangthanaroj, S. and Fukuda, S. (2019) Simulation of a multi-fuel grate combustion using a steady-state discrete model. In *International Conference on Sustainable Energy and Green Technology (SEGT2019)*. Bangkok, Thailand. December 11-14, 2019
- Somwangthanaroj, S. and Fukuda, S. (2019) Nox simulation on CFD modelling of grate combustion with a steady-state discrete particle model (DPM) approach. In *International Conference on Sustainable Energy and Green Technology (SEGT2019)*. Bangkok, Thailand. December 11-14, 2019
- Unchaisri, T., Fukuda, S., and Miura, K. (2018) Estimation of combustion kinetic parameters using temperature-programmed reaction technique of chars prepared from coal and rice straw. In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.
- Unchaisri, T. and Fukuda, S. (2018) Influence of biomass blending ratio on characteristics of ashes from co-firing of coal with rice straw: CFB experiments and FactSage modeling. In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.
- Somwangthanaroj, S. and Fukuda, S. (2018) CFD modeling of grate combustion with a steady-state discrete particle model (DPM) approach. In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.
- Kerkkaiwan, S., Miura, K., and Fukuda, S. (2018) Kinetic study on CO₂ and steam gasification of the fast pyrolysis coal char using the temperature-programmed reaction (TPR) technique. in *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.
- Kerkkaiwan, S., Miura, K., and Fukuda, S. (2018) Investigating combustion characteristics of coal and coal residue using a high-temperature drop tube furnace (HT-DTF). In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.

- Konsomboon, S., Fukuda, S., and Commandré, J.-M. (2018) Biomass torrefaction and its effect on the yield and composition of tar produced during pyrolysis of various biomass feedstocks. In *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.
- Konsomboon, S. and Fukuda, S. (2018) Investigation of Carbonaceous Catalyst Performance on the Reduction of Biomass Derived-Tar Produced at Different Pyrolysis Temperatures. In *The 10th International Conference on Combustion, Incineration/Pyrolysis, Emission and Climate Change (i-CIPEC2018)*. Bangkok, Thailand. December 18-21, 2018
- Kittivech, T. and Fukuda, S. (2018) Effect of bed materials on gasification performance and tar reduction in a bench-scale air blown bubbling fluidised bed reactor. in *7th International Conference on Sustainable Energy and Environment (SEE2018)*. Bangkok, Thailand. 28-30 November.
- Zuldian, P. and Fukuda, S. (2016) Economic Analysis of Coal Gasification Plant for Electricity and Thermal Energy Supplies in Indonesia. in *International Conference of Chemical, Biological and Environmental Engineering (ICBEE2016)* Pataya, Thailand. January 23-25, 2016.
- Kerkkaiwan, S., Buranatrevedhya, S., Sanduang, J., Fukuda, S., and Miura, K. (2016) Characteristics of fast pyrolysis and char product of a low-rank (sub-bituminous) coal in high temperature drop tube furnace (HT-DTF). in *6th International Conference on Sustainable Energy and Environment (SEE2016)*. Bangkok, Thailand. 28-30 November 2016.
- Nutsupak Chovichien, Thanet Unchaisri and Suneerat Fukuda (2014) Experiments on lignite combustion in a circulating fluidized-bed reactor. in *5th International Conference on Sustainable Energy and Environment (SEE 2014)* Bangkok, Thailand. November 19-21, 2014
- Pinchookorn Chobthiangtham and Suneerat Fukuda (2014) Hydrodynamic behavior of a bubbling fluidized bed gasifier under elevated temperature: CFD simulation. in *5th International Conference on Sustainable Energy and Environment (SEE2014)*. Bangkok, Thailand. November 19-21, 2014
- Sasithorn Buranatrevedhya and Suneerat Fukuda (2014) A Comparison of catalytic and non-catalytic steam reforming of naphthalene used as biomass gasification tar model compound. in *5th International Conference on Sustainable Energy and Environment (SEE2014)*. Bangkok, Thailand. November 19-21, 2014
- Siyada Iangmee and Suneerat Fukuda (2013) Upgrading of Pyrolysis Bio-Oil by Catalytic Hydrodeoxygenation Using CoMo Catalyst. In *The 3rd International Thai Chemical Engineering and Applied Chemistry Conference (TICChE 2013)*. Khon Kean, Thailand. October 17-18, 2013
- Dusadee Yoocha and Suneerat Pipatmanomai. (2012) Correlating the Mineral Composition with Ash Fusion Characteristics: a Case Study of Thai Lignite. in *The 4th KKKU International Engineering Conference 2012 (KKU-IENC 2012)*. May 10-12, 2012. Khon Kaen, Thailand.
- Muhammad Penta Helios, Suneerat Pipatmanomai, and Subriyer Nasir. (2012) Energy and Exergy Analysis of Coal-Fired Power Plants: The Selected Case Studies in Thailand and Indonesia. in *4th International Conference on Sustainable Energy & Environment (SEE 2011): A Paradigm Shift to Low Carbon Society*. 27-29 February 2012. Bangkok, Thailand.
- Sukanya Kammalees and Suneerat Pipatmanomai. (2012) Economic Assessment and CO₂ Emission Reduction of Biogas Utilization for CHP and SNG Applications in Thailand. in *4th International Conference on Sustainable Energy & Environment (SEE 2011): A Paradigm Shift to Low Carbon Society*. 27-29 February 2012. Bangkok, Thailand.

- Bundit Fungtammasan, Somrat Kerdsuwan, Suthum Patumsawad, Suneerat Pipatmanomai, Pumyos Vallikul, Nakorn Worasuwanarak, Pisit Yonyingsakthavorn, and Pierre Joulain. (2012) Thermochemical Conversion of Biomass and Waste Towards the Production of Renewable Energy: the JGSEE's Contribution. in 4th International Conference on Sustainable Energy & Environment (SEE 2011): A Paradigm Shift to Low Carbon Society. 27-29 February 2012. Bangkok, Thailand.
- Mitra Kami Delivand, Mirko Barz, and Suneerat Pipatmanomai. (2012) Comparing the Green House Gas Emissions of Projected Rice Straw-Based Power Plants and Rice Straw-Based Ethanol Plants in Thailand. in 4th International Conference on Sustainable Energy & Environment (SEE 2011): A Paradigm Shift to Low Carbon Society. 27-29 February 2012. Bangkok, Thailand.
- Kritsana Sommart and Suneerat Pipatmanomai. (2011) Assessment and Improvement of Energy Utilization in Crude Palm Oil Mill. in 2011 International Conference on Chemistry and Chemical Process (IPCBEE2011). 28-29 May 2011. Bangkok, Thailand.
- Peerapong Yuenyongchaiwat, Suneerat Pipatmanomai, and Sirintornthep Towprayoon. (2010) Bio-oil Production from Various Biomass Feedstocks by Vacuum Pyrolysis. in The 17th Regional Symposium on Chemical Engineering (RSCE 2010). 22-23 November 2010. Bangkok, Thailand.
- Naporn Mungklunchalee, Suneerat Pipatmanomai, Phavanee Narataruksa, and Sankar Bhattacharya. (2010) Comparison of Different Techniques for Upgrading Biogas to Bio-methane using ASPEN Modeling. in Proceedings of RSCE2010 The 17th Regional Symposium on Chemical Engineering 'Sharing Visions, Sharing Tomorrow'. 22-23 November 2010. Bangkok, Thailand.
- Pinchookorn Chobthiangtham and Suneerat Pipatmanomai. (2009) Co-Gasification of Biomass and Plastic Waste in a Bubbling Fluidized Bed Gasifier. in World Renewable Energy Congress 2009 - Asia (WREC 2009-Asia). 19-22 May 2009. Bangkok, Thailand.
- Pornphol Boonnak and Suneerat Pipatmanomai. (2009) Vacuum Pyrolysis System for Bio-Oil Production from Palm Empty Fruit Bunch (EFB) in World Renewable Energy Congress 2009 - Asia (WREC 2009-Asia). 19-22 May 2009. Bangkok, Thailand.
- Auapong Yaemrod and Suneerat Pipatmanomai. (2008) Pyrolysis Characteristics of MSW: The Effect of Temperature and MSW Composition. in 5th International Conference on "Combustion, Incineration/Pyrolysis and Emission Control (i-CIPEC 2008)" 16-19 December 2008. Chiang Mai, Thailand.
- Janewit Wannapeera and S Pipatmanomai. (2008) Product yield and Kinetic Parameters of Biomass Steam Gasification in a Drop-Tube/Fixed-Bed Reactor. in 7th High Temperature Air Combustion and Gasification International Symposium. Jan. 13-16, 2008. Phuket, Thailand.
- N. Noosai, I Ahmed, S Pipatmanomai, and A. K. Gupta. (2008) Comparison of High Temperature Pyrolysis of Coal and Biomass Fuels. in 7th High Temperature Air Combustion and Gasification International Symposium. January 13-16, 2008. Phuket, Thailand.
- Monpilai H. Narasingha, Suneerat Pipatmanomai, and Nipat Songsangthong. (2008) An Improved Kinetic Model of the Reactions in the Reduction Zone of a Fixed-Bed Downdraft Wood Gasifier. . in 7th High Temperature Air Combustion and Gasification International Symposium. January 13-16, 2008. Phuket, Thailand.
- Anuwat Luxsanayotin and Suneerat Pipatmanomai. (2008) Effect of Mineral Oxides on Slag Formation Tendency of Mae Moh Lignite in 5th International Conference on "Combustion,

Incineration/Pyrolysis and Emission Control (i-CIPEC 2008)” 16-19 December 2008. Chiang Mai, Thailand.

- Suchaiand Lertpichet and Suneerat Pipatmanomai. (2008) Potential for CO₂ Emission Reduction in Thailand’s Electricity Sector: Policy Scenario Analysis in 5th International Conference on “Combustion, Incineration/Pyrolysis and Emission Control (i-CIPEC 2008)” 16-19 December 2008. Chiang Mai, Thailand.
- Supatchaya Konsomboon, Suneerat Pipatmanomai, Thanid Madhiyanon, and Suvit Tia. (2008) Effect of Kaolin Addition on Characteristics of Ashes from Palm Empty Fruit Bunch (EFB) Combustion. in 5th International Conference on “Combustion, Incineration/Pyrolysis and Emission Control (i-CIPEC 2008)” 16-19 December 2008. Chiang Mai, Thailand.
- Sommas Kaewluan and Suneerat Pipatmanomai. (2008) Co-gasification of High Moisture Rubber Woodchip Mixed with Shredded Rubber Waste in a Bubbling Fluidized Bed Gasifier. in 5th International Conference on “Combustion, Incineration/Pyrolysis and Emission Control (i-CIPEC 2008)” 16-19 December 2008. Chiang Mai, Thailand.
- Sommas Kaewluan and Suneerat Pipatmanomai. (2008) Sampling and Analysis of Tar from Biomass Gasification in Bubbling Fluidised-Bed Reactor. in 7th High Temperature Air Combustion and Gasification International Symposium. January 13-16, 2008. Phuket, Thailand.
- B Gadde, C Menke, S Pipatmanomai, and W Siemers. (2008) Thermal Combustion of Rice Straw to Energy: Its Relevance in India, Thailand and the Philippines”. in 16th European Biomass Conference and Exhibition. 2-6 June 2008. Valencia, Spain.
- Naksitte Coovattanachai, Suneerat Pipatmanomai, Suvit Tia, and Savitri Garivait. (2008) Thermal Conversion of Biomass in Thailand. . in Thailand-China Symposium on Advances in Renewable Energy Technology. 28-29 January 2008. Bangkok, Thailand
- Nipat Songsangtong, Suneerat Pipatmanomai, Monpilai H Norasingha, and Somrat Kerdsuwan. (2007) Kinetic Study of Wood Waste Gasification using a Fixed-Bed Downdraft Gasifier. in 6th Asia Pacific Conference on Sustainable Energy and Environmental Technologies (APCSEET). May 7-12, 2007. Bangkok, Thailand.
- Sommas Kaewluan, Janewit Wannapeera, and Suneerat Pipatmanomai. (2007) Characteristics of Products from Rubber Woodchip Gasification in a Fluidised-Bed Reactor: . in Effect of Equivalent Ratio. International Conference on Power Engineering-2007. October 23-27, 2007. Hangzhou, China.
- S Kaewluan and S Pipatmanomai. (2007) Preliminary Study of Rubber Wood Chips Gasification in a Bubbling Fluidised-Bed Reactor: Effect of Air to Fuel Ratio. in PSU-UNS International Conference on Engineering and Environment - ICEE-2007. May10-11, 2007. Phuket, Thailand.
- Ta Sonobe, Sa Pipatmanomai, and Nb Worasuwannarak. (2006) Pyrolysis Characteristics of Thai-agricultural Residues of Rice Straw, Rice Husk, and Corncob by TG-MS Technique and Kinetic Analysis. in The 2nd Joint International Conference on Sustainable Energy and Environment (SEE 2006). 21-23 November 2006. Bangkok, Thailand.
- Ta Sonobe, Sa Pipatmanomai, and Nb Worasuwannarak. (2006) Pyrolysis Characteristics of Thai Lignite and Biomass Blends: An In-depth Experimental Investigation. in The 2nd Joint International Conference on Sustainable Energy and Environment (SEE 2006). 21-23 November 2006. Bangkok, Thailand.

- Sa Pipatmanomai, Na Worasuwannarak, Ba Fungtammasan, Sb Bhattacharya, Sc Bhakdisongkram, Sc Paitoon, and Ac Kitchotkul. (2006) Study of Factors Influencing Slag Formation Potential of Lignite under Pulverised Fuel Combustion Conditions: Elemental Partitioning in Lignite Ashes and Slags. in The 2nd Joint International Conference on Sustainable Energy and Environment (SEE 2006). 21-23 November 2006. Bangkok, Thailand.
- Sa Pipatmanomai, Sa Kaewluan, and Tb Vitidsant. (2006) H₂S removal from Biogas using KI-Impregnated Activated Carbon Adsorption for Power Generation in a small pig farm. in World Renewable Energy Congress-IX (WREC). August 19-25, 2006. Florence, Italy.
- S Pipatmanomai, S Kaewluan, and T Chayawattana. (2006) Wood Waste Gasification in a Fluidised-Bed Reactor: System Preparation and Preliminary Testing. In *The 4th International Conference on Combustion, Incineration/Pyrolysis and Emission Control (i-CIPEC)*. September 26-29, 2006. Kyoto, Japan.
- Pipatmanomai, S., Kaewluan, S. and Chayawattana, T. (2006) The Study of Wood Waste Gasification in a Fluidised-Bed Reactor: System Preparation and Preliminary Testing. In *The 4th International Conference on Combustion, Incineration/Pyrolysis and Emission Control (i-CIPEC)*. Sep 26-29, 2006. Kyoto, Japan.
- Sa Pipatmanomai, Sb Dong, Lb Wu, and Rb Kandiyoti. (2006) Pyrolysis of Rubber Woodchips: Product Yields and Characteristics. in World Renewable Energy Congress-IX (WREC). August 19-25, 2006. Florence, Italy.
- S. Pipatmanomai, N. Paterson, D. Dugwell, and R. Kandiyoti. (2004) Kinetic Modelling of Coal Pyrolysis in and Atmospheric Wire-mesh Reactor. In *The Third Regional Conference on Energy Technology towards a Clean Environment "Sustainable Energy and Environment (SEE)"*. December 1-3, 2004. Hilton Hua Hin Resort & Spa, Hua Hin, Thailand.

National Journal

- Idris, I.A., Fukuda, S., and Rousset, P. (2020) Thermal mechanism of large biomass particles during torrefaction. *Journal of Sustainable Energy & Environment*. 11(2): pp. 71-79. April - June 2020
- Chobthiangtham, P. and Fukuda, S. (2014) Comparison of hydrodynamic behavior inside bed zone with non-simplified air distributor in a bubbling fluidized bed gasifier model. *Journal of Sustainable Energy & Environment*. 5(4): pp. 117-125.
- Wongayara, K. and Fukuda, S. (2013) Yield and characteristics of tar formed during biomass fluidised-bed gasification. *Journal of Sustainable Energy & Environment*. 4(4): pp. 153-157. Oct.-Dec. 2013
- Fukuda, S. (2013) Bio-oil production from vacuum pyrolysis of palm empty fruit bunch: Effect of operating conditions and process energy balance. *Journal of Sustainable Energy & Environment*. 4(1): pp. 27-31. Jan.-Mar. 2013
- Luxsanayotin, A., Pipatmanomai, S. and Bhattacharya, S. (2010) Effect of mineral oxides on slag formation tendency of Mae Moh lignites. *Songklanakarin Journal of Science and Technology*. 32(4): pp. 403-412. Jul-Aug 2010
- Wannapeera, J., Worasuwannarak, N. and Pipatmanomai, S. (2008) Product Yields and Characteristics of Rice Husk, Rice Straw and Corncob during Fast Pyrolysis in a Drop Tube/Fixed Bed Reactor. *Songklanakarin J. Sci. Technol.* 30(3): pp. 393-404. May-Jun 2008

National Conference

- Kaewluan, S. and Pipatmanomai, S. (2006) Wood Waste Gasification in a Fluidised-Bed System. in *The First Biomass and Waste Gasification for Power Generation Conference*. November 24, 2006. Bangkok, Thailand.
- Kaewluan, S., Assadamongkol, P. and Pipatmanomai, S. (2006) Techno - Economic Assessment of Biogas Fuels in a Small Gasoline Engine for Electrical Power Production. In *The 2nd Conference on Energy Network of Thailand (E-NETT)*. 27-29 July, 2006. Nakhon Ratchasima, Thailand.
- Sangtong-ngam, K., Worasuwannarak, N., Pipatmanomai, S. and Narasingha, M.H. (2005) Effects of mineral matter on Thai-lignite gasification. In *The 15th Thai Chemical Engineering and Applied Chemistry Conference*. 27-28 October 2005. Chonburi, Thailand.
- Pipatmanomai, S., Yuenyongchaiwat, J., Khanthong, U., Jansuk, S. and Imyim, A. (2004) Lead removal in wastewater by heat treated cockle shell and mussel shell. In *Proceeding to the 30th Congress on Science and Technology of Thailand (STT 2004)*. 19-21 October 2004. Bangkok, Thailand.
- Pipatmanomai, S., Yuenyongchaiwat, J., Chamnan, S., Poolkeaw, W. and Silapakamprirapap, S. (2004) Comparative studies on analytical of lead in PTT public company limited gasoline, Thailand. In *Proceeding to the 30th Congress on Science and Technology of Thailand (STT 2004)*. 19-21 October 2004. Bangkok, Thailand.