

## Topics by Research Programs for Master & PhD applicants

Research Program	Research Project	Supervising Academic Staff	E-Mail
1. Bioenergy Technology and Innovation	1.1 Development of small/medium scale biomass gasification for heat and power production 1.2 Production of High efficiency Biogas and its Application 1.3 Development of Biodiesel Process for ASEAN Industry 1.4 High Quality Fuel from Municipal Solid Waste 1.5 Integrating Process of Biomass Conversion to Fuel and its High Value Chemicals 1.6 Development of torrefaction process for Thai biomass	Assoc. Prof. Dr. Suneerat Fukuda Assoc. Prof. Dr. Sumate Chairapat Assoc. Prof. Dr. Chakrit Tongurai Dr. Yossapong Laonual Prof. Dr. Navadol Laosiripojana Assoc. Prof. Dr. Nakorn Worasuwanarak	<a href="mailto:suneerat@jgsee.kmutt.ac.th">suneerat@jgsee.kmutt.ac.th</a> <a href="mailto:sumate.ch@psu.ac.th">sumate.ch@psu.ac.th</a> <a href="mailto:chakrit.t@psu.ac.th">chakrit.t@psu.ac.th</a> <a href="mailto:yossapong.lao@kmutt.ac.th">yossapong.lao@kmutt.ac.th</a> <a href="mailto:navadol@jgsee.kmutt.ac.th">navadol@jgsee.kmutt.ac.th</a> <a href="mailto:nakorn@jgsee.kmutt.ac.th">nakorn@jgsee.kmutt.ac.th</a>
2. Energy and Environmental Technology for sustainable urban building development towards net zero energy building	2.1 Development and support on the implementation of energy efficiency code and carbon rating scheme for commercial buildings and residential houses 2.2 Solar Cooling and Dehumidification and Dedicated Outside Air System 2.3 Development of Technologies for Daylighting through Window and Roof Aperture for Commercial and Residential Buildings in Thailand	Prof. Dr. Surapong Chirarattananon Asst. Prof. Dr. Pattana Rakkwamsuk Asst. Prof. Dr. Pipat Chaiwiwatworakul	<a href="mailto:surapong_chira@yahoo.com">surapong_chira@yahoo.com</a> <a href="mailto:pattana.rug@kmutt.ac.th">pattana.rug@kmutt.ac.th</a> <a href="mailto:pipatc@gmail.com">pipatc@gmail.com</a>
3. Integrate Energy and Environment for sustainable green urban approach	3.1 Development of Green and Low Carbon City 3.2 Sustainable Integrative Indicator for and Urban Area 3.3 Investigation of Weather and Climatic Conditions, Air-Borne Constituents, Land Cover Change, and Their Relationships for Selected Large Urban Areas.	Assoc. Prof. Dr. Sate Sampattagul Prof. Dr. Shabbir Gheewala Assoc. Prof. Dr. Kasemsan Manomaiphiboon	<a href="mailto:sate@eng.cmu.ac.th">sate@eng.cmu.ac.th</a> <a href="mailto:shabbir_g@jgsee.kmutt.ac.th">shabbir_g@jgsee.kmutt.ac.th</a> <a href="mailto:kasemsan_m@jgsee.kmutt.ac.th">kasemsan_m@jgsee.kmutt.ac.th</a>
4. Solid Waste Management for Sustainable Energy and Environment	4.1 Development of Pilot Plant of Biogas Production without Organic Waste Separation Process 4.2 Application of Serial-self Turning Composting Technology in Local Community 4.3 Study on the Utilization of Municipal Solid Waste for Biogas, Compost, and RDF and the Assessment of Environmental Impacts from the Processes 4.4 Development of Forecasting Model of MSW and	Assoc. Prof. Dr. Sumate Chairapat Assoc. Prof. Dr. Taweep Chaisomphob Assoc. Prof. Dr. Sandhya Babel Assoc. Prof. Dr. Sirintornthep Towprayoon	<a href="mailto:sumate.ch@psu.ac.th">sumate.ch@psu.ac.th</a> <a href="mailto:taweep@siit.tu.ac.th">taweep@siit.tu.ac.th</a> <a href="mailto:sandhya@siit.tu.ac.th">sandhya@siit.tu.ac.th</a> <a href="mailto:sirin@jgsee.kmutt.ac.th">sirin@jgsee.kmutt.ac.th</a>

	<p>its Potential of Utilization in Thailand</p> <p>4.5 Improve MSW Management to provide industrial standard RDF for Import Purpose</p> <p>4.6 Developing scenario modelling and assessment tool for sustainable MSW management in ASEAN cities</p> <p>4.7 Waste-to-energy technologies: RDF gasification, Tar reduction, Emission monitoring, CFD modelling</p>	<p>Dr. Komsilp Wangyao</p> <p>Dr. Awassada Phongphiphat</p> <p>Dr. Awassada Phongphiphat</p>	<p><a href="mailto:komsilp@gmail.com">komsilp@gmail.com</a></p> <p><a href="mailto:awassada@outlook.com">awassada@outlook.com</a></p> <p><a href="mailto:awassada@outlook.com">awassada@outlook.com</a></p>
5. Climate Change Technology and Innovation	<p>5.1 Development of High-resolution Gridded Climatological Database and Derived Products for Thailand</p> <p>5.2 Development of Technology and Innovation for Economic Plant to come with Climate Change and Climate Variable</p> <p>5.3 Development of system analysis framework to identify risk area to air pollution due to tropospheric ozone and particulate matter (PM2.5 and PM10) for Thailand</p> <p>5.4 Impacts of climate extreme on evapotranspiration and carbon exchanges of forest and agricultural ecosystems</p>	<p>Assoc. Prof. Dr. Usa Humphries</p> <p>Assoc. Prof. Dr. Amnat Chidthaisong</p> <p>Assoc. Prof. Dr. Savitri Garivait</p> <p>Dr. Chaiwat Ekkawatpanit</p>	<p><a href="mailto:usa.wan@kmutt.ac.th">usa.wan@kmutt.ac.th</a></p> <p><a href="mailto:amnat@jgsee.kmutt.ac.th">amnat@jgsee.kmutt.ac.th</a></p> <p><a href="mailto:savitri@jgsee.kmutt.ac.th">savitri@jgsee.kmutt.ac.th</a></p> <p><a href="mailto:chaiwat.ekk@kmutt.ac.th">chaiwat.ekk@kmutt.ac.th</a></p>