

Environment Division

No.	Potential Thesis topic	Short description of thesis	Research Lab	Level of degree	Qualification of student	Research project support	special requirement	Remark/Co advisor
<u>Name of Advisor : Assc. Prof .Dr. Kasemsan Manomaipiboon</u>								
1	Modeling and Analysis of Regional Climate	Assess and investigate how regional climate has changed in the past and would change in the future	TCSM	PhD and MS	Engineering or Science	EGAT, NSTDA	Ability to adapt to computational environment	
2	Modeling and Analysis of Regional Air Quality	Assess and investigate how regional quality is impacted due to different natural and anthropogenic factors	TCSM	PhD and MS	Engineering or Science	EGAT, NSTDA	Ability to adapt to computational environment	
<u>Name of Advisor : Assoc. Prof. Dr. Sirintornthep Towprayoon</u>								
3	Application of Biochar on low land crop	Investigation of relationship of biochar and compst and fertilizer when implement in low land agricultural crop (rice) . Various types of Biochar will be applied into the soil. GHG emission and soil carbon balance will be mornitor. Soil carbonstock chnage will be estimatte using DNDC model.	AGAR	PhD	Master of Science/Engineer on Environmental science, Environmental Engineer, Agriculture, Soil science and relevance background upon interview	IRM and project with CIRAD	Ability to work in the field	
4	Potential of energy production from landfill mining	Estimate RDF production from old landfill mining in Thialand and analyze its energy potential , economic and social cost .	AGAR/EEP	Master on Envi Tech or T and M	BSc/B En on Science, ,Technology , Environmental Engineering, Chemical Engineering	Not yet but can be adjusted form MBT project	Experience/keen on solid waste disposal is appreciate.	Co-Advisor: Dr. Kompil Wangyao

5	Dry fermentation of MSW	Experimental study on process and change of key parameters during dry fermentation process of Fresh MSW	AGAR/AFPL	Master or Ph.D.	Master of Engineering: Environmental, Chemical; Master of Science and Technology : Environmental Science or Environmental Technology; Other degree upon interview	Not yet but to be integrate in the RDF KETEP project	Experience in bioreactor	Co-Advisor: Dr. Kompil Wangyao
6	Emission from RDF gasification	Monitoring and measurement of GHG and pollution gases from gasifier applied with various type of RDF . Optimization of the process to reduce emission	AFPL	PhD	M.Sc or M. Eng on Environment, Chemical Eng. Envi Tech.	Under negotiation with SCG	Experience in reactor and analysis equipment	Co-Advisor; Dr. Awassada Phonpiphat
7	Improving the quality of biomass/wood pellet for the purpose of commercial export.	Investigating the current issues and standard of wood/biomass pellet production. Investigating the effect of extrusion, temperatures, binding materials, raw material types on the quality of wood pellet production.	AGAR/AFPL	MEng/MSc	Bachelor degree in Chemical, Environmental, Mechanical Engineering/Science, Environmental technology, and other relevant background.	6,000 BHT/month	Ability to travel and work in other provinces some times for various field visits, lab-scale experiments, as well as factory testing. Familiar with lab-scale experiments.	Co-Advisor; Dr. Awassada Phongpiphat
8	Sustainable options for power production from Municipal Solid Waste (MSW) in Thailand.	Analyzing the available waste-to-energy technologies and its development trend. Investigating the appropriate parameters for technology selection using modelling approach. Introducing policies to support implementation.	AGAR	MEng/MSc	Bachelor degree in Chemical, Environmental, Mechanical Engineering/Science, Environmental technology, Environmental policy and other relevant	6,000 BHT/month	Ability to carry out field survey, site sampling, data collection at various study sites in the country. Applicant with good communication skill, project	Co-Advisor; Dr. Awassada Phongpiphat

					background.		management skill, and/or computer programming skill are favorable.	
<u>Name of Advisor : Asst. Prof. Dr. Sebastien Bonnet</u>								
9	Environmental sustainability of biochar production	GHG implications associated to the production and use of biochar as soil amendment	LCSAL	Master	Master of Science/Engineer in Environmental science	EU-FP8 Biochar Loop (proposal submitted not yet accepted)	Knowledge of LCA and agricultural production systems	
10	Economic sustainability of biochar production	Cost implications (CBA) associated to the production of biochar under various scenarios of production	LCSAL	Master	Master of Science/Engineer in Environmental science	EU-FP8 Biochar Loop (proposal submitted not yet accepted)	Knowledge of LCA and agricultural production systems	
<u>Name of Advisor : Prof. Dr. Shabbir H. Gheewala</u>								
11	Sustainability evaluation of bio-based materials	Several types of bio-based materials (PLA, PHB, etc.) to be evaluated from many possible feedstocks relevant to Thailand (cassava, sugarcane, agricultural residues, etc.)	LCSAL	MSc/PhD	Bachelor or Master of Science/Engineering on Environmental science, Environmental Engineering, Agriculture, and relevant background upon interview	Two different NSTDA projects	Knowledge of LCA and agricultural production systems	Ability to work in the field and have initiative in critical thinking