

Field	No.	Project Title
CE	1	Monitoring of Bridge Loading in Thailand
	2	Initial Shape Analysis of Cable-stayed Bridges during Construction by the Cantilever Method
	3	An Unified Approach for Modeling the Performance of Concrete Structures
	4	Effects of Lateral Load Distribution on Distortion-Induced Fatigue in Steel Bridge Girders
	5	Modal Pushover Analysis of Bridges
	6	Ground Characterization by Microseism Method
	7	Dynamic Properties of Chiang Mai Sand Using Cyclic Simple Shear Test
	8	Development of Thermodynamics-based Soil Model and Finite Element Implementation
	9	Behaviour of Bridges under Tsunami Loading
	10	Contract Risk Allocation of Philippine Government Construction Projects
	11	Water Demand Forecasting in Vientiane City
	12	Walkability and Pedestrian Level of Service in Southeast Asian Countries
ChE	1	Process Control on the Production of Carbon Nanotubes Using Natural Gas by Microwave Induced Plasma
	2	Ethanol Production from Biomass Using Reactive Distillation
	3	Antimicrobial Activities of Essential Oil Compounds (Gingerol, Shogoal, and Allicin) from Philippine Ginger and Garlic
	4	Extraction of Flavor from Spices/Herbs Using Supercritical Carbon Dioxide
	5	Development and Validation of Microwave-Assisted Methods using DLSU Microwave Labstation
	6	Protocatalytic Technology for the Printing Industry's Environmental Concerns
	7	Microwave Pyrolysis of Medical Plastic Wastes
	8	Catalytic Processes for the Production of Syngas from Natural Gas
	9	Removal of Arsenic from Groundwater by using Adsorption
	10	Treatment of Mercury - Contaminated Water Using Zero-Valent Copper
	11	Production of Microalgae in Photobioreactor and Characterization of Algal Fatty Acids for Biodiesel Feedstock
	12	Mass Integration of Batch Methyl Ester Process
EEE	1	Wireless Video Transmission
	2	Mobile / Wireless Networking
	3	Impact of Protection Systems on Distribution System Reliability
	4	Stability of the Micro-grid System
	5	Development of Infrastructures of Control Systems Technology
	6	A Program for Estimating Lightning Outage Rates of Overhead Lines (II)
	7	Voltage Stability Problem in the DGs Installed Distribution System
	8	Collaborative Research on SoC : Application - Robot Controller
	9	Fault Current Contribution from Solar Photovoltaic to Distribution Systems
	10	Formation of InGaAs Nanoholes by Droplet Epitaxy and Its Application
	11	Distribution Systems Power Quality Assessment by Using Probabilistic Techniques
	12	Aviation Ad Hoc Networking Protocols
	13	Noise Reduction Techniques for Hearing Aids
	14	Intelligent Fault Location in Transmission Network
EnvE	1	Remediation of Mine Tailings Contaminated Site Via Compost Application
	2	Improvement of Azo Dye Decolorization in a Sequencing Batch Reactor by Acclimatization of Sludge from Sewage Treatment Plant and Bioaugmentation
	3	Development and Testing of an Indigenous Activated Carbon for Removal of Arsenic from Groundwater
	4	Characterization and Management of Excessive Nutrient Loads from Agricultural and Rural Areas into Selected Rivers and Lakes in Laos
	5	Monitoring and Control of Cyanobacteria in Cambodia and Philippine Surface Water
	6	Design, Processing, Testing, and Modeling of a Solid-Waste-Derived Microbial Support System for Bioreactors in Wastewater Treatment
	7	Performance and Emissions Characteristics of Ozonated Coconut Oil as a Biofuel for Diesel Engines
	8	Biofilm Development in Microbial Support made from Solid Wastes for Bioreactors for Treatment of Wastewater
	9	Community-based Landslide Preparedness Using Remote Sensing and GIS
	10	Assessment of Emissions and Fuel Economy of Coco-Methyl Ester (CME) Biodiesel Considering Vehicle Operation and Traffic Characteristics
	11	Decolorization of Textile Wastewater Using Membrane BioReactor (MBR)
	12	Removal of Heavy Metal from Wastewater by Adsorption Using Fishery Industry Shell Wastes Mixed with Zeolites
	13	Assessing the impacts and risks of natural disasters to the environment
	14	Population Dynamics for Improving the Performance of Biological Wastewater Treatment Processes
	15	Characterization of Landfill Gases
	16	Quantification of Methane Emission in a soil-covered Methane-mixed Payatas Dumpsite: Field Measurements, Monitoring and Simulation Studies
GeoE	1	Toward Sustainable GeoEnvironment and Geohazard Management
	2	Integrated Study on Earth Resources within the Island Arc and Continental Margin Geological Setting of SE Asia
	3	Development of Sustainable Slope Protection in Tropical Residual Soils
	4	Rain-induced Landslide Mitigation in Vietnam
	5	Geological Control on Slope Instability

ICT	1	On-line writer dependent character recognition for Khmer
	2	Design of Robust Power System Damping Controller using Genetic Algorithm-based Fixed-Structure $H_{\infty}$ Loop Shaping Control
	3	Adaptive Noise Canceller using an IIR Notch Filter
	4	Adaptive Modulation and Coding OFDM Wireless Communication Systems
	5	An Online Reconfigurable Architecture for Filtering/Detection System
	6	XCS and Imbalance Problems
	7	Study on UWB Technology Application for HDTV Transmission Signal
	8	Affine Invariant Shape Recognition
	9	Dynamic Modelling and Control of Fourth-Order DC-DC Converters
	10	Fingerprint Enhancement and Classification Techniques
	11	Authentication by Mobile Phone Subscriber Identity Module (SIM)
	12	Specific Personal Distributed Ontology-Based Health Management
	13	ECG Data Compression and Classification
	14	Experimental Investigation on Eye-Motion Tracking
ManuE	1	Evaluation on the Silver Content in Eutectic Lead-free Solder Alloy Sn-0.7 Cu
	2	Integrated vibration and powder-mixed dielectric fluid in EDM system
	3	Multi-feature Recognition for Autonomous Mobile Robot Using Omni-directional Camera
	4	Design and Manufacturing of Brazed Joint Laminated Mold with Conformal Cooling Channel for Plastic Injection Molding
	5	Design of an efficient turbine for wave energy conversion using oscillating water column
	6	Artificial Neural Network as Rotary Machines Fault Diagnosis Tool in Palm Oil Factories
	7	Hydroxyapatite and Titanium composite thin films deposited by magnetron sputtering
	8	Development of Mold and Die 'Add on tool' for IRONCAD
	9	Soldering Process and Development of Lead-Free Solder Alloy for Electronic Application
	10	Development of cadmium-free silver-based brazing filler metal
	11	The effect of copper nano-powder on spreading characteristics and strength development of a Tin-Silver Solder
	12	Optimization powder mixed electrical discharge machining in rough machining
	13	Development and Fabrication of Hydroxyapatite Bone Graft for Implant Application
	14	Vibration Analysis of Defected Bearing using Finite Element Method
	15	'Green' Performance Measurement
	16	Development of a Green Supply Chain Network Assessment Tool
	17	Development of a Sandwich Brick Forming Machine
	18	Fabrication and Characterization of New compound hydroxyapatite for biomedical applications
	19	Development of Nano-sized Bioceramic Particle for Biomaterial Application
	20	Work Design Analysis Using Pro-Model Software to Improve Productivity
MatE	1	Formation of ZrO <sub>2</sub> Thin Film by Thermal Oxidation of Sputtered Zr on SiC Substrate
	2	Optimization and characterization of biodegradable PLLA polymeric blends
	3	Production and characterization of water-based epoxy form and production and utilization of epoxy particle as an advanced fillers
	4	Synthesis of Hydroxyapatite by Wet Precipitation and Mechanochemical Methods
	5	New Construction Materials based on Rice Straw/Rice Husk and Clay Admixtures
	6	Mechanical and Corrosion Behavior of In-Situ Particulate (Al <sub>2</sub> O <sub>3</sub> , TiB <sub>2</sub> , TiC) Reinforced Fe-Al Intermetallic Composites
	7	A Study on Behavior of Three Kinds Silica such as Waste Glass Powder, Ground Silica Sand and Silica Fume in Concrete Performance
	8	Properties and Deformation Behaviour of In-situ Copper Niobium Carbide Composite
	9	Synthesis, structural and magnetic characterization of rare earths substituted Mg-Mn ferrite system
	10	Synthesized and Characterization of Carbonated Hydroxyapatite for Improved Properties
	11	Development of Porous Material for Automotive Application
	12	Synthesis and Characterization of Praseodymium-doped Bismuth Titanate Ceramics
	13	Evaluation and Processing of Limestone Resources for Industrial Applications
	14	Development of Carbonate Apatite by Mechanical Activation
	15	Synthesis and Consolidation of Nanocrystalline Metal Matrix Composite by Mechanical Alloying of Metal-transition Metal-graphite Mixture
	16	Development of Porous Alumina for Gaseous Filtration
ME/AE	1	Ducted Water Current and extremely low head Turbine Helical Type with Boundary Layer Control Flow
	2	Digital Image Correlation measuring 3 Dimensional Displacement Field
	3	Development of a micro/mini UAV
	4	Modelling and Model Validation of Unsteady-state Friction in a Pneumatic Cylinder
	5	Bio Fuel
	6	Digital Image Correlation for 3D Stress Measurements
	7	Low Cost Solar Water Heater
	8	Computational and Experimental Investigations of 3D Flow Separation Phenomena
	9	Development of a Low-speed Control Strategy for DC Motors Operating in the Nonlinear Region
	10	Solar Distillation
	11	Identification and Control of Hydraulic Servomechanism using Neural Network
	12	Development of Highly Efficient Refrigeration System and Environmental-Friendly Refrigerants
	13	The Drying of Meat
	14	Evolution of Vortical Structures Produced by a Flapping Wing
	15	Control System Development of VTOL Micro Aerial Vehicle