

General Program of
“International Conference on Innovations in Agricultural, Food and Renewable Energy
Productions for Mankind”
Surasammanakhan, Suranaree University of Technology, Nakhon Ratchasima, Thailand

1st April, 2009
Suranaree Room

13.00 – 14.00	Registration
14.00 – 14.30	Opening Ceremony <i>by Associate Professor Group Captain Dr. Vorapot Khompis</i> <i>Vice Rector for Planning,</i> <i>Suranaree University of Technology</i>
14.30 – 15.30	Keynote Speech 1 on “ <i>Challenge for the Reinforcement of</i> <i>Agricultural Mechanization in Japan</i> ” <i>by Professor Dr. Masayuki KOIKE,</i> <i>President of Japanese Society of Agricultural Machinery (JSAM)</i>
15.30 – 15.45	Coffee Break
15.45 – 16.45	Keynote Speech 2 on “ <i>Advanced Drying Techniques for</i> <i>Producing Parboiled Rice and Accelerated Rice Aging</i> ” <i>by Professor Dr. Somchart SOPONRONNARIT,</i> <i>School of Energy, Environment and Materials,</i> <i>King Mongkut’s University of Technology Thonburi (KMUTT)</i>
19.00 – 22.00	Welcome Party

2nd April, 2009
International Meeting Room 1

Post Harvest and Emerging Technologies I	
08.45 – 09.00	Determination of Soluble Solids of Honey by Near Infrared Spectroscopy <i>Panmanas SIRISOMBOON, Suppakit HOWVIMONPORN</i>
09.00 – 09.15	Prediction and Analysis of Peel Essential Oil of Pomelo by NIR Spectroscopy <i>Panmanas SIRISOMBOON, Jittra DUANGCHANG</i>
09.15 – 09.30	Identification of Different Storage Duration of Pomelo (Kao Num Peung Variety) by Near Infrared Spectroscopy using SIMCA <i>Panmanas SIRISOMBOON, Warunee THANAPASE, Ravipat LAPCHAROENSUK</i>
09.30 – 09.45	Rapid Quality Determination of Agricultural Soils by Near Infrared Technique <i>Ronnarit RITTIRON, Worapa SEEHALAK</i>
09.45 – 10.00	Fish Size Measurement by Computer Vision using Laser Light Sectioning <i>Navaphattra NUNAK, Taweepol SUESUT, Sarayut INTHUSET</i>
10.00 – 10.15	Phase Separation Prediction of Pasteurized Drinking Yogurt with Artificial Neural Network Modeling <i>Thakul KUKIATIKUL, Sukanya WICHCHUKIT, Sasitorn NAKTHONG</i>
10.15 – 10.30	Coffee Break
Post Harvest and Emerging Technologies II	
10.30 – 10.45	A Unique Corn Roaster for Cornflake Typically Consumed in Bhutan <i>Sangay LHENDUP, Mongkol KWANGWAROPAS, Siwalak PATHAVEERAT</i>
10.45 – 11.00	LPG Gas Vaporizing Mathematical Model for Drying Process <i>Viboon CHANGRUE, Wera PHAPHUANGWITTAYAKUL, Apiwon POLCHAI, G.S.V. RAGHAVAN</i>
11.00 – 11.15	Rice Husk Cyclonic Combustor for Longan Batch Dryer <i>Natthawud DUSSADEE, Wera PHAPHUANGWITTAYAKUL, K SASUJIT, Wiwat KLONGPANICH, G.S.V. RAGHAVAN</i>
11.15 – 11.30	Simultaneous Heating and Cooling for Thai Herb by Heat Pump Technique <i>Wera PHAPHUANGWITTAYAKUL, Viboon CHANGRUE, Prapan SIRIPLABPLA, G.S.V. RAGHAVAN</i>
11.30 – 11.45	Wind and Solar Energy for Competitive Fish Drying <i>Reynan P. CALDERON, Hermogenes M. PAGUIA, Eduardo S. TINAO, Adrian B. SINGIAN</i>
11.45 – 12.00	Relationship between Electrical Capacitance and Moisture Content of Dried Longan Aril <i>Sanong AMAROEK and Nipon THEERA-UMPON</i>
12.00 – 13.30	Lunch Break

Soil and Water Engineering and Others	
13.30 – 13.45	Degree of Soil Erosion of Bataan Upland Areas Covered with Pineapple using Different Planting System <i>Ricson L. INES, Jonathan E. LACAYANGA, Walter G. VALDEZ, Ernesto A. VIRAY Jr., Guillermo S. RILLON Jr.</i>
13.45 – 14.00	Effect of Different Water Management Regimes on Growth, Yield and Water Productivity of Rice in SRI <i>G.A.Sanjeewanie GINIGADDARA, S.L. ANAMUKHAARACHCHI</i>
14.00 – 14.15	Design of a Free-Piston Stirling Engine for Irrigation Pumping <i>Sutapat KWANKAOMENG</i>
14.15 – 14.30	The Effect of pH on the Stability of Grease and Oil in Wastewater from Biodiesel Production Process <i>Aneak SAWAIN, Wirach TAWEEPRED, Udomphon PUETPAIBOON, Chaisri SUKSAROJ</i>
14.30 – 14.45	Development of a Small Rice Combine Harvester <i>Roongruang KALSIRISILP, V.M. SALOKHE</i>
14.45 – 15.00	Coffee Break
Food Engineering and Biotechnology	
15.00 – 15.15	Electrical Conductivity of Bonito Tuna during Ohmic Thawing <i>Navaphattra NUNAK, Taweepol SUESUT</i>
15.15 – 15.30	Phosphate Diffusion and Water Uptake of Marinated Shrimp during Soaking Process <i>Juthamas KHUEANKHANCHAROEN, Aluck THIPAYARAT</i>
15.30 – 15.45	Optimization of Salmonella spp. Cultivation Parameters to Accelerate Industrial Viable Cell Enumeration <i>Nattaya PHIPHITTHONG, Aluck THIPAYARAT</i>
15.45 – 16.00	Effect of Temperature and Glucose Concentration on Colony Surface Growth of <i>Escherichia coli</i> using Image Analysis Technique <i>Ruamporn LIAMKAEW, Aluck THIPAYARAT</i>
16.00 – 16.15	Feasibility Study of Utilization of Waste Syrup from a Carbonated Beverage Factory <i>Onuma PUAGCHAI, Kitti CHERDRUNGS, Piyarat BOONSAWHANG</i>
16.15 – 16.30	BioClean <i>Sittisak UPARIVONG</i>
16.30 – 17.00	Poster Session

International Meeting Room 2

Energy Technology

10.30 – 10.45	An Experimental Study on the Development of Agricultural Gasoline Engine for LPG <i>Sutapat KWANKAOMENG, Sajayos VANNANGKUL, Surasing WORARIT, Asanan RASMIGOSILP</i>
10.45 – 11.00	Investigating the Effects of E20 on Small Engine Combustion and Performance <i>Sutapat KWANKAOMENG, Pongsakorn YAMSRI, Jullawit MARFAK</i>
11.00 – 11.15	Gas-phase Coating of Molecules in Vacuum for Solar Cell Applications <i>Sarayut DEACHAPUNYA</i>
11.15 – 11.30	Numerical and Experimental Study on Temperature Conditioning Hot-gas Flow with Water Spray <i>Damorn BUNDHURAT, Sumpun CHAITEP</i>
11.30 – 11.45	Thermosyphon Application for Energy Thrift on Oven Smoked Fish Sausage <i>T. PARAMETTHANUWAT, S. Thonglat, P. TADTIANG, K. BOODDACHAN, S. RITTIDECH</i>
11.45 – 12.00	Thermosyphon Economizer for Energy Thrift in Production Bio-diesel Process <i>N. BHUWAKIETKUMJOHN, N. PIPATPAIBOON, S. RITTIDECH, K. BOODDACHAN</i>
12.00 – 13.30	Lunch Break

3rd April, 2009

International Meeting Room 1

Post Harvest and Emerging Technologies III

- 09.00 – 09.15 Effect of Velocity Rates as Compression Test to Investigation Properties and Breaking Forms of Guava Types on Cubical Specimens
Veerapong KANCHANAWONGKUL
- 09.15 – 09.30 Hard Rind Property of Fresh Mangosteen Fruit Subjected to Compressive Loading
Udomsak KITTHAWEE, Bundit JARIMOPAS, Siwalak PATHAVEERAT
- 09.30 – 09.45 Mechanical Bruising of Fresh Longan Fruit
Teerapong PHOLPHO, Bundit JARIMOPAS, Panmanas SIRISOMBOON, Siwalak PATHAVEERAT
- 09.45 – 10.00 Physical Characteristics and Mechanical Behavior of Fresh Durian Fruit as Related to Mechanical Dehusking
Pramote KUSON, Bundit JARIMOPAS, Anupun TERDWONGWORAKUL
- 10.00 – 10.15 Physical Characteristics and Mechanical Properties of Dry Betel Nut
Narumon BOONKRACHANG, Bundit JARIMOPAS, Siwalak PATHAVEERAT
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10.15 – 10.30 **Coffee Break**

Post Harvest and Emerging Technologies IV

- 10.30 – 10.45 Development of Durian Maturity Indication
Prakit TIMKHUM, Bundit JARIMOPAS, Anupan TERDWONGWORAKUL
- 10.45 – 11.00 Maturity Classification of Kao Nampueng Pomelo Fruit using Visible Range Spectrum
Panmanas SIRISOMBOON, Charoonpong THEAMPRATEEP
- 11.00 – 11.15 Maturity Grading of Fresh Young coconut Fruit Based on Acoustic Property
Nitipong JAISIN, Bundit JARIMOPAS, Siwalak PATHAVEERAT
- 11.15 – 11.30 Maturity Grading of Fresh Young Coconut Fruit Based on Light Property
Krawee TREEAMNUK, Bundit JARIMOPAS, Siwalak PATHAVEERAT, Manusak JANTHONG, Soros JIWANUWONG
- 11.30 – 11.45 Optimizing Sulfur Dioxide Concentration in Tapioca Starch Process
Wutthi KHONGKITTIKHOON, Kanchana SAENGCHAN, Annop NOPHARATANA, Warinthorn SONGKASIRI
- 11.45 – 12.00 Comparison of Tapioca Starch Collection by Cyclone and Cyclone Equipped with a Post Cyclone
Pipat PATAMARAJVICHIAN, Kanchana SAENGCHAN, Annop NOPHARATANA, Warinthorn SONGKASIRI
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12.00 – 13.30 **Lunch Break**

Power and Farm Machinery

13.30 – 13.45	Indigenous Developed Thai Combine Harvester <i>Jaruwat MOMGKOLTANATAS</i>
13.45 – 14.00	The Design and Function of Future Combine for Bio-resource Production <i>Nobutaka ITO</i>
14.00 – 14.15	Study of the Methods to Improve the Precision Values in a Bucket Type for the 10-row Garlic Planter <i>Jiraporn BENJAPHRAGAIRAT ,Hai SAKURAI, Sanyaluck KINGTHONG</i>
14.15 – 14.30	Improved Rice Hill Seeder for Wet and Dry Land Condition <i>Jonathan E. LACAYANGA, Walter G. VALDEZ, Rickson L. INES, Reynan P. CALDERON</i>
14.30 – 14.45	The Study Favorable Conditions for the Cutting Text on Para Wood by Computer Numerical Controlled Milling <i>Surasit RAWANGWONG, Pichai JANMANEE</i>
14.45 – 15.00	Simulation of Air Flow and Temperature Distribution in Strawberry Greenhouse <i>Sid NUANSIRIKOMON, Wiroj LIMTRAKARN, Jittiporn KRUEENATE, Thammarat PANYATHANMAPORN, Suntaree SIRARATPRAPA</i>
