

School of Bio-Chemical Engineering and Technology

2007 Publications

International Journals

1. Abeysundra, U. G. Yasantha; Sandhya Babel; and Shabbir Gheewala (2007). A decision making matrix with life cycle perspective of materials for roofs in Sri Lanka, *Materials & Design*, Vol. 28, No. 9, 2007, pp. 2478-2487.
2. Abeysundra, U. G. Yasantha; Sandhya Babel; Shabbir Gheewala; and Alice Sharp (2007). Environmental, economic and social analysis of materials for doors and windows in Sri Lanka, *Building and Environment*, Vol. 42, No. 5, May 2007, pp. 2141-2149.
3. Babel, Sandhya and Einstine M. Opiso (2007). Removal of Cr from synthetic wastewater by sorption into volcanic ash soil, *International Journal of Environmental Science and Technology*, Vol. 4, No. 1, Winter 2007, pp. 99-107.
4. Beyer, Anton; Luckhana Lawtrakul; Pornpan Pungpo; and Peter Wolschann (2007). Structural aspects of non-nucleoside HIV-1 reverse transcriptase inhibition, *Current Computer-Aided Drug Design*, Vol. 3, No. 2, June 2007, pp. 87-100.
5. Dacera, Dominica Del Mundo and Sandhya Babel (2007). Heavy metals removal from contaminated sewage sludge by naturally fermented raw liquid from pine apple wastes, *Water Science and Technology*, Vol. 56, No 7, pp. 145-152.
6. Jamsak, W.; S. Assabumrungrat; Peter L. Douglas; E. Croiset; N. Laosiripojana; Rapeepong Suwanwarangkul; and Sumittra Charojrochkul (2007). Thermodynamic assessment of solid oxide fuel cell system integrated with bioethanol purification unit, *Journal of Power Sources*, Vol. 174, No. 1, November 2007, pp. 191-198.
7. Luckhana Lawtrakul and Supa Hannongbua (2007). Molecular dynamics study on the unbinding of HBY 097 in the K103N mutant RT, *Monatshefte für Chemie*, Vol. 138, No. 10, October 2007, pp. 1029-1034.
8. Nuchanat Chamchoi and Suwanchai Nitorisravut (2007). Anammox enrichment from different conventional sludges, *Chemosphere*, Vol. 66, No. 11, February 2007, pp. 2225-2232.
9. Paweena Panichayapichet; Suwanchai Nitorisravut; and Wijarn Simachaya (2007). Spatial distribution and transport of heavy metals in soil, ponded-surface water and grass in a Pb-contaminated watershed as related to land-use practices, *Environmental Monitoring and Assessment*, Vol. 135, No. 1-3, December 2007, pp. 181-193.
10. Rapeepong Suwanwarangkul; E. Croiset; M.D. Pritzker; M.W. Fowler; P.L. Douglas; and E. Entchev (2007). Modelling of a cathode-supported tubular solid oxide fuel cell operating with biomass-derived synthesis gas, *Journal of Power Sources*, Vol. 166, No. 2, April 2007, pp. 386-399.

International Conferences

1. Babel, Sandhya; Suwanchai Nitorisravut; Alice Sharp; and Dominica Del Mundo Dacera (2007). Low cost community based treatment unit for floating food vendors and slum community in Thailand. In *Proceedings of the 2nd International Forum on Water Environmental Governance in Asia*, 3-4 December 2007, Beppu, Oita, Japan. pp. 92-97.
2. Dacera, Dominica Del Mundo and Sandhya Babel (2007). Assessment of heavy metal removal efficiencies by naturally fermented and A. Niger fermented pineapple wastes from contaminated sewage sludge. In *Proceedings of the ECO-TECH 2007 International Conference*, 26-28 November 2007, Kalmar, Sweden. pp. 417-426.
3. Dacera, Dominica Del Mundo and Sandhya Babel (2007). Naturally fermented raw liquid from pineapple wastes as extractant for heavy metal removal from contaminated sewage sludge. In *Proceedings of the International Conference on Water Management and Technology Applications in Developing Countries [CD-ROM]*, 14-16 May 2007, Kuala Lumpur, Malaysia. 8 p.
4. Jenjira Saetang and Sandhya Babel (2007). Landfill leachate treatment using white rot fungi. In *Proceedings of the 2nd IWA – ASPIRE Conference and Exhibition on Water and Sanitation in the Asia-Pacific Region*:

Opportunities, Challenges and Technology [CD-ROM], 29-31 October 2007, Perth, Australia. Paper No. 059, 8 p.

5. Jenjira Saetang and Sandhya Babel (2007). Solid waste landfill leachate treatment from garbage truck using immobilized white rot fungi. In *Proceedings of the 2007 International Symposium on Environmental Science and Technology*, 13-16 November, Beijing, China. pp. 1265-1271.
6. Luckhana Lawtrakul (2007). Molecular dynamics simulations of K103N mutant reverse transcriptase. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 284, pp. 474-477.
7. Nuchanat Chamchoi; Suwanchai Nitorisravut; and J. E. Schmidt (2007). Anammox acclimatization in SBR and preliminary study of COD and sludge concentration affecting on the anammox reaction. In *Proceedings of International Conference on Water Management and Technology Applications in Developing Countries*, 14-16 May 2007, Kuala Lumpur, Malaysia. 9 p.
8. Pisanu Toochinda (2007). Photocatalytic synthesis of hydrocarbon from CO₂ and H₂O over Pt/TiO₂. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 54, pp. 838-841.
9. Pranuda Jivaganont; Pimpa Limthongkul; Rapeepong Suwanwarangkul; and Sumittra Charojrochkul (2007). Effect of anode microstructure to performance of a single cell SOFC. In *Proceedings of the 14th Regional Symposium on Chemical Engineering 2007* [CD-ROM], 4-5 December 2007, Yogyakarta, Indonesia. 7 p.
10. Pranuda Jivaganont; Rapeepong Suwanwarangkul; Pimpa Limthongkul; and Sumittra Charojrochkul (2007). Microstructural investigation in anode-supported SOFC via a micro model. In *Proceedings of the 6th Materials Processing, Properties and Performance (MP3) Conference* [CD-ROM], 13-16 September 2007, Beijing, China. 4 p.
11. Rapeepong Suwanwarangkul and Sumittra Charojrochkul (2007). Experimental and modeling studies of planar solid oxide fuel cell operating with synthesis gas. In *Proceedings of the 6th Materials Processing, Properties and Performance (MP3) Conference* [CD-ROM], 13-16 September 2007, Beijing, China. 4 p.
12. Rapeepong Suwanwarangkul; Sumittra Charojrochkul; and Pramote Dechaumphai (2007). Preliminary study of using biomass-derived synthesis gas to power solid oxide fuel cell. In *Proceedings of the 14th Regional Symposium on Chemical Engineering 2007* [CD-ROM], 4-5 December 2007, Yogyakarta, Indonesia. 6 p.

National Conferences

1. Pranuda Jivaganont; Pimpa Limthongkul; Sumittra Charojrochkul; and Rapeepong Suwanwarangkul (2007). Micro modeling of anode-supported SOFC. In *Proceedings of the 3rd Conference on Energy Network of Thailand; ENETT*, 23-25 May 2007, Bangkok, Thailand. Paper No. ENETT2550-031, 7 p. (in Thai)
2. Rapeepong Suwanwarangkul; Kulpat Wattana; Sumittra Charojrochkul; Sujitra Wongkasemjit; and Pramote Dechaumphai (2007). Testing and development of mathematical model for solid oxide fuel cell stack using synthesis gas as fuel. In *Proceedings of the 3rd Conference on Energy Network of Thailand; ENETT*, 23-25 May 2007, Bangkok, Thailand. Paper No. ENETT2550-094, 5 p. (in Thai)

School of Bio-Chemical Engineering and Technology Faculty Members, 2007

- | | |
|---------------------------------|-------------------------------------|
| 1. Dr. Luckhana Lawtrakul | Assistant Professor |
| 2. Dr. Pisanu Toochinda | Lecturer |
| 3. Dr. Rapeepong Suwanwarangkul | Lecturer |
| 4. Dr. Sandhya Babel | Associate Professor |
| 5. Dr. Suwanchai Nitorisravut | Associate Professor |
| 6. Dr. Wanwipa Siriwatwechakul | Lecturer (Joined SIIT in June 2007) |

School of Civil Engineering and Technology

2007 Publications

International Journals

1. Jaturong Sa-nguanmanasak; Taweep Chaisomphob; and Eiki Yamaguchi (2007). Stress concentration due to shear lag in continuous box girders, *Engineering Structures*, Vol. 29, No. 7, July 2007, pp. 1414-1421.
2. Pannathat Rojanamon; Taweep Chaisomphob; and Winyu Rattanapitikon (2007). Regional flow duration model for the Salawin river basin of Thailand, *ScienceAsia: Journal of the Science Society of Thailand*, Vol. 33, No. 4, December 2007, pp. 411-419.
3. Ratchayut Kasemchaisiri, Somnuk Tangtermsirikul (2007). A method to determine water retainability of porous fine aggregate for design and quality control of fresh concrete, *Construction and Building Materials*, Vol. 21, No. 6, June 2007, pp. 1322-1334.
4. Somnuk Tangtermsirikul and Le Viet Hung (2007). A strength model for no-slump concrete with fly ash, *Magazine of Concrete Research*, Vol. 59, No. 3, April 2007, pp. 211-221.
5. Teeraphot Supaviriyakit; Amorn Pimanmas; and Pennung Warnitchai (2007). Cyclic response of non-seismically detailed interior RC beam-column connection with varying column tributary area, *Magazine of Concrete Research*, Vol. 59, No. 5, June 2007, pp. 351-365.
6. Winyu Rattanapitikon (2007). Calibration and modification of energy dissipation models for irregular wave breaking, *Ocean Engineering*, Vol. 34, Nos. 11-12, August 2007, pp. 1592-1601.
7. Winyu Rattanapitikon and Tomoya Shibayama (2007). Estimation of shallow water representative wave heights, *Coastal Engineering Journal*, Vol. 49, No. 3, September 2007, pp. 291-310.

National Journals

1. Amorn Pimanmas (2007). Behavior and failure mode of reinforced concrete members damaged by pre-cracking, *Songklanakarin Journal of Science and Technology*, Vol. 29, No. 4, July-August 2007, pp. 1039-1048.
2. Amorn Pimanmas (2007). The effect of long-term creep and prestressing on moment redistribution of balanced cantilever cast-in-place segmental bridge, *Songklanakarin Journal of Science and Technology*, Vol. 29, No. 1, January-February 2007, pp. 205-216.
3. Faazal, Ahmed and Krishna M. Neaupane (2007). Coupled analysis of residual soil slope subjected to rainfall, *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 18, No. 4, pp. 1-8.
4. Panuwat Joyklad; Preeda Chaimahawan; and Amorn Pimanmas (2007). Assessment of seismic deficiency of existing reinforced concrete buildings in Bangkok, *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 18, No. 3, 2007, pp. 19-28.
5. Preeda Chaimahawan and Amorn Pimanmas (2007). Simple seismic evaluation methodology for gravity-designed reinforced concrete building, *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 18, No. 1, 2007, pp. 35-45.
6. Teeraphot Supaviriyakit and Amorn Pimanmas (2007). Comparative performance of a substandard beam-column joint with and without initial bond between beam bars and concrete in the joint core, *Thammasat International Journal of Science and Technology*, Vol. 12, No. 1, January-March 2007, pp. 42-51.

International Conferences

1. Amarasingha, R.P. Niranga U. and Mongkut Piantanakulchai (2007). Fuzzy extension of the analytic network process for travel mode-choice modeling. In *Proceedings of the Eastern Asia Society for Transportation Studies [CD-ROM]*, 24-26 September 2007, Dalian, China. Vol. 6, 11 p.
2. Mongkut Piantanakulchai (2007). Some applications of the analytic network process to infrastructure planning. In *Proceedings of the International Conference on Civil and Environmental Engineering (ICCEE – 2007) [CD-ROM]*, 11-12 October 2007, Hiroshima, Japan. 6 p.

3. Natachai Wongchavalidkul and Mongkut Piantanakulchai (2007). Development of population synthesis in Bangkok: review of methodology and framework. In *Proceedings of the International Conference on Civil and Environmental Engineering (ICCEE – 2007)* [CD-ROM], 11-12 October 2007, Hiroshima, Japan. 5 p.
4. Natachai Wongchavalidkul and Mongkut Piantanakulchai (2007). Development of the activity based travel demand model in Bangkok: a review of available data and proposed modeling framework. In *Proceedings of the Eastern Asia Society for Transportation Studies* [CD-ROM], 24-26 September 2007, Dalian, China. Vol. 6, 15 p.
5. Neaupane, Krishna M. (2007). Priority weights of landslide controlling variables using analytic network process model. In *Proceedings of the 13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering*, 10-14 December 2007, Kolkatta, India. Vol. 1, Part 2, pp. 1112-1115.
6. Somnuk Tangtermsirikul and Krittiya Kaewmanee (2007). Development of Thailand code with reference to ACMC part 2 document. In *Proceedings of the 4th Civil Engineering Conference in the Asian Region (4th CECAR)* [CD-ROM], 25-28 June 2007, Taipei, Taiwan. 6 p.
7. Winyu Rattanapitikon and Sangapol Sawanggun (2007). Modification of a parametric wave model. In *Proceedings of the Fourth International Conference on Asia and Pacific Coasts (APAC 2007)* [CD-ROM], 21-24 September 2007, Nanjing, China. pp. 346-357.

National Conferences

1. Amarasingha, R.P. Niranga U. and Mongkut Piantanakulchai (2007). Travel mode-choice modeling using fuzzy extension of the analytic network process: paper identification no. NTC4-30. In *Proceedings of the 4th National Transport Conference*, 23 November 2007, Chiang Mai, Thailand. 10 p.
2. Amorn Pimanmas and Knut Nielsen (2007). Experience in monorail structural design in the palm Jumeriah project. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 259-264. (in Thai)
3. Amorn Pimanmas and Panuwat Joyklad (2007). Measures for tsunami evacuation shelters in Phuket and Pang-Nga. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 319-324. (in Thai)
4. Amorn Pimanmas and Teeraphot Supaviriyakit (2007). Nonlinear FEM analysis of non-seismically detailed interior RC beam-column connection under horizontal cyclic load. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 331-337. (in Thai)
5. Natachai Wongchavalidkul and Mongkut Piantanakulchai (2007). The possibilities of synthesizing the Bangkok population data and their activity schedules using data from National Statistical Office (NSO): paper identification no. NTC4-31. In *Proceedings of the 4th National Transport Conference*, 23 November 2007, Chiang Mai, Thailand. 10 p.
6. Nguyen Trong Lam; Raktipong Sahamitmongkol; and Somnuk Tangtermsirikul (2007). Free expansion and compressive strength of expansive concrete. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 5 (MAT), pp. 292-298.
7. Nguyen Trong Lam; Raktipong Sahamitmongkol; Taweechai Sumranwanich; Pitsan Krammart; and Somnuk Tangtermsirikul (2007). Expansion and compressive strength under restrained condition and durability of expansive concrete. In *Proceedings of the 3rd Annual Concrete Conference (ACC3)* [CD-ROM], 24-26 October 2007, Chonburi, Thailand. Paper No. MAT-32, pp. MAT-201 to MAT-206.
8. Pannathat Rojanamon; Taweep Chaisomphob; and Winyu Rattanapitikon (2007). Monthly flow duration model for small hydropower project development in the upper ping river basin. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 9 (WRE), pp. 383-388.
9. Panuwat Joyklad and Amorn Pimanmas (2007). Design guidelines for evacuation shelter in tsunami hazard area. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 222-226. (in Thai)
10. Pongsak Choktaweekarn and Somnuk Tangtermsirikul (2007). A study of dispersion effect of fly ash on heat of hydration and model for predicting temperature of mass concrete. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 5 (MAT), pp. 304.309.

11. Pongsak Choktaweekarn and Somnuk Tangtermsirikul (2007). Effect of dimension, aggregate type and curing condition on temperature and restrained strain of mass concrete. In *Proceedings of the 3rd Annual Concrete Conference (ACC3)* [CD-ROM], 24-26 October 2007, Chonburi, Thailand. Paper No. MAT-13, pp. MAT-77 to MAT-82.
12. Praj-ya Sungsomboon; Taweep Chaisomphob; Nattakorn Bongochgetsakul; and Ishida Tetsuya (2007). Development of the alternative composting technology for MSW treatment. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. ENV, 6 p.
13. Preeda Chaimahawan and Amorn Pimanmas (2007). Simple seismic evaluation methodology for gravity-designed reinforced building. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 247-252. (in Thai)
14. Preeda Chaimahawan and Amorn Pimanmas (2007). Vulnerability of existing reinforced concrete building in Bangkok against seismic hazard. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 253-258. (in Thai)
15. Sontaya Tongaroonsri and Somnuk Tangtermsirikul (2007). Cracking behavior of concrete under restrained shrinkage condition. In *Proceedings of the 3rd Annual Concrete Conference (ACC3)* [CD-ROM], 24-26 October 2007, Chonburi, Thailand. Paper No. MAT-14, pp. MAT-83 to MAT-88.
16. Teeraphot Supaviriyakit and Amorn Pimanmas (2007). Reversed cyclic behavior of RC beam-column joint designed according to ACI building code. In *Proceedings of the 12th National Convention on Civil Engineering (NCCE12)* [CD-ROM], 2-4 May 2007, Pisanulok, Thailand. Vol. 7 (STR), pp. 313-318. (in Thai)

School of Civil Engineering and Technology Faculty Members, 2007

1.	Dr. Amorn Pimanmas	Associate Professor
2.	Dr. Krishna Murari Neaupane	Associate Professor (Until June 2008)
3.	Dr. Mongkut Piantanakulchai	Assistant Professor
4.	Dr. Pruettha Nanakorn	Associate Professor
5.	Dr. Somnuk Tangtermsirikul	Professor
6.	Dr. Taweep Chaisomphob	Associate Professor
7.	Dr. Winyu Rattanapitikon	Associate Professor



School of Communications, Instrumentations and Control

2007 Publications

International Journals

1. Gierl, Christian; Toshiaki Kondo; H. Voos; Waree Kongprawechon; and Suthee Phoojaruenchanachai (2007). Image processing algorithms for an auto focus system for slit lamp microscopy, *Lecture Notes in Computer Science (Advanced Concepts for Intelligent Vision Systems)*, Vol. 4678/2007, pp. 909-919.
2. Taweesak Samanchuen and Sawasd Tantaratana (2007). PN acquisition schemes using RAKE structure for DS/SS systems over a frequency-selective Rayleigh fading channel, *ECTI Transactions on Electrical Engineering, Electronics, and Communications*, Vol. 5, No. 1, February 2007, pp. 139-152.
3. Worawat Sa-Ngiamvibool and Banlue Srisuchwinwong (2007). 10.7-MHz fully balanced, high-Q, wide-dynamic-range current-tunable Gm-C bandpass filter, *ECTI Transactions on Electrical Engineering, Electronics, and Communications*, Vol. 5, No. 2, August 2007, pp. 177-186.
4. Worawat Sa-Ngiamvibool and Banlue Srisuchinwong (2007). A 10.7-MHz fully balanced, high-Q, 107-dB-dynamic-range current-tunable bandpass filter, *AEÜ International Journal of Electronics and Communications*, Vol. 61, No 5, May 2007, pp. 307-313.

National Journals

1. Pramote Jangisarakul and Chalie Charoenlarnopparut (2007). Finite element method with edge elements for anisotropic waveguide problems, *Suranaree Journal of Science and Technology*, Vol. 14, No. 4, October-December 2007, pp. 309-321.
2. Saravuth Pothiya; C. Khamsum; Waree Kongprawechnon; and Issarachai Ngamroo (2007). Design of optimal PID controller using improved genetic algorithm for AGC including SMES units, *GMSARN International Journal*, 2007, pp. 43-48.
3. Sirisak Wongsura and Waree Kongprawechnon (2007). Discrete-time feedback error learning with time-delay, *Suranaree Journal of Science and Technology*, Vol. 14, No. 3, July-September 2007, pp. 247-255.
4. Sirisak Wongsura and Waree Kongprawechnon (2007). New theoretical analysis for the discrete-time feedback error learning method, *Thammasat International Journal of Science and Technology*, Vol. 12, No. 4, October-December 2007, pp. 62-73.
5. Wimol San-Um; Banlue Srisuchinwong; and Sawasd Tantaratana (2007). A low-power low-error single-ended virtually-grounded-drain class AB switched-current memory cell, *Songklanakarinn Journal of Science and Technology*, Vol. 29, No. 1, January-February 2007, pp. 165-180.

International Conferences

1. Banlue Srisuchinwong and Chun-Hung Liou (2007). High frequency implementation of sprott's chaotic oscillators using current-feedback op amps. In *Proceedings of the International Symposium on Signals, Circuits & Systems (ISSCS 2007)* [CD-ROM], 12-13 July, 2007, Iasi, Romania. 3 p.
2. Banlue Srisuchinwong and Chun-Hung Liou (2007). Improved implementation of Sprott's chaotic oscillators based on current-feedback op amps. In *Proceedings of the 2007 Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI) International Conference* [CD-ROM], 9-12 May 2007, Chiang Rai, Thailand. pp. 38-44.
3. Banlue Srisuchinwong and Wimol San-Um (2007). A Chua's chaotic oscillator based on a coarsely cubic-like CMOS resistor. In *Proceedings of Asia-Pacific Conference on Communications 2007 (APCC 2007)* [CD-ROM], 18-20 October 2007, Bangkok, Thailand. pp. 47-49.
4. Banlue Srisuchinwong and Wimol San-Um (2007). Implementation of a Chua's chaotic oscillator using "roughly-cubic-like" nonlinearity. In *Proceedings of the 2007 Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI) International Conference* [CD-ROM], 9-12 May 2007, Chiang Rai, Thailand. pp. 36-37.
5. Boonyapat Phokaphan; Pattaraneer Guptabutra; Tulvit Onwan; Sirisak Wongsura; and Waree Kongprawechnon (2007). Theoretical discussion on the discrete-time feedback error learning for a time delay system with an uncertainty plant model by using a PD controller. In *the Fourth Power Conversion Conference (PCC)*, 2-5 April 2007, Nagoya, Japan. pp. 172-176.
6. Chalie Charoenlarnopparut (2007). One-dimensional and multidimensional spectral factorization using Gröbner basis approach. In *Proceedings of Asia-Pacific Conference on Communications 2007 (APCC 2007)* [CD-ROM], 18-20 October 2007, Bangkok, Thailand. pp. 201-204.
7. Duangporn Puttadilok; Duangrat Eungdamrong; and Watchanun Tanacharoenwat (2007). A study of narrow-band and compact size microstrip bandpass filters for wireless communications. In *SICE Annual Conference 2007* [CD-ROM], 17-20 September 2007, Takamatsu, Japan. 4 p.
8. Gierl, Christian; Toshiaki Kondo; H. Voos; Waree Kongprawechnon; and Suthee Phoojaruenchanachai (2007). Automatic focusing of a motorized photo slit lamp microscope. In *Proceedings of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE EMBC2007)*, 23-26 August 2007, Lyon, France. pp. 3078-3081.
9. Kaewalongkorn Ngokkham; Naporn Wattanakhajeegul; Somrote Komolavanij; and Waree Kongprawechnon (2007). A neural network approach for analyzing small and medium-sized enterprises lending decisions in Thailand. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 97, pp. 134-137.
10. Kaewalongkorn Ngokkham; Waree Kongprawechnon; and Somrote Komolavanij (2007). Neural network approach for analyzing partnerships. In *Proceedings of the 3rd International Congress on Logistics and SCM Systems (ICLS2007)*, 28-30 August 2007, Yokohama, Japan. pp. 359-366.

11. Kanok Mingsakun; Papitchaya Piyapinyo; Somrote Komolavanij; and Waree Kongprawechnon (2007). The project selection model by fuzzy linear programming. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 58, pp. 814-817.
12. Kanok Mingsakun; Somrote Komolavanij; and Waree Kongprawechnon (2007). An outsourcing model by fuzzy linear programming. In *Proceedings of the 3rd International Congress on Logistics and SCM Systems (ICLS2007)*, 28-30 August 2007, Yokohama, Japan. pp. 367-372.
13. Kondo, Toshiaki (2007). Motion estimation using gradient orientation structure tensors. In *Proceedings of the Second International Conference on Innovative Computing, Information and Control* [CD-ROM], 5-7 September 2007, Kumamoto, Japan. 4 p.
14. Pailin Chanapaitoon; Supawan Kumpituck; Tanon Chintana; and Chalie Charoenlarnopparut (2007). Two-dimensional diamond-shape linear phase perfect reconstruction FIR filter bank design using Gröebner basis approach. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. pp. 37-40.
15. Peerapol Sa-Ngamuang; C. Thamnittasana; and Toshiaki Kondo (2007). Thai car license plate recognition using essential-elements-based method. In *Proceedings of Asia-Pacific Conference on Communications 2007 (APCC 2007)* [CD-ROM], 18-20 October 2007, Bangkok, Thailand. pp. 41-44.
16. Pramuk Boonsieng and Toshiaki Kondo (2007). Comparative study of motion estimation techniques: the gradient method and structure tensor method. In *Proceedings of International Workshop on Advanced Image Technology (IWAIT 2007)* [CD-ROM], 8-9 January 2007, Bangkok, Thailand. pp. 46-49.
17. Saravuth Pothiya; Issarachai Ngamroo; and Waree Kongprawechnon (2007). Design of optimal fuzzy logic-based PID controller using multiple tabu search algorithm for AGC including SMES units. In *the 8th International Power Engineering Conference (IPEC 2007)*, 3-6 December 2007, Singapore. pp. 1183-1188.
18. Sirisak Wongsura and Waree Kongprawechnon (2007). Discrete-time feedback error learning for unknown nonlinear systems. In *Proceedings of the Second International Conference on Innovative Computing, Information and Control* [CD-ROM], 5-7 September 2007, Kumamoto, Japan. 4 p.
19. Taweesak Samanchuen and Sawasd Tantaratana (2007). Performance of a delay-locked-loop symbol tracking system for MC-CDMA. In *Proceedings of Asia-Pacific Conference on Communications 2007 (APCC 2007)* [CD-ROM], 18-20 October 2007, Bangkok, Thailand. pp. 327-330.
20. Theerasit Phoopattanakul; W. Saenghiranwattana; Kamol-On Ruangsa-ad; Chalie Charoenlarnopparut; and P. Boonyanant (2007). Adaptive channel equalizer design for uplink WCDMA rake receiver. In *Proceedings of the 2007 Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI) International Conference* [CD-ROM], 9-12 May 2007, Chiang Rai, Thailand. pp. 691-694.
21. Wasapa Anatapreecha; Nattawan Duangkha, Supakiat Pattichart; and Duangrat Eungdamrong (2007). Novel E-shaped driver based on the quasi-yagi antenna. In *Proceedings of the 9th International Conference on Advanced Communication Technology (ICTACT 2007)*, 12-14 February 2007, Phoenix Park, Korea, pp. 894-896.
22. Worawat Sa-Ngiamvibool and Banlue Srisuchinwong (2007). A 10.7-MHz fully balanced, Q-of-267, 103-dB-dynamic-range current-tunable bandpass filter. In *Proceedings of Asia-Pacific Conference on Communications 2007 (APCC 2007)* [CD-ROM], 18-20 October 2007, Bangkok, Thailand. pp. 51-54.

School of Communications, Instrumentations and Control Faculty Members, 2007

1. Dr. Banlue Srisuchinwong	Associate Professor
2. Dr. Chalie Charoenlarnopparut	Assistant Professor
3. Dr. Duangrat Eungdamrong	Assistant Professor
4. Dr. Sawasd Tantaratana	Professor
5. Dr. Toshiaki Kondo	Assistant Professor
6. Dr. Waree Kongprawechnon	Associate Professor



School of Information and Computer Technology

2007 Publications

International Journals

1. Akama, Kiyoshi and Ekawit Nantajeewarawat (2007). State-transition computation models and program correctness thereon, *Journal of Advanced Computational Intelligence and Intelligent Informatics*, Vol. 11, No. 10, December 2007, pp. 1250-1261.
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6. Ithipan Methasate and Thanaruk Theeramunkong (2007). Experiments on kernel tree support vector machines for text categorization, *Lecture Notes in Computer Science (Advances in Knowledge Discovery and Data Mining)*, Vol. 4426, 2007, pp. 720-727.
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15. Peerasak Intarapaiboon and Ekawit Nantajeewarawat (2007). Representing and reasoning with medical knowledge using description logics. In *Proceedings of the 4th International Joint Conference on Computer Science & Software Engineering (JCSSE2007)* [CD-ROM], 2-4 May 2007, Khon Kaen, Thailand. pp. 218-224.
16. Peerasak Intarapaiboon; Ekawit Nantajeewarawat; and Thanaruk Theeramunkong (2007). Towards generating ontology-based semantic representations of medical symptoms. In *Proceedings of the Eighth International Conference on Intelligent Technologies (InTech'07)* [CD-ROM], 12-14 December 2007, Sydney, Australia. pp.27-34.
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Books

1. Ramamohanarao Kotagiri; P. Radha Krisna; Mukesh Mohania; and Ekawit Nantajeewarawat, eds. (2007). *Advances in Databases: Concepts, Systems and Applications, Proceedings of 12th International Conference on Database Systems for Advanced Applications, DASFAA 2007*, Bangkok Thailand, April 2007, 1126 pages. Springer. ISBN-13 978-3-540-71702-7.
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School of Information and Computer Technology Faculty Members, 2007

- | | | |
|-----|----------------------------|---|
| 1. | Dr. Bunyarit Uyyanonvara | Assistant Professor |
| 2. | Dr. Chaiwat Ootamakorn | Assistant Professor (From October 2007 to May 2008) |
| 3. | Dr. Cholwich Nattee | Lecturer |
| 4. | Dr. Ekawit Nantajeewarawat | Associate Professor |
| 5. | Dr. Komwut Wipusitwarakun | Assistant Professor |
| 6. | Dr. Pakinee Suwannajan | Lecturer |
| 7. | Dr. Philippe Meunier | Lecturer |
| 8. | Dr. Stanislav S. Makhanov | Associate Professor |
| 9. | Dr. Steven Gordon | Assistant Professor |
| 10. | Dr. Thanaruk Theeramunkong | Associate Professor |



School of Management Technology

2007 Publications

International Journals

1. Jalil, Sakib and Suebsak Nanthavanij (2007). Analytical algorithms for ergonomic seated posture when working with notebook computers, *Industrial Engineering and Management Systems*, Vol. 6, No. 2, December 2007, pp. 146-157.
2. Krisada Asawarungsangkul and Suebsak Nanthavanij (2007). A genetic algorithm approach to the selection of engineering controls of optimal noise reduction, *ScienceAsia: Journal of the Science Society of Thailand*, Vol. 33, No. 1, March 2007, pp. 89-101.
3. Krisada Asawarungsangkul; Suebsak Nanthavanij; and Junalux Chalidabhongse (2007). Decision support system for designing effective noise hazard prevention strategies, *International Journal of Occupational Safety and Ergonomics*, Vol. 13, No. 4, pp. 451-470.
4. Shrestha, Shruti and Junalux Chalidabhongse (2007). Improving employee performance appraisal method through web-based appraisal support system: system development from the study on Thai companies, *IEICE Transactions on Information and Systems*, Vol. E90-D, No. 10, October 2007, pp. 1621-1629.
5. Veeris Ammarapala and James T. Luxhøj (2007). A collaborative multi-criteria decision making technique for risk factor prioritization, *Journal of Risk Research*, Vol. 10, No. 4, June 2007, pp. 465-485.

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2. Jail, Sakib and Suebsak Nanthavanij (2007). Analytical algorithms for adjusting body orientation and notebook computer settings to obtain ergonomic seated posture. In *Proceedings of the Eighth Pan-Pacific Conference on Occupational Ergonomics (PPCOE 2007)* [CD-ROM], 17-19 October 2007, Bangkok, Thailand. 11 p.
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4. Jalil, Sakib; Veeris Ammarapala; and Suebsak Nanthavanij (2007). Use of "workstation – NBC" adjustment matrix as a practical tool to estimate recommended adjustments for proper work posture. In *Proceedings of the Eighth Pan-Pacific Conference on Occupational Ergonomics (PPCOE 2007)* [CD-ROM], 17-19 October 2007, Bangkok, Thailand. 6 p.
5. Kaewalongkorn Ngokkham; Naporn Wattanakhajeegul; Somrote Komolavanij; and Waree Kongprawechnon (2007). A neural network approach for analyzing small and medium-sized enterprises lending decisions in Thailand. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 97, pp. 134-137.
6. Kaewalongkorn Ngokkham; Waree Kongprawechnon; and Somrote Komolavanij (2007). Neural network approach for analyzing partnerships. In *Proceedings of the 3rd International Congress on Logistics and SCM Systems (ICLS2007)*, 28-30 August 2007, Yokohama, Japan. pp. 359-366.
7. Kanok Mingsakun; Papitchaya Piyapinyo; Somrote Komolavanij; and Waree Kongprawechnon (2007). The project selection model by fuzzy linear programming. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 58, pp. 814-817.
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10. Nuchrawee Jamjumrus and Suebsak Nanthavanij (2007). Survey of perceived work-related musculoskeletal discomforts (WMSDS) among Thai office employees working predominantly with notebook computers. In *Proceedings of the Eighth Pan-Pacific Conference on Occupational Ergonomics (PPCOE 2007)* [CD-ROM], 17-19 October 2007, Bangkok, Thailand. 10 p.
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13. Somrote Komolavanij and Suebsak Nanthavanij (2007). Developing a neural network based expert system for evaluating desktop and notebook computer operations and workstations. In *Proceedings of the Eighth Pan-Pacific Conference on Occupational Ergonomics (PPCOE 2007)* [CD-ROM], 17-19 October 2007, Bangkok, Thailand. 6 p.
14. Suebsak Nanthavanij (2007). Job rotation procedure for reducing exposure to ergonomics hazards. *Keynote Speech at International Conference on Ergonomics (ICE 2007)*, 3-5 December 2007, Kuala Lumpur, Malaysia. 6 p.
15. Suebsak Nanthavanij and Junalux Chalidabhongse (2007). Ergonomics scheduling of delivery crew for the vehicle routing problem with manual materials handling. In *Proceedings of the 2nd International Conference on Operations and Supply Chain Management (SCM 2007)* [CD-ROM], 18-20 May 2007, Bangkok, Thailand. 5 p.
16. Veeris Ammarapala (2007). The development of supply chain management in Thailand textile industry. In *Proceedings of the 2nd International Conference on Operations and Supply Chain Management (SCM 2007)* [CD-ROM], 18-20 May 2007, Bangkok, Thailand. pp. 689-694.

School of Management Technology Faculty Members, 2007

- | | | |
|----|----------------------------|---|
| 1. | Dr. Chawalit Jeenanunta | Lecturer |
| 2. | Dr. Jittima Tongurai | Lecturer (Until April 2008) |
| 3. | Dr. Junalux Chalidabhongse | Assistant Professor (Until December 2007) |
| 4. | Dr. Pisit Chanvarasuth | Lecturer |
| 5. | Dr. Pornpimol Chongphaisal | Lecturer |
| 6. | Dr. Somrote Komolavanij | Associate Professor |
| 7. | Dr. Suebsak Nanthavanij | Associate Professor |
| 8. | Dr. Suthathip Suanmali | Lecturer (Joined SIIT in October 2007) |
| 9. | Dr. Veeris Ammarapala | Lecturer |



School of Manufacturing Systems and Mechanical Engineering

2007 Publications

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9. K. Pianthong; W. Seehanam; M. Behnia; Thanarath Sriveerakul; and Satha Aphornratana (2007). Investigation and improvement of ejector refrigeration system using computational fluid dynamics technique, *Energy Conversion and Management*, Vol. 48, No. 9, September 2007, pp. 2556-2564.
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16. Teeradej Wuttiornpun and Pisal Yenradee (2007). Performance of TOC based finite capacity material requirement planning system for a multi-stage assembly factory, *Production Planning and Control*, Vol. 18, No. 8, pp. 703-715.
17. Thananchai Leephakpreeda (2007). Car-parking guidance with fuzzy knowledge-based decision making, *Building and Environment*, Vol. 42, No. 2, February 2007, pp. 803-809.
18. Thanarath Sriveerakul; Satha Aphornratana; and Kanjanapon Chunnanond (2007). Performance prediction of steam ejector using computational fluid dynamics: Part 1. Validation of the CFD results, *International Journal of Thermal Sciences*, Vol. 46, No. 8, August 2007, pp. 812-822.
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1. Teeradej Wuttiornpun and Pisal Yenradee (2007). A new approach for a finite capacity material requirement planning system, *Thammasat International Journal of Science and Technology*, Vol. 12, No. 2, April-June 2007, pp. 28-51.

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3. Jirachai Buddhakulsomsiri (2007). Framework for implementing data mining techniques in industrial safety data. In *Proceedings of the Eighth Pan-Pacific Conference on Occupational Ergonomics (PPCOE 2007)* [CD-ROM], 17-19 October 2007, Bangkok, Thailand. 6 p.
4. Kasama Janvijitsakul and Vladimir I. Kuprianov (2007). Emission of polycyclic aromatic hydrocarbons from the fluidized-bed combustion of Thai rice husk. In *Proceedings of the Sixth Asia Pacific Conference on Sustainable Energy and Environmental Technologies (APCSEET 2007)* [CD-ROM], 7-11 May 2007, Bangkok, Thailand. Paper No. COM7, 7 p.
5. Kasama Janvijitsakul and Vladimir I. Kuprianov (2007). Modeling of axial CO and NO concentration profiles in a fluidized-bed combustor firing biomass fuels. In *Proceedings of the Sixth Asia Pacific Conference on Sustainable Energy and Environmental Technologies (APCSEET 2007)* [CD-ROM], 7-11 May 2007, Bangkok, Thailand. Paper No. COM6, 7 p.
6. Kasama Janvijitsakul; Vladimir I. Kuprianov; Poramet Arromdee; and Peter L. Douglas (2007). Effects of operating conditions and air-staging on combustion and emission performance of a 400 kW_{th} fluidized-bed combustor firing rice husk. In *Proceedings of the Second GMSARN International Conference on Sustainable Development: Challenges and Opportunities for the Greater Mekong Subregion* [CD-ROM], 12-14 December 2007, Pattaya, Thailand. Paper No. E-26, 7 p.
7. Kuprianov, Vladimir I.; Rachadaporn Kaewklum; Nutsupak Chovichien; Kanate Thana-Anekcharoen; and Pitipong Benjarungroj (2007). Experimental study on hydrodynamics of a swirling fluidized bed of biomass-sand mixtures in a conical prototype. In *Proceedings of the Sixth Asia Pacific Conference on Sustainable Energy and Environmental Technologies (APCSEET 2007)* [CD-ROM], 7-11 May 2007, Bangkok, Thailand. Paper No. ENG11, 6 p.
8. Kuprianov, Vladimir I.; Watcharee Kaewboonsong; and Nutsupak Chovichien (2007). Predicting fuel and emission costs for a utility boiler co-firing fuel oil and natural gas. In *Proceedings of the Sixth Asia Pacific*

Conference on Sustainable Energy and Environmental Technologies (APCSEET 2007) [CD-ROM], 7-11 May 2007, Bangkok, Thailand. Paper No. PGN4, 7 p.

9. Kuprianov; Vladimir I.; Watcharee Kaewboonsong; and Vicharn Tanetsakunvatana (2007). Emissions from large Thai utilities (co-)fired with fossil fuels. In *Proceedings of the Second GMSARN International Conference on Sustainable Development: Challenges and Opportunities for the Greater Mekong Subregion* [CD-ROM], 12-14 December 2007, Pattaya, Thailand. Paper No. ENV-09, 8 p.
10. Navee Chiadamrong and Priyanka Kohly (2007). Evaluating push and pull production lines at their optimal designs using statistical approach and economic consideration. In *Proceedings of the 3rd International Congress on Logistics and SCM Systems (ICLS2007)*, 28-30 August 2007, Yokohama, Japan. pp. 222-229.
11. Nutsupak Chovichien; Vladimir I. Kuprianov; and Rachadaporn Kaewklum (2007). Hydrodynamics of a swirling fluidized bed in a conical prototype. Part 2: experimental results for different rice husk-sand mixtures. In *Proceedings of International Conference on Engineering, Applied Sciences, and Technology (ICEAST 2007)* [CD-ROM], 21-23 November 2007, Bangkok, Thailand. Paper No. 288, pp. 850-853.
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School of Manufacturing Systems and Mechanical Engineering Faculty Members, 2007

1.	Dr. Bundit Limmeechokchai	Associate Professor
2.	Dr. Jirachai Buddhakulsomsiri	Assistant Professor
3.	Dr. Lalita Tantimuratha	Assistant Professor (Until October 2007)
4.	Dr. Pisal Yenradee	Associate Professor
5.	Dr. Navee Chiadamrong	Associate Professor
6.	Dr. Ruengsak Kawtummachai	Associate Professor
7.	Dr. Satha Aphornratana	Associate Professor
8.	Dr. Supachart Chungpaibulpatana	Associate Professor
9.	Dr. Thananchai Leephakpreeda	Associate Professor
10.	Dr. Vladimir I. Kuprianov	Associate Professor



Department of Common and Graduate Studies

2007 Publications

International Journals

1. Abeysondra, U. G. Yasantha; Sandhya Babel; Shabbir Gheewala; and Alice Sharp (2007). Environmental, economic and social analysis of materials for doors and windows in Sri Lanka, *Building and Environment*, Vol. 42, No. 5, May 2007, pp. 2141-2149.
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Department of Common and Graduate Studies Faculty Members, 2007

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|---------------------------|--|
| 1. Dr. Alice Sharp | Assistant Professor |
| 2. Dr. Jeffrey Frank Webb | Assistant Professor (Until March 2008) |
| 3. Dr. Pakorn Opaprakasit | Assistant Professor |
| 4. Dr. Ruben Nelson Mera | Assistant Professor (Until March 2008) |
| 5. Dr. Sujin Suwanna | Lecturer (Joined SIIT in October 2007) |
| 6. Dr. Thawatchai Onjun | Assistant Professor |

