

The 5th Joint Symposium between CMU and KU

10-12 September, 2014

Chiang Mai University

10 SEPTEMBER 2014

9.30–10.30 **Social Sciences and Humanities**
Chair Persons: Ratchaneekorn TONGSOOKDEE, CMU
 Paul BATTEN, KU
Place: Meeting room 1, Floor 2, Language Institute

9.30–09.50 “Japanese University Students’ Knowledge of Communication Strategies
 in English”

Paul Batten, KU

9.50–10.10 “Connecting Dots : Lessons Learned from Collaborative Special Education
 Among Parents of Students with Special Needs, Teachers, and Communities”
Ratchaneekorn Tongsookdee, Soisuda Vittayakorn, CMU

10.10–10.30 “Lesson Study: Its Impact on the Enhancement of a Novice Principal’s Skills
 and Attributes in Instructional Supervision”

Ivy Santiago C. Liwa, KU

9.30–10.30 **Economics and Business**
Chair Persons: Narumon KIMPAKORN, CMU
 Ravindra R. RANADE, KU
Place: Meeting room 2, Floor 2, Language Institute

9.30–9.50 “Fiscal Sustainability and Fiscal Consolidation”

Pisit Leeahtam, CMU

9.50–10.10 “Border Trade Situation in Upper North of Thailand”
 Boonsawart Prugsiganont, Kemakorn Chaiprasit
 and Sirirat Sughantha, CMU

10.10–10.30 “Economic Inequality, Envy, Crime and Sustainable Society”

Ravindra Ranade, KU

9.30–10.30 **Engineering**
Chair Persons: Nipon THEERA-UMPON, CMU
 Hideyuki SAWADA, KU
Place: Meeting room 3, Floor 2, Language Institute

9.30–9.50 “An Ecologically Sustainable Aquaculture System using Nonaerated
 and Aerated Filter Together with Duckweed for Water Quality Control”

Dhiti Cheochanvit, Thitisan Pomkao and Kittipong Hiranyakam, CMU

9.50–10.10 “Development of a Haptic Device for Tactual Search in Virtual Environment”
Shohei Kitano and Hideyuki Sawada, KU

10.10–10.30 “Destruction of Model Light Tar Using Pulsed Gliding Arc Discharge”

Akarasan Kunnikar and Nakorn Tippayawong, CMU

9.30–10.30 Medicine and Nursing (Neurology and Psychiatry)

Chair Persons: Siwaporn CHANKRACHANG, CMU
Nobuyuki KAWAI, KU

Place: Meeting room 4, Floor 2, Language Institute

- 9.30–9.45 “Multimodal Nondrug Therapy on Dementia symptoms in Nursing Home Residents with Degenerative Dementia in Thailand”
Chankrachang Siwaporn and Singhanter Sasiwimol, CMU
- 9.45–10.00 “Traumatic Brain Injury Accelerates Amyloid- β deposition and Impairs Spatial Learning Ability in Triple-transgenic Model Mouse of Alzheimer’s Disease”
Nobuyuki Kawai, Yasunori Toyota, Hajime Shishido, Yasushi Kishimoto, Yutaka Kirino and Takashi Tamiya, KU
- 10.00–10.15 “Clinical Presentation of Seropositive NMO Spectrum Disorders in Maharaj Nakorn Chiang Mai Hospital”
Atiwat Soontornpun, Surat Tanprawate and Pakamas Pasogpakdee, CMU
- 10.15–10.30 “The Depression, Anxiety and Suicidality (DAS) Program among Elderly Thais: Rational, Methodology and Early Results”
Nahathai Wongpakaran, Tinakon Wongpakaran, Kanokkwan Eurviriyankul, Peerasak Lertrakarnnon, Surin Jiraniramai and DAS Research Group, CMU

09.30–10.30 Agriculture

Chair Persons: Hisashi KATO, KU

Place: Meeting room 5, Floor 2, Language Institute

- 9.30–9.50 “Resistant Starch, *in Vitro* Starch Digestibility and Glycemic Index of Enzymatic Modified Glutinous Rice Starch”
Yuthana Phimolsiripol, Phisit Seesuriyachan, Orapan Sangsee and Pathompong Khamkon, CMU
- 9.50–10.10 “Allelopathic Active Substances from Thai Medicinal Plants”
Hisashi Kato-Noguchi and Piyatida Pukclai, KU
- 10.10–10.30 “Mutation of *Bacillus* sp. for Application in Mannooligosaccharides Production from Copra Meal”
Chartchai Khanongnuch, Janjira Intathap, Apinun Kanpiengjai and Goro Takata, CMU

10.45–11.25 Social Sciences and Humanities

Chair Persons: Benjang JAISAI DER ARSLANIAN, CMU
Yumiko TAKAGI, KU

Place: Meeting room 1, Floor 2, Language Institute

- 10.45–11.05 “Strategies for Developing More Positive Perceptions about Learning the Japanese Language”
Toru Takamizu, Peter Lutes and Mika Shioi, KU
- 11.05–11.25 “Developing Food by Using honey as an Ingredient for Health”
Jantima Busayarassamee, CMU
- 11.25–11.45 “Creation of A Sustainable Inter-Cultural Exchange Program - Consideration of the CSU-KU International Program”
Yumiko Takagi, KU

10.45–11.45 Economics and Business**Chair Persons:** Narumon KIMPAKORN, CMU
Ravindra R. RANADE, KU**Place:** Meeting room 2, Floor 2, Language Institute

10.45–11.05 “Examining Relationships among Sustainable Business Practices, Stakeholder Benefits and Happiness, and Sustainability Performance Outcomes: A Thai Model”

Warat Winit and Sooksan Kantabutra, CMU

11.05–11.25 “Rethinking Strategic Marketing in the Age of Turbulence: An Exploratory Study of Sustainable Marketing from Service-dominant Logic Approach”

Theerakiti Navaratana Na Ayudhya, CMU

11.25–11.45 “Gandhism for Conviviality”

Kazuya Ishii, KU**10.45–11.25 Engineering****Chair Persons:** Nipon Theera-Umpon, CMU
Hideyuki Sawada, KU**Place:** Meeting room 3, Floor 2, Language Institute10.45–11.05 “Automatic Length Estimation and Counting for *Malassezia spp.* Using Image Processing Techniques”Chayanin Chomchuen, Nipon Theera-Umpon,
Sansanee Auephanwiriyaikul and Sirida Youngchim, CMU

11.05–11.25 “A Study on the One Device Systems that Support the Motility Disturbance and Developmental Disability”

Eiichi Miyazaki and Satoshi Sakai, KU**10.45–11.45 Medicine and Nursing (Neurology and Psychiatry)****Chair Persons:** Takeshi YODA, KU
Masaaki TOKUDA, KU**Place:** Meeting room 4, Floor 2, Language Institute

10.45–11.00 “Mental Health Research for Japanese Who are Living in Bangkok, Thailand”

Takeshi Yoda, Katsunori Yokoyama, Marie Yoriki, Hiromi Suzuki
and Tomohiro Hirao, KU

11.00–11.15 “The Clinical Profile and Genetic Study in Spinocerebellar ataxia type 1 (SCA 1) in Northern Thailand”

Surat Tanprawate, Angkana Nudsasarn, Adisak Kittisares,
Atiwat Soontornpun, Siwaporn Chankrachang
and Kanokporn Oranratanachai, CMU

11.15–11.30 “Effects of Age on the Size and Structure of the Cervical Extensor Muscles: A Preliminary Study”

Jenjira Assapun, Suchart Kothan, James M. Elliott
and Sureeporn Uthaikhup, CMU11.30–11.45 “Ultra-rapid PET Measurement for Parametric CBF and CMRO₂ with Sequentially Administering Dual ¹⁵O-labeled tracers”Nobuyuki Kudomi, Yoshiyuki Hirano, Takuya Hayashi,
Hirosi Watabe, Kazuhito Fukushima,
Noboru Teramoto and Hidehiro Iida, KU

10.45–11.05 Agriculture
Chair Persons: Hisashi KATO, KU
Place: Meeting room 5, Floor 2, Language Institute

10.45–11.05 “A Singal Transduction for D-allose Effect in Plants Responses”
Kazuya Akimitsu, Takeshi Fukumoto, Akihito Kano, Kouhei Ohtani,
Megumi Inoue, Kazushi Matsudaira, Ayaka Aki, Susumi Mochizuki,
Shigeyuki Tajima, Fumito Kasai, Yutaka Ishida,
Akihide Yoshihara and Ken Izumori, KU

13.00–14.40 Social Sciences and Humanities
Chair Persons: Benjang JAISAI DER ARSLANIAN, CMU
Toru TERAQ, KU
Place: Meeting room 1, Floor 2, Language Institute

13.00–13.20 “Community-Based Tourism in Thailand : Social Capital Approach”
Benjang Jaisai Der Arslanian and Krith Karnjanakitti, CMU

13.20–13.40 “ENSO and IOD Dynamics and their Impacts on Cholera Epidemics
in Rural and Urban Areas in Bangladesh”
Toru Terao, Motoki Nagura and Masahiro Hashizume, KU

13.40–14.00 “The Stakeholder Collaboration Network of Conservation Management
in Living Heritage site”
Piyadech Arkarapoti Wong, CMU

14.00–14.20 “Radioactivity in Banded Structure Hokutolite
from Tamagawa Hot Spring, Japan”
Nobuyuki Sasaki, KU

14.20–14.40 “Media Exposure of Japanese Elderly in Chiang Mai during the Crisis”
Nataya Tananone, Saranya Kongjit and Pailinpat Sutthipan, CMU

13.30–14.20 Economics and Business
Chair Persons: Narumon KIMPAKORN, CMU
Ravindra R. RANADE, KU
Place: Meeting room 2, Floor 2, Language Institute

13.00–13.20 “Tourism and Politics in Japan”
Mutsuo Oga, KU

13.20–13.40 “Why Do Managers Engage in Green Tourism in Japan?”
Naoyuki Hara, KU

13.40–14.00 “Granger’s Non-causality and the Wald Test of One-way Effect”
Feng Yao, KU

14.00–14.20 “Asian Agriculture Growth Strategy for Abenomics”
Nobutaka Ito, CMU

13.00–14.40 Engineering**Chair Persons:** Nipon THEERA-UMPON, CMU
Hideyuki SAWADA, KU**Place:** Meeting room 3, Floor 2, Language Institute

- 13.00–13.20 “Interaction with Autonomous Mobile Robot by Body Gesture”
Hiroki Taomoto and Hideyuki Sawada, KU
- 13.20–13.40 “Characterization of Chemical Compositions Bounded on PM₁₀ during Haze Episode in Atmosphere of Chiang Mai Area”
Khajornsak Sopajaree, CMU
- 13.40–14.00 “Misconception of Convection and Heat Transfer”
Naoshi Takahashi, Miyuki Ohura, Takaaki Aoki,
Toru Terao and Masazumi Mori, KU
- 14.00–14.20 “Optimal Allocation of Multi-type FACTS Components for Available Transfer Capability Enhancement and Power Loss Reduction Using Hybrid Evolutionary Algorithm”
Peerapol Jirapong and Suttichai Premrudeepreechacharn, CMU
- 14.20–14.40 “Low Cost Test Bed for Identifying Radio Control Motor/ Propeller Thrust Force and Drag Moment”
Mana Saedan and Pinyo Puangmali, CMU

13.00–14.15 Medicine and Nursing (Nursing Research)**Chair Persons:** Kimie TANIMOTO, KU
Phanida JUNTASOPEEPUN, CMU**Place:** Meeting room 4, Floor 2, Language Institute

- 13.00–13.15 “Blood Flow Changes in the Frontal Cortex of Infants”
Kimie Tanimoto, Ikuko Kato, Takashi Kusaka, Tomoko Nishida,
Etsuko Arai and Susumu Itoh, KU
- 13.15–13.30 “Outcome of Intravenous Recombinant Tissue Plasminogen Activator (rt-PA) on Ischemic Stroke in Chiang Mai University Hospital”
Rujee Rattanasathien, CMU
- 13.30–13.45 “The Experiences of Parents Whose Children have Trisomy 18.”
Mayu Suzuki, Sanae Hasui, Rumiko Kodama, Chizuru Ishida,
Nobuko Morita and Kimie Tanimoto, KU
- 13.45–14.00 “Experience of Parents Whose Infant have Congenital Heart Disease”
Navapun Papan and Pornsiri Jaisom, CMU
- 14.00–14.15 “Present Situation of Triage at Emergency Department in the Chugoku-Shikoku Region Including Kagawa Prefecture”
Misa Kunikata, KU

13.00–14.20 Agriculture
Chair Persons: Darunee Naprom, CMU
Place: Meeting room 5, Floor 2, Language Institute

- 13.00–13.20 “Fruits Characteristics of Decaploid Strawberry Strain VSN0408 Grown for Forcing Culture in Japan”
Tomohiro Yanagi, Kornlawat Tantivit and Nobuyuki Okuda, KU
- 13.20–13.40 “D-Gulose Production form Lactitol by Microbial and Chemical Methods and X-ray Structural Analysis”
Kenji Morimoto, Tomohiko Ishii, Seiki Miyake, Akihide Yoshihara and Goro Takata, KU
- 13.40–14.00 “Inhibitory Effects of Rare Sugar D-altrose and D-gulose Fatty Acid Esters on Plant Growth”
Tazul Islam Chowdhury, Madoka Naito, Ryo C. Yanagita, and Yasuhiro Kawanami, KU
- 14.00–14.20 “Research and Development of Pharmaceuticals and Agrochemicals by Utilizing Bioactive Substances of Plants Produced in South East Asia, and Biomass Utilization of Fast-growing trees”
Takeshi Katayama, KU

14.40–16.20 Engineering
Chair Persons: Nipon Theera-Umpon, CMU
Hideyuki Sawada, KU
Place: Meeting room 3, Floor 2, Language Institute

- 14.40–15.00 “Esterification of High FFA Beef Tallow with Microwave Heating”
Pongsakorn Suwannapa and Nakorn Tippayawong, CMU
- 15.00–15.20 “Electrical Performances of Line Post Insulators in 22 kV Distribution System”
Wichet Thipprasert and Peerapol Jirapong, CMU
- 15.20–15.40 “A Trail-based Approach for Job Scheduling in Distributed Systems with Workflows”
Nasi Tantitharanukul, Juggapong Natwichai and Pruet Boonma, CMU
- 15.40–16.00 “Infrastructure Development for Chiang Mai Public Bicycle”
Manop Kaewmorachoen and Wachira Wijitpongsa, CMU
- 16.00–16.20 “Analysis of Transportation Scheduling Problem under Uncertain Travel Time Information”
Nopadon Kronprasert and Preda Pichayapan, CMU

15.00–16.15 Medicine and Nursing (Rare Sugar and Endocrinology)**Chair Persons:** Natapong KOSACHUNHANUN, CMU
Akram HOSSAIN, KU**Place:** Meeting room 4, Floor 2, Language Institute

- 15.00–15.15 “Effectiveness of the Routine Hepatitis B Vaccination to Infants Born to HBsAg-positive Mothers in Lao PDR.”
Prapan Jutavijittum, Amnat Yousukh, Phasouk Vongvichit, Bounthome Samountry, Bounnack Saysanasongkham, Tsutomu Masaki and Masaaki Tokuda, CMU
- 15.15–15.30 “Rare Sugar D-psicose Prevents Progression and Development of Diabetes in T2DM model Otsuka-Long-Evans-Tokushima Fatty Rats”
Akram Hossain, Li Sui, Fuminori Yamaguchi, Kazuyo Kamitori, Tetsuyo Iida, Ikuko Tsukamoto and Masaaki Tokuda, KU
- 15.30–15.45 “Comparison of the Efficacy of Plant Sterol and Soluble Fiber-enriched Soymilk versus Plain Soymilk in Volunteers with Hypercholesterolemia”
Supawan Buranapin, Sirakarn Tejavanija, Sanguansak Siangruangsang, Vipawan chantapanich and Natavuth Hengeerajarus, CMU
- 15.45–16.00 “Reducing Lower Extremity Amputations Due to Diabetes: The Application of Diabetic-Foot Protocol in Chiang Mai University Hospital”
Natapong Kosachunhanun, CMU
- 16.00–16.15 “Molecular Analysis of D-allose Anti-proliferative Effect for Development of a New Cancer Therapy”
Kazuyo Kamitori, Fuminori Yamaguchi, Youyi Dong, Li Sui, Akram Hossain, Ayako Katagi, Chisato Noguchi, Hiroshi Hoshikawa and Masaaki Tokuda, KU

14.30–16.30 Engineering**Chair Person:** Wassanai Wattanutchariya, CMU**Place:** Meeting room 5, Floor 2, Language Institute

- 14.30–14.50 “Evaluation of Travel Demand Management for Chiang Mai University using 360-Degree Assessment”
Preda Pichayapan, Patcharapan Nanthavisit and Nopadon Kronprasert, CMU
- 14.50–15.10 “Blending of Lignite with Oil Shale for Mae Moh Power Plant”
Chairoj Rattanakawin and Panlop Huttagosol, CMU
- 15.10–15.30 “Non-Nickel Loose Particles Removal Process”
Uttapol Smutkupt and Supaluk Kamrungsee, CMU
- 15.30–15.50 “Appropriate Forming Conditions for Hydroxyapatite-Bioactive Glass Compact Scaffold”
Wassanai Wattanutchariya and Jidapah Ruennareenard, CMU
- 15.50–16.10 “Effects of Fibroin Treatments on the Biochemical and Physical Properties of Chitosan/Hydroxyapatite/ Fibroin Bone Scaffold”
Wassanai Wattanutchariya and Kittiya Thunsiri, CMU
- 16.10–16.30 “Prototype Design and Analysis of Cross 4-bar Linkage Knee Prosthesis for Amputees in Thailand”
Nad Siroros, Potsawat Boonjaipet and Sermkiat Jomjunyong, CMU