



AUGUST 28th, 2024 (Day 2): BREAK-OUT SESSIONS

HEALTH SESSION

Activity Program

Environmental health and elderly health for sustainability development

Morning Activity

There will be 9 oral presentations, 3 from each university. The presentation will be divided into 2 session. The first session comprises 4 oral presentations related to environmental health and the second session comprises 5 oral presentations related to ageing.

Location: Meeting room at SWC

Tentative Schedule

Time	Activities
08:30 - 09:00	Pick up at Kantary Hills Hotel
09:00 - 09:15	Opening, orientation of the oral sessions, and housekeeping messages Dr. Kriengkrai Srithanaviboonchai, CMU
09:15 – 10:15	1 st oral session Chair: Dr. Toru Uyama; Co-Chair Dr. Hiromi Suzuki, KU
09:15 – 09:30	Invasive animals and their parasites: connecting Taiwan to the world: Dr. Hsuan-Wien Chen, Department of Biological Resources, NCYU
09:30 – 09:45	Knowledge, awareness, and perception of local villagers in high seasonal pollution area in Northern Thailand: Dr. Linda Aurpibul, Research Institute for Health Sciences, CMU
09:45 – 10:00	Dermal lipogenesis inhibits Adiponectin production in human dermal fibroblasts while exogenous Adiponectin administration could prevent UVA- induced cutaneous photoaging: Dr. Hsin-I Chang, Department of Biochemical Science and Technology, NCYU





HEALTH SESSION

Time	Activities	
10:00 – 10:15	Assessment of the annual acute number of patients with pharyngitis disease attributable to ambient PM _{2.5} in Northern Thailand: Ms. Pakaphorn Ngamsang Research Institute for Health Sciences, CMU	
10:15 – 10:45	Break	
10:45 - 12:00	2 nd oral session Chair: Dr. Hsin-I Chang, NCYU	
10:45 - 11:00	Air pollutant exposure and age-related macular degeneration: Dr. Shun-Ping Huang, Department of Biochemical Science and Technology, NCYU	
11:00 – 11:15	Role of blood coagulation system and Proteinase-activated Receptor 1 in aging: Dr. Katsuya Hirano, Faculty of Medicine, KU	
11:15 – 11:30	Analysis of physiological functions of phospholipid-metabolizing PLAAT enzymes using their knockout mice: Dr. Sumire Sasaki, Faculty of Medicine, KU	
11:30 - 11:45	The association between choline intake and fibrosis among U.S. adults with metabolic dysfunction-associated steatotic liver disease: results from 2017 - 2020 NHANES: Dr. Siraphat Taesuwan, Faculty of Agro-Industry, CMU	
11:45 - 12:00	Therapeutic assessment of chronic pain: A case study: Dr. Tadayuki Hashimoto, Faculty of Medicine, KU	

HEALTH SESSION

Afternoon Activity

The afternoon activities will be organized by SWC. These include SWC facilities tour and parallel group activities in which each participant select to participate from the following 4 activities: Thai Traditional Massage, Thai Hermit Traditional Exercise, Healthy Knee, and Hydrotherapy. Health precautions of each activity have been informed to the participants. The activities will be guided and supervised by the physical therapists of SWC.

Location: SWC facilities

Tentative Schedule

Time	Activities
13:30 - 15:45	SWC activities
13:30 - 13:45	Welcome message and overview of SWC: Dr. Chaiwat Bamrungkit, Director of SWC
13:45 - 14:15	Tour of SWC facilities: Ms. Sirapeach Ruxmanee, Mr. Chalermwongkorn Pingpittayakul
14:15 – 15:45	 Parallel group activities (pre-select 1 activity by each participant) 1. Thai Traditional Massage (5 people) Ms. Thananya Utsom, Ms. Pichamon Chaiwong 2. Thai Hermit Traditional Exercise (10 people) Ms. Hatthamanee Phumas 3. Healthy Knee (8 people) Mr. Ayuwat Mondech 4. Hydrotherapy (10 people) Ms. Neeranuch Siriwattananurak, Ms. Rungrutcha Aramsaengtien
15:45 - 18:00	Tour of Chiang Mai's sights
18:00 - 20:00	Dinner at Parc Thai Eatery

Dinner: Parc Thai Eatery





SCIENCE AND TECHNOLOGY SESSION

Activity Program

The Regional Challenges and Opportunities of Sustainable Science and Technology

Morning Activity

Oral Presentation: By Staff and Students from CMU (2 pax), KU (4 pax) and NCYU (3 pax)

Locations: Exhibition Hall, RSP North Building

Tentative Schedule

Time	Activities	
Room 1:	Exhibition Hall	
	Enhancing Carboxymethyl Chitosan Film Properties through High Substitution	
09:15 - 09:30	Synthesis: The Role of Particle Size Dependency.	
	by Dr. Sarinthip Thanakkasaranee: CMU	
09:30 - 09:45	Novel phosphor materials for next-generation white LEDs	
	or full-color-afterglow indicators. By Prof. Dr. Hayato Miyagawa: KU	
09:45 - 10:00	A Machine Learning Based Estimation of the Proportion of Anthracnose on mango	
	fruit surfaces - Using 2D and flatten Mango Images as Training Set.	
	Prof. Roy Chaoming Shu: NCYU	
10:00 - 10:15	CM Water Forecast Mobile Application Version 1.0	
10:00 10:15	by Asst. Prof. Dr. Tawee Chaipimonplin: CMU	
10:15 – 10:30	Development of supported iridium catalysts for the green synthesis of N-containing	
10110 10100	chemicals. by Prof. Dr. Kenji Wada: KU	
10:30 - 10:45	Refreshment Break	
	Deep Research of Wind Power Techniques and Ocean Wave-Driven Electricity	
10:45 - 11:00	Generation for Promoting Advanced Science Education.	
	by Prof. Chiung-Wu Su: NCYU	
11:00 - 11:15	Design Support Technique for Industrial Equipment to Reduce Environmental	
11.00 11.15	Impact. by Mr. So Fukuhara: KU	
11:15 – 11:30	Wind in digital: anemometer data analysis.	
11.15 11.50	by Asst. Prof. Dr. Yusi Shih: NCYU	
	Maintenance Technology for Extending the Lifespan of Highways to Promote	
11:30 – 11:45	Sustainable Infrastructure (Reproduction of Damaged Concrete in Computer	
	Simulation) by Mr. Hyuta Ki: KU	
11:45 – 13:00	Lunch	

Remark: The schedule is subject to change as appropriate.





SCIENCE AND TECHNOLOGY SESSION

Afternoon Activity

Locations: RSP North Building

Tentative Schedule

Time	Activities
13:00 - 13:30	"Regional Challenges and Opportunities in Sustainable Science and Technology Futures" by Assoc. Prof. Dr. Pitiwat Wattanachai
13:30 - 16:00	Technical Visit (STeP): Group 1: FoodFabr / ABPlas / CIMO / FABLAB / INNO Store Group 2: FABLAB / CIMO / ABPlas / FoodFabr / INNO Store
16:00 - 16:20	Refreshment Break
16:30 - 16:50	Travel from RSP North Building to hotel by van
17:00 - 18:00	Preparing for dinner
18:30 - 20:00	Dinner at Thajene Chomchan Seafood restaurant

Remark: The schedule is subject to change as appropriate.

Dinner: Thajene Chomchan Seafood restaurant





FOOD SESSION

Activity Program

Research Sharing in Food Session and Workshop: When Science Meets Creative Foods

Morning Activity

Locations: Meeting Room 4, Faculty of Agro-Industry, Chiang Mai University

Tentative Schedule

Time	Activities	S	
Room: Meeting F	Room: Meeting Room 4, Faculty of Agro-Industry, Chiang Mai University		
09:00 – 09:15	 Welcome speech and greeting from Chiang Mai University (CMU), Kagawa University (KU) and National Chiayi University (NCU) 1. Assoc. Prof. Dr. Yuthana Phimolsiripol (CMU) 2. Prof. Dr. Mika Nomura (KU) 3. Asst. Prof. Dr. Hsiaowen Wang (NCYU) 		
	Торіс	Speaker	Chair/Co- chair
09:15 – 09:30	Advancing the texture and functionality of plant-based meat: Investigating the synergistic effects of gluten quality, quantity, and food additives on cereal-based protein structures through innovative material engineering techniques	Asst. Prof. Dr. Pavalee Chompoorat Tridtitanakia (CMU)	Chair: Asst. Prof. Dr. Chunchi Chen (NCYU) Co-chair: Dr. Kridsada
09:30 – 09:45	How to improve crop productivity for sustainable agriculture	Prof. Dr. Mika Nomura (KU)	Unban (CMU)
09:45 – 10:00	Effect of harvest maturity on passion fruits quality	Asst. Prof. Dr. Hsiaowen Wang (NCYU)	
10:10 - 10:15	Combinatorial effects of longan peel extract and food additives on oxidative stability of edible oils	Asst. Prof. Dr. Kanyasiri Rakariyatham (CMU)	
10:15 – 10:30	Primary resin acids are involved in amber color formation of aged pine fatwood woodwork	Prof. Dr. Toshisada Suzuki (KU)	
10:30 - 10:45	Break and networking		



Time	Activitie	S	
Room: Meeting	Room: Meeting Room 4, Faculty of Agro-Industry, Chiang Mai University		
10:45 - 11:00	<i>Saccharomyces</i> isolated from traditional fermented tea (Miang) and its feasible applications	Dr. Kridsada Unban (CMU)	Chair: Prof. Dr. Mika Nomura (KU)
11:00 - 11:15	Al system image analysis to detect strawberry fruit development	Mr. Seigo Miya (KU)	Co-chair: Asst. Prof. Dr.
11:15 – 11:30	Proteomic analysis of <i>Mesona chinensis</i> polysaccharides-induced aggregation of milk proteins	Asst. Prof. Dr. Chunchi Chen (NCYU)	Kanyasiri Rakariyatham (CMU)
11:30 – 11:45	Enhancing functionality of whey protein concentrate (WPC) with galacto-oligosaccharide (GOS) via the Maillard reaction	Ms. Nareekan Chaiwong (CMU)	(0.00)
11:45 – 12:00	Selenium biotransformation and bioactivity of polysaccharide extraction from <i>Pleurotus ostreatus</i>	W.M.P.B.K. Warnasooriya (CMU)	
12:00 – 12:15	Unlocking academic opportunities: navigating study paths at the Faculty of Agriculture for international scholars & students	Prof. Dr. Peter Lutes (KU)	

Remarks: The program may be adopted as appropriate.

The presentation will be 10-12 min and Q&A for 3-5 min.





FOOD SESSION

Afternoon Activity

Locations: Future Food Lab, Food Innovation and Packaging Center (FIN), Faculty of Agro-Industry

Tentative Schedule

Time	Activities
13:00 - 13:15	Registration for the event "When Science Meets Creative Foods"
13:15 – 14:15	Demonstration and Hands-on Activity to create "Bouillabaisse de Chiang Mai" by Mr. Pathapee Moonkonkaew, Chef and owner of L'éléphant. Inspiration for creating Local to Global menu: French-style fish stew featuring seasonal fish, prawns, Chom Thong black-red native chicken, and Chiang Mai purple rice.
14:15 - 15:30	Workshop: Local Food Creation
15:30 - 16:30	Chef Special taste: Pairing food with beverage
16:30 – 17:00	 Discussion in Topic "The Science behind fusion cuisine: Bouillabaisse de Chiang Mai" by Dr. Shitapan Bai-Ngew and Dr. Ponjan Walter, Lecturers of Faculty of Agro-Industry, Chiang Mai University The culinary chemistry and the reaction behind "Bouillabaisse de Chiang Mai" Local ingredients meet Global technique The convergence of science and gastronomy
17:00 - 17:30	Leisure time on Mae-Hia campus, Leave to the Restaurant
17:30 - 20:00	Dinner at The View Village

Remarks: The program may be adopted as appropriate.

Dinner: The View Village





SOCIAL SCIENCE SESSION

Activity Program

Social and Cultural Inclusion and Community Understanding in Northern of Thailand

Tentative Oral Presentation Program

The presentation will be a virtual presentation with cultural field trips.

The presentation will be broadcast for participants to look up on 28 August 2024

Presenters from National Chiayi University, TAIWAN	
Voluntary Service Abroad To Promote Education Quality" Department of E-learning Design and	
Management. Kuo-Hung Huang (NCYU)	
Bringing down Urban-Rural Walls: A Preliminary Investigation of Visiting Teachers Program in Taiwan	
Teacher Education Center. Chun-wen Lin (NCYU)	
Policies and Their Implementations for Rural Education in Taiwan Department of Early Childhood Education.	

Meng-Lung Lai (NCYU)

Presenters from Kagawa University, Japan

Management of local industrial clusters in the globally competitive environment: A case study of the gloverelated industry in Shikoku. Atsushi Taira, Faculty of Education (KU)

University Entrance Examinations in New Zealand and Japan: A Contrast in Two Sustainable Testing Systems" Department of English. **Paul Batten (KU)**

Research on the possibility of sustainable art materials for the Takamatsu City Artists Dispatch, Faculty of Education. **Nobuko Yoshikawa (KU)**

Development of an ICT system using AI to encourage spontaneous activity in people with severe and multiple disabilities. Eiichi Miyazaki and Satoshi Sakai (KU)

Fostering Reflective Practice in Teacher Education (2): Strengthening Reflective Practices with Digital Tools. **Takayoshi Sasaya and Reiko Isshiki (KU)**

Taiwan-Japan Comparison of Pedagogical Photo Documentation in Early Childhood Education and Care. Hiroo Matsumoto, Gota Matsui, Ching-Ching Cheng, and Kuohung Huang, (KU), (NCYU)

Presenters from Chiang Mai University, Thailand

Interagency Working Group for Consistent Labour Protection Act Enforcement for Unprotected Migrant Workers Faculty of Humanities. Songphan Tantrakul & Warangkana Naksen (CMU)

Cultural Canopies: Bridging Heritage and Urban Green Engagement in Chiang Mai City Faculty of Architecture. Warong Wonglangka (CMU)

Forging Culture of Lawfulness through the Lens of Conflict Management Theories in Addressing Environmental Issues. Chernporn Ruangsawasdi (CMU)

Locations: Chiang Mai Province





Tentative Schedule

Morning and Afternoon Activity

Time	Activities
09:00 - 09:30	Pick up from hotel
09:30 - 10:30	Visit Museum of Northern Traditional House
10:30 - 12:30	Visit 3 Kings Museum in Chinag Mai center
12:30 - 13:30	Lunch at Local community in the heart of Chiang Mai
13:30 - 15:30	Puaktam community and Lacquer ware making
15:30 - 17:30	Jedee Hualuang Temple: How to conserve traditional trees
18:00 - 19:30	Dinner at Lan-Dai House restaurant (tradition Thai with Michelin Guide)

Dinner: Ban Lan-Dai Restaurant





TOURISM SESSION

Activity Program

Creative Tourism and Sustainability

Morning Activity

Locations: Center for the Promotion of Art, Culture and Creative Lanna (ACCL) Tentative Schedule

Time	Activities
Venue: Center for the Promotion of Art, Culture and Creative Lanna (ACCL)	
	Welcome address "Creativity and Sustainability" (TBC)
09:00 - 09:30	by Professor of Practice Dr Ekkachai Mahaek
	Vice President of CMU and Acting Director of ACCL CMU
09:30 - 10:30	Visit Lanna House Museum
10:30 - 11:00	Refreshment Break (Creative Craft Coffee & Tea Workshop)
11:00 - 12:00	Research Seminar on "Sustainability and Creative Tourism for Society"
12:00 - 13:00	Lunch at ACCL (Khao Soi and CL Signature dishes)
13:00 - 13:45	Depart for Queen Sirikit Botanical Garden Travel by van for 45 mins.

Afternoon Activity

Locations: QSBC and Jirung Health Village Tentative Schedule

Time	Activities	
Venue: QSBC and Jirung Health Village		
13:45 – 15:00	Arrive Queen Sirikit Botanical Garden	
10110 10100	Sightseeing and canopy walks for 1 hour 15 min.	
15:00 - 15:20	Depart for Jirung Health Village (20 mins)	
15:20 - 17:00	Site visit and short workshop for 1 hour 40 min.	
17:00 - 18:00	Depart for Old Chiang Mai for 45 mins.	
18:00 - 20:00	Dinner	

Dinner: Chiang Mai Cultural Centre (Old Chiang Mai)





CLIMATE ACTION SESSION

Activity Program

In Response to Climate Crisis from Two Different Angles from Waste to Energy and from Rice Fields to Exquisite Thai Desserts

Morning Activity Locations: ERDI-CMU Tentative Schedule

Time	Activities
09:00 - 09:15	Prof. Dr. Wen-Lii Huang (National Chiayi University) Carbon Footprinting Inventory of NCYU-TN1, A New Drought Tolerant Rice Cultivar from NCYU
09:15 –09:30	Assoc. Prof. Dr. Yukitaka Kamino (Kagawa University) Title: Strategies for Climate Action and Mitigation of Climate Change Impacts
09:30 - 09:45	Asst. Prof. Dr. Kannikar Intawong (Chiang Mai University) Title: Climate –integrated Platforms for Enhancing Public Health Surveillance and Decision Support Systems
09:45 – 10:00	Asst. Prof. Dr. Yui OYAKE (Kagawa University) Title: i-Tree Eco in Japan: Quantitative Evaluation of the Ecosystem Service Value of Street Trees
10:10 - 10:30	Break
10:30 - 10:45	Dr. Minoru Tokumasu (Kagawa University) Title: Ground Water Salinization During the Irrigation Period and Sustainable Water Use under Climate Change in the Saijo Plain Japan
10:45 - 11:00	Prof. Dr. Masashi Miyagawa (Kagawa University) Title: Seto Inland Sea Restoration with Blue Carbon – Development of Seaweed Bed Regeneration Structure
11:00 - 11:15	Prof. Show-Jen Chiou (National Chiayi University) Title: Advancing Sustainablity and Climate Resilience at National Chiayi University: Intergrating Renewable Energy and Smart Resource Management





Chair: Prof. Dr. Chanakan Prom-u-thai (CMU) Co-chair: Assoc. Prof. Dr. Apinpus Rujiwatra (CMU)		
Time	Activities	
11:15 - 11:30	Dr. Matthew Robson (Chiang Mai University) Title: Contesting the Capitalist State to Halt Mass Extinction? Climate Change and the Extinction Rebellion (XR) "War-Machine"	
11:30 - 11:45	Mr. Kose Nakahara (Kagawa University) Title: Monitoring of Rainwater Infiltration and Storage in a Rain Garden on the Kagawa University	

CLIMATE ACTION SESSION

Afternoon Activity

Locations: ERDI-CMU and LRRC-CMU

Tentative Schedule

Time	Activities
13:00 - 14:30	Visits CMU Recycled Plastic Road and Biogas Plant EV
14:30 - 16:00	Cooking Workshop: "From rice to Thai dessert at LRRC-CMU"
16:00 - 18:00	Rice Cultivation in the Demonstration Field

Dinner: LRRC (Lanna Style)





STUDENT SESSION

Activity Program

Student Site Visit and Reflection Workshop

Morning Activity

The morning session will begin with a comprehensive campus tour and an insightful overview of the CMU Smart City initiative presented by Assoc. Prof. Wongkot Wongsapai. Participants will gain an understanding of the innovative approaches to urban development and technology integration of Chiang Mai University. Following this, the group will proceed to Kaomai Lanna Hotel and Resort, where they will engage in an in depth exploration of sustainable practices implemented at the resort. This visit will include a guided tour of the facilities, highlighting ecofriendly architecture, renewable energy usage, and sustainable tourism practices.

Locations: CMU Main Campus, Kaomai Lanna Hotel and Resort

Tentative Schedule

Time	Activities
08:00	Depart hotel to CMU Main Campus by CMU bus
08:15 - 09:00	Campus Tour and overview of CMU Smart City and Multi Disciplinary Research Institute (MdRI) by Assoc. Prof. Wongkot Wongsapai (MdRI-CMU)
09:00 - 10:00	Depart from CMU to Kaomai Lanna Hotel and Resort
10:00 - 10:15	Coffee and Snack Break at Kaomai Lanna Hotel and Resort
10:15 - 11:00	Site visit at Kaomai Lanna Hotel and Resort on Sustainability
11:00 - 12:00	Conclude morning site visit activity with integration of insights into afternoon presentations by Assoc. Prof. Wongkot Wongsapai (MdRI-CMU)
12:00 - 13:00	Lunch break at Kaomai Lanna Hotel and Resort





STUDENT SESSION

Afternoon Activity

In the afternoon, students will be divided into designated groups to reflect on and discuss the insights gained from the morning sessions. Each group will engage in collaborative discussions to brainstorm and develop innovative ideas inspired by the campus tour and the sustainability practices observed at Kaomai Lanna Hotel and Resort. These ideas will be presented through group presentations. A panel of judges will evaluate the presentations and the top 3 groups will be recognized as winners. This activity aims to foster teamwork, critical thinking, and practical application of sustainability concepts.

Locations: Kaomai Lanna Hotel and Resort

Tentative Schedule

Time	Activities
13:00 - 13:15	Briefing of Afternoon Activity
13:15 - 16:30	Students divided in groups and Brainstorm Activity
16:30 - 17:30	Group Presentations
17:30 - 17:45	Committee Meeting
17:45 – 18:00	Winner Announcement/ Group Photo Session
18:00	Dinner at Kaomai Lanna Hotel and Resort

Dinner: Kaomai Lanna Hotel and Resort