

PROGRAM FOR GRAND OPENING CEREMONY OF STT51

November 11st, 2025

CHULALONGKORN UNIVERSITY AUDITORIUM, CHULALONGKORN UNIVERSITY, BANGKOK, THAILAND

Time	Events
6:30	Guests of honor arriving at Chulalongkorn University Auditorium
7:30	All guests are seated in the Chulalongkorn University Auditorium
9:00	- Arrival of Her Royal Highness Princess Maha Chakri Sirindhorn
	- Presentation of commemorative items and congress documents to Her Royal
	Highness
	- Address of appreciation by the President of the Chulalongkorn University
	Council
	- Welcome remarks and report on the objectives of the Congress by the
	President of the Science Society of Thailand
	- Royal address and declaration of the Congress open by HRH Princess Maha Chakri Sirindhorn
9:20	- Honor Royal Keynote Speaker: "TWO DECADES OF STRATEGIC COOPERATION
	IN SCIENCE AND TECHNOLOGY BETWEEN THAILAND AND CHINA UNDER THE
	INITIATIVE OF HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN"
	by Her Royal Highness Princess Maha Chakri Sirindhorn
9:50	- Keynote Lecture: "SINO_THAI COLLABORATION ON JUNO" by Professor Cao
	Jun, Director of Institute of High Energy Physics (iHEP), Chinese Academy of
	Sciences (CAS)
10:10	- Keynote Lecture: "HOW OBESITY LEADS TO COGNITIVE IMPAIRMENT AND
	BRAIN AGING: APPROACHES TO INTERVENTION" by Distinguished Prof. Dr.
	Siriporn Chatthipakorn, Outstanding Scientist of Thailand 2025.
10:30	- Her Royal Highness Princess Maha Chakri Sirindhorn proceeds to the
	Exhibition Hall to view special exhibitions, including: Scientific activities
	related to China under HRH Princess Maha Chakri Sirindhorn's initiatives,
	Academic achievements of the Faculty of Science, Chulalongkorn University,
	Contributions of the Science Society of Thailand under the Patronage of HM
	the King, and National award-winning science projects by high school
12.30	students - Her Royal Highness Princess Maha Chakri Sirindhorn presides at group photo
12.30	sessions
12:45	Her Royal Highness Princess Maha Chakri Sirindhorn graciously departs
	Chulalongkorn University



HONOR ROYAL KEYNOTE SPEAKER: H.R.H. Princess Maha Chakri Sirindhorn



TWO DECADES OF STRATEGIC COOPERATION IN SCIENCE AND TECHNOLOGY BETWEEN THAILAND AND CHINA UNDER THE INITIATIVE OF HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN

Her Royal Highness Princess Maha Chakri Sirindhorn



KEYNOTE SPEAKER: PROF. DR. CAO JUN

SINO-THAI COLLABORATION ON JUNO

Jun Cao^{1,*}

¹ Director of Institute of High Energy Physics (IHEP), Chinese Academy of Sciences (CAS)

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Abstract:

Neutrinos are the most abundant matter particles in the universe, but incredibly difficult to detect. Many fundamental questions remain to



be solved. The Jiangmen Underground Neutrino Observatory (JUNO) is one of the world-leading experiments to tackle these mysteries. It consists of a 20,000-ton liquid scintillator detector located 700 meters underground. The project is hosted by the Institute of High Energy Physics of Chinese Academy of Sciences, with contributions from 17 cooperating countries and regions. Three Thai universities contributed to the design and construction of the Earth Magnetic Coil system, which is designed to protect photomultipliers from the influence of the geomagnetic field on their detection efficiency, and to the performance test of the photomultipliers. Thailand is also working on the data analysis and theoretical researches. JUNO has completed construction. Data taking began in August 2025. It aims to answer fundamental questions such as: Which neutrino is the heaviest or lightest among the three types? How does neutrino drive the supernova explosion, solar evolution and the Earth's evolution? And even the ultimate question: can proton decay?



Figure 1. A photo of the nearly-complete JUNO detector selected as the month's best science images by *Nature* in October, 2024. Earth Magnetic Coils are clearly seen on the photo together with 20-inch photomultipliers.

Professor Jun Cao obtained his bachelor's degree from Wuhan University, China in 1993 and Ph.D. degree from the Institute of High Energy Physics (IHEP), China in 1998. Following postdoctoral fellowships at the Linear Accelerator Laboratory in France and the University of Michigan in USA, he has worked at IHEP since 2004. He led the antineutrino detector design and construction, liquid scintillator R&D, and data analysis of the Daya Bay Reactor Neutrino Experiment (Daya Bay), and has served as the co-spokesperson since 2013. He is an initiator of the Jiangmen Underground Neutrino Observatory (JUNO), and serves as the deputy spokesperson. He has been awarded the First Prize of the State Natural Science Award in 2016, the 2013's Outstanding Science and Technology Achievement Prize of CAS, and the C.N. Yang award of the Association of Asia-Pacific Physical Societies in 2013. He has been the director of IHEP since 2024.



KEYNOTE SPEAKER: DISTINGUISHED PROF. DR. SIRIPORN C. CHATTIPAKORN

HOW OBESITY LEADS TO COGNITIVE IMPAIRMENT AND BRAIN **AGING: APPROACHES TO INTERVENTION**

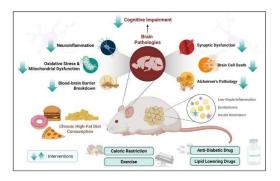
Patcharapong Pantiya, 1,2 Titikorn Chunchai, 1,2 Nattayaporn Apaijai, 1,2,3 Thonusin, 1,2,3 Wasana Pratchayasakul, 1,2,3 Phrommintikul, ⁴ Nipon Chattipakorn, ^{1,2,3,5} Siriporn C. Chattipakorn ^{1,2,6,*}

- ¹ Neurophysiology Unit, Cardiac Electrophysiology Research and Training Center, Faculty of Medicine, Chiang Mai University, Chiang Mai, 50200, Thailand
- ² Center of Excellence in Cardiac Electrophysiology Research, Chiang Mai University, Chiang Mai, 50200. Thailand
- ³ Cardiac Electrophysiology Unit, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, 50200, Thailand
- ⁴ Department of Internal Medicine, Faculty of Medicine, Chiang Mai University, Chiang Mai, 50200, Thailand
- ⁵ The Academy of Science, The Royal Society of Thailand, Bangkok, Thailand
- ⁶ Department of Oral Biology and Diagnostic Sciences, Faculty of Dentistry, Chiang Mai University, Chiang Mai, 50200, Thailand
- *e-mail: siriporn.c@cmu.ac.th; scchattipakorn@gmail.com (Thailand Outstanding Scientist Award 2025)

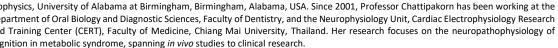


Obesity is increasingly recognized as a significant risk factor not only for metabolic and cardiovascular diseases but also for neurocognitive decline and accelerated brain aging. Our studies investigate the multifactorial mechanisms through which obesity impairs brain function, including chronic neuroinflammation, insulin resistance, oxidative stress, synaptic dysregulation, and mitochondrial dysfunction in the brain. These pathological processes contribute to structural brain changes, reduced cognitive performance, and an increased risk of neurodegenerative diseases such as Alzheimer's disease. Moreover, the obese brain exhibits characteristics commonly associated with aging. Intervention strategies—such as lifestyle modifications, including dietary changes and physical activity, as well as pharmacological treatments—have shown promise in mitigating these adverse effects. These findings suggest that early intervention targeting both metabolic and neurological pathways may help preserve cognitive health and delay brain aging in individuals with obesity, as summarized in the graphical figure.

Keywords: Obesity; Insulin Resistance; Brain; Cognition; Aging: Interventions



Professor Dr. Siriporn Chattipakorn was born in Phuket, Thailand, in 1967. She received her Bachelor's degree in Doctor of Dental Surgery (Honors) from the Faculty of Dentistry, Chiang Mai University, Thailand, in 1992. She earned her Doctor of Philosophy (Ph.D.) in Oral Biology, with a specialization in Neurobiology, in 1999 from the Dental Research Center, University of North Carolina at Chapel Hill, North Carolina, USA. She subsequently completed a Postdoctoral Fellowship in Neurophysiology from 1999 to 2001 at the Department of Physiology and Biophysics, University of Alabama at Birmingham, Birmingham, Alabama, USA. Since 2001, Professor Chattipakorn has been working at the Department of Oral Biology and Diagnostic Sciences, Faculty of Dentistry, and the Neurophysiology Unit, Cardiac Electrophysiology Research and Training Center (CERT), Faculty of Medicine, Chiang Mai University, Thailand. Her research focuses on the neuropathophysiology of cognition in metabolic syndrome, spanning in vivo studies to clinical research.



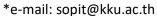


PLENARY SPEAKER: PROF. DR. SOPIT WONGKHAM

CRACKING THE SUGAR CODE: CHALLENGES AND OPPORTUNITIES IN PRECISION MEDICINE FOR CHOLANGIOCARCINOMA

Atit Silsirivanit,¹ Chatchai Phoomak,^{1,2} Marutpong Detarya,^{1,3} Somsiri Indramanee,^{1,4} Sopit Wongkham^{1,*}

- ¹ Department of Biochemistry, Faculty of Medicine, Khon Kaen University, Thailand
- ² Department of Biology, Faculty of Science, Chulalongkorn University, Thailand
- ³ Department of Radiation Oncology, Cancer Institute of New Jersey, USA
- ⁴ Division of Biochemistry, Department of Preclinical Science, Faculty of Medicine, Thammasat University, Thailand





Abstract:

Thailand's national incidence of cholangiocarcinoma (CCA) is declining but remains significantly higher than the global average, underscoring the ongoing public health challenges and the urgent need for improved diagnostic and treatment strategies. Glycans influence tissue elasticity, protection, and integrity, protein folding, sorting, and secretion, cell-cell recognition and communication, etc. Aberrant glycosylation contributes significantly to tumor development and metastasis. This presentation highlights the importance of altered glycan modifications—specifically sialylation, fucosylation, O-GalNAcylation, and O-GlcNAcylation—in CCA progression, demonstrated both in human tissues and a hamster model. Targeted inhibition of these glycosylation pathways via siRNA or lectin blocking markedly reduces the aggressive behavior of CCA cells. Elevated O-GalNAcylation enhances EGF/EGFR binding and activation of EGFR signaling, which finally promotes tumor progression. Notably, intracellular O-GlcNAcylation can modulate extracellular glycan patterns on CCA cells, resulting in an increase in high-mannose-type N-glycans that correlates with the metastatic potential of CCA cells. Deciphering these "sugar codes" offers promising avenues for "Glyco-medicine" in identifying specific biomarkers for CCA diagnosis, prognosis, and targeted therapy. Personalized glycan profiling may revolutionize precision medicine by enabling accurate prediction of disease risk, progression, and treatment response for individual patients, ultimately improving clinical outcomes in CCA management.

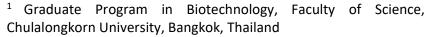
Professor Sopit Wongkham earned her B.Sc. in Medical Technology with gold medal honors, followed by an M.Sc. and Ph.D. in Biochemistry from Mahidol University in 1983. She began her academic career as a lecturer in the Department of Biochemistry, Faculty of Medicine, Khon Kaen University, where she advanced to Professor and Emeritus Professor. Her research focuses on identifying tumor markers for diagnosis/prognosis and effective treatment of cholangiocarcinoma. Her work has established a comprehensive knowledge base, discovering promising molecules for tumor markers and targeted therapies of the disease. She has received multiple awards, including the 2013 Outstanding Scientist Award from the Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King.



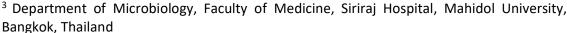
PLENARY SPEAKER: PROF. DR. TANAPAT PALAGA

UNTAPPED POTENTIAL OF TISSUE MICROENVIRONMENT MACROPHAGES IN HEALTH AND CANCER

Pornlapat Keawvilai,^{1,2} Suphanun Phuphanitcharoenkun,^{1,2} Atsadang Boonmee,³ Kittin Weerasophol,^{1,2} Benjawan Sae-sue,⁴ <u>Tanapat</u> Palaga^{2,5,*}







⁴ Faculty of Veterinary Science, Mahasarakham University, Thailand

Abstract:

Macrophages are innate immune cells essential for the first line of defense against infection through their pro-inflammatory functions. Beyond this role, accumulating evidence highlights their importance in maintaining tissue integrity by promoting homeostasis and facilitating resolution of inflammation. Conversely, macrophages can be co-opted by tumors to support cancer growth and metastasis, and they contribute to age-associated chronic inflammation, or inflammaging. These diverse functions underscore their therapeutic potential. Macrophages originate during embryogenesis, seed most adult tissues, and adapt to the local microenvironment; thus, strategies to manipulate them must consider tissue context. Compared with other immune cells, therapeutic interventions that specifically target macrophages remain limited. In this study, we investigated the molecular control of tissue macrophages using three-dimensional (3D) tissue culture systems and conditional gene deletion in vivo. In a 3D human skin model incorporating macrophages, we established an immunocompetent skin system suitable for studying responses to external stimuli, such as UV exposure. In a hepatocellular carcinoma spheroid model, co-culture with macrophages revealed tumor-promoting molecular signatures. Furthermore, targeted deletion of an epigenetic-modifying enzyme in macrophages in vivo accelerated tumor growth. Together, our findings highlight tissue microenvironment macrophages as critical regulators in both healthy and diseased states and demonstrate their potential as targets for immunotherapeutic interventions.

Professor Tanapat Palaga received his Bachelor's and Master's degrees in Bioengineering from the Tokyo Institute of Technology, Japan in 1994 and 1996, respectively, and his Ph.D. in Microbiology from the University of Massachusetts Amherst, USA in 2002. He is currently Head of the Department of Microbiology, Faculty of Science, Chulalongkorn University, and serves as Chair of the Immunology Academic Division of the Allergy, Asthma, and Immunology Association of Thailand.

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PLENARY SPEAKER: PROF. DR. TAISUKE SASAKI

UNVEILING MICROSTRUCTURES OF METALLIC MATERIALS – FROM MICRON SCALE TO ATOMIC SCALE

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Abstract:

The microstructure is a determining factor in materials properties, in addition to materials' intrinsic properties. Since microstructures affecting properties lie over a wide range of length scales—from micro to atomic—various microscopy techniques are required to analyze them in detail. This presentation will showcase state-of-the-art 2D and 3D microstructure analyses using advanced electron microscopes and 3D atom probe (3DAP). One example is visualizing interactions between solute elements and defects in a lightweight magnesium alloy using correlative transmission electron microscopy (TEM)/APT analysis. A bright-field TEM image of a needle-shaped specimen for APT analysis reveals dislocations (Fig. a). Atomic-resolution HAADF-STEM imaging shows no significant elemental fluctuation (Fig. b). However, the 3D atom map obtained from the needle reveals the dispersion of nanoscale solute clusters and solute segregation to dislocations (Fig. c). These features, revealed for the first time by correlative TEM/APT analysis, explain the strength of the magnesium alloy presented here [1]. Furthermore, this presentation will showcase how understanding microstructure has been used to explain the origin of properties and develop high-performance materials such as structural materials, permanent magnets, and semiconductors.

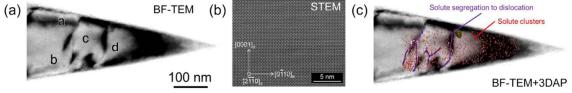


Figure 1. (a) A bright-field TEM image obtained from a magnesium alloy showing dislocations. (b) Atomic-resolution HAADF-STEM image showing no elemental fluctuation. (c) 3D atom map overlaid with a bright-field TEM image. The segregation of solute elements in defects can be clearly visualized through this method, which is difficult to visualize using TEM analysis [1].

[1] M.Z. Bian, T.T. Sasaki et al., Acta Mater. 150 (2018) 278.

Dr. Taisuke Sasaki, the Group Leader of Microstructure Analysis Group at the Research Center for Structural Materials in NIMS, was born in Osaka, Japan in 1980. He received the Doctorate in Engineering, in 2008 from University of Tsukuba, Japan. Following postdoctoral appointments at NIMS and the University of Alabama, USA, he started working as a tenured researcher at NIMS, Japan in 2011. His research interests include microstructural analysis using electron microscopes, such as SEM and TEM, and 3DAP, as well as the development of high-performance metallic materials. He is a professor of subprogram in Materials Science and Engineering, University of Tsukuba-NIMS joint graduate school.



PLENARY SPEAKER: PROF. DR. XIAOGUANG LEI

OPPORTUNITIES FOR MERGING CHEMICAL AND BIOLOGICAL SYNTHESIS

Xiaoguang Lei^{1,*}

¹ College of Chemistry and Molecular Engineering, Peking-Tsinghua Center for Life Sciences, Peking University, Beijing 100871, China *e-mail: xglei@pku.edu.cn



Abstract:

Natural products and their derivatives have long been utilized as medicinal agents, and they continue to comprise a significant portion of clinically approved drugs. Natural product synthesis offers a rich and unparalleled opportunity to develop new synthetic transformations, conceive novel and general strategies for accessing complex structures, and study the mechanisms of action of bioactive targets. This lecture will illustrate the opportunities at this interface between synthetic organic chemistry and chemical biology by describing a series of examples we are actively working on in our laboratory at Peking University. We draw inspiration from Mother Nature to investigate the biosynthesis of plant-derived natural products, with the goal of elucidating new enzymatic mechanisms. By applying the chemoenzymatic approach, we aim to prepare complex natural products and their derivatives. Moreover, we further use bioactive natural products to explore new biology and develop novel drug candidates for human diseases.

Prof. Xiaoguang Lei obtained a BS in chemistry from Peking University in 2001 and a Ph.D. in organic synthesis from Boston University under the supervision of Prof. John Porco in 2006. He then conducted postdoctoral work in bioorganic chemistry with Prof. Samuel Danishefsky at Columbia University from 2006 to 2008. In early 2009, he returned to China. He started his independent career as a Principal Investigator and Director of the Chemistry Center at the National Institute of Biological Sciences (NIBS) in Beijing. In early 2014, he received a tenured full professorship at Peking University and moved to the College of Chemistry. Now, he is the Boya Distinguished Professor of Chemistry and Chemical Biology and a senior PI of the Peking-Tsinghua Center for Life Sciences. His primary research areas include chemical biology, natural product synthesis, biocatalysis, and drug discovery. He has published more than 180 original research papers, including those in Science (5), Cell (2), and Nature (2), among others, and has obtained 30 granted patents for new drug discoveries. He has developed four "first-inclass" drug candidates, one of which has started Phase II clinical trials in the USA and China since 2022. He has received many prestigious awards, including the 2023 Sackler Chair Award in Israel, the 2022 Molecules Tu Youyou Award, the 2022 Xplore Prize, the 2021 Boehringer-Ingelheim Senior Investigator Award, the 2020 Bayer Investigator Award, the 2018 David Ginsburg Award in Israel, the 2017 Tetrahedron Young Investigator Award, the 2017 Swiss Chemical Society Distinguished Lectureship Award, the 2015 Chemical Society of Japan Distinguished Lectureship Award, the 2014 Roche Young Investigator Award, the 2013 International Chemical Biology Society (ICBS) Young Chemical Biologist Award, and the 2010 IUPAC Young Chemist Award, etc. He is currently an Associate Editor for JACS Au.



PLENARY SPEAKER: DR. PICHAET WIRIYACHITRA

WORLD'S FIRST 100 CASES OF HIV CURE WITH STEM CELLS STIMULATED BY FORTIFIED MANGOSTEEN EXTRACT Pichaet Wiriyachitra^{1,*}

¹ CEO, Asian Phytoceuticals Public Company Limited



Abstract:

Since the identification of Human Immunodeficiency Virus (HIV) in 1981, antiretroviral therapy (ART) has remained the primary means of disease control, effectively suppressing viral replication but causing cumulative side effects during long-term use. Despite extensive global efforts, a definitive cure for HIV has yet to be achieved. After more than two decades of research on Thai edible plant extracts, a fortified mangosteen extract—comprising mangosteen (Garcinia mangostana), soy, sesame, guava, and Centella asiatica—has demonstrated potential as an effective HIV cure.

This formulation has been found to stimulate endogenous stem cell production and activate their differentiation into immune effector cells, including CD4⁺ (Th1 and Th17) and CD8⁺ (cytotoxic T) lymphocytes. These immune cells selectively target and eliminate HIV-infected cells.

To date, 100 HIV-positive individuals treated with this fortified extract have shown complete viral eradication with no observable side effects. Furthermore, participants exhibited markers of telomere elongation, suggesting potential anti-aging benefits. The first recorded case of HIV eradication occurred in 1957, and the patient has since maintained good health with undetectable viral load.

References:

- 1. ByeByeHIV with Thai Innovation: https://www.scivisionpub.com/abstract-display.php?id=3167 (Clinical Immunology & Research)
- 2. ByeByeHIV with Plant-Based Immunotherapy: Progress Update on 40 Cases without the Use of ARV Drugs (Group A): https://www.scivisionpub.com/abstract-display.php?id=3769 (Clinical Immunology & Research)
- 3. ByeByeHIV with Plant-Based Immunotherapy: Progress Update on 40 Cases with Prior Use of ARV Drugs (Group B): https://www.scivisionpub.com/abstract-display.php?id=3770 (Clinical Immunology & Research)
- 4. 100 Cases of ByeByeHIV with Stem Cell Stimulated by Fortified Mangosteen Extract: (Clinical Immunology & Research). In press

Professor Pichaet Wiriyachitra is the CEO of Asian Phytoceuticals Public Company Limited, a company listed in Stock Exchange of Thailand, to engage in research, development and commercialization of health products derived from natural extracts. Dr.Pichaet received the BSc.Hons (Organic Chemistry) from University of Western Australia in 1970 and Ph.D. (Organic Chemistry) from University of Tasmania in 1972. He was a NIH Post-doctoral Fellow at University of Connecticut, America in 1974 and a NSF Post-doctoral Fellow at University of Pennsylvania, America in 1976. His research interests in the Prince of Songkla University and Chiang Mai University in Thailand include the development of Balancing Immunity (BIM) products for autoimmune symptoms and immune-deficient symptoms.

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PLENARY SPEAKER: DR. RAFFAEL OSEN

FROM BIODIVERSITY TO BIOAVAILABILITY: ENHANCING NUTRITION IN FUTURE FOODS FOR ASIAN CONSUMERS

Raffael Osen, 1,* Melanie Weingarten, 1 Jie Hong Chiang 1

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Abstract:

Consumer dietary habits are evolving rapidly in response to growing concerns about health, environmental sustainability, and ethical values. A rising number of consumers are seeking to complement animal-based products with alternative protein-based alternatives.

While such future foods have already entered the market, perceived gaps in taste and nutrition remain key barriers to broader adoption. Simultaneously, increasing public discourse around ultra-processed foods—particularly within the future foods sector—is generating confusion, often blurring the lines between technological innovation and perceived healthfulness.

To address these challenges, it is essential to understand how the structuring and processing of alternative proteins influence consumer acceptance and nutritional performance, especially within the diverse cultural and dietary contexts of Asia.

This presentation will examine how protein sources derived from plants and microorganisms can be processed for diverse food applications. It will also explore the impact of how processing techniques affect the nutritional, sensory, and functional characteristics of these proteins, highlighting opportunities to enhance bioavailability and overall quality of future foods for Asian consumers.

Dr. Raffael Osen is Deputy Head of the Food & Sensory Science Division at ASTAR's Singapore Institute of Food and Biotech Innovation (SIFBI). He holds a PhD in Food Technology from the Technical University of Munich and has over 15 years of experience leading multidisciplinary teams in sustainable food innovation. At SIFBI, he coleads the Food Processing Joint Lab at Nurasa's Food Tech Innovation Center, where he supports the scale-up and commercialization of future foods. Prior to joining ASTAR, he was in charge of the Food Process Development department at Fraunhofer in Germany, where his team pioneered high-moisture extrusion for plant-based meat and co-initiated the spin-off Endori, now a leading producer of plant-based foods in Europe. Dr. Osen has published over 20 peer-reviewed articles, filed several patents, and licensed technologies for commercial use.



PROGRAM FOR SESSIONS, SYMPOSIUMS AND MEETINGS

NOVEMBER 11st, 2025

AFTERNOON PROGRAM

Session:	PLENARY SPEAKER			
Room:	M01 MHMK BUILD	M01 MHMK BUILDING		
Chairperson:	Prof. Dr. Tavan Jar	Prof. Dr. Tavan Janvilisri		
Time	ID	Speaker	Title	
13:00-13:45	-	Sopit Wongkam	CRACKING THE SUGAR CODE: CHALLENGES AND OPPORTUNITIES IN PRECISION MEDICINE FOR CHOLANGIOCARCINOMA	

Session:	PLENARY SPEAKER			
Room:	M02 MHMK BUILD	M02 MHMK BUILDING		
Chairperson:	Khun Pawatsawan	Khun Pawatsawan Niyomkaew		
Time	ID	Speaker	Title	
13:00-13:45	-	Pichaet Wiriyachitra	WORLD'S FIRST 100 CASES OF HIV CURE WITH STEM CELLS STIMULATED BY FORTIFIED MANGOSTEEN EXTRACT	



Session:	A – PHYSICS / APP	A – PHYSICS / APPLIED PHYSICS		
Room:	306 MHMK BUILD	ING		
Chairperson:	Asst. Prof. Dr.Paw Co-Chair: Dr. Vicha	in Ittisamai arit Yingcharoenrat		
Time	ID	Speaker	Title	
15:30-16:00	A_INV01	Apimook Watcharangkool	CORE COLLAPSE SUPERNOVAE AND BEYOND STANDARD MODEL FROM MULTI- MESSENGER DETECTIONS	
16:00-16:15	A_001	Kitisak Boonkham / Thanyanan Somnam	A COMPARATIVE STUDY OF LINEAR EXPANSION COEFFICIENTS OF DIFFERENT METALS USING AN INDUCTION HEATING SYSTEM	
16:15-16:30	A_002	Subsirirach Maharatanawong	EFFECT OF ANGULAR VARIATION IN DETACHED BREAKWATER STRUCTURE ON THE COASTAL MORPHOLOGY	
16:30-16:45	A_003	Jatuporn Puntree	ENTROPY AND LEARNING EFFICIENCY IN SPECIAL RELATIVITY: AN INFORMATION-THEORETIC LENS ON ASSESSMENT DESIGN	



Session:	B - BIOLOGICA	B - BIOLOGICAL SCIENCES		
Room:	M01 MHMK BI	M01 MHMK BUILDING		
Chairperson:	Prof. Dr. Tavan Janvilisri			
	Co-Chair: Asso	Co-Chair: Assoc. Prof. Dr. Kunlaya Somboonwiwat		
Time	ID	Speaker	Title	
14:00-14:30	B_INV01	Ikuo Hirono	UNRAVELING THE MYSTERY OF THE	
			MECHANISM BY WHICH FEEDING	
			BENEFICIAL MICROORGANISMS REDUCES	
			MORTALITY FROM MICROBIAL INFECTIONS	
			IN SHRIMP	
14:30-14:45	B_001	Suphaporn Paenkaew	RAPID DNA EXTRACTION FOR DETECTING	
			Babesia spp. USING RPA-CRISPR-CAS12A	
			FOR POINT-OF-CARE TESTING	
14:45-15:00	B_002	Suchada Panjan	COMPARATIVE ANALYSIS OF GUT	
			MICROBIOME COMPOSITION AMONG	
			THREE POPULATIONS OF STONE-TOOL-	
			USING LONG-TAILED MACAQUES (Macaca	
			fascicularis)	
		COFFEE BREAK		
15:15-15:45	B_INV02	Saroj Ruchisansakun	PROGRESS IN GINGER FAMILY RESEARCH IN	
			THAILAND: DIVERSITY, EVOLUTION, AND	
			CONTRIBUTIONS TO ECOSYSTEM SERVICES	
15:45-16:00	B_003	Neera Shrestha	RISK OF SEQUENTIAL INVASIONS:	
			INFLUENCE OF Ageratina adenophora ON	
			GROWTH AND DEVELOPMENT OF Bidens	
			pilosa.	
16:00-16:15	B_004	Lela Yaya	SUPPRESSION OF BANANA FUSARIUM WILT	
			Fusarium oxysporum f.sp. cubense BY FROG	
			SKIN-ASSOCIATED BACTERIA	
16:15-16:30	B_005	Samita Phothong	METABOLOMIC PROFILING OF THAI Centella	
			asiatica (L.) Urb. ACCESSIONS REVEALS	
			VARIATION IN LPS-ACTIVATED NITRIC OXIDE	
			IN RAW264.7 CELLS	
16:30-16:45	B_006	Jittakan Pangthong	AMYLASE ACTIVITY IN Oryzaephilus	
			mercator: BIOCHEMICAL INSIGHTS AND	
			METAL ION EFFECTS ANALYZED BY	
16.45.45.55	D 00=	<u> </u>	ZYMOGRAPHY AND SPECTROPHOTOMETRY	
16:45-17:00	B_007	Jiraporn kamsarn	ISOLATION AND CHARACTERIZATION OF	
			Wolffia globosa-DERIVED EXOSOMES WITH	
			ANTIOXIDANT POTENTIAL	



Session:	C - CHEMISTRY C(1)A: INORGANIC & SUPRAMOLECULAR CHEMISTRY C(1)B: LABORATORY AUTOMATION, PROCESS OPTIMIZATION		
Room:	304 MHMK BUILD	DING	
Chairperson:	Prof. Dr. Thawato Co-Chair: Dr. And		
Time	ID	Speaker	Title
14:00-14:30	C_INV01	Thanthapatra Bunchuay	SUPRAMOLECULAR ARCHITECTURES FOR ADVANCED MOLECULAR RECOGNITION AND SUSTAINABLE DEVELOPMENT
14:30-14:45	C_001	Gulzaib Basharat	CYCLODEXTRIN-BASED INCLUSION COMPLEXATION ENHANCES SOLUBILITY AND STABILITY OF A PSORALEN DERIVATIVE: IN SILICO AND IN VITRO STUDY
14:45-15:00	C_002	Papangkorn Phongchamnaphai	MECHANISTIC INVESTIGATION OF ZnO/Ag SYSTEMS VIA DIRECT MODULATION OF ANTIMICROBIAL ACTIVITY USING STACKED Ag-ZnO NANOCUBE "NANOAPARTMENTS" AND NANOWIRE "NANOCONDOMINIUMS"
		COFFEE BREAK	
15:15-15:45	C_INV02	Kwanwoo Shin	ROBOT-ARM BASED CHEMISTRY LAB- AUTOMATION
15:45-16:15	C_INV03	Nopmaneerat Leelawiwat	WTE - BRUKER MS – GERSTEL FROM MOLECULES TO MEANING: BUILDING A FUTURE OF PURPOSE-DRIVEN ONE HEALTH ANALYSIS
16:15-16:30	C_003	Banpot Klinpratoom	OPTIMIZATION OF ULTRASONIC-ASSISTED GREEN EXTRACTION OF HEAVY METALS FROM GALANGAL USING RESPONSE SURFACE METHODOLOGY



Session:	E: ENERGY / E	E: ENERGY / ENVIRONMENTAL & EARTH SCIENCE / MATERIALS SCIENCE / CHEMICAL		
Room:		201 MHMK BUILDING		
Chairperson:		Assoc. Prof. Dr. Prasert Reubroycharoen		
		Co-Chair: Dr. Mati Horprathum		
Time	ID	Speaker	Title	
14:00-14:30	E_INV01	Limin Guo	Ln ₂ O ₃ BASED CATALYSTS FOR CO ₂	
	_		HYDROGENATION TO METHANOL	
14:30-14:45	E_001	Supakarn Kumfoo /	ASSESSMENT OF CARBON CAPTURE USING	
		Thanapon Mahaparn	UNMANNED AERIAL VEHICAL COMBINED	
			WITH IMAGE PROCESSING TECHNOLOGY	
14:45-15:00	E_002	Abdulrahim Ibrahim	CATALYTIC ENHANCEMENT OF ABSORBENT	
			REGENERATION USING 13X MOLECULAR	
			SIEVES FOR ENERGY-EFFICIENT CARBON	
			CAPTURE	
		COFFEE BREAK		
15:15-15:30	E_003	Bryle Matthew Bacatan	UPCYCLING PLASTIC WASTE INTO	
			BIMETALLIC METAL ORGANIC FRAMEWORK	
15:30-15:45	E_004	Thanapisut Petai	FACTOR ANALYSIS OF VARIOUS Zn	
			PRECURSORS IN THE SYNTHESIS OF ZnO	
			NANOPARTICLES UNDER THE GREEN	
			SYNTHESIS PROCESS USING Tecoma stants	
			FLOWER EXTRACT	
15:45-16:00	E_005	Yu Jono	TERNARY AND QUATERNARY AMORPHOUS	
			OXIDE NANOPARTICLES FOR SELECTIVE	
			ACETONE GAS DETECTION	
16:00-16:15	E_006	Mana Yamaguchi	SOLID ELECTROLYTE-TYPE	
			ELECTROCHEMICAL GAS SENSORS WITH	
			MOF-BASED ELECTRODE CATALYSTS FOR	
			N₂O AND CO DETECTION	
16:15-16:30	E_007	Sopida Kaewsuk	SURFACE MODIFICATION OF ACTIVATED	
			CARBON FROM RICE HUSK VIA PHYSICAL	
			AND CHEMICAL PRETREATMENTS FOR	
			CATALYTIC APPLICATION IN SOLKETAL	
16 20 16 15	5.000		PRODUCTION	
16:30-16:45	E_008	Paparwalin Wayupa /	OPTIMIZATION OF WATER CONTENT IN	
		Nonpawit Koheng	CH₃NH₃PBI₃ AND MICROPIPETTE-ASSISTED	
			FABRICATION FOR HIGH-PERFORMANCE	
16.45 17:00	F 000	Culvit Carati	PEROVSKITE SOLAR CELLS	
16:45-17:00	E_009	Sukrit Sarati	SYNTHESIS OF HYDROXYAPATITE FROM FLUE GAS DESULFURIZATION GYPSUM FOR	
			ADSORPTION OF Cd ² AND Pb ²⁺	
			ADSORPTION OF CO. AND PD.	



Session:	E: ENERGY / ENVIRONMENTAL & EARTH SCIENCE / MATERIALS SCIENCE / CHEMICAL TECHNOLOGY			
Room:	202 MHMK BU	202 MHMK BUILDING		
Chairperson:		Assoc. Prof. Dr. Pasicha Chaikaew Co-Chair: Assoc. Prof. Dr. Suwadee Kongparakul		
Time	ID	Speaker	Title	
14:00-14:30	E INV02	Feng Wang	CATALYTIC CONVERSION OF BIOMASS	
14:30-14:45	E_010	Nguyen Ngoc Diep	ASSESSMENT OF WATER QUALITY FLUCTUATION TRENDS IN INNER-CITY CANALS IN CONDITION OF CLIMATE CHANGE AND SEA LEVEL RAISE	
14:45-15:00	E_011	Soravit Sukchuay / Ploypitcha Pattarapongpetch	POST-TREATMENT OF PALM OIL MILL EFFLUENT USING IMMOBILIZED Chlorella vulgaris	
		COFFEE BREAK		
15:15-15:30	E_012	Natthawat Wisaiprom	EFFECTS OF HYDRAULIC RETENTION TIME AND pH FOR THERMAL EFFICIENCY IN BIOGAS PRODUCTS FROM FOOD WASTE VIA ANAEROBIC DIGESTION METHOD	
15:30-15:45	E_013	Chayachon Jiemwetwittayaporn / Warinthip Suwanratsamee	AN INTEGRATED BIOREMEDIATION SYSTEM COMBINING BIOCOMPOSITE-ZEOLITE ADSORPTION BEADS AND AGRICULTURAL WASTE-ENHANCED MICROBIAL DEGRADATION FOR INDUSTRIAL DYE WASTEWATER TREATMENT	
15:45-16:00	E_014	Lukman Abdullahi	BIMETALLIC MIL-101(Fe,Cu) METAL ORGANIC FRAMEWORK FOR PHOTOCATALYTIC DEGRADATION OF REACTIVE RED 239 DYE WASTEWATER.	
16:00-16:15	E_015	Jia Zhu	NOVEL FLEXIBLE ELECTROCHEMICAL SENSORS FOR VISUALIZED CLINICS	
16:15-16:30	E_016	Shuhan Dong	COFFEE GROUND-MEDIATED GREEN SYNTHESIS OF COPPER-DOPED ZINC OXIDE / MAGNESIUM OXIDE NANOPARTICLES: ANTIBACTERIAL ACTIVITY AND PHOTOCATALYTIC DEGRADATION OF METHYL RED	
16:30-16:45	E_017	Patcharawarin Sathapornwajana	ENHANCING SUPERHYDROPHOBICITY OF PAPER VIA GAS-PHASE SILYLATION USING HEXADECYLTRIMETHOXYSILANE AND TITANIUM (IV) ISOPROPOXIDE	
16:45-17:00	E_018	Poowarin Sakrungrueang	OPTIMIZING LIQUID-TO-SOLID RATIO AND PRESSING PRESSURE FOR HIGH-PERFORMANCE GEOPOLYMER-CORNCOB COMPOSITES	
17:00-17:15	E_019	Pisipong Meunprasertdee	HEAVY METAL RISK ASSESSMENT AND SPATIOTEMPORAL DISTRIBUTION IN SURFACE WATER OF THE NA THAP RIVER, SONGKHLA, THAILAND	



Symposium:		SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE		
Room:		207 MHMK BUILDING		
Chairperson:				
Time	ID	Speaker	Title	
13:00-13:00	SP1_PLS01	Jin-Shi Xu	FROM THE EPR PARADOX TO QUANTUM	
			ENGINEERING: ADVANCING CHINA-	
			THAILAND COLLABORATION IN QUANTUM	
	NIETA/C	DEVINE DEFAY / DEFAALE FOR DE	RESEARCH	
6		ORKING BREAK / PREPARE FOR BR		
Session:		E ON THAILAND - CHINA SCIENCE L HIGHNESS'S INITIATIVE	AND TECHNOLOGY COLLABORATIONS	
			LABORATION ON JUNO/PARTICLE PHYSICS	
Room:	207 MHMK BUILD		ELECTRATION ON JONE, FAMILIEE	
Chairperson:	Assoc. Prof. Boonr	ucksar Soonthornthum		
Time	ID	Speaker	Title	
14:00-15:00	SP1_INV01	Yang Changgen	SCIENCE AND TECHNOLOGY DEVELOPMENT	
			IN JUNO	
	SP1_INV02	Narumon Suwonjandee /	THAI-JUNO COLLABORATION	
		Khanchai Khosonthongkee		
	SP1_INV03	Hai-Bo Li	PHYSICS HIGHLIGHTS FROM THE BESIII	
	SP1_INV04	Ayut Limphirat	THAI-BESIII RESEARCH AND ACTIVITIES	
	371_1111/04	Ayut Limpiiirat	THAI-BESIII RESEARCH AND ACTIVITIES	
		COFFEE BREAK		
Symposium:	SP1 - CONFERENC	E ON THAILAND - CHINA SCIENCE	AND TECHNOLOGY COLLABORATIONS	
		L HIGHNESS'S INITIATIVE		
Cl. :		CS RESEARCH AND NANOTECHNO	DLOGY	
Chairperson:	Dr. Uracha Ruktan	T	T-11	
Time	ID Spt. INVOS	Speaker	Title	
15:15-16:00	SP1_INV05	Panu Nueangjumnong	GEOSPATIAL APPLICATIONS FOR RICE MONITORING IN CAMBODIA, LAO PDR, AND	
			MYANMAR COUNTRIES	
	SP1 INV06	Deanpen Japrung	DEVELOPMENT OF NANOSENSORS FOR	
			MINIMALLY INVASIVE SCREENING OF NON-	
			COMMUNICABLE DISEASES	
	SP1_INV07	Liang Xing-Jie	NANOSCALE BIOMEDICAL ENGINEERING	
			FOR PHARMACEUTICAL DEVELOPMENT	



Symposium:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS			
	UNDER HER ROYAL HIGHNESS'S INITIATIVE			
Room:	205 MHMK BUILDING			
Chairperson:				
Time	ID	Speaker	Title	
13:00-13:00	-	-	-	
Session:	UNDER HER ROYA	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE - SPACE AND ASTRONOMY > THAILAND-CHINA COLLABORATION ON SPACE AND ASTRONOMY		
Room:	208 MHMK BUILD	DING		
Chairperson:	Dr. Saran Poshyad	chinda		
Time	ID	Speaker	Title	
14:00-15:00	SP1_INV08	Zhiqiang Shen	BRIDGING SKIES AND BORDERS: THE SINO- THAI VLBI COLLABORATION	
	SP1_INV09	David Ruffolo	SINO-THAI HIGH-ENERGY ASTROPHYSICS AND COSMIC RAYS	
	SP1_INV10	Wiphu Rujopakarn	DEVELOPMENT OF PAYLOADS AND SATELLITES FOR LUNAR EXPLORATION	
	SP1_INV11	A-Li Luo	SINO-THAI BIG DATA AND COLLABORATION	
		COFFEE BREAK		
Symposium:	UNDER HER ROYA - S&T HUMAN RE	AL HIGHNESS'S INITIATIVE SOURCES DEVELOPMENT AND SC	AND TECHNOLOGY COLLABORATIONS HOLARSHIPS > THAILAND-CHINA HUMAN RESOURCES DEVELOPMENT	
Chairperson:	Dr. Piyawat Sivara	aks		
Time	ID	Speaker	Title	
15:15-16:00	SP1_INV12	Chadamas Thuvasethakul	OVERVIEW OF THAILAND-CHINA COLLABORATION ON SCIENCE AND TECHNOLOGY HUMAN RESOURCES DEVELOPMENT UNDER THE INITIATIVE OF HRH PRINCESS MAHA CHAKRI SIRINDHORN	
	SP1_INV13	Huang Dingcheng / Thee Chowwanonthapunya	OCSC-UCAS SCHOLARSHIP	
	SP1_INV14	Ditchaphong Phoomikiattisak	SIRINDHORN CENTER FOR GEO- INFORMATICS (SCGI) MASTER PROGRAM	
	SP1_INV15	Chayanit Asawatangtrakuldee	BRIDGING THAILAND AND CHINA THROUGH EDUCATION: THE HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN'S SCHOLARSHIP	



Symposium:	SP3 - NEXGEN E	SP3 - NEXGEN ENERGY: STORAGE AND CONVERSION FOR SUSTAINABILITY		
Room:	203 MHMK BUI	203 MHMK BUILDING		
Chairperson:	-	ana Pornprasertsuk Prof. Dr. Manaswee Suttipong		
Time	ID	Speaker	Title	
14:00-14:25	SP3_INV01	Liqiang Xie	STUDY ON SURFACES AND INTERFACES OF PEROVSKITE SOLAR CELLS	
14:25-14:50	SP3_INV02	Yanfen Wan	MICRO-NANO ENERGY CONVERSION APPLIED IN FLEXIBLE ELECTRONICS AND SOLAR WATER PURIFICATION	
14:50-15:15	SP3_001	Jia Zhu	NOVEL FLEXIBLE ELECTROCHEMICAL SENSORS FOR VISUALIZED CLINICS	
		COFFEE BREAK		
15:30-15:55	SP3_INV03	Chiaki Terashima	SYNERGISTIC PHOTOCATALYSIS AND IN- LIQUID PLASMA FOR EFFICIENT CO ₂ CONVERSION	
15:55-16:20	SP3_INV04	Limin Guo	In ₂ O ₃ BASED CATALYSTS FOR CO ₂ HYDROGENATION TO METHANOL	
16:20-16:45	SP3_INV05	Pawin lamprasertkun	UNRAVELING ELECTROCHEMICAL COMPLEXITY OF 2D MATERIALS: A JOURNEY TO THE CENTER OF TUNGSTEN DISELENIDE (WSe ₂)	
16:45-17:00	SP3_002	Tanat Srikhota	DEVELOPING SUPPORTER FOR MANGANESE-SODIUM CATALYSTS IN THE OXIDATIVE COUPLING OF METHANE TO HIGHER HYDROCARBONS	



Symposium:	SP6 - NAVIGATING	SP6 - NAVIGATING THE QUANTUM FRONTIER		
Room:	305 MHMK BUILD	305 MHMK BUILDING		
Chairperson:	Asst. Prof. Dr. Thip	parat Chotibut		
	Co-Chair: Dr. Supa	nut Thanasilp		
Time	ID	Speaker	Title	
14:00-14:30	SP6_INV01	Worawat Meewasana	EXPLORATION OF ELECTRONIC STATES IN	
			QUANTUM MATERIALS	
14:30-15:00	SP6_INV02	Pruet Kalasuwan	RESEARCH ACTIVITIES ON QUANTUM	
			COMMUNICATION IN THAILAND	
15:00-15:30	SP6_INV03	Poompong Chaiwongkhot	QUANTUM SECURED COMMUNICATIONS	
		COFFEE BREAK		
15:45-16:15	SP6_INV04	Sorawis Sangtawesin	VECTOR MAGNETOMETRY WITH	
			NITROGEN-VACANCY CENTERS IN DIAMOND	
16:15-16:45	SP6_INV05	Nithiwadee Thaicharoen	QUANTUM SIMULATION AND SENSING	
			WITH RYDBERG ATOMS	
16:45-17:15	SP6_INV06	Phatthamon Kongkhambut	TORUS BIFURCATION OF A TIME CRYSTAL IN	
			AN ATOM-CAVITY SYSTEM	

Symposium:	SP10 - X-RAY CRY	SP10 - X-RAY CRYSTALLOGRAPHY		
Room:	206 MHMK BUILD	206 MHMK BUILDING		
Chairperson:		Prof. Dr. Kuakarun Kruson Co-Chair: Asst. Prof. Dr. Kittikhun Wangkanont		
Time	ID	Speaker	Title	
14:00-15:00	-	-	CRYSTALLOGRAPHY WORKSHOP 1: STRUCTURE REPRESENTATIONS, MEASUREMENTS	
		COFFE	E BREAK	
15:15-17:00	-	-	CRYSTALLOGRAPHY WORKSHOP 2: DISPLAYING LIGANDS AND MAPS, STRUCTURE SUPERPOSITION, RAY TRACING, FIGURE RESOLUTION	



Symposium:	SP14 - VALORIZATION OF BIOMASS-RELATED WASTES			
Room:	308 MHMK BUILD	308 MHMK BUILDING		
Chairperson:	Assoc. Prof. Dr. Kanokwan Ngaosuwan			
Time	ID	Speaker	Title	
13:30-13:45	SP14_001	Nuttida Rosmontri	MODIFIED SOLUBILITY MODELLING FOR PREDICTING BIOACTIVE COMPOUND EXTRACTION IN SUPERCRITICAL CARBON DIOXIDE SYSTEM WITH CO-SOLVENT	
13:45-14:00	SP14_002	Ami Takase	DEUTERIUM LABELING OF AMINES USING A PROTON-CONDUCTIVE GRAPHENE OXIDE MEMBRANE REACTOR	
14:00-14:30	SP14_INV01	Armando T. Quitain	INSIGHTS AND PERSPECTIVES ON MICROWAVE-CO ₂ -H ₂ O SYNERGY FOR BIOMASS VALORIZATION	
14:30-15:00	SP14_INV02	Insik In	SURFACE-FUNCTIONALIZATION OF MXENE WITH CATECHOL LIGANDS: GREENER PREPARATION AND VARIOUS APPLICATIONS.	
		COFFEE BREAK		
15:15-15:45	SP14_INV03	Noppon Weeranoppanant	UTILIZING BIO-BASED FEEDSTOCKS IN A MODULAR CONTINUOUS FLOW SYNTHESIS SYSTEM	
15:45-16:15	SP14_INV04	Rattana Muangrat	SUPERCRITICAL CO ₂ EXTRACTION OF OILS FROM OIL BIOMASS SOURCES: A SUSTAINABLE VALORIZATION APPROACH	
16:15-16:45	SP14_INV05	Siti Zullaikah	A SUSTAINABLE SYMPHONY OF VALORIZING AGRO-INDUSTRIAL WASTE: THE CIRCULAR BIOECONOMY	
16:45-17:00	SP14_003	Kanokorn Sae-Ueng	FIBERBOARD FROM OIL PALM EMPTY FRUIT BUNCH USING BIOBASED ADHESIVE FROM WASTE OIL PALM TRUNK: MECHANICAL AND ENVIRONMENTAL ASSESSMENTS	



Session:	MEETING OF THE SCIENCE DEANS		
Room:	205 MAHA CHULALONGKORN BUILDING		
Time	ID	Speaker	Title
14:00-16:00	-	-	MEETING OF THE SCIENCE DEANS

Session:	POSTER PRESENTA	POSTER PRESENTATION – SESSION		
Room:	SALA PHRA KIEO	SALA PHRA KIEO		
Time	ID	Speaker	Title	
15:00-18:00	-	-	POSTER PRESENTATION (SESSION'S COMMITTEE)	

Session:	SCIENCE DEANS & CHAIR & KEYNOTE / PLENARY / INVITED SPEAKER RECEPTION		
Room:	MONTIEN HOTEL SURAWONG BANGKOK		
Time	ID	Speaker	Title
17:30-19:00	-	-	RECEPTION



NOVEMBER 12nd, 2025

MORNING PROGRAM

Session:	PLENARY SPEAKER			
Room:	M01 MHMK BUILD	M01 MHMK BUILDING		
Chairperson:	Assoc. Prof. Chaleeda Borompichaichartkul			
Time	ID	Speaker	Title	
8:30-9:15	-	Raffael Osen	FROM BIODIVERSITY TO BIOAVAILABILITY: ENHANCING NUTRITION IN FUTURE FOODS FOR ASIAN CONSUMERS	

Session:	PLENARY SPEAKER	PLENARY SPEAKER		
Room:	M02 MHMK BUILI	M02 MHMK BUILDING		
	Dr. Warakorn Yan	Dr. Warakorn Yanwachirakul		
Chairperson:	Co-chair: Assoc. P	Co-chair: Assoc. Prof. Dr. Udomsilp Pinsook		
Time	ID	Speaker	Title	
8:30-9:15	-	Taisuke Sasaki	UNVEILING MICROSTRUCTURES OF	
			METALLIC MATERIALS – FROM MICRON	
			SCALE TO ATOMIC SCALE	



Session:	A – PHYSICS / A	A – PHYSICS / APPLIED PHYSICS		
Room:	306 MHMK BU	306 MHMK BUILDING		
Chairperson:	Assoc. Prof. Dr.	. Auttakit Chatrabhuti		
	Co-Chair: Asst.	Prof. Dr. Sakhorn Rimjaem		
Time	ID	Speaker	Title	
9:30-10:00	A_INV02	Chinorat Kobdaj	DEVELOPMENT OF THE PROTON	
			COMPUTED TOMOGRAPHY PROTOTYPE IN	
			THAILAND	
10:00-10:30	A_INV03	Apiwat Wisitsorasak	RECENT PROGRESS ON THE FAST ION STUDY	
			IN THAILAND TOKAMAK-1	
		COFFEE BREAK		
10:45-11:00	A_004	Kasidit Piekbut	AN ANALYTICAL FRAMEWORK FOR	
			PROCESSING AND INTERPRETING	
			EXPERIMENTAL DATA FROM THAILAND	
			TOKAMAK-1 (TT-1)	
11:00-11:15	A_005	Faneel Nontree	PLASMA TEMPERATURES AND DENSITY	
			PROFILES SIMULATIONS OF THAILAND	
			TOKAMAK 1 USING CRONOS CODE	
11:15-11:30	A_006	Ami Takase /	DEUTERIUM LABELING OF AMINES USING A	
		Imam Sahroni	PROTON-CONDUCTIVE GRAPHENE OXIDE	
			MEMBRANE REACTOR	
11:30-11:45	A_007	Thiti Aungcharoen	THE ONE-DIMENSIONAL MODEL OF STATE	
			TRANSITION IN MAGNETIZED PLASMA	
			BASED ON BIFURCATION ANALYSIS	



Session:	B - BIOLOGICAL	B - BIOLOGICAL SCIENCES		
Room:	M01 MHMK BU	M01 MHMK BUILDING		
Chairperson:		Prof. Dr. Tavan Janvilisri Co-Chair: Assoc. Prof. Dr. Sittiporn Pattaradilokrat		
Time	ID	Speaker	Title	
9:30-10:00	B_INV03	Wibhu Kutanan	GENETIC ORIGIN OF THE SEA NOMADS FROM THAILAND	
10:00-10:15	B_008	Dhammawit Haemanwichian	MATERNAL GENETIC HISTORY OF LOLOISH SPEAKING HILL-TRIBES IN NORTHERN THAILAND	
10:15-10:30	B_009	Piyathida Suebwonglee	A PILOT STUDY ON DEVELOPING A DNA METHYLATION-BASED MODEL FOR AGE ESTIMATION IN BONE: A STUDY IN THE THAI POPULATION	
		COFFEE BREAK		
10:45-11:00	B_INV04	Pongchai Dumrongrojwatthana	GAMING AND SIMULATIONS TO SUPPORT ACTIVE LEARNING, BIODIVERSITY CONSERVATION, AND SUSTAINABLE DEVELOPMENT	
11:00-11:15	B_010	Watchara Thepsupa	THE EFFECT OF SECRETORY LEUKOCYTE PROTEASE INHIBITOR (SLPI)- DERIVED SMALL PEPTIDE (SDSPs) COATED TITANIUM ON HUMAN OSTEOBLAST ADHESION	
11:15-11:30	B_011	Philomena Oga	ANTIBACTERIAL ACTIVITY OF CHITOSANS AGAINST BIOFILM OF Streptococcus mutans.	
11:30-11:45	B_012	Meghamouli Rana	DEVELOPMENT OF A PH AND THERMO- RESPONSIVE INJECTABLE HYDROGELS FOR CANCER THERAPY	
11:45-12:00	B_013	Sereysonita Keo	INVESTIGATION OF ANTIOXIDANT PROPERTIES AND CYTOTOXIC EFFECTS OF CERIUM OXIDE NANOPARTICLES ON HUMAN BREAST CANCER CELLS	



Session:		C - CHEMISTRY		
Room:		C(2): MATERIALS FOR ENERGY, ENVIRONMENT, AND SENSOR APPLICATIONS 304 MHMK BUILDING		
Chairperson:		vatchai Tuntulani		
		Nadnudda Rodthongkum		
Time	ID	Speaker	Title	
09:30-10:00	C_INV04	He Zhang	BIOCHAR: A KEY MATERIAL BRIDGING	
			WASTE VALORIZATION AND	
			ENVIRONMENTAL SUSTAINABILITY	
10:00-10:30	C_INV05	Xin Wang	HYDROPHILICITY-TUNED POLYMER FOR	
			STABLE AQUEOUS BATTERY ELECTROLYTE	
		COFFEE BREAK	(
10:45-11:00	C_004	Ekasith Somsook	PET-DERIVED CARBON MATERIALS FOR	
			FLUORESCENT SENSORS AND	
			MICROPLASTIC REMOVAL	
11:00-11:15	C_005	Muhammad Utama	A NOVEL FLUORESCENT PROBE BASED ON	
			ZINC-COPPER BIMETALLIC NANOCLUSTERS	
			FOR ANALYSIS OF IODIDE IN FOOD	
			ADDITIVES	
11:15-11:30	C_006	Sukanya Thisan	CHALCONE-LEUCINE-NORBORNENE	
			CONJUGATE: SYNTHESIS, FLUORESCENCE	
			PROPERTIES, AND POTENTIAL APPLICATION	
			FOR Fe ³⁺ DETECTION IN BIOLOGICAL FLUIDS	



Session:	D - MATHEMATICS	D - MATHEMATICS / STATISTICS / COMPUTER SCIENCE / DATA SCIENCE / AI		
Room:	201 MHMK BUILDING			
Chairperson:		nartchai Leenawong haya Rattanametawee		
Time	ID	Speaker	Title	
9:30-10:00	D_INV01	Orawich Kumphon	WHEN STATISTICS MEETS RESEARCH: LESSONS FROM HANDS-ON INTEGRATION	
10:00-10:15	D_001	Kittimasak Naijit	TIME SERIES FORECASTING OF NET BUSINESS GROWTH IN THAILAND: AN ARIMA-BASED INTERACTIVE DASHBOARD APPROACH	
10:00-10:30	D_002	Sathit Prasomphan	AUTOMATED VIDEO SCREENING SYSTEM FOR YOUTH-APPROPRIATE CONTENT	
		COFFEE BREAK		
Chairperson:		nartchai Leenawong of. Dr. Nawinda Chutsagulprom		
Time	ID	Speaker	Title	
10:45-11:15	D_INV02	Udomsak Rakwongwan	MAKING MONEY WITH MATHEMATICS: CASE STUDIES	
11:15-11:30	D_003	Chinnapong Angsuchotmetee	PERFORMANCE TRADE-OFFS: AN ANALYSIS OF MODEL SIZE VERSUS SPEED AND INTELLIGENCE IN LARGE LANGUAGE MODELS	
11:30-11:45	D_004	Chinnapong Angsuchotmetee	RUST PDF GUARD: A WASM-BASED LIBRARY FOR PDF FILE UPLOAD PRESCREENING IN ZERO-TRUST ENVIRONMENTS	
11:45-12:00	D_005	Supanat Jumpalek	A NONSTANDARD PROOF OF MICHAEL'S SELECTION THEOREM	



Session:	E: ENERGY / ENV	E: ENERGY / ENVIRONMENTAL & EARTH SCIENCE / MATERIALS SCIENCE / CHEMICAL TECHNOLOGY		
Room:	202 MHMK BUILDING			
Chairperson:		pong Kanjanapayont rof. Dr. Chatchalerm Ketwetsuriya		
Time	ID	Speaker	Title	
9:30-10:00	E_INV03	Prayath Nantasin	PARTICIPATION OF THAI GEOLOGISTS ON ANTARCTIC RESEARCH	
10:00-10:30	E_019	Subsirirach Maharatanawong	EFFECT OF ANGULAR VARIATION IN DETACHED BREAKWATER STRUCTURE ON THE COASTAL MORPHOLOGY	
	•	COFFEE BREAK		
10:45-11:00	E_020	Kuntapon Kongtago	ENHANCING SEISMIC AMPLIFICATION PREDICTION IN JAPAN USING MULTI-LAYER PERCEPTRON MODELS WITH GEOTECHNICAL, GEOLOGICAL, AND GEOPHYSICAL FEATURES	
11:00-11:15	E_021	A-lin Suksawat	CHARACTERISTICS OF CLAY MINERALS RELATED TO ION-ADSORPTION RARE EARTH ELEMENT DEPOSIT FROM GRANITIC ROCKS IN PHANG NGA AREA, SOUTHERN THAILAND, SE ASIA TIN BELT	
11:15-11:30	E_022	Sermsak Thamasa	DELINEATION OF GEOLOGICAL LAYERS AND GROUNDWATER AQUIFERS USING 2D ELECTRICAL RESISTIVITY TOMOGRAPHY AND 2D INDUCED POLARIZATION: A CASE STUDY FROM GRAVEL HILL, SAWATI SUBDISTRICT, MUEANG DISTRICT, KHON KAEN PROVINCE	
11:30-11:45	E_023	Zing Par	ESTIMATING GROUND-LEVEL NO₂ IN THAILAND USING TROPOMI SATELLITE DATA AND GEOS-CHEM MODEL	
11:45-12:00	E_024	Hazlamee Benjawong	SPATIAL DISTRIBUTION OF RAINFALL AND TEMPERATURE ANOMALIES IN THAILAND ASSOCIATED WITH ENSO	



Symposium:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE			
Room:	207 MHMK BUILDING			
Chairperson:				
Time	ID	Speaker	Title	
8:30-9:00	SP1_PLS02	Lu Kun	FUSION: A PROMISING ENERGY SOLUTION FOR OUR FUTURE	
	NETWO	ORKING BREAK / PREPARE FOR BR	REAKOUT ROOM	
Session:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE - NUCLEAR AND CLIMATE SCIENCES			
Room:	207 MHMK BUILD	ING		
Chairperson:	Assoc. Prof. Dr. Thawatchai Onjun			
Time	ID	Speaker	Title	
9:30-10:30	SP1_INV16	Somsak Dangtip	THAILAND TOKAMAK-1 AT A GLANCE	
	SP1_INV17	Peng Xuebing	CURRENT STATUS AND PROGRESS OF BEST TOKAMAK PROJECT	
	SP1_INV18	Zhaohui Lin	EARTH SYSTEM MODEL DEVELOPMENT FOR CLIMATE STUDIES	
	SP1_INV19	Siwatt Pongpiachan	SIZE-SEGREGATED ANALYSIS OF PAHs IN	
			URBAN AIR: SOURCE APPORTIONMENT AND	
			HEALTH RISK ASSESSMENT IN AN URBAN	
			CANAL-ADJACENT ENVIRONMENT	
	COFFEE BREAK			
Chairperson:	Dr. Kampanart Silva			
Time	ID	Speaker	Title	
10:45-11:30	SP1_INV20	Thawatchai Onjun / Siriwat Chedsi / Mao Yawei	PANEL: FROM CHINA TO THAILAND: SMR – A MAJOR LEAP FORWARD FOR GLOBAL CLEAN ENERGY	



Symposium:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE		
Room:	205 MHMK BUILDING		
Chairperson:			
Time	ID	Speaker	Title
8:30-9:00	-	-	-
Session:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE - PARTICLE ACCELERATOR TECHNOLOGIES		
Room:	208 MHMK BUILD	ING	
Chairperson:	Assoc. Prof. Dr. Sa	roj Rujirawat	
Time	ID	Speaker	Title
9:30-10:30	SP1_INV21	Fang Wencheng	R&D ON PROTON AND HELIUM-ION THERAPY FACILITIES AT SSRF/SARI
	SP1_INV22	Somjai Chunjarean	A THAI LINEAR ACCELERATOR FOR PRODUCT IRRADIATION: ADVANCING SUSTAINABLE AGRICULTURE AND ECONOMIC SELF-RELIANCE
	SP1_INV23	Prayoon Songsiriritthigul	PRESENT STATUS OF THAILAND AMS RADIOCARBON DATING PROJECT
	SP1_INV24	Apichat Leckngam	SEM's DESIGN AND DEVELOPMENT
		COFFEE BREAK	
Chairperson:	Dr. Jitti Mungkalasiri		
Time	ID	Speaker	Title
10:45-11:30	SP1_INV25	Chonlakiet Khorprasert / Chomporn Sitathanee / Ekkasit Tharavichitkul	PANEL: CLINICAL APPLICATIONS OF PROTON THERAPY IN THAILAND



Symposium:	SP2 - FLAVOR AND FRAGRANCE WITHOUT BORDERS: FROM ORIGIN TO GLOBAL MARKET			
Room:	308 MHMK BUILDING			
Chairperson:	Assoc. Prof. Dr. Sittiwat Lertsiri			
Time	ID Speaker Title			
9:30-10:30	SP2_INV01	Thitipat Suppattranont /	GLOBAL MARKET INSIGHT: THAI FLAVOR &	
		Bangon Kietthanakorn /	FRAGRANCE	
		Sittiwat Lertsiri		
COFFEE BREAK				
10:45-12:00	SP2_INV02	Bangon Kietthanakorn /	PRODUCTION AND QUALITY CONTROL OF	
		Udomlak Sukatta	ESSENTIAL OILS IN FLAVOR & FRAGRANCE	

Symposium:	SP3 - NEXGEN E	SP3 - NEXGEN ENERGY: STORAGE AND CONVERSION FOR SUSTAINABILITY		
Room:	203 MHMK BUILDING			
Chairperson:		Dr. Priew Eiamlamai Co-Chair: Asst. Prof. Dr. Jiagian Qin		
Time	ID	Speaker	Title	
9:30-9:55	SP3_INV06	Suk Won Cha	EVALUATION OF PEMWE CORROSION CONDITIONS AND ADVANCED COATINGS FOR BIPOLAR PLATE	
9:55-10:20	SP3_INV07	Rapee Utke	HYDROGEN-BASED ENERGY STORAGES	
	COFFEE BREAK			
10:40-11:05	SP3_INV08	Ruiqin Zhang,	UREA-DRIVEN UNIFORM Sn DEPOSITION FOR LONG-LIFE Sn-I FLOW BATTERIES	
11:05-11:30	SP3_INV09	Hongyi Gao	REGULATION OF ACTIVE SITE MICROENVIRONMENT IN METAL-LOADED RE-MOFS FOR ENHANCED CATALYTIC HYDROGENATION PERFORMANCE	
11:30-11:45	SP3_003	Wathanyu Kao-ian	HIGHLY STABLE CATHODE DERIVED FROM MANGANESE-ALUMINIUM LAYERED DOUBLE HYDROXIDE FOR WET NONAQUEOUS ZINC-ION BATTERY	
11:45-12:00	SP3_004	Suparada Kamchompoo	COMPARATIVE STUDY OF IONIC PUMPING AT MXENE AND CARBON-COATED MXENE INTERFACES FOR STABLE LITHIUM-ION BATTERIES AT LOW TEMPERATURES	



Symposium:	SP7 - COLOUR SO	SP7 - COLOUR SCIENCE/TECHNOLOGY, LIGHT AND APPLICATIONS		
Room:	M02 MHMK BUILDING			
Chairperson:	Prof. Dr. Shigeki	Prof. Dr. Shigeki Nakauchi		
Time	ID	Speaker	Title	
9:30-10:15	SP7_INV01	Steve Paolini	PROGRAMMABLE MULTICHANNEL LIGHTING FOR ACCURATE SPECTRAL CONTROL AND DAYLIGHT EMULATION	
10:15-10-30	SP7_001	Duantemdoung Dethsuphar	WAVELENGTH-DEPENDENT DEGRADATION OF RED PIGMENTS UNDER NARROW-BAND LED ILLUMINATION	
		COFFEE BREAK		
10:45-11.25	SP7_INV02	Vineetha Kalavally	PERSONAL LIGHT DOSIMETRY— CHALLENGES, OPPORTUNITIES, AND EMERGING AI APPLICATIONS	
11:25-11:40	SP7_002	Pakorn Prajuabwan	ON THE DESIGN OF CIRCULAR SHAPE LIGHT GUIDE PLATE AS ARTIFICIAL LIGHTING FOR WOLFFIA ILLUMINATION TO INVESTIGATE THE EFFECT OF BLUE LIGHT AND RED LIGHT ON WOLFFIA BUDDING	
11:40-11:55	SP7_003	Phuttharaksa Lanoi	THE IMPACT OF SIMULATED LOW VISION ON THAI FONT LEGIBILITY: A STUDY OF FOVEA AND PARAFOVEA VISION	
11:55-12:10	SP7_004	Krittin Assawaphom	THERMAL AND LIGHT STABILITY OF PIGMENTS AND BINDERS USED IN PAINTING UNDER XENON AND MIXED WHITE LED ILLUMINATION	



Symposium:	SP9 - EXPLORING THE COSMOS: ADVANCES IN OBSERVATIONAL AND THEORETICAL ASTROPHYSICS			
Room:	305 MHMK BUIL	DING		
Chairperson:	Dr. Taweewat So	mboonpanyakul		
	Co-Chair: Dr. Nic	ha Leethochawalit		
Time	ID	Speaker	Title	
9:30-10:00	SP9_INV01	Yuhiko Aoyama	HYDROGEN LINE EMISSION FROM	
			ACCRETION SHOCK ON FORMING GAS-	
			GIANT PLANTS	
10:00-10:30	SP9_INV02	David Ruffolo	COSMIC RAYS: WHERE THEY COME FROM	
			AND HOW THEY GET HERE	
	COFFEE BREAK			
10:45-11:15	SP9_INV03	Samaporn Tinyanont	LIVES AND EXPLOSIVE DEATHS OF MASSIVE	
			STARS: HOW WE ARE MADE OF STARDUST	
11:15-11:30	SP9_001	Anas Yamalae	DISCOVERY OF SPIRAL BRIGHTEST CLUSTER	
			GALAXIES AT Z = 0.1-1.2	
11:30-11:45	SP9_002	Nutchapak Konjaisue /	A STUDY OF SINGLE PULSE FLUENCE	
		Nisawara Piyaratanaphiphat	DISTRIBUTION OF PSR J2048-1616 FOR	
			COMMISIONING THE THAI NATIONAL	
			RADIO TELESCOPE (TNRT)	
11:45-12:00	SP9_003	Ekkawee Tangsailertkul	DARK MATTER DISTRIBUTION AND ITS	
			IMPACT ON GALAXY CLUSTER PROPERTIES:	
			A WEAK LENSING APPROACH	



Symposium:	SP10 - X-RAY CRYSTALLOGRAPHY			
Room:	206 MHMK BUILDING			
Chairperson:		Prof. Dr. Kuakarun Kruson		
	Co-Chair: Assoc. I	Prof. Dr. Kittipong Chainok		
Time	ID	Speaker	Title	
9:30-10:00	SP10_INV01	Chun-Hung Lin	STRUCTURAL INSIGHT INTO THE CATALYTIC MECHANISM AND INHIBITOR DEVELOPMENT OF L-FUCOSE-RELATED ENZYMES	
10:00-10:30	SP10_INV02	Numpon Insin	MULTIFUNCTIONAL MAGNETIC MATERIALS AS PHOTOCATALYSTS, FROM COMPOSITE MATERIALS TO HIGH ENTROPY MATERIALS	
		COFFEE BREAK		
10:45-11:15	SP10_INV03	Tatchamapan Yoskamtorn	DECODING STRUCTURES AND DYNAMICS IN FUNCTIONAL FRAMEWORK MATERIALS FOR A NET-ZERO FUTURE	
11:15-11:45	SP10_INV04	Prathapa Siriyara Jagannatha	REDEFINING LABORATORY CRYSTALLOGRAPHY: HIGH-INTENSITY SILVER RADIATION AND ADVANCED DETECTION FOR PRECISION STRUCTURAL ANALYSIS	
11:45-12:00	SP10_001	Natcha Suparangkul	CRYSTALLIZATION OF A-L-RHAMNOSIDASE FROM <i>Pediococcus acidilactici</i>	



Symposium:	SP12 - THE 2ND INTERNATIONAL SYMPOSIUM OF SCIENCE COMMUNICATION AND PUBLIC SCIENCE LITERACY			
Room:	302 MHMK BUILD	302 MHMK BUILDING		
Chairperson:	Dr. Ganigar Chen			
Time	ID	Speaker	Title	
9:30-10:15	SP12_INV01	Julia Rizzo	"TRUST ME, I'M A SCIENTIST." WHY SCIENCE	
			COMMUNICATION MATTERS	
	COFFEE BREAK			
10:30-12:00	SP12_INV02	Saran Poshyachinda	ASTRONOMY AS A TOOL FOR SCIENCE	
			COMMUNICATION: THE NARIT MODEL	
	SP12_INV03	Fung Hon Ngen (Kenneth)	EVALUATING IMPACT IN SCIENCE	
			ENCULTURATION IN MALAYSIA	
	SP12_INV04	Mark Ivan Coronado Roblas	PROMOTING PUBLIC ENGAGEMENT IN	
			FRONTIER SCIENCE THROUGH SCIENCE	
			COMMUNICATION RESEARCH AND	
			DEVELOPMENT: THE PHILIPPINE	
			EXPERIENCE	



Symposium:	SP13 - NATURE-BASED SOLUTIONS FOR CLIMATE MITIGATION Session 1: NbS for Climate Mitigation and Driving NbS in Thailand and Internationally			
Room:	204 MHMK BUILDING			
Chairperson:	Co-Chair: Asst. Pr	Prof. Dr. Anchana Prathep Co-Chair: Asst. Prof. Dr. Tassanee Jiaphasuanan Co-Chair: Dr. Milica Stankovic		
Time	ID	Speaker	Title	
9:00-9:20	SP13_INV01	Andreas A. Hutahaean	THE CONCEPT OF NATURE-BASED SOLUTIONS (NbS) AND THEIR IMPLEMENTATION AT THE INTERNATIONAL LEVEL	
9:20-9:40	SP13_INV02	Pakkasem Tongchai	THE CONCEPT OF NATURE-BASED SOLUTIONS (NbS) AND THEIR IMPLEMENTATION AT THE REGIONAL LEVEL	
9:40-10:00	SP13_INV03	Wongkot Wongsapai	THE IMPLEMENTATION OF NbS IN NATIONAL POLICY	
10:00-10:30	-	Anchana Prathep / Tassanee Jiaphasuanan / Milica Stankovic	Q&A	
COFFEE BREAK				
Symposium:	SP13 - NATURE-BASED SOLUTIONS FOR CLIMATE MITIGATION Session 2: NbS Technology for Climate Mitigation			
Chairperson:	Prof. Dr. Anchana Prathep Co-Chair: Asst. Prof. Dr. Tassanee Jiaphasuanan Co-Chair: Dr. Milica Stankovic			
Time	ID	Speaker	Title	
10:45-11:00	SP13_INV04	Jeark Principe	NbS TECHNOLOGY FOR CLIMATE	
11:00-11:15		Nuntikorn Kitratporn	MITIGATION	
11:15-11:30		Atthaphon Ariyarit		
11:30-11:45		Sirilak Chumkiew		
11:45-12:00	-	Anchana Prathep / Tassanee Jiaphasuanan / Milica Stankovic	Q&A	



Symposium:	SP15 - EMPOWERING SCIENCE EDUCATORS FOR GLOBAL CHALLENGES (SESSION IN THAI LANGUAGE)		
Room:	307 MHMK BUILDING		
Chairperson:	Assoc. Prof. Dr. Pu	nnama Siriphannon	
Time	ID	Speaker	Title
9:30-9:35	-	Thanuttkhul Mongkolaussavarat (President of The Science Society of Thailand Under the Patronage of His Majesty the King)	OPENING REMARKS
9:35-10:15	SP15_001	Senior Scientist of the Year 2025 • Pichai Sonchaeng	KEYNOTE SPEECH: IGNITING MINDS: TRANSFORM CRISIS TO OPPORTUNITY BY SCIENCE AND TECHNOLOGY
SHOWCASE INSPI	RING INNOVATION:	EMPOWERING STUDENTS THROU	JGH AWARD-WINNING SCIENCE TEACHING
10:15-10:45	SP15_002	Outstanding Science Teacher (Primary Level), 2025 Suwit Sida Orathai Mungkalad	INSPIRING LITTLE EXPLORERS: SCIENCE BEYOND TEXTBOOK
10:45-11:15	SP15_003	Outstanding Science Teacher (Secondary Level), 2025 Sakda Chanklan Wannapa Thuwawit,	FROM LOCAL PROBLEMS TO GLOBAL THINKERS: SCIENCE PROJECTS WITH REAL- WORLD IMPACT
11:15-11.30	SP15_004	Outstanding Science Teacher (Vocational Education Level), 2025 • Suwat Netcharoen	HANDS-ON, MINDS-ON: VOCATIONAL INNOVATIONS FOR A SUSTAINABLE FUTURE
11.30-11:45	SP15_005	Outstanding Science Teacher (Higher Education Level), 2025 • Chaiwat Lertwiriyanuntakul	FROM LAB TO SOCIETY: NURTURING GRADUATE RESEARCHERS FOR GLOBAL CHANGE
11:45-11:55	-	-	Q&A
11:55-12:00	-	-	CLOSING REMARKS



Session:	STT52 MEETING		
Room:	MULTI-FUNCTIONAL ROOM TAB BLD		
Time	ID	Speaker	Title
9:30-11:30	-	-	STT52 MEETING

Session:	ANNUAL MEETING OF THE SCISOC		
Room:	MULTI-FUNCTIONAL ROOM TAB BLD		
Time	ID	Speaker	Title
12:00-13:30	-	-	ANNUAL MEETING OF THE SCISOC



AFTERNOON PROGRAM

Session:	PLENARY SPEAKER	PLENARY SPEAKER		
Room:	M01 MHMK BUILD	M01 MHMK BUILDING		
Chairperson:	Assoc. Prof. Dr. Sit	Assoc. Prof. Dr. Sittiporn Pattaradilokrat		
Time	ID	Speaker	Title	
13:00-13:45	-	Tanapat Palaga	UNTAPPED POTENTIAL OF TISSUE MICROENVIRONMENT MACROPHAGES IN HEALTH AND CANCER	

Session:	PLENARY SPEAKER			
Room:	202 MHMK BUILD	202 MHMK BUILDING		
Chairperson:	Dr. Chanat Aonbar	Dr. Chanat Aonbangkhen		
Time	ID	Speaker	Title	
13:00-13:45	-	Xiaoguang Lei	OPPORTUNITIES FOR MERGING CHEMICAL AND BIOLOGICAL SYNTHESIS	

Session:	A – PHYSICS / APP	A – PHYSICS / APPLIED PHYSICS		
Room:	306 MHMK BUILD	306 MHMK BUILDING		
Chairperson:	Assoc.Prof.DrUdo	· · · · · · · · · · · · · · · · · · ·		
	Co-Chair: Dr.Wara	korn Yanwachirakul		
Time	ID	Speaker	Title	
14:00-14:30	A_INV04	Dr. Noppadon Nuntawong	ADVANCING MEDICAL DIAGNOSTICS	
			WITH SERS: FROM SUBSTRATE	
			ENGINEERING TO CLINICAL	
			APPLICATIONS	
14:30-14:45	A_008	Punphum Jarunyakorn /	INVESTIGATION OF VIBRATION EFFECTS	
		Mathus Manedam /	ON FRICTION COEFFICIENTS BETWEEN	
		Kriangkamon Sawangsri	SURFACES: EXPERIMENTAL	
			MEASUREMENT AND ANALYSIS	
14:45-15:00	A_009	Pinthudit Klinkajorn	ANALYSIS OF ERROR IN THE	
			PHOTOELECTRIC EXPERIMENT USING A	
			LIGHT FILTER: A CASE STUDY	
	COFFEE BREAK			



Session:	C - CHEMISTRY C(3): ORGANIC	C - CHEMISTRY C(3): ORGANIC AND MEDICINAL CHEMISTRY, NATURAL PRODUCTS, CHEMICAL BIOLOGY			
Room:	304 MHMK BUI	304 MHMK BUILDING			
Chairperson:		rin Rukachaisirikul anat Aonbangkhen			
Time	ID	Speaker	Title		
14:00-14:30	C_INV06	Rungnapha Saeeng	STRUCTURAL MODIFICATION OF NATURAL PRODUCTS TO UNLOCK BIOACTIVITY		
14:30-14:45	C_007	Reza Setiawan	α-GLUCOSIDASE INHIBITORS FROM CANNABINOL DERIVATIVES		
14:45-15:00	C_008	Muhammad Raffi Zakaria	COMPARISON BETWEEN FRESH AND DRIED Phyllanthus emblica FRUIT EXTRACTS AGAINST BREAST CANCER CELLS		
		COFFEE BREAK			
15:15-15:45	C_INV07	Tanatorn Khotavivattana	RATIONAL APPROACHES TO DRUG DISCOVERY: TARGETING VIRAL PROTEASE AND CANCER TUBULIN PATHWAYS		
15:45-16:00	C_009	Yazdaniyar Halimi	IN SILICO SCREENING OF IN-HOUSE LIBRARY REVEALS XANTHONE DERIVATIVES AS PROMISING INHIBITORS OF WILD-TYPE AND MUTANT EGFR-TKS		
16:00-16:15	C_010	Ade Sally	ESTER AND SULFONYL HYDRAZONE DERIVATIVES OF ALOE-EMODIN AS NEW α -GLUCOSIDASE INHIBITORS		



Session:	D - MATHEMA	D - MATHEMATICS / STATISTICS / COMPUTER SCIENCE / DATA SCIENCE / AI		
Room:	201 MHMK BU	201 MHMK BUILDING		
Chairperson:	Asst. Prof. Dr.	Asst. Prof. Dr. Jiraphan Suntornchost		
	Co-Chair: Asst	. Prof. Dr. Areena Hazanee		
Time	ID	Speaker	Title	
14:00-14:30	D_INV03	Varayu Boonpogkrong	THE HENSTOCK-KURZWEIL INTEGRAL: A	
			MODERN PERSPECTIVE AND APPLICATIONS	
14:30-14:45	D_006	Siripatana Tikamma	EXISTENCE, UNIQUENESS AND QUENCHING	
			FOR A PARABOLIC EQUATION WITH A	
			CONCENTRATED NONLINEAR SOURCE ON A	
			SEMI-INFINITE INTERVAL UNDER A	
			NEUMANN BOUNDARY CONDITION	
14:45-15:00	D_007	Thandar Maung Maung	TOWARD A SUSTAINABLE DATA LAKE:	
			MEASURING AND FORECASTING ENERGY	
			USAGE OF CRUD OPERATIONS	
		COFFEE BREAK		
Chairperson:		r. Athipat Thamrongthanyalak		
		oc. Prof. Dr. Suphakant Phimoltares		
Time	ID	Speaker	Title	
15:15-15:45	D_INV04	Dittaya Wanvarie	LLM IN LANGUAGE LEARNING	
15:45-16:00	D_008	Jirateep Mahasuweerachai	SideOffNet: ENHANCED MACHINE	
			LEARNING FRAMEWORK BASED ON OFF-	
			TARGET-AWARE NETWORKS FOR	
			PREDICTING DRUG SIDE EFFECTS	
16:00-16:15	D_009	Natthanicha Trisirirat	ASSESSMENT OF STUDENTS' ATTENTION	
			WHILE LEARNING USING ARTIFICIAL	
			INTELLIGENCE MODEL	
16:15-16:30	D_010	Natnicha Rakbumrung	THE GEOMETRY OF RANDERS CYLINDERS OF	
			REVOLUTION WITH NON-CONSTANT	
			NAVIGATION DATA ALONG MERIDIANS	
16:30-16:45	D_011	Chanon Bampeng	A STUDY OF MINIMUM SECURE	
			DOMINATING SETS IN CYCLE AND PATH	



Session:	E: ENERGY / EN TECHNOLOGY	E: ENERGY / ENVIRONMENTAL & EARTH SCIENCE / MATERIALS SCIENCE / CHEMICAL TECHNOLOGY			
Room:	202 MHMK BU	202 MHMK BUILDING			
Chairperson:		Assoc. Prof. Dr. Pakorn Opaprakasit Co-Chair: Assoc. Prof. Dr. Chanatip Samart			
Time	ID	Speaker	Title		
14:00-14:30	E_INV04	Ning Yan	FUTURE FUELS: FROM BIOMASS TO HYDROGEN		
14:30-14:45	E_025	Pimpet Sratong-on	SPENT COFFEE GROUND/RICE HUSK AND RECYCLED PAPER-BASED MYCELIUM BIOCOMPOSITES FOR SUSTAINABLE ROAD GUIDEPOSTS		
14:45-15:00	E_026	Pheeranat Leangthanarerx	DEVELOPMENT OF A MULTILAYERED ALUMINA-SIC CERAMIC COMPOSITE FOR ENHANCED IMPACT RESISTANCE IN ARMOR APPLICATIONS		
		COFFEE BREAK			
15:15-15:30	E_027	Chananchida Sukchaiya / Miyuki Sato	MULTIFUNCTIONAL NANOCAPSULE- INTEGRATED POLYESTER AND MICRO- POLYESTER TEXTILES ENHANCED WITH CHITOSAN AND SILVER PARTICLES FOR ANTIBACTERIAL ACTIVITY AND SUSTAINED FRAGRANCE RELEASE		
15:30-15:45	E_028	Thanyathorn Lohabunditwong	BIOCOMPOSITE FROM DURIAN RIND AND ORANGE PEEL AS A NATURAL POLYMER MATRIX FOR ADVANCED WOUND DRESSING		
15:45-16:00	E_029	Thanakorn Teekasung	ZINC GLYCEROLATE SYNTHESIZED VIA MICROWAVE AND METHANOL-ASSISTED REFLUX METHODS: COMPARATIVE CHARACTERIZATION AND THERMAL STABILIZATION IN PVC		
16:00-16:15	E_030	Pawarisa Ngamroj / Natthakit Phophuttharaksa	MODULATION OF ANTIMICROBIAL EFFECT ON VANADIUM-PROMOTED CASSAVA/CHITOSAN BIOPOLYMER FILMS USING WHITE-LIGHT IRRADIATION		
16:15-16:30	E_031	Methakriat Sirival	MICROENCAPSULATION OF Zingiber cassumunar ROXB. ESSENTIAL OIL USING POLY-L-LACTIC ACID FOR ENHANCED STABILITY		
16:30-16:45	E_032	Shehbaz Ameer	CONTROLLED RELEASE OF HOLY BASIL ESSENTIAL OIL NANOEMULSION ENCAPSULATED IN GELATIN/CARBOXYMETHYL CELLULOSE HYDROGEL FOR WOUND CARE		
16:45-17:00	E_033	Le Hanh Trang Ho	TRIPLE-SHAPE MEMORY POLYMER: INTERPENETRATING POLYMER NETWORKS FROM BIO-BASED EPOXY AND BENZOXAZINE		



Session:	F: FOOD SCIEN	F: FOOD SCIENCE AND TECHNOLOGY/AGRICULTURAL SCIENCE			
Room:	308 MHMK BU	308 MHMK BUILDING			
Chairperson:	Assoc. Prof. D	Assoc. Prof. Dr. Siwaret Arikit			
Time	ID	Speaker	Title		
14:00-14:30	F_INV01	Rui Xia	TBTOOLS: AN INTEGRATED AND		
			MULTIFUNCTIONAL BIOINFORMATICS		
			TOOLKIT FOR THE BIG DATA ERA		
14:30-14:45	F_INV02	Poonpipope Kasemsap	FROM QUANTUM AND SATELLITE TO		
			CARBON FARMING: MAKING NET ZERO		
			MISSION POSSIBLE		
14:45-15:00	F_001	Moe Moe Kyi Win	QTL-SEQ IDENTIFIES KEY GENES IMPORTANT		
			FOR BACTERIAL LEAF STREAK (Xanthomonas		
			oryzae pv. oryzicola) RESISTANCE IN RICE		
		COFFEE BREAK			
15:15-15:30	F_002	Natawat Jantong	ENHANCING CULTIVATION EFFICIENCY AND		
			NUTRITIONAL VALUE OF SUNFLOWER		
			SPROUTS USING ULTRASONIC WAVES AND		
			SUCROSE FOR FUTURE FOOD PRODUCTION		
15:30-15:45	F_003	Suparad Klinsawang	IDENTIFICATION OF ROOT RESPONSIVE		
			GENES UNDERLYING PENETRATION ABILITY		
			IN COMPACTED SOIL USING QTL-SEQ IN		
			RICE (Oryza sativa L.)		
15:45-16:00	F_004	Papapin Prasertsil	TARGETED AROMA VOLATILE COMPOUNDS		
			ASSOCIATED WITH CONSUMER		
			PREFERENCES IN CHILLI		
16:00-16:15	F_005	Watchara Phetluan	IDENTIFICATION OF GENETIC LOCI		
			ASSOCIATED WITH STOMATAL DENSITY IN		
			RICE (Oryza sativa L.) THROUGH GENOME-		
			WIDE ASSOCIATION STUDIES		
16:15-16:30	F_006	Piyamongkol Mangkalasane	GENOME-WIDE ASSOCIATION STUDY		
			(GWAS) REVEALS ENDOSPERM-SPECIFIC		
			GENES (OsenS) AND Wx GENE REGULATING		
			SEED STORAGE PROTEIN (SSP) IN RICE		
			GRAIN (<i>Oryza sativa</i> L.)		



Session:	F: FOOD SCIEN	F: FOOD SCIENCE AND TECHNOLOGY/AGRICULTURAL SCIENCE			
Room:	301 MHMK BU	301 MHMK BUILDING			
Chairperson:					
Time	ID	Speaker	Title		
14:00-14:30	F_INV03	Hisayuki Uneyama	KOKU AND UMAMI: ASIAN TASTE INNOVATIONS FOR HEALTH AND PLANETARY WELL-BEING		
14:30-14:45	F_INV04	Nathdanai Harnkarnsujarit	MODERN FOOD TECHNOLOGY FOR SUSTAINABILITY AND GLOBAL COMPETITIVENESS		
14:45-15:00	F_007	Panitta Boonsrirat	BIOCONVERSION OF MEALWORM (<i>Tenebrio molitor</i>) FRASS BY BLACK SOLDIER FLY LARVAE (<i>Hermetia illucens</i>) SIGNIFICANTLY IMPROVED QUANTITY AND QUALITY OF AQUAFEED PROTEIN		
		COFFEE BREAK			
15:15-15:30	F_008	Apichaya Feepakpro	EFFECT OF ALKALIZATION PROCESS ON COCOA NIBS AND POWDER QUALITIES		
15:30-15:45	F_009	Endy Triyannanto	THE EFFECT OF X-RAY RADIATION DOSE ON THE QUALITY AND SHELF LIFE OF BEEF MEATBALLS STORED AT REFRIGERATION TEMPERATURE		
15:45-16:00	F_010	Piyaorn Likhitrattanakon	UV-C TECHNOLOGY FOR MICROBIAL CONTROL AND QUALITY RETENTION IN 'PATTAVIA' PINEAPPLE JUICE		
16:00-16:15	F_011	Thanakorn Wongprasert	SCREENING OF AROMA CHANGES BY ROASTING PROCESS IN THAI FORASTERO HYBRID STRAIN CACAO NIBS (<i>Theobroma Cacao</i>)		
16:15-16:30	F_012	Aung Myint Myat	DEVELOPMENT OF PROTEIN- AND FIBER- ENRICHED GLUTEN-FREE PASTA INCORPORATING WITH DEFATTED RICE BRAN AND LUPIN FLOUR		



Symposium:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE			
Room:	207 MHMK BUILD	207 MHMK BUILDING		
Chairperson:				
Time	ID	Speaker	Title	
13:30-14:00	SP1_PLS03	Wang Peng	AI/GENERATIVE AI IN CHINA	
	NETWO	RKING BREAK / PREPARE FOR BR	EAKOUT ROOM	
Session:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE - ARTIFICIAL INTELLIGENCE, LARGE LANGUAGE MODEL AND GENERATIVE AI > NEXT STEP OF GENERATIVE AI AND LLMS			
Room:	207 MHMK BUILD	ING		
Chairperson:	Dr. Thepchai Supn	iti		
Time	ID	Speaker	Title	
14:00-15:00	SP1_INV26	Chengqing Zong	RESEARCH ON LARGE LANGUAGE MODELS AND BEYOND	
	SP1_INV27	Yang Feng	CHINA'S PROGRESS IN LARGE LANGUAGE MODELS	
	SP1_INV28	Chai Wutiwiwatchai	THAILAND LOCAL LARGE LANGUAGE MODEL: THE ThaiLLM	
	SP1_INV29	Thatpong Pongthawornkamol	BUSINESS TRANSFORMATION THROUGH AGENTIC AI	
		COFFEE BREAK		

Symposium:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE			
Room:	205 MHMK BUILD	205 MHMK BUILDING		
Chairperson:				
Time	ID	Speaker	Title	
13:00-13:00	-	-	-	
Session:	SP1 - CONFERENCE ON THAILAND - CHINA SCIENCE AND TECHNOLOGY COLLABORATIONS UNDER HER ROYAL HIGHNESS'S INITIATIVE - POLAR RESEARCH > SYNERGY IN POLAR RESEARCH: BRIDGING THAILAND AND CHINA FOR SUSTAINABLE SOLUTIONS			
Room:	208 MHMK BUILD	ING		
Chairperson:	Prof. Dr. Voranop	Viyakarn		
Time	ID	Speaker	Title	
14:00-15:00	SP1_INV30	Xueyuan Tang	CHINA'S AIRBORNE GEOPHYSICAL SURVEY IN EAST ANTARCTICA	
	SP1_INV31	Jiang Peng	CHINA'S POLAR VISION: A JOURNEY OF DISCOVERY AND GLOBAL RESPONSIBILITY	
	SP1_INV32	Suchana Chavanich	THAILAND AND POLAR RESEARCH: A DIALOGUE ON HISTORY, COLLABORATION, AND THE FUTURE	
COFFEE BREAK				



Symposium:	SP3 - NEXGEN E	SP3 - NEXGEN ENERGY: STORAGE AND CONVERSION FOR SUSTAINABILITY		
Room:	203 MHMK BUI	203 MHMK BUILDING		
Chairperson:	Asst. Prof. Dr. Ji Co-Chair: Dr. Pi	tti Kasemchainan nit Kidkhuntod		
Time	ID	Speaker	Title	
14:00-14:25	SP3_INV10	Liping Wang	PYRITES CATHODES AS HIGH ENERGY DENSITY LITHIUM METAL BATTERY	
14:25-14:50	SP3_INV11	Pimpa Limthongkul	DEVELOPMENT OF NEXT GENERATION ENERGY STORAGE TOWARDS SUSTAINABLE, HIGH ENERGY AND SAFE BATTERY SYSTEM	
		COFFEE BREAK		
15:05-15:30	SP3_INV12	Athaweena Krittayavathananon	CONCEPTUAL DESIGN OF A SOLID-STATE ELECTROLYTE FOR ENHANCED SAFETY IN LITHIUM-BASED BATTERIES	
15:30-15:55	SP3_INV13	Fuda Yu	SUPERSTRUCTURE DESIGN FOR OXYGEN REDOX IN LI-RICH CATHODES	
15:55-16:20	SP3_005	Guangmin Zhou	REPAIRING AND UPCYCLING OF ELECTRODE MATERIALS FROM SPENT LITHIUM ION BATTERIES	
16:20-16:45	SP3_006	Pei-Chen Su	SURFACE MODIFICATION OF SOLID OXIDE FUEL CELL ELECTRODES FOR PERFORMANCE AND STABILITY	
16:45-17:00	SP3_007	Pakawan Sereerattanakorn	A DUAL-FUNCTION LITHIUM BORATE GLASS CERAMICS-COPOLYMER COMPOSITE INTERLAYER FOR LITHIUM-SULFUR BATTERIES	



Symposium:	SP4 - BIOREFINI	SP4 - BIOREFINERY		
Room:	M01 MHMK BU	M01 MHMK BUILDING		
Chairperson:	Prof. Dr. Chawa	Prof. Dr. Chawalit Ngamcharussrivichai		
Time	ID	Speaker	Title	
14:00-14:05	-	-	OPENING SPEECH	
14:05-15:05	-	Representatives from government agencies, the private sector/industry, and universities	THE PANEL DISCUSSION > BIOREFINERY INNOVATION FOR THAILAND'S BIOECONOMY: FROM AGRICULTURAL WASTE TO HIGH-VALUE CHEMICALS FOR SUSTAINABLE DEVELOPMENT	
15:10-15:30	SP4_INV01	Duangamol Tungasmita	VALORIZATION OF AGRICULTURAL RESIDUES INTO BIO-BASED CHEMICALS THROUGH GREEN CATALYTIC TRANSFORMATION	
15:30-15:50	SP4_INV02	Nuttapat Thiensuwan	DESIGNING ADVANCED CATALYSTS FOR A MULTI-FEEDSTOCK BIOREFINERY: CONVERTING BIOMASS AND BIO-DERIVED FEEDSTOCKS INTO BIOCHEMICALS	
15:50-16:10	SP4_INV03	Warodom Hunsiri	FACILE AND COST-EFFECTIVE NI-BASED CATALYSTS FOR HYDROCONVERSION OF PALM OIL DERIVATIVES TO BIO-JET FUELS	
16:10-16:30	SP4_INV04	Lalita Attanatho	TRANSFORMING AGRICULTURAL FEEDSTOCKS INTO BIOFUELS AND BIOCHEMICALS THROUGH CHEMICAL PATHWAY IN THE BIOREFINERY FRAMEWORK	
16:30-16:40	-	-	SYMPOSIUM SUMMARY AND CONCLUDING REMARK	
		COFFEE BREAK		



Symposium:	SP8 - CULTURAL	SP8 - CULTURAL HERITAGE: TRADITIONAL/DIGITAL COLOR			
Room:	M02 MHMK BUII	M02 MHMK BUILDING			
Chairperson:	Prof. Dr. Shigeki	Prof. Dr. Shigeki Nakauchi			
Time	ID	Speaker	Title		
13:10-14:00	SP8_INV01	Shigeki Nakauchi	UNIVERSALITY AND DIVERSITY IN COLOR PREFERENCE FOR ART PAINTINGS		
14:00-14:15	SP8_001	Nattawan Worawannotai	X-RAY FLUORESCENCE ANALYSIS OF PIGMENTS IN THE MURAL PAINTINGS AT WAT DON KRABUEANG, RATCHABURI, THAILAND		
14:15-14:30	SP8_002	Atikarn Kraichok	SAFE REMOVAL OF AGED POLYVINYL ACETATE ADHESIVES FROM CANVAS USING NANOCELLULOSE AEROGEL: PRESERVING ORIGINAL COLOR OF ARTWORKS		
14:30-15:00	-	-	WORKSHOP: SP8: COLOUR IN CULTURAL HERITAGE: BRIDGING TRADITION AND INNOVATION THE SMILE OF THE CENTURY: SCIENCE BEHIND THE MONA LISA. DISCOVER THE HIDDEN SECRETS OF A WORLD-RENOWNED MASTERPIECE THROUGH THE LENS OF BOTH SCIENCE AND ART.		
		COFFEE BREAK			
15:15-17.00	-	-	WORKSHOP: SP8: COLOUR IN CULTURAL HERITAGE: BRIDGING TRADITION AND INNOVATION THE SMILE OF THE CENTURY: SCIENCE BEHIND THE MONA LISA. DISCOVER THE HIDDEN SECRETS OF A WORLD-RENOWNED MASTERPIECE THROUGH THE LENS OF BOTH SCIENCE AND ART.		



Symposium:	SP9 - EXPLORING THE COSMOS: ADVANCES IN OBSERVATIONAL AND THEORETICAL ASTROPHYSICS			
Room:	305 MHMK BUILDI	305 MHMK BUILDING		
Chairperson:	Dr. Krittapas Chan	Dr. Krittapas Chanchaiworawit		
Time	ID	Speaker	Title	
14:00-14:30	SP9_INV04	Waraporn Nuntiyakul	THAI–CHINESE COLLABORATION ON COSMIC RAY SURVEYS AND DEEP-SEA NEUTRINO TELESCOPES	
14:30-15:00	SP9_INV05 Teeraparb Chantavat THE EXTREME OBJECTS AT HIGH REDSHIFTS			
COFFEE BREAK				

Symposium:	SP10 - X-RAY CRYSTALLOGRAPHY				
Room:	206 MHMK BUILD	206 MHMK BUILDING			
Chairperson:	Prof. Dr. Kuakarun	Kruson			
	Co-Chair: Assoc. Pi	rof. Dr. Kittipong Chainok			
	Co-Chair: Asst. Pro	f. Dr. Nanthawat Wannarit			
Time	ID	Speaker	Title		
14:00-15:00	SP10_INV05	Santi Pailoplee /	TALKS ABOUT CRYSTALLOGRAPHY I		
		Kittikhun Wangkanont /			
	Puey Ounjai				
	COFFEE BREAK				
15:15-16:15	SP10_INV05	Santi Pailoplee /			
		Kittikhun Wangkanont /			
		Puey Ounjai	TALKS ABOUT CRYSTALLOGRAPHY II		

Symposium:	SP11 - RADIOECOL	SP11 - RADIOECOLOGY AND ENVIRONMENTAL RADIOACTIVITY		
Room:	DEPARTMENT OF NUCLEAR ENGINEERING, FACULTY OF ENGINEERING, CHULALONGKORN UNIVERSITY			
Chairperson:		Dr. Yutthana Tumnoi Co-Chair: Dr. Wipada Ngansom		
Time	ID	Speaker	Title	
14:00-14:30	SP9_INV04	Dumrongsak Rodphothong	COMPUTATIONAL FLUID DYNAMICS INVESTIGATION OF INDOOR RADON DISTRIBUTION AT HAT YAI HOT SPRING SPA IN RANONG PROVINCE, THAILAND	
14:30-15:00	SP9_INV05	Saroh Niyomdecha	INVESTIGATION OF RADON CONCENTRATION (Rn-222) IN GEOTHERMAL SPRINGS, THE SOUTHERN PART OF THAILAND	
	COFFEE BREAK			



Symposium:	SP12 - THE 2ND INTERNATIONAL SYMPOSIUM OF SCIENCE COMMUNICATION AND PUBLIC SCIENCE LITERACY		
Room:	302 MHMK BUILDING		
Chairperson:	Dr. Ganigar Chen		
Time	ID	Speaker	Title
13:00-14:45 (Sharing Session 1: Bridging the Frontiers:	SP12_001	Natdanai Nirutmeteekul	A PROACTIVE APPROACH TO MISINFORMATION: LEVERAGING QFT TO CULTIVATE CRITICAL ANALYSIS AND EVALUATION SKILLS FOR THE AI ERA
Innovative Tools for Science Communication)	SP12_002	Wan Wiriya	EMPOWERING NORTHERN YOUTH FOR ACTION ON THE SMOKE HAZE CRISIS THROUGH A HANDS-ON SCIENCE COMMUNICATION MODEL
	SP12_003	Kanchanaphan Poonudom	WHERE SCIENCE MEETS ART: TRANSFORMING MEDICAL EDUCATION THROUGH CREATIVE MEDIA DESIGN
	SP12_004	Namkang Sriwattanarotha	BEYOND THE TEXTBOOK: DESIGNING FOR CURIOSITY AND DISCOVERY IN STEM
	SP12_005	Nutthapol Orpipath	WHAT INSPIRES ME TO DEVELOP BOARD GAMES AS LEARNING TOOLS
14.45 – 16.15 (Sharing Session 2: <i>From</i>	SP12_006	Kitipong Soontrapa	A JAPANESE HEALTH TV PROGRAM: EFFECTIVE COMMUNICATION OF MEDICAL SCIENCE FOR PROMOTING PUBLIC HEALTH
Research to Relevance:	SP12_007	Unchalisa Taetragool	TRAVEL LINK: CONNECTING DATA, DECISIONS, AND UNDERSTANDING
Connecting Science with Society)	SP12_008	Sarayut Tunmee	ENHANCING PUBLIC UNDERSTANDING OF SYNCHROTRON TECHNOLOGY THROUGH TARGETED SCIENCE COMMUNICATION
	SP12_009	Sukhum Ruangchai	BRIDGING MINDS, SHARING SCIENCE: THE THAI-TAIWAN EXCHANGE STORY
16:15-17:00 (5-minute Poster Sharing)	SP12_001_P	Kuan-Chun Wang	EFFECTIVENESS OF THAILAND SCIENCE CARAVAN: A CASE STUDY OF NST FAIR 2025 IN CHIANG MAI
	SP12_002_P	Pimonrat Tiansawat	SEED BANKING INITIATIVES IN NORTHERN THAILAND
	SP12_003_P	Pranee Disrattakit	INNOVATIVE STEM CHALLENGE ACTIVITY THROUGH BIOMIMICRY-INSPIRED ENGINEERING: A STRATEGY FOR ENHANCING SCIENTIFIC COMPETENCIES IN SECONDARY STUDENTS FOR SUSTAINABLE COMMUNITY
	SP12_004_P	Siraya Janasak	HERBAL INNOVATION AND MULTI- STAKEHOLDER INTEGRATION FOR SUSTAINABLE AREA-BASED DEVELOPMENT: POLICY RECOMMENDATIONS FROM THE MAEMOK HERBAL VALUE CHAIN, LAMPANG PROVINCE



Symposium:	Session 3: High	SP13 - NATURE-BASED SOLUTIONS FOR CLIMATE MITIGATION Session 3: High Performance Researchers in Carbon Verifiers Through Nature Based Solution for Carbon Net Zero			
Room:	204 MHMK BUILDING				
Chairperson:	Co-Chair: Asst. I	Prof. Dr. Anchana Prathep Co-Chair: Asst. Prof. Dr. Tassanee Jiaphasuanan Co-Chair: Dr. Milica Stankovic			
Time	ID	Speaker	Title		
13:00-13:10	-	Anchana Prathep	INTRODUCTION FOR NbS PROJECT		
13:10-13:25	SP13_INV05	Prateep Duengkae	Nbs project implementation in forest ecosystem		
13:25-13:40	SP13_INV06	Pannawee Mekwichai	Nbs project implementation in Freshwater ecosystem		
13:40-13:55	SP13_INV07	Vanyarat Kongsap	Nbs project implementation in marine and coastal ecosystem		
13:55-14:10	-	Anchana Prathep / Tassanee Jiaphasuanan / Milica Stankovic	Q&A		
		COFFEE BREAK			
Symposium:		SP13 - NATURE-BASED SOLUTIONS FOR CLIMATE MITIGATION Session 4: Brain Power Driving NbS in Thailand			
Chairperson:	Co-Chair: Dr. Mi	Prof. Dr. Anchana Prathep Co-Chair: Dr. Milica Stankovic Co-Chair: Khun Kanyanat Kaewutai			
Time	ID	Speaker	Title		
14:30-14:42	SP13_001	Chanunchida Polpakdee	SPATIO-TEMPORAL TRENDS IN SEAGRASS DISTRIBUTION AND ABUNDANCE AND THE ROLE OF ENVIRONMENTAL FORCING		
14:45-14:57	SP13_002	Grissanee Suwanpahu	ASSESSMENT OF THE CARBON SEQUESTRATION CAPACITY OF MANGROVE FOREST PLANTATION: CASE STUDY OF RAYONG, PROVINCE, THAILAND		
15:00-15:12	SP13_003	Kanokorn Sae-Ueng	EXPLORATION OF CARBON SEQUESTRATION POTENTIAL IN DURIAN ORCHARDS WITH VARIOUS MANAGEMENT PRACTICES IN SURAT THANI		
15:15-15:27	SP13_004	Kanyakorn Keawwilai	QUANTIFYING THE CARBON STOCK OF FOREST ECOSYSTEMS WITH SATELLITE IMAGERY AND GEOSPATIAL AI		
15:30-15:42	SP13_005	Nattarika Intarapradit	PHYTOLITH-OCCLUDED CARBON ACCUMULATION ACROSS DIVERSE BAMBOO SPECIES IN THAI FOREST ECOSYSTEMS		
15:45-15:57	SP13_006	Nattawut Sareein	ASSESSMENT OF CARBON STORAGE IN WETLANDS OF CHIANG RAI, THAILAND		
16:00-16:12	SP13_007	Pipat Yodpinij	OPTIMIZING BIOCHAR APPLICATION RATES IN AGRICULTURAL SOIL THROUGH ANALYSIS OF NH4+ AND NO3-SORPTION-DESORPTION DYNAMICS		



Symposium:	SP16-YOUNG RISING STARS OF SCIENCE 2025 (YRSS) & JUNIOR YOUNG RISING STARS OF			
	SCIENCE AWARD 2025 (JYRSS)			
Room:	309 MHMK BUILD	309 MHMK BUILDING		
Chairperson:	Chair: Assoc. Prof. Dr. Kitipong Assatarakul			
	Co-Chair: Assoc. Prof. Dr. Athipat Thamrongthanyalak			
	Co-Chair: Asst. Prof. Dr. Pumidech Puthongkham			
Time	ID	Speaker	Title	
13:00-14:00	-	-	COMMITTEE MEETING	



Symposium:	SP17- SCIENCE PO	SP17- SCIENCE POPULARIZATION FOR SUSTAINABLE COMMUNITY DEVELOPMENT			
Room:	208 MHMK BUILI	208 MHMK BUILDING			
Chairperson:	Co-Chair: Dr. Sara	Assoc. Prof. Dr. Songsak Srianujata Co-Chair: Dr. Sarawut Siriwong Co-Chairs: Ms. Monthida Sitathani			
Time	ID	Speaker	Title		
14:00-14:05	-	Songsak Srianujata	Introduction		
14:05-14:15	SP17_INV01	Hu Junping	CHINA'S ACTION TO ENHANCE CIVIC SCIENTIFIC LITERACY: POLICY ENVIRONMENT, PRACTICES, AND ASSESSMENT		
14:15-14.25	SP17_INV02	Li Xiuju	A NATIONAL SURVEY ON THE SCIENTIFIC LITERACY OF PRIMARY AND SECONDARY SCHOOL STUDENTS IN CHINA: FRAMEWORK, FINDINGS, AND IMPLICATIONS		
14:25-14:35	SP17_INV03	Sarawut Siriwong	CHANGE AGENTS AS CATALYSTS FOR COMMUNITY-BASED OYSTER PRODUCTION ENTERPRISE: A CASE STUDY IN TRAT PROVINCE		
14:35-14:45	SP17_INV04	Korakot Aromdee	CHANGE AGENTS AS CATALYSTS FOR COMMUNITY-BASED BAMBOO UTILIZATION: A CASE STUDY IN KORAKOT BAMBOO HANDICRAFTS		
14:45:14:55	SP17_INV05	Taweechai Amornsakchai	TRANSFORMING PINEAPPLE FIELD WASTE INTO CLIMATE-POSITIVE MATERIALS: A VISION FOR COMMUNITY-BASED SCIENCE POPULARIZATION		
14:55-15:05	SP17_INV06	Winai Kaewlamun	DEVELOPING A SUSTAINABLE GOAT AND SHEEP FARMING NETWORK WITH CIRCULAR ECONOMY FOR NEW LIVESTOCK INDUSTRIES		
15:05-15:15	SP17_INV07	Niti Mekmok	THE INTEGRATION OF DIGITAL TECHNOLOGY TO ASSIST FARMERS IN IRRIGATED ZONES, AIMING TO ENHANCE PRODUCTIVITY AND ENSURE SUSTAINABLE AGRICULTURAL OUTCOMES		
		COFFEE BREAK			
15:15-15:25	SP17_INV08	Siraya Janasak	HERBAL INNOVATION AND MULTI- STAKEHOLDER INTEGRATION FOR SUSTAINABLE AREA-BASED DEVELOPMENT: POLICY RECOMMENDATIONS FROM THE MAEMOK HERBAL VALUE CHAIN, LAMPANG PROVINCE		
15:25-15:35	SP17_INV09	Suneerat Fukuda	FROM CAMPUS TO COMMUNITY: ADVANCING LOW-CARBON FUTURES THROUGH UNIVERSITY-LED CLIMATE ACTION		



15:35-15:45	SP17_INV10	Kittisak Ajariyakhajorn	ADVANCING AGRICULTURAL INNOVATION AND DAIRY SUSTAINABILITY IN THAILAND: A STRATEGIC MODEL FROM AIC CHULA- SARABURI
15:45-15:55	SP17_INV11	Jaroon Duangkrayom	GEO-EDUCATIONAL PROMOTING ACTIVITIES AND IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT IN KHORAT UNESCO GLOBAL GEOPARK, THAILAND
15:55-17:00	-	Songsak Srianujata Sarawut Siriwong Monthida Sitathani	OPEN DIALOGUE

Session:	POSTER PRESENTATION – SYMPOSIUM		
Room:	SALA PHRA KIEO		
Time	ID	Speaker	Title
14:00-17:00	-	-	POSTER PRESENTATION
			(YRSS / JYRSS'S COMMITTEE)
15:00-18:00	-	-	POSTER PRESENTATION
			(SYMPOSIUM'S COMMITTEE)

Session:	STT51 CONGRESS BANQUET		
Room:	SALA PHRA KIEO		
Time	ID	Speaker	Title
18:00-21:00	-	-	BANQUET



NOVEMBER 13rd, 2025

MORNING PROGRAM

Symposium:	SP5 - GENOME EDITING AND SYNTHETIC BIOLOGY			
Room:	203 MHMK BUILDING			
Chairperson:	Prof. Dr. Supaart Sirikantaramas			
	Co-Chair: Prof. Dr. Teerapong Buaboocha			
	Co-Chair: Assoc. Prof. Dr. Natapol Pornputtapong			
	Co-Chair: Dr. Chay	Co-Chair: Dr. Chayasith Uttamapinant		
Time	ID	Speaker	Title	
9:00-9:30	SP5_INV01	Alisa Tubsuwan	GENE EDITING: FROM MOLECULAR	
			SCISSORS TO THERAPEUTIC APPROACHES	
9:30-10:00	SP5_INV02	Hikaru Seki	METABOLIC ENGINEERING OF HIGH-VALUE	
			TRITERPENOID BIOSYNTHESIS IN PLANTS	
			USING GENOME EDITING	
10:00-10:30	SP5_INV03	Supachitra Chadchawan	EFFECTS OF OsGTL1 GENE EDITING IN RICE	
COFFEE BREAK				
10:45-11:15	SP5_INV04	Tom Ellis	ENGINEERING UNICELLULAR YEAST TO	
			ACHIEVE MODULAR MULTICELLULARITY	
11:15-11:45	SP5_INV05	Bunpote Siridechadilok	MAPPING THE INTERACTIONS BETWEEN	
			VITELLOGENIN AND ITS RECEPTOR FOR	
			DEVELOPMENT OF OOCYTE-TARGETING	
			PROTEIN DELIVERY IN SHRIMPS	



Symposium:	SP16-YOUNG RISING STARS OF SCIENCE 2025 (YRSS) & JUNIOR YOUNG RISING STARS OF SCIENCE AWARD 2025 (JYRSS) – PITCHING PRESENTATION – YRSS		
Room 1:	Chem > 204 MHMK BUILDING		
Room 2:	Mat > 205 MHMK BUILDING		
Room 3:	Phy > 206 MHMK BUILDING		
Room 4:	Bio > 207 MHMK BUILDING		
Room 5:	Math > 304 MHMK BUILDING		
Room 6:	Com > 305 MHMK BUILDING		
Room 7:	Food > 306 MHMK BUILDING		
Room 8:	Env > 307 MHMK BUILDING		
Time	ID	Speaker	Title
9:00-10:30	-	-	PITCHING PRESENTATION – YRSS
COFFEE BREAK			

Session:	AWARDING CEREMONY — BEST ORAL & POSTER PRESENTATIONS — YRSS / JYRSS AWARDING SESSION		
Room:	SALA PHRA KIEO		
Time	ID	Speaker	Title
10:00-10:30	-	-	JYRSS AWARDING SESSION
10:30-11.00	-	-	AWARDING CEREMONY – BEST ORAL &
			POSTER PRESENTATIONS
11:00-12:00	-	-	YRSS AWARDING SESSION