## The 5th Kyoto University - Mahidol University



## on-site laboratory workshop



March 11<sup>th</sup> (Fri), 2022 / ONLINE

The Online Workshop is open for everyone to join. Please register on the website below <del>by February 20<sup>th</sup> March 4th (extended).</del>

https://forms.gle/CPhbBasbj1WopFM2A

We will provide detailed information on how to participate in the workshop later (Zoom Link, etc.).

All hours are shown in JST (Japan Standard Time)

## **Opening Session**

MC: Wen Liu (Graduate School of Global Environmental Studies, Kyoto University)

10:30-10:40	Opening remarks Yasuyuki Kono (Vice-President of Kyoto University) Banchong Mahaisavariya (President of Mahidol University)	
10:40-10:50	<b>GSGES On-site Laboratory at Mahidol University and its activities</b> Shigeo Fujii (Visiting professor / Professor Emeritus, Kyoto University)	
10:50-11:00	Break	
Parallel Research Sessions		
Room1: Environmental Science and Engineering		
	Coordinator: Masaki Takaoka (Graduate School of Engineering, Kyoto University) Suwanna Kitpati Boontanon (Faculty of Engineering, Mahidol University) MC: Trakarn Prapaspongsa (Faculty of Engineering, Mahidol University)	
11:00-11:07	Introduction of environmentally-friendly industries for sustainable development Shuhei Tanaka (Graduate School of Global Environmental Studies, Kyoto University)	
11:07-11:14	PM2.5 collected by cyclone technique causes stronger biological responses than that collected by filter Akiko Honda (Graduate School of Global Environmental Studies, Kyoto University)	
11:14-11:21	Advanced wastewater treatment technologies to control the risks of trace organic chemicals and pathogens Haruka Takeuchi (Graduate School of Engineering, Kyoto University)	
11:21-11:28	Abatement of mercury emissions and treatment of waste mercury Taketoshi Kusakabe (Graduate School of Engineering, Kyoto University)	
11:28-11:35	Integrated assessment modeling for climate change mitigation strategies Ken Oshiro (Graduate School of Engineering, Kyoto University)	
11:35-11:42	Water resources and solid waste management models and their application Luksanaree Maneechot (School of Interdisciplinary Studies, Mahidol Univ. Kanchanaburi Campus)	
11:42-11:49	<b>Eco-efficient engineering research and applications towards sustainable industry,</b> <b>agriculture and communities in Thailand</b> Trakarn Prapaspongsa (Faculty of Engineering, Mahidol University)	
11:49-12:56	Occurrence and exposure of emerging contaminants from urban areas and e-waste dismantling sites Suwanna Kitpati Boontanon (Faculty of Engineering, Mahidol University)	
12:56-12:03	Modeling the changes in climate, land use, and water balance Arika Bridhikitti (School of Interdisciplinary Studies, Mahidol Univ. Kanchanaburi Campus)	
12:03-12:10	Sanitation field of study: Study and research works through Asia and Africa Nawatch Surinkul (Faculty of Engineering, Mahidol University)	
12:10-12:30	Discussion	
12:30-13:10	Break	

## **Room2: Chemical Engineering**

11:00-11:05	Greeting and introduction of session	
	Noriaki Sano (Graduate School of Engineering, Kyoto University)	
	Sira Srinives (Faculty of Engineering, Mahidol University)	
44.05.44.05		
11:05-11:25	Recent researches in Chemical Engineering at Kyoto University and nanomaterial	
	researches in Separation Lab	
	Noriaki Sano (Graduate School of Engineering, Kyoto University)	
	Kyuya Nakagawa (Graduate School of Engineering, Kyoto University)	
11 25 11 25		
11:25-11:35	Biomass reaction studies in Environmental Process Engineering Lab	
	Yosuke Muranaka (Graduate School of Engineering, Kyoto University)	
11:35-11:45	Researches on biomass utilization in Chemical Reaction Engineering Lab	
	Ryuichi Ashida (Graduate School of Engineering, Kyoto University)	
11:45-12:00		
11.45-12.00	Photocatalytic H <sub>2</sub> production from biodiesel wastewater	
	Mali Hunsom (Faculty of Engineering, Mahidol University)	
12:00-12:10	Recent research activities on catalyst material development for CO <sub>2</sub> conversion and	
	nanomaterial synthesis	
	Sakhon Ratchahat (Faculty of Engineering, Mahidol University)	
12:10-12:20		
12:10-12:20	The photocatalytic conversion of CO <sub>2</sub> to liquid fuels	
	Sira Srinives (Faculty of Engineering, Mahidol University)	
12:20-12:30	Discussion	
	Chair: Noriaki Sano (Graduate School of Engineering, Kyoto University)	
12:30-13:10	Break	
Room3: Ag	riculture and Ecosystem	
Coo	ordinator & MC:	
	Mamoru Kanzaki (Graduate School of Agriculture, Kyoto University)	
	Watcharra Chintakovid (School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus)	
11 00 11 05		
11:00-11:05	Introduction	
	Mamoru Kanzaki (Graduate School of Agriculture, Kyoto University)	
	Watcharra Chintakovid (School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus)	
11:05-11:20	Long-term study of gibbons in Khao Yai, Thailand	
	Chanpen Saralamba (School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus)	
11 20 11 25		
11:20-11:35	Reduction of flood and sediment disaster risk using traditional knowledge of satoyama	
Contraction in the	landscape on the west side of Lake Biwa, Japan	
and the second	Katsue Fukamachi (Graduate School of Agriculture, Kyoto University)	
11:35-11:50	Lipophilic succinyl monoglyceride pre-added to the oil phase in wheat flour dough	
11.00 11.00		
	efficiently improves bread quality via enhanced complex formation with starch molecules	
	Kentaro Matsumiya (Graduate School of <mark>Agriculture, Ky</mark> oto University)	
	Endophytic actinomycetes for controlling damping-off and growth promoting of cabbage	
11:50-12:05	seedling	
	Prapaipit Suwitchayanon (Agricultural Science, Mahidol University Kanchanaburi Campus)	
	Discussion	
12:05-12:30		
12:05-12:50	Chair: Mamoru Kanzaki (Graduate School of Agriculture, Kyoto University)	
	Watcharra Chintakovid (School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus)	
12:30-13:10	Break	
Room4. Pu	blic Health	
Coordinators: Kouji Harada (Graduate School of Medicine, Kyoto University)		
	Arthit Phosri (Faculty of Public Health, Mahidol University)	
	MC: Ayako Kohno (Internationalization Promotion Office, School of Public Health, Kyoto University)	
11:00-11:05	Opening Remark	
	Ayako Kohno (Internationalization Promotion Office, School of Public Health, Kyoto University)	
11.05.11.15		
11:05-11:15	Effect of biomass burning related air pollution on outpatient department visits in	
	Thailand	
	Marissa Rotjanabumrung (Faculty of Public Health, Mahidol University)	

11:15-11:25 **Mortality and its economic benefits of PM2.5 reduction in Bangkok, Thailand** Khamonpat Phongkhanat (Faculty of Public Health, Mahidol University)

11:25-11:35	Depressive symptoms and its related factors among Thai seafarers during COVID-19 pandemic Woraluk Jonglertmontree (Faculty of Public Health, Mahidol University)
11:35-11:45	<b>The roles of environmental epidemiology in evaluating environmental health policy</b> <b>during COVID-19 in Thailand</b> Arthit Phosri (Faculty of Public Health, Mahidol University)
11:45-11:55	<b>Temporal trend in exposures to bisphenol analogues among Japanese women</b> Zhaoqing Lyu (Graduate School of Medicine, Kyoto University)
11:55-12:05	Isoflavone and its metabolite as endocrine modifiers Tomoko Fujitani (Graduate School of Medicine, Kyoto University)
12:05-12:15	Environmental contamination of perfluoroalkyl substances in Japan and exposure to them
12:15-12:20	Kouji Harada (Graduate School of Medicine, Kyoto University) <b>Recent update on DDP between MU and KU and other activities</b> Orawan Kaewboonchoo (Faculty of Public Health, Mahidol University)
12:20-12:25	Recent update on DDP between MU and KU and other activities Ayako Kohno (Internationalization Promotion Office, School of Public Health, Kyoto University)
12:25-12:55	Discussion
12:55-13:00	Closing Remark Ayako Kohno (Internationalization Promotion Office, School of Public Health, Kyoto University)
13:00-13:10	Break
,	Special Session
-]	Decentralized water and waste management systems in rural areas-
	Coordinator: Shinya Echigo (Graduate School of Global Environmental Studies, Kyoto University) Suwanna Kitpati Boontanon (Faculty of Engineering, Mahidol University) MC: Minori Tokito (Graduate School of Global Environmental Studies, Kyoto University)
13:10-13:20	Introduction Background and purpose of the project Shinya Echigo (Graduate School of Global Environmental Studies, Kyoto University) Introduction of study Site Watcharra Chintakovid (School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus)
13:20-13:35	Task Group 1: Water SupplyMulti-souce water supply in rural areas Shinya Echigo (Graduate School of Global Environmental Studies, Kyoto University)Automatic greywater diverter by sensors: challenges for water reuse Suwanna Kitpati Boontanon (Faculty of Engineering, Mahidol University)
13:35-13:50	Task Group 2: Wastewater managementDecentralized wastewater treatment with virtually centralized management Hidenori Harada (Graduate School of Asian and African Area Studies, Kyoto University)Possibility of using selected microbial media in constructed wetland for the post- treatment of septic tank Nawatch Surinkul (Faculty of Engineering, Mahidol University)
13:50-14:05	Task Group 3: Co-treatment of domestic and agricultural wasteCo-processing of municipal solid waste and agricultural residue at rural area in ThailandKazuyuki Oshita (Graduate School of Engineering, Kyoto University)Weerawut Chaiwat (Faculty of Engineering, Mahidol University)
14:05-14:20	Task Group 4: Integrated Evaluation ModelCoupling GIS and LCA for measuring environmental performances of systemoptimization
14:20-14:30	Trakarn Prapaspongsa (Faculty of Engineering, Mahidol University) Discussion Chair: Shinya Echigo (Graduate School of Global Environmental Studies, Kyoto University)
14:30-15:10	Break

Plenary session		
	MC: Wen Liu (Graduate School of Global Environmental Studies, Kyoto University)	
15:10-15:40	Environmental Science and Engineering	
15:10-15:25	Introduction of group members, research topics, and report of today's session Suwanna Kitpati Boontanon (Faculty of Engineering, Mahidol University) Trakarn Prapaspongsa (Faculty of Engineering, Mahidol University) Shinya Echigo (Graduate School of Global Environmental Studies, Kyoto University)	
15:25-15:35	The international exchange about education and research between MU and KU Internship experience and study on the ecosystem services mapping in Saijo city, Ehime prefecture, Japan	
	Pema Eden (DD student of Kyoto University and Mahidol University) Characterization and recovery of lipids from urban sewage sludge as a potential biodiesel feedstock	
	Febrian Rizkianto (Graduate School of Engineering, Kyoto University / former DD student of Kyoto University and Mahidol University)	
15:35-15:40	Q&A	
15:40-16:10	Chemical Engineering	
15:40-16:10	Summary of morning session in Chemical Engineering field Noriaki Sano (Graduate School of Engineering, Kyoto University)	
15:55-16:05	Application of machine learning for leak gas detection and classification in chemical industry Satrio Yudanto (Faculty of Engineering, Mahidol University)	
16:05-16:10		
<b>16:10-16:40</b>	Agriculture and Ecosystem	
16:10-16:25	Mamoru Kanzaki (Graduate School of Agriculture, Kyoto University) Watcharra Chintakovid (School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus)	
16:25-16:35	Collaborative research report -Preliminary report on plastic pollution in Manko mangrove forest, Okinawa Nuttatida Thongyoi (Faculty of Engineering, Mahidol University)	
16:35-16:40	Q&A	
16:40-17:10	Public Health	
16:40-16:55	Summary of presentations and discussions in Public Health subcommittee Arthit Phosri (Faculty of Public Health, Mahidol University)	
16:55-17:05	Recent update on DDP between MU and KU and other activities Orawan Kaewboonchoo (Faculty of Public Health, Mahidol University)	
17:05-17:10	Q&A	
17:10-17:20	Discussion Chair: Eiji Nawata (Director of Kyoto University ASEAN Center)	
Closing Session		
	MC: Wen Liu (Graduate School of Global Environmental Studies, Kyoto University)	
17:20-17:30	Closing remarks	
	Thanapat Wanichanon (Vice Dean for Human Capital Management and Corporate Communication, Faculty of Engineering, Mahidol University) Takeshi Katsumi	
	(Dean of Graduate School of Global Environmental Studies, Kyoto University)	



Organized by: Kyoto University and Mahidol University Contact Information: Graduate School of Global Environmental Studies, Kyoto University Email: 160on-site@mail2.adm.kyoto-u.ac.jp