



PAWEES 2021

INTERNATIONAL CONFERENCE

Oct. 29, 2021 (Friday)

Time		Agenda					
(GMT+8)	(GMT+9)						
09:30-09:50	10:30-10:50	Opening Ceremony					
09:50-11:10	10:50-12:10	Keynote Speeches					
11:10-11:30	12:10-12:30	Break					
11:30-13:30	12:30-14:30	Conference Seminar					
		ROOM 1 Topic 1	ROOM 2 Topic 2	ROOM 3 Topic 3	ROOM 4 Topic 3	ROOM 5 Topic 3	ROOM 6 Topic 3
13:30-13:50	14:30-14:50	Break					
13:50-16:05	14:50-17:05	Conference Seminar					
		ROOM 1 Topic 1 &4		ROOM 2 Topic 2		ROOM 3 Annual Meeting	
16:05-16:35	17:05-17:35	Closing ceremony					

Seminar Schedule

ROOM 1 (11:30-13:30, GMT+8; 12:30-14:30, GMT+9)

Water-Energy-Food Nexus (1)	
Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T1_1 11:30-11:45 12:30-12:45	The analysis of heavy metal transport mechanism and electrolytic reduction method for remediation of agricultural ditches Mr. Ci-Jyun Liao
P2021T1_2 11:45-12:00 12:45-13:00	Evaluating the tradeoffs between environmental and economic metrics within the WFEE nexus of food waste: Progress towards sustainable resources and environmental management Dr. Bashir Adelodun

Water-Energy-Food Nexus (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T1_3 12:00-12:15 13:00-13:15	Application of Machine Learning for Automated Mapping of Paddy Rice Growth Stages in Selangor, Malaysia Using Sentinel-1 Time Series Data Dr. Rudiyanto Rudiyanto
P2021T1_4 12:15:12:30 13:15:13:30	Mapping of Rice Extent and Cropping Pattern in Selangor and Terengganu, Malaysia Using Sentinel-1 Temporal Data Mr. Fatchurrachman
P2021T1_5 12:30-12:45 13:30-13:45	Trapped in Flood Control Regimes: River Islands in Taiwan Prof. Wen-Lu Wang
P2021T1_6 12:45-13:00 13:45-14:00	Crop Mapping and Crop Rotation Pattern Analysis Using Multi-temporal Remote Sensing Imageries Ms. Nan WANG
P2021T1_7 13:00-13:15 14:00-14:15	Tidal effects on groundwater level in the coastal aquifer of the Taoyuan-Hukou Table plain, Taiwan Ms. Duong Quynh Thanh
P2021T1_8 13:15-13:30 14:15-14:30	Effectiveness of ground bamboo application on weed suppression and rice production: a three-year paddy field experiment Dr. Nisikawa Usio

ROOM 1 (13:50-16:05, GMT+8; 14:50-17:05, GMT+9)

Water-Energy-Food Nexus (2)

Water Saving Irrigation and Irrigation Service Extension (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T1_9 13:50-14:05 14:50-15:05	The Role of Lock-in in Water–Energy–Food Nexus Dr. Lu-Yen Chen Chen
P2021T1_10 14:05-14:20 15:05-15:20	Agricultural Activity Impacts Assessment for Agricultural Environment Conservation Program using Soil-Water-Energy-Food Nexus Analysis Ms. Pureun Yoon
P2021T1_11 14:20-14:35 15:20-15:35	Trophic state index(TSI) evaluation of domestic agricultural reservoirs using long-term monitoring results Ms. Yeon Jung Noh

Water-Energy-Food Nexus (2)

Water Saving Irrigation and Irrigation Service Extension (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T4_1 14:35-14:50 15:35-15:50	Development of Leak Detection Method for in-Service Pipeline using Support Vector Machine Prof. Tetsuya Suzuki
P2021T4_2 14:50-15:05 15:50-16:05	Source-Reduction Fertilization Approach for Non-Point Source Control in Agricultural Farmland Ms. Ya-Zhen Huang
P2021T4_3 15:05-15:20 16:05-16:20	Research on the Factors of the System of Rice Intensification (SRI) Dissemination in Indonesia -Case Study in Banyumas Regency, Central Java- Mr. Alvin Mariogani
P2021T4_4 15:20-15:35 16:20-16:35	Analysis of Important Components for Establishing Agricultural Water-Saving Governance by using Analytic Hierarchy Process Ms. Seul-gi Lee
P2021T4_5 15:35-15:50 16:35-16:50	Aquatic habitat evaluation for Zacco platypus of Banbyeon stream based on hydraulic and water-quality Mr. Jinseok Park
P2021T4_6 15:50-16:05 16:50-17:05	Assessment of climate change induced water stresses in temperature fruit crop in Nepal's Himalayan Region Shankar Bhattarai

ROOM 2 (11:30-13:30, GMT+8; 12:30-14:30, GMT+9)

Smart Irrigation Quantity and Quality Technologies (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T2_1 11:30-11:45 12:30-12:45	Water level predictions in a drainage pumping station using a deep neural network and frequency-separated datasets Dr. Nobuaki Kimura
P2021T2_2 11:45-12:00 12:45-13:00	Water Quality Improvement via Anoxification Recovery Using Underwater LED Irradiation Ms. Daoluang Honglikith

Smart Irrigation Quantity and Quality Technologies (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T2_3 12:00-12:15 13:00-13:15	Comparison of Reservoir Water Level Prediction Models using LSTM and Effect of Input Variables Mr. Tsumugu Kusudo
P2021T2_4 12:15-12:30 13:15-13:30	Development of Damage Estimation Method for in-Service Structure by Acoustic Emission Ms. Nadezhda Morozova
P2021T2_5 12:30-12:45 13:30-13:45	Application of coupled hydraulic-hydrological modeling of irrigation canal network for improving water delivery performance Prof. Won-Ho Nam
P2021T2_6 12:45-13:00 13:45-14:00	Use of Random Forest for Estimating Mechanical Properties of Agro-infrastructure's Concrete Ms. Yuma Shimamoto
P2021T2_7 13:00-13:15 14:00-14:15	Detection of Corroded Condition in Agricultural Steel Sheet Pile Canals by using Image Analysis Mr. Taiki Hagiwara
P2021T2_8 13:15-13:30 14:15-14:30	Evaluation of interaction between irrigational pumping and groundwater As variation by non-conventional approaches Dr. Sheng-Wei Wang

ROOM 2 (13:50-16:05, GMT+8; 14:50-17:05, GMT+9)

Smart Irrigation Quantity and Quality Technologies (2)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T2_9 13:50-14:05 14:05-15:05	Estimates of Soil Matric Potential from Meteorological data using Long Short-term Memory model Mr. Haodong Zhang
P2021T2_10 14:05-14:20 15:05-15:20	Development of a Smart Monitoring System via Integrating NB-IoT and LoRa: an Application for Greenhouse Agriculture Mr. Su Po-Nien
P2021T2_11 14:20-14:35 15:20-15:35	Development of a Short-Term Prediction Model for Water Levels in Low-Lying Area applying Machine Learning Trained by Observed and Artificially Generated Data Dr. Masaomi Kimura

Smart Irrigation Quantity and Quality Technologies (2)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T2_12 14:35-14:50 15:35-15:50	Runoff Estimation with Various Input Factors and Predicting Time Scale using ANN model Mr. Maga Kim
P2021T2_13 14:50-15:05 15:50-16:05	Water Level Classification of Agricultural Open Channel CCTV Images using CNN Mr. Kwihoon Kim
P2021T2_14 15:05-15:20 16:05-16:20	Evaluation of LoRa Radio Propagation and Optimization Method of LoRa Network Construction in Iitate Village, Fukushima Mr. Maulana Riko Ahmad
P2021T2_15 15:20-15:35 16:20-16:35	Characteristics of Water Management to Meet the Water demand of Paddy Fields after Farmland Consolidation in Cold Regions of Japan Dr. Naoko Koshiyama
P2021T2_16 15:35-15:50 16:35-16:50	Development of Comb-ML for Inflow Prediction Using Machine Learning Algorithms Ms. Jiyeong Hong
P2021T2_17 15:50-16:05 16:50-17:05	Uncertainties Quantifications of Deep and Machine Learning Models for Predicting Mundan Reservoir Surface Water Temperature Using Satellite Data Sabastian S. Mukonza

ROOM 3 (11:30-13:30, GMT+8; 12:30-14:30, GMT+9)

Irrigation Management in Water Shortage and Climate Change (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_1 11:30-11:45 12:30-12:45	Irrigation schedules and design water requirements of the rice-wheat system under climate change Mr. Mirza Junaid Ahmad
P2021T3_2 11:45-12:00 12:45-13:00	Hourly observation and modeling of relationship between dryness of soil and water stress of soybean measured by stomatal conductance at converted field Prof. Atsushi SAKAGUCHI

Irrigation Management in Water Shortage and Climate Change (1)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_3 12:00-12:15 13:00-13:15	Rainfall intercomparison of satellite and rain gauge datasets over Bali Island in the agricultural application Mr. Putu Aryastana
P2021T3_4 12:15-12:30 13:15-13:30	Evaluation of Spatiotemporal Influence of Rainfall on Soybean Yield in a Temperate Environment: A Korean Case Study Mr. Golden Odey
P2021T3_5 12:30-12:45 13:30-13:45	Rainy Cloud Detection and Precipitation Intensity Classification from Himawari-8 Spectral and Cloud Information Mr. Meng Yue Lin
P2021T3_6 12:45-13:00 13:45-14:00	Examination of Climate Resilience of Paddy Farming under Climate Change using Short-term Hybrid Forecast Model Mr. Wenpeng Xie
P2021T3_8 13:00-13:15 14:00-14:15	Evaluation of Climate Change Effects on Farm Lands Flooding Dr. Hyungon Cho

ROOM 4 (11:30-13:30, GMT+8; 12:30-14:30, GMT+9)

Irrigation Management in Water Shortage and Climate Change (2)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_9 11:30-11:45 12:30-12:45	Visualizing the Subsurface Flow in Terraced Paddy Fields by Using Geoelectric Resistivity Tomography--a Case Study Mr. HUANG Qun-Zhan
P2021T3_10 11:45-12:00 12:45-13:00	Monitoring of Homogenization of Soybean Growth with Sub-surface Irrigation at Generalized Paddy Fields Dr. Tadao AODA
P2021T3_11 12:00-12:15 13:00-13:15	Assessment of Drought Characteristics under Climate Change over the Agriculture-dominated Marathwada Region, India Mr. SABYASACHI SWAIN

Irrigation Management in Water Shortage and Climate Change (2)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_12 12:15-12:30 13:15-13:30	Fit-for-Purpose Water Reclamation using Integrated Circular Processes Exemplified by Piggery Wastewater Prof. Shu-Yuan Pan
P2021T3_13 12:30-12:45 13:30-13:45	Improvement of Water Management and Crop Productivity by Managing Irrigation Scheduling for Maize Mr. Khalid Adeyemi
P2021T3_14 12:45-13:00 13:45-14:00	Preserving irrigation water through a new water allocation framework - a case study in northern Taiwan Mr. Shih-Yao Lee
P2021T3_15 13:00-13:15 14:00-14:15	Analyzing Conjunctive Operation of Agricultural Reservoirs and Pumping Station Using Optimization Method Mr. Jehong Bang
P2021T3_16 13:15-13:30 14:15-14:30	Peak discharge mitigation effects in different rainfall patterns at paddy plot with discharge control plate Mr. Yushi Suzuki

ROOM 5 (11:30-13:30, GMT+8; 12:30-14:30, GMT+9)

Irrigation Management in Water Shortage and Climate Change (3)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_17 11:30-11:45 12:30-12:45	An analysis of role sharing between Government and WUA in water distribution management in a large rice paddy irrigation scheme in Uganda Mr. PAUL Ayella
P2021T3_18 11:45-12:00 12:45-13:00	Quantification of Domestic Water Use in Households in Northern Ghana Dr. Naoko Oka
P2021T3_19 12:00-12:15 13:00-13:15	Manifold analysis of climate pattern of Pacific islands Prof. Ming-Che Hu

Irrigation Management in Water Shortage and Climate Change (3)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_20 12:15-12:30 13:15-13:30	Assessing agricultural conservation practices for reducing runoff and T-N load under climate change scenarios using SWAPX model Mr. Dong Hyeon Donghyeon Kim Kim
P2021T3_21 12:30-12:45 13:30-13:45	Greenhouse gas emission from organic matter rich rice terraces affects the stability of soil structure Prof. Yasushi Mori
P2021T3_22 12:45-13:00 13:45-14:00	Assessment of soil moisture prediction using Multi-model simulation with various land surface models Dr. Yegeun Jonggun Jang Kim
P2021T3_23 13:00-13:15 14:00-14:15	Assessment of Spatially Distributed Soil Water prediction using Parameterization based on Remote Sensing Dr. Seounghun Sin
P2021T3_24 13:15-13:30 14:15-14:30	Random forests as a tool for modelling estuarine salinity dynamics in Ben Tre, Vietnam Dr. Shinji Fukuda

ROOM 6 (11:30-13:30, GMT+8; 12:30-14:30, GMT+9)

Irrigation Management in Water Shortage and Climate Change (4)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_25 11:30-11:45 12:30-12;45	A 1D hydrodynamic model for sediment transport analysis around the Ba Lai sluice gate in the Mekong Delta, Vietnam Mr. Koki Asano
P2021T3_26 11:45-12:00 12:45-13:00	Performance of Surface and Subsurface Irrigations under Different Water Regimes on Crop and Water Productivities Dr. Chusnul Arif
P2021T3_27 12:00-12:15 13:00-13:15	Monitoring of soil moisture in street trees that problematic by wither Ms. Kieun Jeong

Irrigation Management in Water Shortage and Climate Change (4)

Article Number Time, GMT+8 Time, GMT+9	Article Title Speaker
P2021T3_28 12:15-12:30 13:15-13:30	Estimation of an optimum Ecological Flow by Considering Flow Change: Using the SWAT-PHABSIM Mr. Byeon Sangdon
P2021T3_29 12:30-12:45 13:30-13:45	Investigation Winter Cropping on Paddy Field in Korea Using Sentinel-2 Satellite Images Mr. Seongju Jang
P2021T3_30 12:45-13:00 13:45-14:00	Spatiotemporal characteristics of water quality through monitoring of small-scale agricultural reservoirs during the rainy season Mr. UISEOK KIM
P2021T3_31 13:00-13:15 14:00-14:15	Assessment of climate change impact & evaluation of reduction effect of NPS in a highland agricultural watershed using SWAT Mr. Sadiqi Sayed Shah Jan
P2021T3_32 13:15-13:30 14:15-14:30	Spatiotemporal Assessment of Vegetation Cover over the Upper Ganga Basin in the Indian Himalayan State of Uttarakhand using Google Earth Engine Mr. Gagandeep Singh