



# The 373rd Symposium on Sustainable Humanosphere

## The 3rd ASIA RESEARCH NODE SYMPOSIUM ON HUMANOSPHERE SCIENCE

**31** 25 - 27 September 2018

@ National Chung Hsing University, Taichung, Taiwan  
Agricultural & Environmental Science Building  
10th Floor International Conference Hall

Date	Time	Title & Speaker	Date	Time	Title
Sep 25 (Tue)	1030-1210	<b>Atmospheric Observations with MST radars</b> Recent Progress of Chung-Li VHF Radar Group in Lower and Upper Atmospheric Researches Yen-Hsiyang Chu (National Central University, Taiwan) 25 years of Indian MST radar at NARL, Gadanki Thota N. Rao (National Atmospheric Research Laboratory, India) An overview of results from ShUREX campaigns (2015-2017) at Shigaraki MU Observatory Hubert Luce (Mediterranean Institute of Oceanography, France) Status of Equatorial MU Radar project in 2018 Mamoru Yamamoto (Kyoto University, Japan)	Sep 27 (Thu)	0830-1010	<b>Our Footprints on Global Environment: Threats to Ecosystem Sustainability</b> Globalization and invasive ants: polydomy as an enigmatic characteristics Kazuki Tsuji (University of the Ryukyus, Japan) The importance of urban pest management on the sustainable future of urban ecosystem Chow-Yang Lee (Universiti Sains Malaysia, Malaysia) How sublethal neonicotinoid insecticides weaken honey bee colonies? En-Cheng Yang (National Taiwan University, Taiwan) How will climate change affect a crop system that includes soybeans (crop), aphids (pest), and ladybugs (biocontrol agent)? Chuan-Kai Ho (National Taiwan University, Taiwan)
	1310-1450	<b>Energy Transfer and Conversion In Geospace</b> Auroras and precipitating particles above the high-latitude boreal forests Jih-Hong Shue (National Central University, Taiwan) Geospace Exploration by the ERG/Arase satellite; collaborations on spacephysics between Japan and Taiwan Yoshizumi Miyoshi (Nagoya University, Japan) Parameters of magnetospheric locations associated with occurrences of aurora and comparison with their ionospheric counterparts Sunny W. Y. Tam (National Cheng Kung University, Taiwan) Energy flow from the solar wind to the Earth during substorm: Simulation results Yusuke Ebihara (Kyoto University, Japan) Magnetic explosion in the Sun-Earth system: Magnetic reconnection Seiji Zenitani (Kyoto University, Japan)		1030-1210	<b>Wireless Power Transfer for Sustainable Electronics</b> Wirelessly-Powered CMOS Electrochemical Sensing Interface Design Yu-Te Liao (National Chiao Tung University, Taiwan) Some preliminary theoretical and experimental research results of WPT system between two points using Microwave power beam at 2.45 GHz Dao Khac An (Vietnam Academy of Science and Technology, Vietnam) Design of a 13.56-MHz Active Rectifier with Digital Offset Compensation for Implantable Medical Devices Po-Hung Chen (National Chiao Tung University, Taiwan) Signal Communication in Wireless Power Transfer For Internet of Things Heng-Ming Hsu (National Chung Hsing University, Taiwan) Recent Research of Wireless Power Transfer at RISH for a Smart, Happy, and Resilient Society Naoki Shinohara (Kyoto University, Japan)
	1520-1700	<b>Plants for Sustainable Humanosphere –Biomass and Bioactive Compounds– (Tentative)</b> Genetics and Genomic Analysis of the Heartwood Traits in Taiwan cryptomeriae Ying-Hsuan Sun (National Chung Hsing University, Taiwan) Reciprocal cross-regulation of VND and SND multigene TF families for wood formation in Populus trichocarpa Ying-Chung Jimmy Lin (National Taiwan University, Taiwan) Biosynthesis of Heartwood and Antitumor Lignans Toshiaki Umezawa (Kyoto University, Japan) Dynamics and functions of plant bioactive compounds in the rhizosphere Akifumi Sugiyama (Kyoto University, Japan)		1310-1450	<b>Water, carbon, and nutrient cycling in forest under climate change</b> Are the evapotranspiration and canopy photosynthesis of Asian tropical rainforests affected by climate change? Yoshiko Kosugi (Kyoto University, Japan) Effects of inter-annual climate difference on hydrologic and biogeochemical controls on methane dynamics in forest ecosystems Masayuki Itoh (University of Hyogo, Japan) T.B.D. Shih-Chieh Chang (National Dong Hwa University, Taiwan) The linkage between fine root dynamics and community structure in subtropical evergreen forest Jyh-Min Chiang (Tunghai University)
Sep 26 (Wed)	0830-1010	<b>Integrated Vector Management: a Strategy for Sustainable Humanosphere</b> Establishment of an early warning system for malaria in Southern Africa, incorporating climate predictions-the iDEWS project Noboru Minakawa (Nagasaki University, Japan) Plant-based repellents to control mosquitoes Theeraphap Charoenviriyaphap (Kasetsart University, Thailand) Dengue Vector Control and Aedes aegypti resistance to insecticides from Indonesia Intan Ahmad (Bandung Institute of Technology, Indonesia) Dengue Prevention: Alternative Approaches in Managing Aedes Mosquitoes Wan Fatma Zuharah (Universiti Sains Malaysia, Malaysia) Mosquito reproduction control and the effects of mosquito host factors to dengue virus replication Shin-Hong Shiao (National Taiwan University, Taiwan)		1520-1700	<b>Atmospheric and Ionospheric studies with new instruments and technology</b> Lessons Learned from the Ongoing Development of the Ionospheric Dynamics Explorer and Altitude Subsystem Satellite (IDEASSat) Loren Chang (National Central University, Taiwan) Convective-scale assimilation with the GPS-zenith total delay and radar data and its impact on heavy rainfall prediction in Taiwan Shu-Chih Yang (National Central University, Taiwan) Equatorial Plasma Bubble for Space Weather Monitoring in Malaysia Suhaila M Buhari (Universiti Teknologi Malaysia, Malaysia) The development of data assimilation in the ionospheric space weather Chia-Hung Chen (National Cheng Kung University, Taiwan)

