

ORGANIZER & CO-ORGANIZER



ORGANIZING PARTNERS



VANJ CONFERENCE 2023



GREEN ENVIRONMENT AND ENERGY

DEC
2-3
2023

Venue: The University of Tokyo
Online: Zoom Conference

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MESSAGE

FROM ORGANIZING COMMITTEE

Dear esteemed scientists and fellow researchers,

On behalf of the Vietnamese Academic Network in Japan (VANJ), the co-chairs of the Organizing Committee VANJ 2023 welcome you back to Tokyo, Japan, and to **VANJ Conference 2023**, the annual international event co-organized with Center for Spintronics Research Network (CSRN), University of Tokyo.

Our world is changing, marked by unprecedented climate disruptions, environmental pollution, and the alarming depletion of natural resources. These pressing issues pose a critical challenge to the sustainable development of nations worldwide. At this critical juncture, where environmental preservation and the pursuit of sustainable energy solutions are paramount, **VANJ Conference 2023** endeavors to catalyze interdisciplinary dialogues that transcend the conventional confines of academia. Focusing on the theme “**Green Environment and Energy**”, our aim is to stimulate the formulation of scientifically informed solutions for these pressing challenges. Our objective is to cultivate an intellectual environment that fosters the exploration, celebration, and innovative advancement of the symbiotic relationship between the green environment and the energy sector.

We extend a heartfelt welcome and encourage you to take this opportunity to participate in VANJ 2023 discussions. Together, let's work towards our shared objective of a cleaner environment and widespread adoption of green energy, while making your experience at VANJ 2023 both enjoyable and memorable.



Assoc. Prof. Anh T.N. Dao
Nagasaki University
Chair



Dr. Ngo Minh Chu
*National Institute of Advanced Industrial
Science and Technology (AIST)*
Co-Chair

ORGANIZER



Vietnamese Academic Network in Japan
一般社団法人在日ベトナム人学術ネットワーク

VISION

Our vision is to be the representative platform/network for Vietnamese academics in Japan, where generations of Vietnamese intellectuals gather and connect, initiate and promote education, science, and technology, and contribute to the development of Vietnam.

MISSION

Our mission is to initiate and promote networks among the Vietnamese academic community in Japan towards progressive values that make practical contributions to the development of Vietnam and the good relationship between Vietnam and Japan.

“To Share Knowledge”

VANJ places “sharing knowledge” at the center of all its activities. VANJ considers knowledge to be the lasting value of humanity and a lever for breakthrough developments in society. VANJ’s activities are intended not only to facilitate the creation of new knowledge but also to promote sharing of useful information, knowledge, and experience within the intellectual community and to society.

“Via Academic Network”

The foundation of VANJ is based on individuals and organizations in the fields of research and academia. The academic network is, therefore, a primary goal and core activity of our mission. “Academic network” includes connections within the network, between individuals and member organizations, and with external partners such as corporations, government agencies, investment funds, and other research institutions around the world to create value in bridging academia and industry.

“For Society”

VANJ promotes the contribution of Vietnamese scientists, researchers, and experts in Japan to the development of Vietnam, Japan in particular, and the world in general, as a core value. VANJ hopes to connect scientists, researchers, and experts with national and international institutions, companies, and organizations to provide knowledge and initiatives to help solve social problems and create breakthrough developments.

CO-ORGANIZER

■ CENTER FOR SPINTRONICS RESEARCH NETWORK



Center for Spintronics Research Network
Graduate School of Engineering, The University of Tokyo

PARTNERS

■ VIETNAM YOUTH VET NETWORK



■ VIETNAMESE CONSTRUCTION SOCIETY IN JAPAN



BRONZE SPONSORS

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Joy brings us together



■ SOJITZ LIFEONE CORPORATION



Sojitz LifeOne Corporation

DIAMOND SPONSOR



E-connect Vietnam (ECVN) was established on June 18, 2013, in Hanoi, with a core team consisting of passionate young individuals from the Diplomatic Academy of Vietnam. After four years of shaping and development, ECVN implemented a language training program delivered by 100% native-speaking teachers to students in five provinces and major cities in the Northern region, including Hanoi, Nam Dinh, Hai Duong, Hai Phong, and Quang Ninh.

The core values of ECVN revolve around the commitment to rapid and sustainable development through “dedication, high-quality education, and non-stop improvement”. Over the course of 8 years of construction and growth, ECVN has gradually affirmed its unique identity. Recognizing that a good language center is not only about modern facilities but also about teachers who understand their students (including personality, learning capacity, etc.), this is what is referred to as the dedication of the educators and educational management personnel.

ECVN aims to collaborate with schools to incorporate foreign-influenced English programs into the main curriculum. Additionally, ECVN not only focuses on teaching English but also emphasizes sharing culture and providing training in skills such as Communication, Critical Thinking, Creativity, and Collaboration.

ECVN also fosters a strong, friendly connection among staffs and foreign teachers. As colleagues and friends, the ECVN team works together wholeheartedly to contribute to the development of the national education system.

With this dedication, ECVN hopes to provide opportunities for students to access an advanced international education, confidently stepping onto the path of becoming global citizens.

GENERAL INFORMATION

■ VENUE

Building 2, Faculty of Engineering

The University of Tokyo 7-3-1 Hongo, Bunkyo-ku, Tokyo, 113-8656 JAPAN

■ SPEAKER SERVICES

For On-site

Saturday, December 2nd: Reception Desk, 1st floor

Sunday, December 3rd: Reception Desk, 1st floor

For Online

<https://vanj.jp/links/vanj2023-zooms>

Person in charge/contact: Ngo Minh Chu - 080 4836 5865

■ NETWORKING SESSION

Networking & Luncheon will be held as follows:

Dec. 2nd (Sat): 1F near Reception desk

Dec. 3rd (Sun): 1F near Reception desk & 3F Poster room

■ POSTER PRESENTATION INFORMATION

Venue: Room 4, 3rd floor

Poster Set-Up: Sunday, December 3rd; From 9:00 AM

Poster will be printed and set-up by the conference staffs in advance.

Poster Presentations: Sunday, December 3rd; From 11:30 AM to 1:00 PM

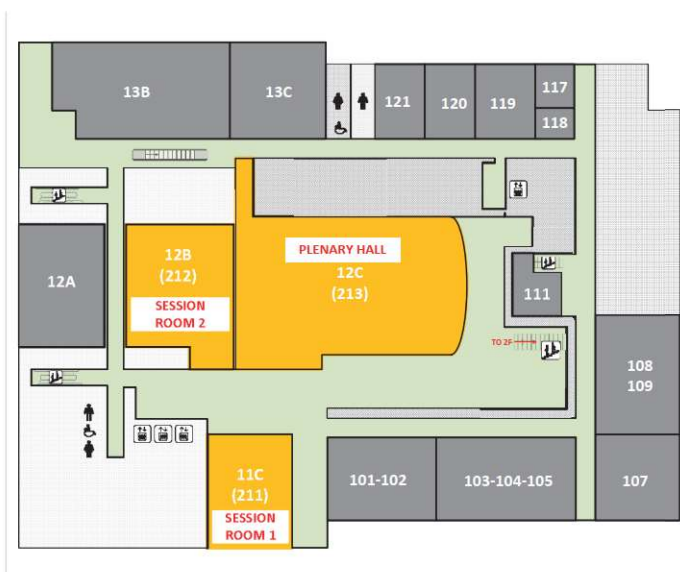
- Presentation Format: Hybrid: On-site at The University of Tokyo and Online via Zoom
- Presentation time: 5 min / person
- Q&A: free discussion

Poster Tear Down: Sunday, December 3rd; From 3:30 PM – 5:00 PM

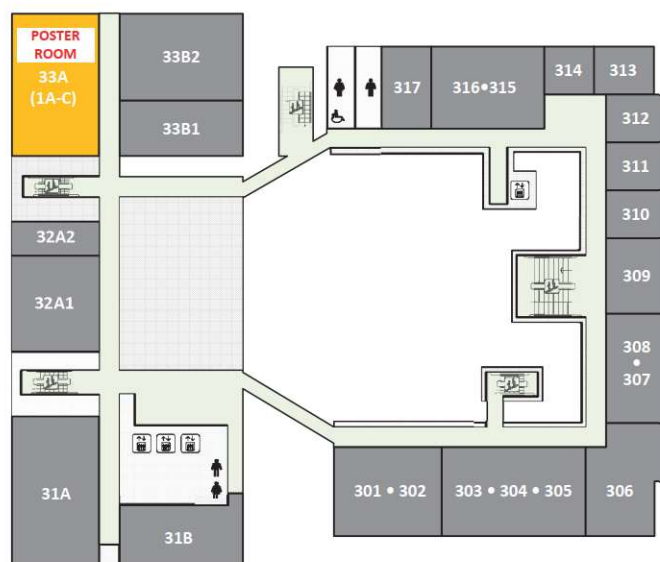
■ OTHER INSTRUCTIONS

Lunch boxes and drinks will be provided to all speakers (Invited speakers, Guest speakers, General Speakers) and Organizing Members who attend on-site.

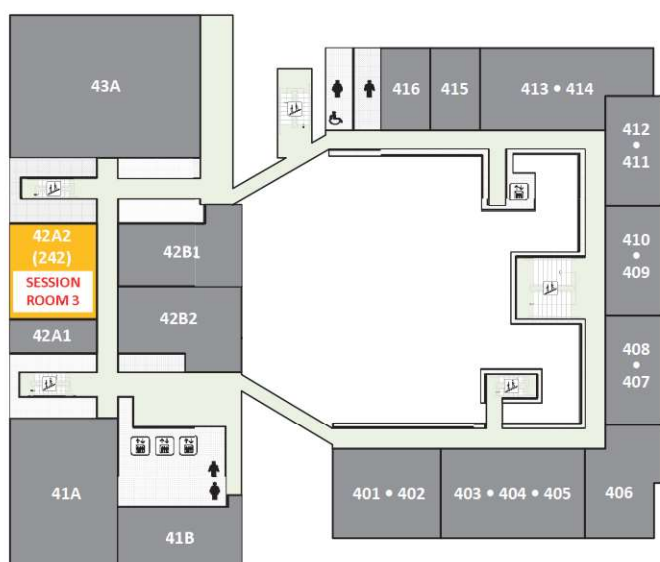
Please pick up your lunch box and drinks at the Reception desk on the 1st floor from 11:30 AM.



1ST FLOOR PLAN



3RD FLOOR PLAN



4TH FLOOR PLAN

AT-A-GLANCE

SATURDAY, DECEMBER 2, 2023

	Hall	Room 1	Room 2	Room 3
9:30	Opening 9:30 – 10:00			
10:00	Plenary 10:00 – 12:00			
10:30				
11:00				
11:30				
12:00		Lunch 12:00 – 13:00		
12:30				
13:00		Special Session 1 <i>New Frontiers in Materials Science</i> 13:00-15:15	Special Session 2 <i>Nano-biotechnology</i> 13:00 – 15:00	General 1/2 13:00 – 15:00
13:30				
14:00				
14:30				
15:00		Coffee Break 15:00 – 15:30		
15:30		Special Session 3 <i>Health-Related Water Microorganisms in an Urban Water Cycle</i> 15:30-18:00	Special Session 2 <i>Nano-biotechnology</i> 15:30– 17:30	Special Session 4 <i>Circular Livestock Farming and its Potential for a Sustainable Country</i> 15:30 – 18:00
16:00				
16:30				
17:00				

AT-A-GLANCE

SUNDAY, DECEMBER 3, 2023

	Room 1	Room 2	Room 3	Room 4
9:30	Special Session 5 <i>Infectious Disease Prevention and Research from Local to Global Perspective</i> 9:30 – 12:30	Special Session 6 <i>Inspiring Examples Drive Change: Training to Integrate Sustainable Development Goals (SDGs) into Teaching Practice</i> 9:30 –12:00	General 2/2 9:30 – 11:30	Poster Setup 9:30 – 11:30
10:00				
10:30				
11:00				
11:30	Poster viewing at Room 4 & Lunch Break 11:30 – 13:00			Poster Presentations 11:30 – 13:00
12:00				
12:30				
13:00	Special Session 7 <i>The Evolution of Agriculture: Emerging Trends, Achievements, and Challenges</i> 13:00 – 16:40	Special Session 8 <i>Trending Aspects in Chemistry and Chemical Engineering towards Environmental and Health Science</i> 13:00 – 15:30	Special Session 9 <i>Innovative Green Construction Technologies for Sustainable Development</i> 13:30 – 15:15	Poster Viewing 13:00 – 15:30
13:30				
14:00				
14:30				
15:00	Poster viewing at Room 4 & Coffee Break 13:00 – 15:30			
15:30		Special Session 10 <i>Green Energy Aspects and Development</i> 15:30 – 17:40		
16:00				
16:30				
17:00				
17:30	Closing 17:30 – 18:30			
18:00				

CONFERENCE SCIENTIFIC PROGRAM

■ SATURDAY, DECEMBER 2, 2023

Plenary Session: Green Energy and Environment		Plenary Hall
Dec. 2nd, 2023, 10:00-11:45 (JST)		Organized by: Assoc. Prof. Anh T.N. Dao, <i>Nagasaki University</i> Dr. Ngo Minh Chu, <i>National Institute of Advanced Industrial Science and Technology (AIST)</i> Mr. Le Hoai Phong, <i>Hiroshima University</i>
Chair: Assoc. Prof. Anh T.N. Dao, <i>Nagasaki University</i> Assist. Prof. Ta Duc Tung, <i>The University of Tokyo</i>		
Session description: Green energy and chemistry are crucial for driving advancements in science and technology towards sustainability, meeting the need for eco-friendly solutions. In this session, the plenary lecture focuses on using advanced algorithms to optimize the design of renewable energy devices, specifically for smart buoys designed to monitor ocean conditions for extended periods using tidal current energy. At the same time, the keynote lecture delves into practical aspects of drug discovery and health support products, emphasizing the potential of Vietnamese medicinal plants. This approach highlights the practical applications of innovation across different areas for a more sustainable and healthier future.		
Plenary Lecture (10:00-11:00)		
10:00–11:00	Design Optimization by ANN-assisted Genetic Algorithms for Renewable Energy Devices <u>Sakaguchi Daisaku</u> <i>Nagasaki University, Nagasaki, Japan</i>	S0-1
Keynote Lecture (11:00-11:45)		
11:00–11:45	Opportunities in Drug Discovery and Development of Health Support Products from Vietnamese Medicinal Plants <u>Thi Thanh Mai Nguyen</u> <i>University of Science, Vietnam National University - HoChiMinh City, Vietnam</i>	S0-2

* Presentation time:

Plenary Speaker: **50** min (Presentation) + **10** min (Discussion)

Keynote Speaker: **35** min (Presentation) + **10** min (Discussion)

SATURDAY, DECEMBER 2, 2023

General Session 1: Social Challenges and Solutions in Modern Vietnam Society		Room 3
Dec. 2nd, 2023, 13:00-15:00 (JST) Organized by: Dr. Nguyen Duy Hieu, <i>National Institute for Materials Science (NIMS)</i> Mr. Nguyen Nam Quoc, <i>Tsukuba University</i> Chair: Dr. Le Duc Dung, <i>Keio University</i> Dr. Tran Thi Ngoc Phuong, <i>Waseda University</i>		
13:00–13:15	Influencing Factors of Live-Streaming E-Commerce on Consumers' Purchase Intention regarding Dermatology Cosmetics in Vietnam Tran Le FPT University, Ho Chi Minh City, Vietnam	G1-1
13:15–13:30	Supply Chain Transparency, Traceability and Consumer Behavior: Empirical Evidence in Vietnam Nguyen Ha Duy <i>School of International Business - Marketing, College of Business, University of Economics Ho Chi Minh City, Ho Chi Minh, Vietnam</i>	G1-2
13:30–13:45	Integration of Agroecology into Public Policy in Southeast Asia: a Case Study of Vietnam Minh Thu Doan, McDonald A <i>Graduate School of Global Environmental Studies, Sophia University, Japan</i>	G1-3
13:45–15:05	Break	
13:55–14:10	Assessing the Impact of Application of Green Economy on the Relationship between Working Capital Management and Profitability of Listed Companies in Ho Chi Minh City Stock Exchange during 2016 to 2022 Van Ta ¹ , Minh Chau Thi Ta ² ¹ <i>University of Economics Ho Chi Minh City, Vietnam</i> ² <i>Tax Client 1, Deloitte Vietnam Limited, Company, Vietnam</i>	G1-4
14:10–14:25	The TITP Participants Experience: A Case Study from Vietnamese Anh Bui, Francis Peddie <i>Graduate School of International Development, Nagoya University, Japan</i>	G1-5
14:25–14:40	Intention to Return to Work in Rural Areas: Evidence from Students in a Developing Economy Nguyen Hoang Chau Pha ¹ , Nguyen Thi Lan Anh ¹ , Pham Tien Thanh ^{1,2} ¹ <i>Ton Duc Thang University, Ho Chi Minh City, Vietnam</i> ² <i>University of Tokyo, Tokyo, Japan</i>	G1-6
14:40–14:55	Resilience and Vulnerability among Older Street Vendors during a Pandemic: Evidence from Vietnam Nguyen Thi Lan Anh ¹ , Nguyen Hoang Chau Pha ¹ , Pham Tien Thanh ^{1,2} ¹ <i>Ton Duc Thang University, Ho Chi Minh City, Vietnam</i> ² <i>University of Tokyo, Tokyo, Japan</i>	G1-7

* Presentation time:

General Speaker: **10 min** (Presentation) + **3-5 min** (Discussion)

Special Session 1: New Frontiers in Materials Science		Room 1
<p>Dec. 2nd, 2023, 13:00–15:15 (JST)</p> <p>Organized by: Dr. Duong Dinh Hiep, <i>ASM International Tokyo</i> Assist. Prof. Nguyen Tuan Hung, <i>Tohoku University</i> Dr. Ngo Minh Chu, <i>National Institute of Advanced Industrial Science and Technology (AIST)</i></p> <p>Chair: Assoc. Prof. Le Duc Anh, <i>The University of Tokyo</i></p> <p>Session description: New frontiers in materials science refer to the latest advancements and emerging research areas within the field of materials science. This session will focus on the topological materials for advanced spintronic devices, the neutron irradiation target material for radiopharmacy production, the two-dimensional material for the optic device, smart materials for agricultural applications, etc. The "frontiers" in materials science means that it can evolve over time as new discoveries are made and technologies advance. Therefore, in this section, we would like to invite researchers in the material science field to join us to discuss the future of material science in its applications with experts from both Vietnam and Japan.</p>		
Keynote Speaker (13:00-13:30)		
13:00–13:30	<p>Isotope Production Using Novel MoO₃ Targets Hisayuki Suematsu¹, Minh Chu Ngo^{1,2}, Ngoc Mai Quach^{1,3}, Yoshitaka Fujita⁴, Thi Mai Dung Do¹, Tadachika Nakayama¹, Tatsuya Suzuki¹, Van Thai Nguyen³ and Koichi Niihara¹ ¹Nagaoka University of Technology, Nagaoka, Japan ²National Institute of Advanced Industrial Science and Technology (AIST), Japan ³Hanoi University of Technology, Vietnam ⁴Japan Atomic Energy Agency, Japan</p>	S1-1
Invited Speaker (13:30-15:10)		
13:30–13:48	<p>Staking Order and Strain Boosts Second-harmonic Generation in 2D Materials Nguyen Tuan Hung^{1,2} ¹FRIS, Tohoku University, Japan ²QMG, MIT, USA</p>	S1-3
13:48–14:06	<p>Topological Materials for Advanced Spintronic Devices Pham Nam Hai Tokyo Institute of Technology, Tokyo, Japan</p>	S1-3
14:06–14:24	<p>Direct Synthesis of Submicron-sized Core-shell Particles via Spray Pyrolysis Method Eka Lutfi Septiani and Takashi Ogi Hiroshima University, Hiroshima, Japan</p>	S1-4
14:24–14:42	<p>Thermal Strain Measurement of Metallized Silicon Nitride Substrate under Thermal Cycling Test Using Digital Image Correlation Method Minh Chu Ngo, Hiroyuki Miyazaki, Kiyoshi Hirao and Manabu Fukushima National Institute of Advanced Industrial Science and Technology (AIST), Japan</p>	S1-5

Special Session 1: New Frontiers in Materials Science		Room 1
14:42–15:00	“Useless” Fundamental Organic Materials Research with Multi-million \$ Applications <u>Ngo Huynh Thien</u> ^{1,2} ¹ <i>Center for Research and Development of Saigon High Tech Park, Tp. Thu Duc, Tp. Ho Chi Minh, Vietnam</i> ² <i>National Institute for Materials Science, Tsukuba, Japan</i>	S1-6
General Speaker (15:00-15:15)		
15:00–15:15	Highly Efficient Spin-Charge Conversion in a Ferromagnetic Metal Fe/ Topological Dirac Semimetal α-Sn Heterostructure <u>Masayuki Ishida</u> ¹ , Soichiro Fukuoka ¹ , Masaaki Tanaka ^{1,3} , and Le Duc Anh ^{1,2,3} ¹ <i>Dept. of Electrical Engineering and Information Systems, The University of Tokyo, Japan</i> ² <i>PRESTO, Japan Agency of Science and Technology, Japan</i> ³ <i>Center for Spintronics Research Network, The University of Tokyo, Japan</i>	S1-7

* Presentation time:

Keynote Speaker: **25 min** (Presentation) + **5 min** (Discussion)

Invited Speaker: **15 min** (Presentation) + **3 min** (Discussion)

General Speaker: **12 min** (Presentation) + **3 min** (Discussion)

Special Session 2: Nano-Biotechnology		Room 2
Dec. 2nd, 2023, 13:00-17:00 (JST)		
Organized by: Dr. Thi Kim Dung Doan, <i>Innovation Center of Nanomedicine (iCONM)</i> Dr. Dang An Do, <i>The University of Tokyo</i>		
Chair: Dr. Thi Kim Dung Doan, <i>Innovation Center of Nanomedicine (iCONM)</i>		
Session description: The nano-biotechnology session illuminates the revolutionary impact of nanotechnology in reshaping biomedicine, showcasing its potential for precise drug delivery, advanced imaging, and ultra-sensitive biomolecule detection. Discussions elucidate the intricate synthesis of tailored nanostructures, emphasizing the imperative understanding of intricate nanoscale mechanisms for seamless clinical integration. By emphasizing the crucial role of collaborative synergy among multiple disciplines, the session underscores the profound implications of nano-biotechnology in elevating healthcare standards and catalyzing transformative medical breakthroughs.		
Keynote Speaker (13:00-14:20)		
13:00–13:40	Nano-Bio Engineering for Near Infrared Biomedical Photonics <u>Kohei Soga</u> <i>¹Department of Medical and Robotic Engineering Design, Tokyo University of Science, Tokyo, Japan</i> <i>²Research Institute for Biomedical Sciences, Tokyo University of Japan, Chiba, Japan</i>	S2-1
13:40–14:20	The Biomedical Application of Radionuclides <u>Hirofumi Fuji</u> <i>¹Japan Radioisotope Association, Tokyo, Japan and</i> <i>²National Cancer Center, Kashiwa Japan</i>	S2-2
Invited Speaker (14:20-14:50)		
14:20–14:50	Transient Stealth Coating of Liver Sinusoidal Wall Enables Retargeting of Nanomedicines <u>Anjaneyulu Dirisala</u> , Satoshi Uchida, Kazuko Toh, Kazunori Kataoka <i>¹Innovation Center of NanoMedicien, Kawasaki Institute of Industrial Promotion, Kawasaki, Japan</i> <i>²Tokyo Medical and Dental University (Department of Advanced Nanomedical Engineering, Medical Research Institute, Tokyo, Japan)</i>	S2-3
14:50–15:05	Break	
Keynote Speaker (15:05-15:45)		
15:05–15:45	Artificial Intelligence for Bio-hydrogen Production <u>Jun Miyake</u> <i>School of Engineering Science, Osaka University</i>	S2-4

Special Session 2: Nano-Biotechnology		Room 2
Invited Speaker (15:45-16:45)		
15:45-16:15	Fabrication of Silk Protein to Hybrid Nanocarriers for Cancer Therapy Anh T.N. Dao ¹ , H. Nakatani ¹ , H. Kasai ² ¹ Graduate School of Engineering, Nagasaki University, Japan ² Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan	S2-5
16:15-16:45	Quantification of Cellular Metabolites with Genetically Encoded Fluorescence Lifetime Biosensors Cong Quang Vu and Satoshi Arai WPI Nano Life Science Institute, Kanazawa University, Kakuma-machi, Kanazawa 920-1192, Japan	S2-6
General Speaker (16:45-17:00)		
16:45-17:00	Creation of Hybrid Nanomedicine Composed of SN-38 Prodrugs and Au NPS Towards Chemo-photothermal Therapy Taiyufei Liu, Anh T.N. Dao, Ryuju Suzuki, Yoshitaka Koseki, Hitoshi Kasai University of Science, Vietnam National University - HoChiMinh City, Vietnam	S2-7

* Presentation time:

Keynote Speaker: **30 min** (Presentation) + **10 min** (Discussion)

Invited Speaker: **20 min** (Presentation) + **10 min** (Discussion)

General Speaker: **12 min** (Presentation) + **3 min** (Discussion)

Special Session 3: Health-Related Water Microorganisms in an Urban Water Cycle		Room 1
Dec. 2nd, 2023, 15:30-18:00 (JST) Organized by: Dr. Vu Duc Canh, <i>The University of Tokyo</i> Dr. Shotaro Torii, <i>The University of Tokyo</i> Chair: Dr. Vu Duc Canh, <i>The University of Tokyo</i> Dr. Shotaro Torii, <i>The University of Tokyo</i> Session description: Recently, pathogenic microorganisms such as enteric viruses, SARS-CoV-2 virus and antibiotic-resistant bacteria have been frequently detected in wastewater and aquatic environments, causing many concerns about risks to public health. Therefore, monitoring and controlling these pathogenic microorganisms in urban water systems plays an important role in protecting public health. Furthermore, monitoring the presence of pathogenic microorganisms in wastewater is also an effective solution to early assess and predict the spread of infectious diseases in the community. This helps ensure community safety and minimize the impact of infectious diseases on health and the economy. Therefore, the special session on "Health-Related Water Microorganisms in an Urban Water Cycle" will focus on discussing a number of important topics, including: <ol style="list-style-type: none"> 1. Achievements and challenges in monitoring the SARS-CoV-2 virus to monitor the COVID-19 epidemic in Asian countries (Japan, Indonesia, Nepal, Philippines, Thailand and Vietnam). 2. Assess the prevalence of antibiotic-resistant bacteria in the aquatic environment. 3. The important role of disinfection in controlling pathogenic microorganisms in urban water systems. 		
Keynote Speaker (15:30-16:00)		
15:30–16:00	Implementation of Wastewater-based Epidemiology for Monitoring the Incidence of COVID-19 and Other Infectious Diseases in Communities <u>Eiji Haramoto</u> <i>¹University of Yamanashi, Kofu, Japan</i>	S3-1
Invited Speaker (16:00-17:00)		
16:00–16:20	Tailoring Wastewater Surveillance to Thailand's Urban Landscape Insights from COVID-19 WBE Initiatives <u>Jatuwat Sangsanont</u> <i>Chulalongkorn University, Thailand</i>	S3-2
16:20–16:40	Prevalence of Antimicrobial Resistant Bacteria and Their Genes in Aquatic Environments and Possible Inactivation Methods <u>Mohan Amarasiri</u> ¹ , Takashi Furukawa ¹ , Daisuke Sano ² , Kazunari Sei ¹ <i>¹Kitasato University, Sagami-hara, Japan</i> <i>²Tohoku University, Sendai, Japan</i>	S3-3
16:40–17:00	Fate of Enteric Viruses in Urban Water Cycle: Disinfection as a Critical Control Point <u>Shotaro Torii</u> <i>Department of Urban Engineering, School of Engineering, The University of Tokyo, Japan</i>	S3-4
17:00–17:10	Break	

Special Session 3: Health-Related Water Microorganisms in an Urban Water Cycle		Room 1
General Speaker (17:10-17:58)		
17:10–17:22	Monitoring of SARS-CoV-2 and Other Viruses in Hospital Sewage Soichiro Hirai ¹ , Satoru Hosoda ² , Eiji Haramoto ¹ ¹ University of Yamanashi, Yamanashi, Japan ² Raijin No Kaze/Ohta Hospital, Tokyo, Japan	S3-5
17:22–17:34	Enhance Removal of Hospital Wastewater Contaminated Antibiotics by H₂O₂/S₂O₈²⁻/ZVI Process Nguyen Thi Phuong ¹ , Tran Thanh Binh ² , Nguyen Thanh Hoa ² ¹ Mavin Group joint stock Company, Hanoi, Vietnam ² Thuyloi University, Hanoi, Vietnam	S3-6
17:34–17:46	Developing Passive Dosing Method for Aquatic Toxicity Test of Cationic Surfactants Anh T. Ngoc Do, Kyoshiro Hiki, Satoshi Endo Health and Environmental Risk Division, National Institute for Environmental Studies (NIES), Japan	S3-7
17:46–17:58	Synthesis of Analcime Zeolite from Fly Ash by Solvent-free Method for Heavy Metal Removal from Water Nguyen Duc Thang, Doan Huy Hoang, Nguyen Kim Hang, Trinh Thi Ngoc Anh, Pham Minh Nguyen, Tran Hoang Minh Faculty of Materials Technology, Ho Chi Minh City University of Technology - Vietnam National University (HCMUT-VNU), Viet Nam	S3-8

* Presentation time:

Keynote Speaker: **20 min** (Presentation) + **10 min** (Discussion)

Invited Speaker: **15 min** (Presentation) + **5 min** (Discussion)

General Speaker: **10 min** (Presentation) + **2 min** (Discussion)

Special Session 4: Circular Livestock Farming and its Potential for a Sustainable Country		Room 3
Dec. 2nd, 2023, 15:30-18:00 (JST)	Organized by: Dr. Vuong Tuan Phong, <i>Theriogenology Laboratory, Graduate School of Veterinary Medicine, Hokkaido University</i> MSc. Cong Ha My, <i>Tokyo University of Agriculture and Technology</i>	
Chair: Dr. Tuan Nguyen, <i>Computational Biology at Agriculture Victoria</i> Dr. Vuong Tuan Phong, <i>Theriogenology Laboratory, Graduate School of Veterinary Medicine, Hokkaido University</i>		
Session description: <p>"VANJ 2023 - Green Environment and Energy" welcomes all scientists, researchers, experts, and intellectuals to jointly participate and discuss various aspects of science and technology. The context of environmental and green energy issues is becoming increasingly critical globally. The world is witnessing a rise in climate change, environmental pollution, and depletion of natural resources. These challenges pose a significant threat to the sustainable development of all nations, including Vietnam and Japan.</p> <p>On a global scale, nations are collaborating to form agreements and strong commitments to reduce greenhouse gas emissions and protect the environment. The transition to green and sustainable energy sources is no longer just a trend but a necessity. New technologies related to renewable energy, energy conservation, and environmental management are being developed and implemented extensively. The world is working together to ensure we can generate clean energy, protect the environment, and ensure sustainable living for all. Our session, titled "Circular Livestock Farming and its Potential for a Sustainable Country," explores a vital aspect of the Green Environment and Energy theme. The global community faces a multitude of environmental challenges, from climate change to resource depletion. Now more than ever, we must seek innovative solutions that promote both economic prosperity and ecological well-being.</p> <p>Circular livestock farming, the focus of our session, is a transformative concept that embodies the principles of sustainability and circular economy. In traditional livestock farming, resources such as water, feed, and energy are often used linearly, leading to inefficiencies and significant waste generation. Circular livestock farming, on the other hand, seeks to create a closed-loop system where waste is minimized, and resources are optimized to their fullest potential.</p> <p>In this innovative approach, the cycle begins with the sustainable production of animal feed, utilizing regenerative agricultural practices and minimizing the environmental footprint. Livestock are raised in systems that prioritize animal welfare and minimize stress. Manure and other byproducts from these animals are managed in a manner that converts waste into valuable resources, such as organic fertilizers or biogas for energy production.</p> <p>Circular livestock farming strives to reduce the use of antibiotics and chemicals, aiming for a healthier, more natural environment for both animals and ecosystems. It often incorporates advanced technologies such as precision agriculture, IoT, and data analytics to monitor and optimize processes. Through a holistic and systemic approach, circular livestock farming enhances resource efficiency, minimizes greenhouse gas emissions, and reduces the overall environmental impact of animal agriculture.</p> <p>Over the course of this session, we will hear from experts, researchers, and practitioners who will share their insights, experiences, and research findings on circular livestock farming. We will delve into the principles, practices, and tangible benefits of this approach, and discuss how it can contribute to a more sustainable, environmentally friendly, and economically robust agricultural sector. Our goal is to provide you with a comprehensive understanding of how circular livestock farming can be a catalyst for positive change, not only in Vietnam and Japan but around the world.</p>		

Special Session 4: Circular Livestock Farming and its Potential for a Sustainable Country		Room 3
Keynote Speaker (15:35-16:25)		
15:35–16:00	Potential of Metabolic Programming for Grassfed Wagyu Production and Space Cow Project <u>Takafumi Gotoh</u> <i>Hokkaido University, Sapporo, Japan</i>	S4-1
16:00–16:25	Circular Economy Implementation for Livestock Production Sector in the Vietnam Context <u>Nguyen Van Thu</u> <i>College of Agriculture, Can Tho University, Can Tho City, Vietnam</i>	S4-2
16:25–16:30	Break	
Invited Speaker (16:30-17:10)		
16:30–16:50	Assessing the Physiological Stress of Animals Using Minimally Invasive Methods to Advance our Knowledge of Welfare <u>Edward Narayan</u> <i>School of Agriculture and Food Sustainability, The University of Queensland, Australia</i>	S4-3
16:50–17:10	Circular Carbon in Livestock and Cropping in Australia <u>Quan Nguyen</u> ^{1,2} and Francois Visser ^{1,2} ¹ Carbon Friendly Pty Ltd, Brisbane, Queensland, Australia ² Tasmanian Institute of Agriculture, University of Tasmania, Launceston, Tasmania, Australia	S4-4
General Speaker (17:10-17:25)		
17:10–17:25	Campylobacter Billis sp. nov., Isolated from Chickens with Spotty Liver Disease Ganh Phung¹, Peter C Scott², Chaitali Dekiwadia¹, Robert J Moore¹, Thi Thu Hao Van¹ ¹ School of Science, RMIT University, Bundoora West Campus, Bundoora, VIC, Australia ² Scolexia Pty Ltd, Moonee Ponds, VIC, Australia	S4-5
17:25–18:00	Panel Discussion	

* Presentation time:

Keynote Speaker: **25 min** (Presentation)

Invited Speaker: **20 min** (Presentation)

General Speaker: **15 min** (Presentation)

General Session 2: Sustainable Development in Modern Society		Room 3
<p>Dec. 3rd, 2023, 9:30-11:30 (JST)</p> <p>Organized by: Dr. Nguyen Duy Hieu, <i>National Institute for Materials Science (NIMS)</i> Mr. Nguyen Nam Quoc, <i>Tsukuba University</i></p> <p>Chair: Dr. Tran Huynh Ngoc, <i>INS Engineering</i> Assoc. Prof. Anh T.N. Dao, <i>Nagasaki University</i></p>		
9:30–9:45	<p>Microencapsulation of Peppermint (<i>Mentha Arvensis</i>) Essential Oil Using Beta-Cyclodextrin</p> <p>Phan Thi Khanh Vinh, <u>Tran Thi Phuong Anh</u> <i>Faculty of Food Technology, Nha Trang University, Vietnam</i></p>	G2-1
9:45–10:00	<p>The Antibacterial Activity of Some Preparations Used In Ophthalmology</p> <p><u>Pham Thi Thanh Hue</u>, Bac V.G Nguyen <i>University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Vietnam</i></p>	G2-2
10:00–10:15	<p>Snamboo: Handmade Bag from Natural Fibers of Snake Plant (<i>Dracaena Trifasciata</i>) Leaves and Bamboo (<i>Bambusa Vulgaris</i>) Sheaths</p> <p><u>John Lloyd B. Enguito</u>, Christian J. Lanipa, Pricks James S. Manongas, JV Emmanuel T. Indonto, Charlyn Paula L. Gimoros <i>Misamis Occidental National High School, Senior High School Department, Oroquieta City, Misamis Occidental Province, Philippines</i></p>	G2-3
10:15–10:30	<p>Current Status of Rice straw in a Commune of Thua Thien Hue Province, central Vietnam and a Proposed Process to Produce Paper from Rice Straw</p> <p>Duong Thi Nhung¹, Tran Ngoc Khanh Ni¹, Nguyen Tran Bao Khuyen¹, Phan Thi Nha¹, Do Thi Cam Diem¹, Ngo Huu Binh¹, Le Nguyet Khanh¹, Doan Minh Vu¹, Nguyen Nhat Gia Hung¹, Duong Van Nguyen Thanh¹, Le Van Linh¹, Le Quy Hien¹, Dang Dang Phuoc An¹, <u>Nguyen Ha Phuong Thao</u>¹, Vo Nguyen Anh Duy² ¹<i>University of Science, Hue University, Thua Thien Hue, Vietnam</i> ²<i>The Ho Chi Minh City Center for Disease Control (HCDC), Ho Chi Minh, Vietnam</i></p>	G2-4
10:30–10:45	Break	
10:45–11:00	<p>Carbon Pricing and Firms' GHG emissions: Firm-level empirical evidence from East Asia</p> <p><u>Hai Le</u>, Dina Azhgaliyeva <i>Asian Development Bank Institute, Tokyo, Japan</i></p>	G2-5

General Session 2: Sustainable Development in Modern Society		Room 3
11:00–11:15	Increasing the Effectiveness of Official Development Assistance for Climate Change Adaptation and Mitigation: Investigating Local Stakeholder Dialogues for Green Environment in Vietnam. <u>Margaux Duhem</u> <i>Sophia University, Japan</i>	G2-6
11:15–11:30	Reducing Emissions from Deforestation and Forest Degradation (REDD+) Mechanism Incorporation in Vietnam-Japan Joint Crediting Mechanism (JCM) on Forest Carbon Credit Vs. Comprehensive Vietnam-Japan JCM REDD+ Legal Framework Establishment on Forest Carbon Credit <u>Le Chau Anh</u> , Nguyen Duc Toan, Nguyen Mai Huong, Duong Thu Huong, and Nguyen Hoang Mai <i>Diplomatic Academy of Vietnam, Hanoi, Vietnam</i>	G2-7

* Presentation time:

General Speaker: **10 min** (Presentation) + **3-5 min** (Discussion)

Special Session 5: Infectious Disease Prevention and Research from Local to Global Perspectives		Room 1
<p>Dec. 3rd, 2023, 09:30-12:30 (JST)</p> <p>Organized by: Assoc.Prof. Le Thi Thanh Thuy, <i>Osaka Metropolitan University</i> Dr. Do Dang An, <i>The University of Tokyo</i></p> <p>Chair: Assoc.Prof. Le Thi Thanh Thuy, <i>Osaka Metropolitan University</i></p> <p>Session description: In a world facing complex challenges at the intersection of health and the environment, the upcoming VANJ session on Medicine promises to shed light on critical issues in infectious disease prevention and research. With the participants of renowned experts, we will explore the diverse aspects of infectious disease prevention and research from local to global perspectives. We will start from the situation of antibiotic resistance of pathogens like <i>Klebsiella pneumoniae</i> in the post-COVID-19 to the innovative potential of bacteriocins in combating antibiotic resistance. We will have a chance to listen to the changing dynamics of disease distribution like Dengue fever in the face of climate change to the impact of migration on tuberculosis prevalence in Japan. We will also gain insights into Japan's cutting-edge research initiatives and prevention measurements to learn lessons for Vietnam. Join us on December 2-3, 2023, as we bridge the gap between medicine and the environment, emphasizing the importance of a holistic approach to global well-being.</p>		
Opening Remarks (09:30-9:40)		
9:30-9:40	Assoc.Prof. Le Thi Thanh Thuy <i>Osaka Metropolitan University</i>	
Invited Speaker (09:40-11:20)		
9:40-10:00	The New Trend of Infectious Disease Prevention and Research in Japan <u>Ohmagari Norio</u> <i>Department of Infectious Diseases, National Center of Global Health and Medicine, Japan</i>	S5-1
10:00-10:20	The Distribution and Antibiotic Resistance of <i>Klebsiella Pneumoniae</i> before and after COVID-19 in Cho Ray Hospital <u>Truong Thien Phu</u> <i>Department of Microbiology, Cho Ray Hospital, Vietnam</i>	S5-2
10:20-10:40	Bacteriocins: a Potential Alternative to Traditional Antibiotics in the Era of Antimicrobial Resistance <u>Le Nguyen Tra Mi</u> <i>Graduate School of Biomedical and Health Sciences, Hiroshima University, Japan</i>	S5-3
10:40-11:00	Prediction Models for Dengue Fever Outbreak: a Multi Levels, Multi Factors Approach <u>Tran Ngoc Dang</u> <i>Department of Environmental Health, University of medicine and pharmacy at Ho Chi Minh City, Vietnam</i>	S5-4

Special Session 5: Infectious disease prevention and research from local to global perspectives		Room 1
11:00-11:20	Migration and Health Issues from Local to Global Perspectives: A Model of Tuberculosis Responses <u>Lee Sangnim</u> <i>The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan</i>	S5-5
General Speaker (11:50-11:50)		
11:20-11:35	Antibacterial Activity of Endophytic Fungi Isolated from Nut Grass (<i>Cyperus Rotundus L. cyperaceae</i>) Nguyen Phuoc Vinh ¹ , <u>Tran Xuan Thuy Linh</u> ² , Nguyen Vu Giang Bac ² ¹ <i>School of Medicine, Vietnam National University Ho Chi Minh City, Vietnam</i> ² <i>University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam</i>	S5-6
11:35-11:50	Screening Epidemic for Furuncle Caused by <i>Staphylococcus Aureus</i> in Ho Chi Minh City <u>Phong Giang Huyen</u> <i>University of Medicine and Pharmacy, Ho Chi Minh city, Vietnam</i>	S5-7
11:50-12:30	Panel Discussion	

* Presentation time:

Invited Speaker: **15 min** (Presentation) + **5 min** (Discussion)

General Speaker: **10 min** (Presentation) + **5 min** (Discussion)

Special Session 6: Inspiring Examples Drive Change: Training to Integrate Sustainable Development Goals (SDGs) into Teaching Practice		Room 2
Dec. 3rd, 2023, 09:30-12:00 (JST) Organized by: Dr. Tran Thi Ngoc Phuong, <i>Waseda University</i> Dr. Ngo Minh Chu, <i>National Institute of Advanced Industrial Science and Technology (AIST)</i> Chair: Dr. Tran Thi Ngoc Phuong, <i>Waseda University</i> Session description: In this session, we would like to inspire you with teaching and training practical examples ranging from language courses to content-based courses in Asian contexts. First, we discuss concepts and practices of translanguaging in the EMI contexts (English as a Medium of Instruction) from the ideological, pedagogical, and sociocultural perspectives. Second, we bring together three major strands related to learning, the nature of teaching and training practices in the Asian context, informed by theory and supported by practical examples in Japan, Kyrgyzstan Vietnam, with an emphasis on pre-service training for school teachers. The focus of the seminars is to ensure that new teachers are well-prepared to succeed in the classroom, by building them up and giving them practice and confidence in a teaching practicum. Third, as the technology advances, technology aids instructors in developing a learning environment conducive to students from different cultures and backgrounds to embrace their talents and to develop their potential while learning from one another. Thoughtfully-selected digital tools will afford students enhanced collaboration and interaction opportunities rather than interfering. Finally, in the global classrooms, how to build the peace awareness of international students in the class is an important factor for successful learning outcomes. In this talk, we will introduce some examples of students' transformation through class as well.		
Keynote Speaker (9:30-10:20)		
9:30-9:55	Successful Teaching and Training Practices – Japan, Kyrgyzstan and Vietnam <u>Roger Palmer</u> <i>Konan University, Hyogo, Japan</i>	S6-1
9:55-10:20	Three Attempts to Cultivate Peace Awareness of Future Engineers <u>Hideko Shibasaki</u> <i>Nagaoka University of Technology, Japan</i>	S5-1
Invited Speaker (10:20-11:10)		
10:20-10:40	Translanguaging in EMI Contexts: Ideological, Pedagogical, and Sociocultural Perspectives <u>Yanty Wirza</u> <i>Indonesia University of Education, Bandung, Indonesia</i>	S6-3
10:40-10:50	Break	

Special Session 6: Inspiring Examples Drive Change: Training to Integrate Sustainable Development Goals (SDGs) into Teaching Practice		Room 2
10:50-11:10	Developing Intercultural Literacy, Inclusive Lifelong Learning Opportunities, through Collaborative Technology in the Classroom <u>Marcela Lopez Bravo</u> <i>Florida International University, Miami, Florida, United States</i>	S6-4
General Speaker (11:10-12:00)		
11:10-11:23	Identifying Factors Affecting Learner Satisfaction of MOOCs in Higher Education Institutes in Vietnam <u>Thi Bao Tran Le</u> <i>FPT University, Ho Chi Minh City, Vietnam</i>	S6-5
11:23-11:36	From Crisis to Inclusion; Understanding Educational Inequality during COVID-19 <u>Pham Ngoc Van Anh¹, Pham Tien Thanh^{1,2}</u> <i>¹Faculty of Business Administration, Ton Duc Thang University, Ho Chi Minh City, Vietnam</i> <i>²Department of Agricultural and Resource Economics, University of Tokyo, Tokyo, Japan</i>	S6-6
11:36-12:00	Panel Discussion	

* Presentation time:

Keynote Speaker: **20 min** (Presentation) + **5 min** (Discussion)

Invited Speaker: **15 min** (Presentation) + **5 min** (Discussion)

General Speaker: **10 min** (Presentation) + **3-5 min** (Discussion)

Special Session 7: The Evolution of Agriculture: Emerging Trends, Achievements, and Challenges		Room 1
Dec. 3rd, 2023, 13:00-16:40 (JST) Organized by: Dr. La Hoang Anh, <i>Hiroshima University</i> Dr. Pham Thi Dung, <i>Vietnam National University of Agriculture</i> Chair: Dr. La Hoang Anh, <i>Hiroshima University</i> Dr. Pham Thi Dung, <i>Vietnam National University of Agriculture</i> Session description: In the session "The Evolution of Agriculture: Emerging Trends, Achievements, and Challenges," we provide a comprehensive overview of the most recent advancements in the field of agriculture. The session comprises a series of presentations with diverse themes, highlighting breakthrough studies and practical applications, facilitating effective approaches to sustainable agricultural production while ensuring food security. During the session, participants will have the opportunity to research and discuss innovative solutions and strategies to address the most pressing challenges in agriculture from different countries. The session also presents interdisciplinary achievements and contributions, emphasizing the significance of agricultural development for various fields beyond agriculture. Furthermore, the session aims to foster international collaboration and innovation, contributing to the creation of groundbreaking innovations and the future revolution of agriculture.		
Keynote Speaker (13:00-13:30)		
13:00-13:30	Japan's Experience in Developing Green and Sustainable Agriculture and Recommendations to Vietnam <u>Tran Dang Xuan</u> <i>Center for the Planetary Health and Innovation Science (PHIS), The IDEC Institute, Hiroshima University, Japan</i>	S7-1
Invited Speaker (13:30-14:10)		
13:30-13:50	Conservation and Utilization of Agricultural Plant Resources in Vietnam <u>La Tuan Nghia</u> ¹ , Hoang Thi Hue ¹ , Le Thi Thu Trang ¹ , Ha Minh Loan ¹ , La Hoang Anh ² ¹ National Plant Resources Center, Hanoi, Vietnam ² Center for the Planetary Health and Innovation Science (PHIS), The IDEC Institute, Hiroshima University, Japan	S7-2
13:50-14:10	Alternate Solutions to Cope with Phosphate Deficiency Problem in Plants <u>Artik Elisa Angkawijaya</u> ¹ , Van Cam Nguyen ¹ , Shella Permatasari Santoso ² , Yuki Nakamura ^{1,3} ¹ RIKEN Center for Sustainable Resource Science, Yokohama, Japan ² Department of Chemical Engineering, Widya Mandala Catholic University Surabaya, Surabaya, Indonesia ³ Department of Biological Sciences, The University of Tokyo, Tokyo, Japan	S7-3
General Speaker (14:10-14:50)		
14:10-14:25	Using Spoiled Eggs as Fertilizer for Organic Vegetable Production <u>Phan Thi Thuy</u> ¹ ¹ Vietnam National University of Agriculture, Hanoi, Vietnam	S7-4

Special Session 7: The Evolution of Agriculture: Emerging Trends, Achievements, and Challenges		Room 1
14:25-14:40	Influenced Factors SRP Scores of SRP Rice Cultivation in the Mekong Delta, Vietnam Ngo Duy Dong^{1,2} ¹VNU, Tokyo, Japan ²Kagoshima University, Japan	S7-5
14:40-15:10	Break	
Invited Speaker (15:10-16:10)		
15:10-15:30	Agricultural Biotechnology in Ensuring Food Security and Sustainable Development Pham Thi Dung ¹ <i>¹Vietnam National University of Agriculture, GiaLam, Hanoi, Vietnam</i>	S7-6
15:30-15:50	Gene Editing in Potato to Enhance PVY Resistance Hunziker Johan ¹ , Le Rat Anaïs ¹ , Chauvin Jean-Eric ¹ , Gallois Jean-Luc ² , Nogue Fabien ³ , Eriksson Dennis ⁴ <i>¹INRAE, Agrocampus Ouest, Université de Rennes, IGEPP, F-29260 Ploudaniel, France</i> <i>²INRAE, GAFL, Montfavet, France</i> <i>³Université Paris-Saclay, INRAE, AgroParisTech, Institut Jean-Pierre Bourgin (JPB), Versailles, France</i> <i>⁴Department of Plant Breeding, Swedish University of Agricultural Sciences, 23053 Alnarp, Sweden</i>	S7-7
15:50-16:10	Tomato Mutant Collections in National Bioresource Project-Tomato and Their Informations Koichi Sugimoto ¹ <i>¹Tsukuba-Plant Innovation Research Center, University of Tsukuba, Ibaraki, Japan</i>	S7-8
General Speaker (16:10-16:40)		
16:10-16:25	Impact of Specific Essential Oils on the Growth and Biofilm Formation of Candida Albicans Hoang Huy Giang ¹ , Bac V.G Nguyen ¹ <i>¹University of Medicine and Pharmacy at Ho Chi Minh city, Ho Chi Minh city, Vietnam</i>	S7-9
16:25-16:40	Fabrication And Evaluation of Neem Oil-Based Nanoemulsion Applied in Green Pest Control Long Lieu ¹ , Phuc Nguyen ² , Nhung Duong ² <i>¹School of Biotechnology, International University, Vietnam National University, Ho Chi Minh City, Vietnam</i> <i>²Faculty of Chemical Engineering, Ho Chi Minh City University of Technology, Vietnam National University, Ho Chi Minh City, Vietnam</i>	S7-10

* Presentation time:

Keynote Speaker: **25 min** (Presentation) + **5 min** (Discussion)

Invited Speaker: **15 min** (Presentation) + **5 min** (Discussion)

General Speaker: **13 min** (Presentation) + **2 min** (Discussion)

Special Session 8: Trending Aspects in Chemistry and Chemical Engineering towards Environmental and Health Science		Room 2
<p>Dec. 3rd, 2023, 13:00-15:30 (JST)</p> <p>Organized by: Dr. Truong Lam Son Hai, <i>University of Science, VNU HCMC</i> Le Hoai Phong, <i>Hiroshima University</i></p> <p>Chair: Dr. Truong Lam Son Hai, <i>University of Science, VNU HCMC</i></p> <p>Session description: In recent years, the fields of chemistry and chemical engineering are witnessing a strong shift in research towards solving problems in reducing environmental pollution and protecting human health. Scientists are actively searching for new solutions and technologies to minimize negative impacts and promote sustainable development. The seminar "Trending Aspects in Chemistry and Chemical Engineering for Environmental Science and Health" aims to bring together experts, researchers, scientists from various fields to discuss the latest advances and trends in chemistry and chemical engineering that contribute towards environmental sustainability and improved human health.</p> <p>Key Topics to be discussed:</p> <ol style="list-style-type: none"> 1. Development of new environmentally friendly materials for scale-up and commercialization of photosensitizer adsorbent solar cells 2. Simulate the movement model of particles in the human lung. 3. Health support products derived from nature. 4. Application of hydrate technology in water treatment. 		
Invited Speaker (13:00-15:00)		
13:00-13:30	<p>Reduction of Volatile Solvent in Eco-friendly Electrolyte for Dye-sensitized Solar Cells</p> <p><u>Nguyen Tuyet Phuong</u>¹ <i>¹Faculty of Chemistry, University of Science, Vietnam National University, Ho Chi Minh City, Vietnam</i></p>	S8-1
13:30-14:00	<p>Numerical Simulation on Particle Motion in Human Lung</p> <p><u>Ryosuke Mitani</u>¹ <i>¹Keio University, Kanagawa, Japan</i></p>	S8-2
14:00-14:30	<p>Current Studies on Bee Productions in Vietnam</p> <p><u>Nguyen Trung Nhan</u>¹ <i>¹University of Science, Vietnam National University, Ho Chi Minh City, Vietnam</i></p>	S8-3
14:30-15:00	<p>Hydrate-based Water Treatment using Automated Pelletizing System</p> <p><u>Truong Lam Son Hai</u>^{1,2} and <u>Ju Dong Lee</u>³ <i>¹Vietnam National University Ho Chi Minh city, Ho Chi Minh, Vietnam</i> <i>²Faculty of Chemistry, University of Science, Ho Chi Minh, Vietnam</i> <i>³Offshore Plant Resources R&D Center, Korea Institute of Industrial Technology, Busan, South Korea</i></p>	S8-4

Special Session 8: Trending Aspects in Chemistry and Chemical Engineering towards Environmental and Health Science		Room 2
General Speaker (15:00 - 15:30)		
15:00-15:15	Total Synthesis of Natural Product Contained Phloroglucinol Core <u>Nguyen Ngoc Thanh Luan</u> ¹ , Okada Takuya ^{1,2} , Toyooka Naoki ^{1,2} ¹ Graduate School of Innovative Life Science, University of Toyama, Japan ² Faculty of Engineering, University of Toyama, Japan	S8-5
15:15-15:30	Unlocking The Potential of Nano-Technology and Molecular Docking for Combatting Antifungal Drug Resistance in Vietnamese Cancer Patients <u>Du Thien Nguyen</u> ¹ , Bac-Vu Giang-Nguyen ² , Tu-Nguyen Anh-Ha ¹ , Minh Tri Le ^{1,2} , Phuoc Vinh Nguyen ^{1,3} ¹ School of Medicine, Vietnam National University Ho Chi Minh City, Vietnam ² Faculty of Pharmacy, University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam ³ Research center for infectious diseases, International University, Vietnam National University Ho Chi Minh City, Vietnam	S8-6

* Presentation time:

Invited Speaker: **20 min** (Presentation) + **10 min** (Discussion)

General Speaker: **10 min** (Presentation) + **5 min** (Discussion)

Special Session 9: Innovative Green Construction Technologies for Sustainable Development		Room 3
Dec. 3rd, 2023, 13:00-15:15 (JST)		Organized by: The Vietnamese Construction Society in Japan-VCJ
Chair:		
Dr. Bui Ngoc Kien, <i>The University of Tokyo</i>		(Chair)
Dr. Phan Thanh Ngoc, <i>Yokohama National University</i>		(Co-chair)
Dr. Nguyen Hong Son, <i>Hazama Ando Corporation</i>		(Coordinator)
Session description:		
In the context of the world's pursuit of the crucial goal of carbon neutrality by 2050, the focus on the green transition is becoming indispensable in all sectors. The construction industry is no exception; on the contrary, it faces an essential task in meeting societal and environmental demands. The most evident aspect of this green transition in construction is the use of environmentally friendly materials, sustainable construction materials, recycling, and the adoption of green technologies, alongside efficient energy conservation. Hence, the session at VANJ conference with the theme "Innovative Green Construction Technologies for Sustainable Development" will center its discussions on the following key topics:		
1. Capturing CO ₂ by concrete waste through advanced technologies.		
2. Innovative utilization of returned and remained fresh concrete for environmentally friendly high-value construction materials.		
3. Utilizing recycled concrete waste in building structures to promote sustainability.		
4. Transforming waste sludge into green construction materials.		
This session will provide new insights, uncover innovative solutions, and foster collaboration in building a sustainable future for the construction industry.		
Opening Remarks		
13:00-13:05	Dr. Bui Ngoc Kien <i>The University of Tokyo</i>	
Keynote Speaker (13:05-13:30)		
13:05-13:30	Innovative Utilization of Returned and Remained Concrete for High-value Construction Materials Akira Hosoda (Online) <i>Yokohama National University, Yokohama, Japan</i>	S9-1
Invited Speaker (13:30-14:55)		
13:30-13:50	Mechanical Behavior of GFRP-Recycled Concrete-Steel Multitube Concrete Columns under Axial Compression Fubin Zhang ^{1,2,3} , Zheng Hua, Jianzhuang Xiao ² ¹ <i>Faculty of Civil Engineering and Mechanics, Jiangsu University, Zhenjiang, China</i> ² <i>Department of Structural Engineering, Tongji University, Shanghai, 200092, China</i> ³ <i>Department of Architecture, Graduate School of Engineering, The University of Tokyo, Tokyo, Japan</i>	S9-2

Special Session 9: Innovative Green Construction Technologies for Sustainable Development		Room 3
13:50-14:10	Accelerated Carbonation of Cement-based Materials Towards Low-carbon Construction Dianchao Wang ¹ , Takafumi Noguchi ¹ , Takahito Nozaki ² , Mai Nanano ² , Takayuki Hayakawa ² ¹ Department of Architecture, Graduate School of Engineering, The University of Tokyo, Tokyo, Japan ² Central Research Laboratory, Taiheiyo Cement Corporation, Osaku 2-4-2, 285-8655 Sakura City, Chiba Prefecture, Japan	S9-3
10:40-10:50	Break	
14:15-14:35	Direct Comparison with ¹H NMR Relaxometry and Sorption Measurements Using Hydrated Cement Pastes Ryo Kurihara ¹ , Ippei Maruyama ^{1,2} ¹ The University of Tokyo, Tokyo, Japan ² Nagoya University, Aichi, Japan	S9-4
14:35-14:55	Harnessing The Potential of PSA in Liquefied Stabilized Soil and the Efficacy of Genetic Programming in Prediction Models Vu Minh Chien ¹ , Tomoaki Satomi ² and Hiroshi Takahashi ² ¹ Detomo Inc., Tokyo, Japan ² Tohoku University, Sendai, Japan	S9-5
General Speaker (14:55-15:15)		
14:55-15:05	Optimizing Energy Efficiency Through Shading Devices in Vietnamese Tubehouses Huynh Van Khang HUTECH University, Ho Chi Minh City, Vietnam	S9-6
15:05-15:15	Green Space Planning Along Metro Urban Railway Line Number 1 Ben Thanh-Suoi Tien in Ho Chi Minh City: Current Status of Planning and Proposed Solutions Vo Minh Thang ¹ , Le Hoang Anh ¹ , To Thi Phuong Thao ¹ , Hoang Thien Bao ¹ , Nguyen Pham Viet Ha ² ¹ University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City, Vietnam ² University of Technology, Vietnam National University, Ho Chi Minh City, Vietnam	S9-7

* Presentation time:

Keynote Speaker: **15 mins** (Presentation) + **10 mins** (Discussion)

Invited Speaker: **15 mins** (Presentation) + **5 mins** (Discussion)

General Speaker: **8 mins** (Presentation) + **2 mins** (Discussion)

Special Session 10: Green Energy Aspects and Development		Room 2
<p>Dec. 3rd, 2023, 15:30-17:40 (JST)</p> <p>Organized by: Dr. Tran Huynh Ngoc, <i>INS Engineering</i> Dr. Nguyen Xuan Hieu, <i>TMEIC</i></p> <p>Chair: Dr. Tran Huynh Ngoc, <i>INS Engineering</i> Dr. Nguyen Xuan Hieu, <i>TMEIC</i></p> <p>Session description: You've heard a lot about green energy, but... Did you know using energy efficiently is also considered a high priority and important practice of green energy? Did you know that the green energy roadmap has many challenges, one of which is integrating them into the current energy system? Did you know that the transition to green energy also requires us to deal with traditional energy sources appropriately? In this session, you will hear about very interesting aspects of green energy, including:</p> <ol style="list-style-type: none"> 1. Electrification and optimization of energy use in automobiles 2. Technologies that integrate green energy into the current energy system such as renewable energy forecasting, microgrid, smart grids 3. Policy tools in the electricity market serving green energy development 4. Carbon capture technology, a technology that supports a smooth transition to green energy 5. Other relevant topics. <p>Join the session to discuss with experts on various aspects of green energy and expand our green energy horizons</p>		
Opening Remarks (15:30–15:35)		
15:30–15:35	Session Chair	
Invited Speaker (15:35-16:50)		
15:35–15:50	Advanced Traction Control of Electric Vehicles <u>Nguyen Binh Minh</u> <i>The University of Tokyo, Japan</i>	S10-1
15:50–16:05	Optimization and Intelligent Control for Hybrid Energy Systems with Consideration of Renewable Energy Sources and Electric Vehicles <u>Nguyen Gia Minh Thao</u> <i>Shimane University, Japan</i>	S10-2
16:05–16:20	Meteodyn Forecast: Short-term Prediction and Beyond <u>Do Minh Thang</u> <i>METEODYN, 33 Boulevard Salvador Allende, 44800 Saint Herblain, France</i>	S10-3
16:20–16:35	CCS Deployment in Apec Southeast Asia: Bottlenecks Should Be Addressed <u>Phung Quoc Huy</u> <i>Asia Pacific Energy Research Centre, Tokyo, Japan</i>	S10-4

Special Session 10: Green Energy Aspects and Development		Room 2
16:35–16:50	Incentive Mechanism for Renewable Energy to Participate in Competitive Electricity Market <u>Le Hong Lam</u> , Nguyen Tan Thanh <i>Faculty of Electrical Engineering, The University of Danang, University of Science and Technology</i>	S10-5
General Speaker (16:50-17:16)		
16:50–17:03	Application of E-Waste Recycling Technology Towards The Goal of Developing Renewable Energy and Environmental Sustainability in Japan and Reference Suggestions for Vietnam <u>Le Thi Hoai Anh</u>, Phan Thi Cam Ly <i>Diplomatic Academy of Viet Nam, Hanoi, Viet Nam</i>	S10-6
17:03–17:16	Sustainability Assessment of GIS Network Analysis-Based Life Cycle Assessment for Green Energy Planning in The Yangon Region, Myanmar <u>Tin Min Htoo</u> , Helmut Yabar <i>University of Tsukuba, Japan</i>	S10-7
17:16–17:40	Panel Discussion	

* Presentation time:

Invited Speaker: **15 min** (Presentation) + **5 min** (Panel Discussion)

General Speaker: **10 min** (Presentation) + **3 min** (Discussion)

Poster Session		Room 4
Dec. 3rd, 2023 11:30-13:00 (JST) Organized by: Dr. Nguyen Duy Hieu, <i>National Institute for Materials Science (NIMS)</i> Mr. Nguyen Nam Quoc, <i>Tsukuba University</i>		
11:30-11:35	Breeding Study on Target Leaf Spot Resistances in Cucumber Ho Thi Minh ^{1,2} , Yosuke Yoshioka ¹ ¹ The University of Tsukuba, Japan ² Vietnam Academy Agricultural Science Institution, Hanoi, Vietnam	P-1
11:35-11:40	Correlation of Rhizospheric and Endophytic Bacteria in The Roots of Adenosma Bracteosum Ngo Thanh Nha¹, Pham Thuy Trang¹, Nguyen Huu Thanh^{2,3} ¹Institute of Food and Biotechnology, Can Tho University, Vietnam ²Biotechnology Department, Faculty of Agriculture and Natural Resources, An Giang University, Vietnam ³Vietnam National University of Ho Chi Minh City, Vietnam	P-2
11:40-11:45	The Impact of M&A Activities on the Sustainable Development Goals of Vietnamese Cement Enterprises Nguyen Duc Trung, Ly Nguyen Ngoc ¹Foreign Trade University, Hanoi, Vietnam	P-3
11:45-11:50	Surface Enhanced Raman Spectroscopy Substrate Based on Graphene Oxide/Ag Nanoparticles/Cotton Swab for Sensitive Detection of Organic Molecules Nguyen Le Truong Giang, Hoang Duy Minh, Nguyen Thao Linh Chi, Luong Duc Anh, Le Ngoc Long, Tran Van Khai, <u>Tran Hoang Minh</u> <i>Faculty of Materials Technology, Ho Chi Minh City, University of Technology - Vietnam National University (HCMUT-VNU), Ho Chi Minh City, Viet Nam</i>	P-4
11:50-11:55	Survey of the Situation of Use Of Antibiotics to Treat Community Pneumonia in Patients With Small Cancer Levels at Nghe An Oncology Hospital <u>Le Thi Lan Chi</u> , Nguyen Thi Can, Hoang Thi Thu Hien, Nguyen Khanh Toan <i>Vinh Medical University</i>	P-5
11:55-12:00	Effect of Maturity Stages on Proximate Composition, Phytochemical and Antioxidant Activities of Noni Fruit Grown in Vietnam Dat Pham Van, Hanh Tran Thi My, and Duy Nguyen Xuan Faculty of Food Technology, Nha Trang University, Nha Trang City, Vietnam	P-6

Poster Session		Room 4
12:00-12:05	<p>Thermo-Adaptive Hydrogen Production Potential of Halotolerant Microflora from Salt Fields Huy Thanh Vo¹, Teuyoshi Imai², Prapaipid Chairattananakorn³, Alicesara Reungsang⁴ ¹Research Group of Big data for Sustainable Development, MienTrung University of Civil Engineering, Tuy Hoa 620000, Vietnam ²Graduate School of Sciences and Technology for Innovation, Yamaguchi University, Yamaguchi 755-8611, Japan ³Department of Environmental Engineering and Management, Faculty of Environment, Kasetsart University, Bangkok 10900, Thailand ⁴Department of Biotechnology, Faculty of Technology, Khon Kaen University, Khon Kaen 40002, Thailand</p>	P-7
12:05-12:10	<p>Environmental Tax Policies to Promote Green Growth: International Experiences and Current Situation in Vietnam <u>Nguyen Vu</u> School of Banking and Finance, National Economics University, Vietnam</p>	P-8
12:10-12:15	<p>Adversarial Variational Autoencoders to Extend and Improve Generative Model <u>Loc Nguyen</u> Loc Nguyen's Academic Network, Vietnam</p>	P-9
12:15-12:20	<p>Optimizing Sustainable Food Production Through Advanced 3D Printing Techniques in Manufacturing Technology Lo Ngoc Lan and Nguyen Hoang Lan Huong Vin University, Vietnam</p>	P-10
12:20-13:00	Free Discussion for all presentations (Moving to breakout rooms for online speakers)	

* Presentation time:

General Poster Presentation: **5 min** (Presentation) + **40 min** (Discussion)



ACKNOWLEDGEMENT

We extend our deepest gratitude to all committee members whose dedication and expertise made the VANJ Conference 2023 an exceptional success. We sincerely appreciate your passion and support in shaping this remarkable experience for all participants.

Thank you for your outstanding contributions and commitment to excellence.

“On behalf of the Vietnamese Academic Network in Japan, we would like to express our sincere thanks for the sponsorship of E-connect as the Diamond Sponsor of VANJ Conference 2023”

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The VANJ Conference aims to create a venue to gather Vietnamese academics, build and strengthen the research community, and expand the connections across multiple research fields.

■ VANJ COMPENDIUM

With the desire to provide useful information on science and technology in Japan to a large number of Vietnamese people living in Vietnam and abroad, VANJ officially launched a project to build a compendium, "Science and Technology in Japan". This project is non-profit, with the aim of periodic publications.

VANJ seminars are held frequently for VANJ members and guests who are experts in a specific field to talk, share, and discuss a specific topic.

■ VANJ-NET

Connect and support the Vietnamese Academics who were, are, and will be in Japan. Speakers will share their experiences and help the next Vietnamese generations to understand as well as prepare for graduate studies and academic environments in Japan.

■ VANJ-SPEC

Bring in-depth scientific seminars to share and discuss research findings, exchange ideas and insights, and promote the learning spirit and research ability of young scientists.

Speakers: Academics who received his/her Master's and/or Doctor degrees and are currently actively involved in research and business sectors.



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