

12th Annual ISAJ Symposium

70 years of India and Japan Diplomatic Relations

United Nations Decade of Ocean Science for Sustainable Development (2021-2030)

Science-Technology-Innovation (STI) Towards A Sustainable World



Tokai University Marine Science Museum (Auditorium)

(Interdisciplinary and Hybrid)



Time (JST)

DAY 1: Nov. 26, 2021 (Friday)

11:30-13:30 Registration (Beach Hotel Gosea's Lobby)

Inaugural Session

14:00-14:04	Opening Address	Dr. Kedar Mahapatra, Convener, the 12th Annual ISAJ Symposium
14:04-14:08	Welcome Address	Prof. Hiroshi Saito, Dean, School of Marine Science and Technology, Tokai Univ.
14:08-14:13	Chairman's Address	Dr. Sunil Kaul, Chairman, ISAJ
14:13-14:23	Inaugural Address	H.E. Mr. Sanjay Kumar Verma, Ambassador of India to Japan
14:23-14:28	Chancellor's Address	Prof. Kiyoshi Yamada, Chancellor, Tokai University
14:28-14:33	Mayors' Address	Mr. Nobuhiro Tanabe, Mayor, Shizuoka City
14:33-14:38	Counsellor's Address	Dr. Usha Dixit, Counsellor (S&T), Embassy of India, Tokyo
14:38-14:43	Special Address	Mr. Yoshiro Kaku, Chief Representative, NEDO, India
14:43-14:48	Awards Presentations & Addresses	ISAJ Life Time Achievement Award Distinguished Mentor Award
14:48-15:18	Keynote Lecture	Prof. Asahiko Taira, Executive Director, Institute of Oceanic Research & Development, Tokai University <i>"Comparison of the Tectonic Framework between Eastern India and Southwestern Japan -Implications for the Evolution of Continental Crust- F53"</i>
15:18-15:23	Vote of Thanks / Closing Remarks	Dr. Alok Singh, Vice-Chairman, ISAJ

Group Photo

15:23-15:28

Tea Break

15:28-15:50

Ocean Science & Technology (Plenary and Invited Lectures)

Chairs: Satoshi Ishikawa, Tokai Univ. and Swadhin Behera, JAMSTEC

15:50-16:10	Plenary Lecture (Web)	Towards Blue Economy. <i>Shailesh Nayak, Director, National Institute of Advanced Studies, India</i>
16:10-16:30	Plenary Lecture	Oceans for a Sustainable World. <i>Swadhin Behera, JAMSTEC</i>
16:30- 16:50	Invited Lecture	Experimental Study on Applicability of Molten Slag to Tidal Flat Materials. <i>Masato Niki, Tokai University</i>
16:50- 17:10	Invited Lecture	Negative pressure effect plate for portable underwater robot. <i>Norimitsu Sakagami, Tokai University</i>
17:10 -17:25	Invited Lecture (Web)	Surface layer temperature inversion, a rare oceanographic process occurring in the Kuroshio-Oyashio frontal zone and the northeastern Indian Ocean(Southeastern Arabian and Bay of Bengal). <i>Pankajakshan T, Naval Physical & Oceanographic Laboratory (NPOL), India</i>
17:25-17:40	Invited Lecture (Web)	Escalating levels of pathogenic Fecal Indicator Bacteria in coastal waters and marine beaches of Mumbai, India: a public health risks. <i>Abhay B. Fulke, National Institute of Oceanography, India</i>
17:40-17:55	Invited Lecture (Web)	Effects of climate variability on pelagic fishery production in the Indian Ocean. <i>Jonson Lumban-Gaol, Institut Pertanian Bogor (IPB) University, Indonesia</i>
17:55-18:00	Closing Remarks	<i>Satoshi Ishikawa, Tokai University</i>

Time (JST)	DAY 2: Nov. 27, 2021 (Saturday)	
8:30 9:15	Registration: (Beach Hotel Gosea's Lobby)	
9:15 9:30	Convener's opening remarks: Swapnil Ghodke & Santosh Gothwal	
9:30 10:50	Session 1- Plenary ROOM A (Marine Science Museum Auditorium) <i>Session Chair: Swadhin Behera & Sunil Kaul</i>	
9:30 9:50	The state of climate and its future projection in IPCC AR6 (WG1) Prabir K. Patra, JAMSTEC (in person)	
9:50 10:10	Design of Microstructures in Metallic Materials for High Performance and Reliability Alok Singh, NIMS (in person)	
10:10 10:30	Optimum Preparation Methods of Poly(vinyl alcohol) Gels with Excellent Swelling and Mechanical Properties Atsushi Suzuki, Yokohama National University (in person)	
10:30 10:50	Smart Windows for Energy Savings and Emerging Technologies utilizing Vanadium Dioxide Films with Insulator-Metal Transition Kunio Okimura, Tokai University (in person)	
10:50 11:00	Break	
	Session 2	
11:00 12:15	Session 2A	Session 2B
	ROOM A (Marine Science Museum Auditorium) <i>Session Chair : Rumpa Pal & Usha Dixit</i>	ROOM B (Beach Hotel Gosea's Lobby) <i>Session Chair: Santosh Gothwal</i>
11:00 11:15	Living cell manipulation and analysis using nanoneedle Chikashi Nakamura, AIST (In person)	Why is REM sleep important? Deependra Kumar, University of Tsukuba (web)
11:15 11:30	Definitions of reality and the role of scientists in science and technology for a sustainable world: Emphasis on Japan activities and influence of the United States Darius C. Greenidge, Shizuoka University (In person)	Protective Effects of Ashwagandha Extracts on Palmitate Acid-Induced Lipid Accumulation and Oxidative Stress in Hepatocytes Dongyang Li, AIST (web)
11:30 11:45	Selective Separation of Medically Indispensable Isotope Gases through Nanopores Sanjeev Kumar, Shinshu University (In person)	Ashwagandha Withanolides Enhance Muscle Cell Differentiation Jia Wang, AIST (web)
11:45 12:00	π -hole Bonding in a New Co-crystal Hydrate of Gallic Acid and Pyrazine: Static and Dynamic Charge Density Analysis Rumpa Pal, University of Tsukuba (In person)	Cancer Targeted Delivery of Withaferin A Using a Nanostructured Covalent Organic Framework Yu Yue, AIST (web)
12:00 12:15	Therapeutic Taping Technique (Hatanaka Style) Catherine E Shukla, Shukla Hatanaka medical taping center (In person)	CRISPR-based Genome Editing Tools for Basic and Applied Biological Research Rahul Shelake, Gyeongsang National University, Korea (web)
12:15 13:15	Lunch Break (Beach Hotel Gosea's Lobby) and Poster Session (Marine Science Museum Auditorium)	
12:15 13:15	Poster session: <ol style="list-style-type: none"> Two Snailfishes of the Genus Osteodiscus (Scorpaeniformes: Liparidae) from Japanese Waters, Kenta Murasaki, Tokai University How can we maintain the "Richness" of agriculture? Focus upon the Utilization and protection of heirloom crops in Shizuoka, Kuniko Hanamori, Tokai University Covid-19 impact on Collaboration between University Students and Local Community, Hiyori Nagano, Tokai university Evaluation of the carotenoid contents heirloom sweet potato 'ninjin-imo', Setsuko Maeda, Shizuoka Professional University of Agriculture Remote sensing in coastal water monitoring: Applications in the Suruga Bay and the coastal waters along the east coast of Japan, Kedarnath Mahapatra, Tokai university 	

Session 3 - Young Researchers		
13:15-14:05	Session 3A	Session 3B
	ROOM A (Marine Science Museum Auditorium) <i>Session Chair: Manjiri Kulkarni</i>	ROOM B (Beach Hotel Gosea's Lobby) <i>Session Chair: Abhay B Fulke</i>
13:15 13:20	Cell Surface Engineering with Functional Peptides to Improve Therapeutic Effect for Stroke Treatment Isha Goel, The University of Tokyo (web)	microRNA-708 Regulates CARF (a stress regulatory protein) Differentially in Telomerase Positive and Negative Human Cancer Cells He Huifu, AIST (web)
13:20-13:25	How can we maintain the "Richness" of agriculture? Focus upon the Utilization and protection of heirloom crops in Shizuoka Kuniko Hanamori, Tokai University (web)	Antistress and Antiaging Activities in Lipoic Acid: Experimental Evidence Ashish Kaul, DAILAB, AIST (web)
13:25 13:30	Covid-19 impact on Collaboration between University Students and Local Community Hiyori Nagano, Tokai university (web)	Anti-Stress Activities in the Hypoxia-Inducing Phytochemical Tectorigenin Mallika Khurana, DAILAB, AIST (web)
13:30 13:35	Evaluation of the carotenoid contents heirloom sweet potato 'ninjin-imo' MAEDA Setsuko, Shizuoka Professional University of Agriculture (web)	MortaparibPlus - A Novel Multimodal Anticancer Small Molecule Anissa Nofita Sari, DAILAB, AIST (web)
13:35 13:40	Mortaparibmild: A Novel Anticancer Agent with p53-dependent and -independent Mechanism Hazna Noor Meidinna, DAILAB, AIST (web)	Cell-based Screenings for Anti-stress Natural Compounds: Selection of Ashwagandha Withanolides and Their Molecular Mechanisms Huayue Zhang, University of Tsukuba (web)
13:40 13:45	Isolation and Characterization of 3-Chlorobenzoate (3-CB) Degrading Bacteria from Soils in Shizuoka Ifat Ara, Shizuoka University (web)	Use of sequencing batch reactor for simultaneous carbon, nitrogen and phosphorus removal from domestic wastewater by alternatng cyclic times Vinod Kumar Jangam, IIT BHU, India (web)
13:45 13:50	Stress Buffering and Longevity Effects of AE in Caenorhabditis elegans (C. elegans) Somuah-Asante, Sandra, University of Tsukuba (web)	Geospatial assessment of expanding solar farms for electrification of India Hitesh Supe, Hokkaido University (web)
13:50 13:55	Developing a Low-Cost Open-Source based UAV System for Mapping of Plantations Land Use in Sabah, Malaysian Borneo. Stanley Anak Suab, Hokkaido University (web)	Machine learning based approach for assessment of typhoon induced forest damage in case of Hokkaido Xinyu Chen, Hokkaido University (web)
13:55 14:00	Isolation and Identification of Indigenous Chromium Tolerant Bacteria from a Heavy Metal Polluted Urban Creek, India Aashna Monga, National Institute of Oceanography (NIO), India (web)	Capturing and transmission of drug resistance gene by conjugative plasmids Singh Shweta, Shizuoka University (web)
14:00 14:05		Study of Geo-morphological changes in Chambal Ravine of India using TanDEM-X SAR and machine learning model Raveena Raj, Hokkaido University (web)
14:05 14:15	Break	

Session 4		
14:15-14:30	Session 4A	Session 4B
	ROOM A (Marine Science Museum Auditorium) <i>Session Chairs :Saurabh Singh & Swapnil Ghodke</i>	ROOM B (Beach Hotel Gosea's Lobby) <i>Session Chair: Santosh Gothwal</i>
14:15-14:30	Various programs for graduate study and collaborative research at NIMS Seiji Kuroda, Global Networking Division, NIMS (web)	Long lead predictions of ENSO using convolutional neural networks Kalpesh Ravindra Patil, JAMSTEC (web)
14:30-14:45	Strategic Interfacial Design for Advanced Secondary Batteries Noriyoshi Matsumi, JAIST (web)	Synthesis, Characterization and Molecular Docking Study of Isoxazolines Swarnagowri Nayak, Manipal Institute of Technology, India (web)
14:45-15:00	Design of ideal active sites on the ZrO ₂ surface in the anode layer to improve SOFC performance Shigeharu ITO, NIMS (web)	Molecular Mechanism of Apical Hook Development in Arabidopsis thaliana Pawan Kumar Jewariya, Beijing Forestry University, China (web)
15:00-15:15	Emerging Materials for Mitigating the Environmental Threats Rajendra P Bunkar, Defense R & D Establishment (DRDE), India (web)	On elucidation of structure-function relationship of human proteins upon binding with sulfa drugs Jhimli Bhattacharyaa, NIT Nagaland (web)
15:15-15:30	Opportunities and challenges in the search of highly efficient thermoelectric materials Sudhir Kumar Pandey, IIT Mandi, India (web)	Development of Novel DNA Aptamer-based Analytical Tools to Detect Toxic Insecticides from Plants Ulhas S. Kadam, Gyeongsang National University, Republic of South Korea (web)
17:30-17:45	Design and Development of Mechanically Robust p-Type Thermoelectric Device Using Flexible Ag ₂ (S,Se) Material Saurabh Singh, Toyota Technological Institute (web)	CRISPR/Cas9-mediated Genome Engineering of Tomato for Pathogen Resistance Trait: A Case Study Dibyajyoti Pramanik, Gyeongsang National University (web)
15:45-16:00	Break	

Session 5		
16:00-17:30	Session 5A	Session 5B
	ROOM A (Marine Science Museum Auditorium) <i>Session Chairs :Saurabh Singh & Swapnil Ghodke</i>	ROOM B (Beach Hotel Gosea's Lobby) <i>Session Chair : Rumpa Pal & Manjiri Kulkarni</i>
16:00-16:15	Cell surface engineering with heparin-conjugated lipids for regulating blood activation in transplantation Yuji Teramura, AIST (In person)	Response Surface Based Model Updating of Heritage Multiple Arch Gallery Masonry Bridge Vinay Shimpi, National Institute of Technology Puduchery, India (web)
16:15-16:30	Subsurface mapping using ground penetrating radars (GPR) Elvis Anup Shukla, Ehime University, Imeiyu GK (In person)	Application of High-Performance Computing to Fire Safety Assessment of Reinforced Concrete Structures Mahendra Kumar Pal, IIT BHU, India (web)
16:30-16:45	Highly respirable SWCNT based stretchable sensor for skin CO ₂ gas monitoring Preety Ahuja, Shinshu University (In person)	Nanoparticle Functionalized with Biomolecular Machines PK Hashim, Hokkaido University (web)

Session 5 Continued.....

16:45 17:00	Detection and evaluation of specific single cell by using "magcup" Hyonchol Kim, DAILAB, AIST (In person)	Numerical and Experimental Investigation of Slow-Drift Damping for a Single-Point Moored Floating Offshore Wind Turbine Sharath Srinivasamurthy, Saga University (web)
17:00 17:15	Marine small-scale fisheries in Cambodia Leakhena Chin, Tokai University (Web)	Experiments and Numerical Analysis on Wave Energy Converter using Ocean Breaking Waves Paresh Halder, Saga University (web)
17:15 17:30	Assessment of marine litter and microplastics (MPs) quantification along the Indian coast Pravakar Mishra, National Centre for Coastal Research, India (web)	Accurate classification of breast cancer cells from normal mammary epithelial cells by machine learning assisted Raman microspectroscopy Hemanth Noothalapati, Shimane University (web)
17:30 17:40	Sperm allocation strategies in Japanese pygmy squid Ryohei Tanabe, Tokai University (In person)	
17:40 18:00	Closing Ceremony and Award Session	