

**Interdisciplinary Science & Technology for
Safety and Quality of Life
9th Annual ISAJ Symposium
December 7th, 2018 (Friday)**

Time	PROGRAM	
8:00-9:00	Registration of participants	
9:00-9:45	Inaugural Session	
9:00	Welcome Address	Sunil Kaul, Chairman, ISAJ
9:10	Inaugural Address	Dr. Katsunori Matsuoka AIST Vice-President Director General, Department of Life Science & Biotechnology
9:20	Special Address	Mr. Raj Kumar Srivastava Chargé d'affaires a.i. Embassy of India, Tokyo
9:35	Vote of Thanks	Alok Singh, Vice Chairman, ISAJ
9:45-10:15	PHOTO SESSION & COFFEE BREAK	
10:15-11:55	Session – I Chair: Dr. Renu Wadhwa, AIST	
10:15	Nobutaka Mitsuda National Institute of Advanced Industrial Science & Technology, Japan	Plant transcription factors --- Tool for crop improvement and beyond
10:35	Manish Biyani Japan Advanced Institute of Science & Technology, Japan	DEPSOR based biosensors and analytical platform for the SDGs
10:55	Kazuhiro Kimura National Institute for Materials Science, Japan	Activity of NIMS creep data sheet project
11:15	Santosh K. Gothwal Kyoto University, Japan	Regulation of class switch recombination by bromodomain protein Brd2
11:35	Shinichi Hasako Taiho Pharmaceuticals Co., Ltd., Japan	Drug development for lung cancer
11:55-13:00	LUNCH & POSTER SESSION Chairs: Dr. Yoshiaki Onishi, AIST; Dr. Manish Biyani, JAIST; Dr. Nazmul Ahsan, University of Tokyo	
13:00-14:10	Session – II, Students Session Chairs: Dr. Caroline T. Cheung, AIST Ms. Vidhi Malik, Indian Institute of Technology (IIT) Delhi	
13:00	Shreya Thusoo Tokyo Institute of Technology, Japan	Numerical study on steel-encased concrete section of earthquake resistant piles
13:10	Alok Kumar Kyoto University, Japan	Mechanistic analysis of unresponsiveness to the PD-1 blockade therapy
13:20	Priyanka National Brain Research Centre, India	HIV-mediated neurotoxicity in human astrocytes is modulated by stress chaperone mortalin/mthsp70
13:30	Nehpreet Kaur Walia University of Tokyo, Japan	Slow-mode shock observations in the Earth's dayside magnetopause

13:40	Yusuke Hashimoto Japan Advanced Institute of Science & Technology, Japan	Simple detection of amyloid-beta oligomers using peptide aptamer and DEPSOR based hybrid biosensor for Alzheimer's disease
13:50	Sneha University of Tokyo, Japan	Understanding multiplicity of urban governance and planning regulations for a metropolitan region with focus on land and private development – case study NCR – Delhi, India
14:00	Vidhi Malik Indian Institute of Technology (IIT) Delhi, India	Bioinformatics and experimental insights into the anti-metastatic activity of withaferin-A and its derivative 2,3-dihydro-3 β -methoxy withaferin-A
14:10-15:50	Session – III Chair: Dr. Alok Singh, NIMS	
14:10	Parmanand Sharma Tohoku University, Japan	Creation of rare earth free meteoritic magnet
14:30	Ryouji Kurita National Institute of Advanced Industrial Science & Technology, Japan	Microfluidic disease marker determination by surface plasmon resonance technique
14:50	Steven Phillips National Institute of Advanced Industrial Science & Technology, Japan	Category theory for cognition
15:10	Ayako Yachie SBX Corporation, Japan	Towards predictive biology and beyond
15:30	Subramani Thiyagu National Institute for Materials Science, Japan	Effect of silicon nanocrystalline quantum dot on its energy transfer effect and applications for hybrid solar cells
15:50 - 16:00	COFFEE BREAK	
16:00-18:00	Session – IV Chair: Dr. Mahesh Kaushik, University of Tsukuba	
16:00	Nazmul Ahsan University of Tokyo, Japan	Next generation solar cell technology
16:20	Motomichi Doi National Institute of Advanced Industrial Science & Technology, Japan	Bioimaging-based screening for the factors concerning neuronal functions and diseases
16:40	Mahesh K. Kaushik University of Tsukuba, Japan	Sleep need and its relation to neurological disorders
17:00	Santosh Gaonkar Manipal Academy of Higher Education, India	One pot green synthesis of angiotensin II receptor antagonist drug losartan
17:20	Daisuke Kageyama National Agriculture and Food Research Organization (NARO), Japan	Selfish microbes that manipulate reproductive system of insects: basic and applied research on <i>Wolbachia</i>
17:40	Mahendra Kumar Pal National Research Institute for Earth Science and Disaster Resilience (NIED), Japan	E-Simulator: A high-performance simulation tool for seismic analysis and resilience assessment
18:00-18:30	CLOSING SESSION AND POSTER AWARDS	

List of poster presentations

No.	Name of presenter	University/Institute	Presentation Title
P1	Sajal Afzal	University of Tsukuba, Japan	Cucurbitacin B & Withanone (CucWi-N) for cancer treatment – merits and mechanism
P2	Lokesh Agrawal	University of Tsukuba, Japan	Role of serotonin 5-HT4 receptor in dendrite and axon formation of mice hippocampus neurons <i>in vitro</i>
P3	Zubin Atre	AtréYoga Studio, India	The biomechanics of yoga and its application to sports science
P4	Dudekula Althaf Basha	National Institute for Materials Science, Japan	<i>In-situ</i> straining studies of crack propagation behavior in pure Mg and Mg-0.3 at.%Y alloy in transmission electron microscope
P5	Rahul Bhardwaj	Japan Advanced Institute of Science & Technology, Japan	Single cell transcriptomics analysis with positional information using silicon chip
P6	Priyanshu Bhargava	National Institute of Advanced Industrial Science & Technology, Japan	A small molecule modulator of hypoxia: identification and therapeutic potency
P7	Gopakumar Changarathil	University of Tsukuba, Japan	Wild-type and SAMP8 mice show age-dependent changes in distinct stem cell compartments of the interfollicular epidermis
P8	Caroline TY Cheung	National Institute of Advanced Industrial Science & Technology, Japan	Differential expression and activities of microRNA-708 in human cancer cells with and without telomerase
P9	Nusaiba Madappuram Cheruthu	University of Tokyo, Japan	Development of ratiometric carbohydrate sensor based on boron dipyrromethene (BODIPY) scaffold
P10	Ashu Choudhary	National Institute for Materials Science, Japan	Revisiting grignard reagent based electrolytes in magnesium-ion battery: a first-principles study
P11	Paulino Cristovao	National Institute of Advanced Industrial Science & Technology, Japan	Designing loss-of-function that generates latent space for image in-betweening “interpolation”
P12	Nancy David	National Institute for Materials Science, Japan	Double layer surface modification of magnesium AZ31 alloy using ceramic oxide composite for orthopedic application
P13	Behnam Derakhshani	University of Zanjan, Iran	Comparative transcriptome analysis of two contrasting genotypes of barley reveals the gene networks involved in signal transduction
P14	Ambika Dudhate	University of Tokyo, Japan	Comparative metabolite profiling of pearl millet for drought and salinity stress response
P15	Ahmed Elwakeel	University of Tsukuba, Japan	Cytotoxicity of fucoxanthin for a variety of cancer cells - molecular insights
P16	Kenta Goto	National Institute for Materials Science, Japan	Inverse estimation of stress-strain curve from load-displacement curve and indentation mark of single indentation
P17	He Huifu	University of Tsukuba, Japan	Quantitative and qualitative cell viability (QCV) assay for evaluation of the short and long-term cytotoxicity of drugs
P18	Xin Ji	National Institute for Materials Science, Japan	Twinning behavior of orthorhombic- α

			martensite in a Ti-7.5Mo alloy
P19	Rajkumar S. Kalra	National Institute of Advanced Industrial Science & Technology, Japan	Clinical relevance of CARF in malignant and metastatic cancers: impact of beta Catenin activity
P20	Dai Kato	National Institute of Advanced Industrial Science & Technology, Japan	Design of nanocarbon film-based electrodes for biomolecular detection
P21	Ashish Kaul	University of Tsukuba, Japan	Molecular insights to the anticancer potential of honey bee propolis (green) extract
P22	Manpreet Kaur	National Institute for Materials Science, Japan	All-ceramic solar-driven water purifier based on anodized aluminum oxide and plasmonic titanium nitride
P23	Naoshi Kojima	National Institute of Advanced Industrial Science & Technology, Japan	Immobilization of genomic DNA with bifunctional linker molecules for 5-methylcytosine immunoassay
P24	Ling Li	National Institute of Advanced Industrial Science & Technology, Japan	Ashwagandha leaf extract Possesses anti-survivin activities
P25	Subrata Maji	National Institute for Materials Science, Japan	Macaroni fullerene crystals: novel nanocarbon materials for energy storage application
P26	Madhu Malini	Kyoto University, Japan	Combination immunotherapy using synthetic genetic switches
P27	Vaibhav P. Mehta	Yokohama National University, Japan	Estimating the dynamic stiffness and flexibility of laterally loaded pile foundation of seismically isolated cable-stayed bridge
P28	Murugan Muralidharan	National Institute for Materials Science, Japan	Iron sulphide nanoclusters biomineralized by the sulphate reducing bacteria enhanced synergetic anodic current generation with the Iron reducing bacteria
P29	S. Pavan Kumar Naik	National Institute of Advanced Industrial Science & Technology, Japan	Infiltration growth processing of bulk $YBa_2Cu_3O_{7-x}/REBa_2Cu_3O_{7-x}$ superconductors: Nano metal oxides and rare earth elements effects on crystal growth and physical properties
P30	Divya Naradasu	University of Tokyo, Japan	Low pH induced extracellular electron transfer by an oral pathogen
P31	Jingmin Nie	University of Tsukuba, Japan	Effects of N_2 -nanosoluble water on anaerobic co-digestion of waste activated sludge & lignin
P32	Lalhaba Oinam	University of Tsukuba, Japan	Differential surface protein modifications during epidermal stem cell aging
P33	Amr Omar	National Institute of Advanced Industrial Science & Technology, Japan	Anticancer activity of soyasapogenol – potency and molecular mechanism
P34	Himankshi Rathore	Japan Advanced Institute of Science & Technology, Japan	Bio sensing of Leishmaniosis using FTA card as direct sampling tool for recombinase polymerase amplification
P35	Pathik Sahoo	National Institute for Materials Science, Japan	A time crystal aspect on slow release of sex pheromone from supramolecular container to control the pest in green way
P36	Ryuichi Saito	National Institute of Advanced Industrial Science & Technology, Japan	The novel F-box protein regulates a

			quick avoidance behavior to a pathogenic bacterium <i>P. aeruginosa</i> in <i>C. elegans</i>
P37	Anissa Nofita Sari	University of Tsukuba, Japan	Withaferin A and CAPE are potential inhibitors of PARP-1 and DNA repair
P38	Mengjiao Tan	University of Tsukuba, Japan	Short chain fatty acids production from blast furnace gas under anaerobic conditions: Effect of additional H ₂ , pH and inoculum pretreatment
P39	Shunsuke Tomita	National Institute of Advanced Industrial Science & Technology, Japan	Optical fingerprint-based sensing of proteins using an environmentally-responsive fluorescent polymer
P40	Tatsunosuke Tomita	National Institute of Advanced Industrial Science & Technology, Japan	Cell-based real-time reporter gene assay for circadian rhythm monitoring and its application
P41	Jia Wang	University of Tsukuba, Japan	Folic acid receptor-targeting of alcoholic extract of Ashwagandha leaves enhances its cancer cell selectivity
P42	Liu Xuan	National Institute for Materials Science, Japan	<i>In situ</i> heating TEM observations on the carbide formation in twinned martensite
P43	Sushma Yadav	National Institute for Materials Science, Japan	All-atom first-principles molecular dynamics study for ion selectivity across biological ion channel
P44	Hao K. Shen	University of Tokyo, Japan	1D Coassembly of chaperonin GroEL and streptavidin: potential application on drug delivery and biosensor