

March 23 (Mon)

9:50 – Opening **Keisuke Tominaga**

10:00 – 10:40 **Hiroaki Minamide** (RIKEN)

Nonlinear Up-Conversion Detection of Terahertz Waves toward Quantum-Level THz Photonics

10:40 – 11:10 **Elmer S. Estacio** (University of the Philippines Diliman)

Summarizing the Terahertz Photonics, and Optoelectronics Research at the University of the Philippines under the auspices of the Asian Research Network for Terahertz Molecular Science (2023 Core-to-Core programs of the Japan Society for the Promotion of Science)

Short Break

11:15 – 11:45 **Pham Hong Minh** (Institute of Physics, Vietnam Academy of Science and Technology)

Amplification of a modeless ultrabroadband ultraviolet laser for high resolution laser spectroscopy

11:45 – 12:15 **Mega Novita** (Universitas PGRI Semarang)

From Spectra to Structure to Data: A Machine Learning Perspective on Molecular in Terahertz Molecular Science

Lunch and poster

13:20 – 13:50 **Alvin Karlo G. Tapia** (University of the Philippines Los Banos)

Insights into Structure–Property Relationships in the Terahertz Spectra of Polymeric Systems

13:50 – 14:20 **Keisuke Tominaga** (Kobe University)

THz Molecular Science of Condensed Matter

14:20 – 14:40 **Kippeji Shoji** (Shizuoka University)

Anisotropic Thermal Expansion and Vibrational Dynamics of galactitol

14:40 – 15:00 **Jaruporn Rakmai** (Kasetsart University)

Fourier Transform Infrared-Based Chemometric Models for Determination of Caffeine in Encapsulated Caffeine Powder

Break

15:15 – 15:45 **Masahiko Tani** (University of Fukui)

High-precision measurement of complex dielectric constant of low-loss polymers in the millimetre wave region

15:45 – 16:15 **Susumu Okubo** (Kobe University)

Terahertz ESR Studies of Triangular Cupola Antiferromagnet SrCu(OH)₃Cl

16:15 – 16:45 **Yuya Ishikawa** (University of Fukui)

Diabolo type micro resonator properties for Electron Spin Resonance

Break

16:55 – 17:25 **Lou Serafin M. Lozada** (University of the Philippines Los Banos)

Broadband Dielectric Relaxation of Soft Matter and Solvents

17:25 – 17:45 **Mary Clare Escaño** (University of Fukui)

Spin-injection at spintronic THz FM/NM heterostructures investigated by SDFIT with multichannel Landauer approach

17:45 – 18:05 **Yeonju Park** (Kangwon National University)

Application of THz Spectroscopy and 2D Correlation Analysis to Structural Transitions in Polymers and Organic Oligomers

18:05 - **dinner and information exchange**

March 24 (Tue)

9:30 – 10:00 **Amalendu Chandra** (Indian Institute of Technology Kanpur)

Linear and Nonlinear Terahertz Spectral Calculations of Bulk Aqueous Solutions and Liquid-Vapor Interfaces

10:00 – 10:30 **Hideaki Shirota** (Chiba University)

Intermolecular Vibrations of A Deep Eutectic Solvent Reline Probed by Femtosecond Raman-Induced Kerr Effect Spectroscopy

10:30 – 10:50 **Miezel L. Talara** (Tokushima University)

Photonic Stabilization of Resonant Tunneling Diode Terahertz Oscillators through Microcomb Referencing

Break

11:05 – 11:35 **Vu Dinh Lam** (Graduate University of Science and Technology, Vietnam Academy of Science and Technology)

Metamaterial-enhanced non-dispersive infrared gas sensors for high-technology farming

11:35 – 12:05 **Harumi Sato** (Kobe University)

Study on polymer structure and properties using low-frequency vibration spectroscopy and imaging

Lunch and Poster

13:20 – 13:50 **Arnel Salvador** (University of the Philippines Diliman)

MBE growth and characterization of InGaAs-based heterostructures for 1000 nm and 1550 nm wavelength excitation

13:50 – 14:20 **Masafumi Fukunari** (University of Fukui)

Comparison of CST PIC Simulations with Self-Consistent Modeling and Experimental Results for Gyrotron FU CW GVII

14:20 – 14:50 **Feng Zhang** (Xinjiang Technical Institute of Physics and Chemistry, Chinese Academy of Sciences)

Terahertz Evidence of Fluorine bridge in a Fluorooxoborate Framework

14:50-15:20 **Michitoshi Hayashi** (National Taiwan University)

Lattice-Modulated Anharmonic Coupling in Hybrid Perovskites: First-Principles Insights into Terahertz Lattice–Molecular Mode Interactions

Break

15:35 – 16:05 **Tetsuo Sasaki** (Shizuoka University)

Pharmaceutical Co-crystallization under Vapor Pressure Control

16:05 – 16:35 **Akihiro Furube** (Tokushima University)

Plasmon-Enhanced Interfacial Charge Transfer and Photocatalytic Hydrogen Evolution in Ag Nanowire/MoS₂ Hybrid Photocatalysts

16:35 – 17:05 **Dian Marlina** (Universitas Setia Budi)

Understanding Molecular Interactions in Bioactive Materials through Low-Frequency Vibrational Spectroscopy: Insights from Phycocyanin

17:05 – 17:35 **Kaoru Ohta** (Kobe University)

Probing the Effect of Phonons in Charge Transport Characteristics of All-Inorganic and Hybrid Perovskite Nanocrystals

17:35 – 17:45 Closing **Keisuke Tominaga**

Posters

P1 Sunee Jungtheerapanich (Kasetsart University)

Near-Infrared Spectroscopy and Chemometric Methods for the Determination of Caffeine in Encapsulated Powder

P2 Alexander De Los Reyes (RIKEN)

Towards sub-terahertz-wave phase-shift interferometry using a narrow-linewidth tunable backward terahertz-wave parametric oscillator

P3 Arvin Lester Cornejo Jusi (University of Fukui)

Plastic Identification using Terahertz Time-Domain Coherent Raman Spectroscopy

P4 Maharoo Koyakkat (Chiba University)

Influence of Anion on the Intermolecular Vibrational Dynamics of Lithium Salt-Acetamide Based Deep Eutectic Solvents

P5 Genne Patt O. Samar (University of the Philippines Los Banos)

Investigation of the Interaction Between a Citric Acid-Choline Chloride Deep Eutectic Solvent and Bamboo Biomass