

PROGRAMME

International Symposium on Data Science (DSWS-2023)

- Building an Open Data Collaborative Network in the Asia-Oceania Area

14 December 2023

Science Council of Japan, Tokyo (hybrid type conference)

(Blue Colour; Online Presentations)

(Time; JST = UTC+9h)

Thursday 14 December 2023

Session 3: Lessons learned from COVID-19 data (10:00-12:00 JST)

Conveners: * Tomoya Baba, Tadahiko Maeda, Mari Minowa, Elaine Faustman

10:00–12:00 (Chairs: Tomoya Baba, Tadahiko Maeda)

- *Reviewing COVID-19 Management in Practice by a comparative study of India, Taiwan, USA and Japan through the Perspective of TQM and Preparing for Future pandemics*
Kazuyuki Suzuki (University of Electro-Communications, Japan) (20'; S3.1)
- *Towards a global and integrated wastewater surveillance system: a review of historical and latest activities*
Noriko Endo (Kyoto University, Japan) (20'; S3.2)
- *Wastewater Surveillance Data: Tracking Imported SARS-CoV-2 Variants*
Jatuwat Sangsanont (Chulalongkorn University, Thailand) (20; S3.3)
- *Harnessing Advanced Data Science and Machine Learning in Smart Wastewater-Based Epidemiology*
Guangming Jiang (University of Wollongong, Australia) (20'; S3.4)
- *Airborne surveillance of bioaerosol in built environment for future pandemic preparedness: Beyond COVID-19*
Irvan Luhung (Nanyang Technological University, Singapore) (20'; S3.5)
- *Issues of Digital Sequence Information (DSI) emerged from the COVID-19 pandemic*
Masanori Arita (DNA Data Bank of Japan, National Institute of Genetics, Japan) (20'; S3.6)

12:00–12:15 **Lightning Talks 2 (Poster Sessions)**

12:15–14:00 **Lunch Time**

13:00–14:00 **Core Time 2 (Poster Sessions)**

Poster Sessions

Abstracts will be included in the conference “Programme and Abstracts” online booklet.

Thursday 14 December 2023

Lightning Talks 2; 12:00-12:15 JST (@Zoom)

Core time 2; 13:00-14:00 JST (@Spatial Chat)

(Chairs: Elaine Faustman, Mari Minowa)

- *Genomic Surveillance of SARS-CoV-2 based on comparison among Japanese cities*
Takashi Abe (Niigata University, Japan) (S3-P.2)
- *Unsupervised AI analysis of oligonucleotide usage in a wide range of variants of SARS-CoV-2*
Toshimichi Ikemura (Nagahama Institute of Bio-Science and Technology, Japan) (S3-P.3)
- *Host cell-dependent genomic changes in SARS-CoV-2*
Yuki Iwasaki (Nagahama Institute of Bio-Science and Technology, Japan) (S3-P.4)
- *SARS-CoV-2 HaploGraph: visualization of SARS-CoV-2 haplotypes spread in Japan*
So Nakagawa (Tokai University, Japan) (S3-P.5)
- *Urban Microbiome Monitoring in Japan: Collaborative Research with MetaSUB Consortium*
Haruo Suzuki (Keio University, Japan) (S3-P.6)
- *Comparison of microbial diversity and resistant determinants in the built environment in Japan using shotgun metagenomic sequencing*
Dewa A.P. Rasmika Dewi (International University of Health and Welfare, Japan) (S3-P.7)
- *Evaluation of rRNA depletion methods for capturing the RNA virome from environmental surface*
Yuh Shiwa (Tokyo University of Agriculture, Japan) (S3-P.8)
- *Wastewater-Based Epidemiology for Efficient SARS-CoV-2 Surveillance in Three Japanese Cities*
Ryo Honda (Kanazawa University, Japan) (S3-P.9)
- *Implementation of wastewater-based epidemiology for viral infectious diseases in Japan*
Masaaki Kitajima (Hokkaido University, Japan) (S3-P.10)
- *Investigation of experimental procedures for detecting SARS-CoV-2 from airborne low-density RNA samples*
Jun Uetake (Hokkaido University, Japan) (S3-P.11)
- *Educational Activities for Young Researchers in Kyusyu University's MAGDAS Project*
Shuji Abe (Polar Environment Data Science Center,
Joint Support-Center for Data Science Research (DS), ROIS;
International Research Center for Space and Planetary Environmental Science,
Kyushu University) (S5-P.1)

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Session 4: Recent developments in data science (14:00-15:30 JST)

Conveners: *Asanobu Kitamoto, Kassim S. Mwitondi

14:00–15:30 (Chairs: Asanobu Kitamoto, Kassim S. Mwitondi)

- *A Recursive Method for Identifying Glacial Landforms in Hillshaded Areas Using Digital Elevation Data and CNN Models*
Kassim S. Mwitondi (Sheffield Hallam University) (15'; S4.1)

- *Synergies of Satellite Datasets, Modeling and Data Analytic Approaches in Pollutant Retrieval*
Hugo Wai Leung MAK (The Chinese University of Hong Kong;
The Hong Kong University of Science and Technology) (15'; S4.2)
- *NSSDC's Data Governance Practices for AI for Space Science*
Zou Ziming (National Space Science Center, Chinese Academy of Sciences) (15'; S4.3)
- *OpenCSDB: Enabling Knowledge-Driven Scientific Data Linking and Integration*
Han Fang (Computer Network Information Center, Chinese Academy of Sciences) (15'; S4.4)
- *A Robust Data-Driven Method for Quantifying Methane Emission from Cattle*
Tebogo Sebake (African Earth Observation Network, Nelson Mandela University) (15'; S4.5)

Discussion (15')

15:30–16:00 **Break**

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Session 5: Involvement of early career researchers and scientists (16:00-17:30 JST)

Conveners: *Shuji Abe, Akira Kadokura, Masahito Nose, Toshihiro Ashino, Susumu Goto, Takashi Watanabe, Maja Dolinar

16:00–17:30 (Chairs: Shuji Abe, Susumu Goto, Masahito Nose)

- *Empowering the Future of Data Science: Introducing the Activities of the WDS-ECR Network*
Maja Dolinar (Slovenian Social Science Data Archives, Faculty of Social Sciences, University of Ljubljana; Co-Chair of the World Data System ECR Network) (15'; S5.1)
- *CODATA Connect Early Career and Alumni initiative*
Shaily Gandhi (CEPT Research and Development Foundation, India) (15'; S5.2)
- *When Graduates Increase, So Must Faculty Members: Project for Training Experts in Statistical Sciences*
Yoshinori Kawasaki (The Institute of Statistical Mathematics) (15'; S5.3)
- *Introduction of Data Science Activities for Young Researchers in IUGONET*
Shun Imajo (Data Analysis Center for Geomagnetism and Space Magnetism,
Graduate School of Science, Kyoto University) (15'; S5.4)
- *Navigating the Research Data Management Compliance Maze as an Indonesian Early-Career Researcher: Unravelling Policies Across Borders*
Madiareni Sulaiman (National Research and Innovation Agency, Indonesia;
University College London) (15'; S5.5)
- *DAEPO Projects of National Astronomical Data Center (NADC) in China*
Shanshan Li (National Astronomical Observatories, Chinese Academy of Sciences) (15'; S5.6)