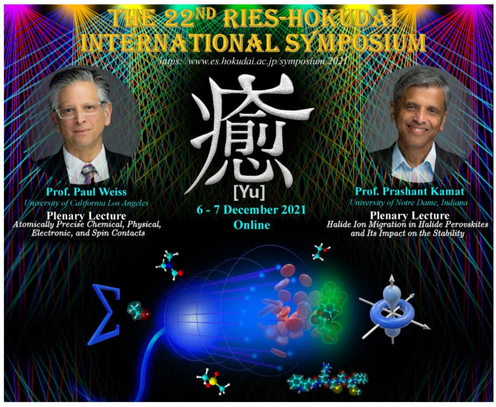

Best Poster Award

P014 Minori Ishihara
(Graduate School of Information Science and Technology, Hokkaido University)

Symposium Chair Poster Award

P029 Mukkatt Indulekha
(CSIR - National Institute for Interdisciplinary Science and Technology)

Poster Award

P023 Zhijing Zhang
(Graduate School of Environmental Science, Hokkaido University)

P070 Hanjun Zhao
(Graduate School of Environmental Science, Hokkaido University)

P095 Takuya Chiba
(Graduate School of Life Science, Hokkaido University)

P105 Sota Takahashi
(Department of Science, Hokkaido University)

Invited

Prof. Challapalli Subrahmanyam

Indian Institute of Technology Hyderabad

"Nanostructures with Novel Configurations for Photoelectrochemical Water Splitting"

Invited

Associate Prof. Elliot Ginder

Meiji University

"Active Interfaces and Why They Matter"

Invited

Prof. Hiromichi Ohta

Hokkaido University

"Thermoelectric Energy Conversion using Metal Oxide Thin Films"

Invited

Prof. Jin Cheng

Fudan University

"Theory and Algorithms of Extracting Information from Big Data"

Invited

Prof. Mamoru Hashimoto

Hokkaido University

"Coherent Raman Endoscopy for Label-Free Imaging During Surgery"

Invited

Prof. Martin Vacha

Tokyo Institute of Technology

"Single Molecule Spectroscopy in Physics and Chemistry of Materials: From Conjugated Polymers and Perovskite Nanocrystals to Photosynthetic Systems"

Invited

Prof. Masaaki Murakami

IGS, Hokkaido University

"Gateway Reflex, a Molecular Mechanism How to Establish Gateways for Autoreactive CD4+ T Cells in Blood Barriers"

Invited

Prof. Shi-Wei Chu

National Taiwan University

"High-Speed Volumetric Imaging to Unravel Brain Functions"

Invited

Prof. Shuhei Furukawa

Kyoto University

"Porous Soft Materials Based on Metal-Organic Cages"

Invited

Associate Prof. Sohei Tasaki

Hokkaido University

"Morphologies of Bacillus Subtilis Communities Responding to Environmental Variation"

Invited

Prof. Yasushi Yagi

ISIR, Osaka University

"Computer Vision in Medical Applications"

Date	December 6th –7th, 2021
Organized by	Research Institute for Electronic Science (RIES), Hokkaido University
Registration	Deadline: Participants with poster presentations: October 18 Participants without poster presentation: December 3
Registration fee	Free
Abstract submission	Abstract submission:Abstract submission is closed
Contact (E-mail)	ask2021_es@ml.hokudai.ac.jp
Symposium poster	

Joint with the 6th International Symposium of Dynamic Alliance for Open Innovation Bridging Human, Environment and Materials(Five-Star Alliance)

Five-Star Alliance

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Preface

Program

Preface

On behalf of the organizing committee of the 22nd RIES-HOKUDAI International Symposium, I am pleased to invite and welcome you to this multidisciplinary symposium from 6 to 7 December 2021. Your participation, presentation, and discussion are inevitable for the success of the symposium.

Research Institute for Electronic Science (RIES) began its voyage as “Research Institute of Ultrashort Waves” in 1943 and is now aiming to develop new interdisciplinary fields by conducting diverse research and education programs, including optical science, material science, life science, and mathematics. To this aim, we nurture several interdisciplinary and cross-disciplinary programs, one of which is the RIES-HOKUDAI International Symposium.

We have been organizing the RIES-HOKUDAI International Symposium annually in December since 1999. It is our tradition to select a Chinese character (Kanji) for the symposium. The Kanji for the 2021 Symposium is ‘癒’ (Yu), meaning ‘recovery’ or ‘healing’. Until 2019, we organized the symposiums on campus, in a convention center, or a hotel in Sapporo. Although we have been making arrangements to conduct the 22nd RIES-HOKUDAI International Symposium in a hotel in Sapporo, the latest updates about the Covid-19 pandemic direct us to go on a virtual platform. I hope this online symposium on 癒 will help us move to an onsite platform in the coming years.

Like in the previous symposiums, we are happy to support as many participants as possible by offering free-of-charge registration and presentation. Considering the current situation, I request you to join the online symposium, present your research, and actively participate in discussions.

I am looking forward to welcoming you to the symposium.

On behalf of the symposium organizing committee
Vasudevan P. Biju
Chairman, the 22nd RIES-HOKUDAI International Symposium
Professor, Research Institute for Electronic Science
Hokkaido University

Program of the 22nd RIES-Hokudai International Symposium '癒' [Yu]

6 – 7 December 2021

Online

December 6th(Japan Standard Time)

9:00 – 9:05 Opening Remarks	9:00-9:05 Kuniharu Ijiro, Director of RIES	Join
9:05 – 9:10 Conference Remarks	9:05-9:10 Vasudevan P. Biju, Chairman of the 22ndRIES International Symposium	Join
9:10-10:50 Session 1 Invited Lectures Chairman: Yuta Takano	9:10-9:40 Invited Lecture 1 Yasushi Yagi, Osaka University "Computer Vision in Medical Applications"	Join
	9:40-10:10 Invited Lecture 2 Shuhei Furukawa, Kyoto University "Porous Soft Materials Based on Metal-Organic Cages"	Join
	10:10-10:50 Invited Lecture 3 Shi-Wei Chu, National Taiwan University "High-Speed Volumetric Imaging to Unravel Brain Functions"	Join
10:50 – 11:00 Short Break		
11:00 – 12:00 Session 2 Plenary Lecture 1 Chairman: Vasudevan P. Biju	11:00-12:00 Paul Weiss, University of California Los Angeles "Atomically Precise Chemical, Physical, Electronic, and Spin Contacts"	Join
12:00 – 13:00 Lunch Break		
13:00 – 14:40 Session 3 Poster Session Chairman: Hideharu Mikami	13:00-13:50 Poster session 1 (odd number)	Join (To be opened from 6th/Dec JST)
	13:50-14:40 Poster session 2 (even number)	Join (To be opened from 6th/Dec JST)
14:40-16:10 Session 4 Invited Lectures Chairman: Tamiki Komatsuzaki	14:40-15:00 Invited Lecture 4 Hiromichi Ohta, Hokkaido University "Thermoelectric Energy Conversion using Metal Oxide Thin Films"	Join
	15:00-15:40 Invited Lecture 5 Jin Cheng, Fudan University "Theory and Algorithms of Extracting Information from Big Data"	Join
	15:40-16:10 Invited Lecture 6 Elliott Ginder, Meiji University "Active Interfaces and Why They Matter"	Join
16:10 – 16:20 Short Break		
16:20-17:00 Session 5 Invited Lectures Chairman: Atsushi Shibukawa	16:20-16:40 Invited Lecture 7 Masaaki Murakami, Hokkaido University "Gateway Reflex, a Molecular Mechanism How to Establish Gateways for Autoreactive CD4+ T Cells in Blood Barriers"	Join
	16:40-17:00 Invited Lecture 8 Sohei Tasaki, Hokkaido University "Morphologies of *Bacillus Subtilis* Communities Responding to Environmental Variation"	Join

December 7th(Japan Standard Time)

9:00-9:50 Session 6 Invited Lectures Chairman: Kenji Hirai	9:00-9:20 Invited Lecture 9 Mamoru Hashimoto, Hokkaido University "Coherent Raman Endoscopy for Label-Free Imaging During Surgery"	Join
	9:20-9:50 Invited Lecture 10 Martin Vacha, Tokyo Institute of Technology ""Single Molecule Spectroscopy in Physics and Chemistry of Materials: From Conjugated Polymers and Perovskite Nanocrystals to Photosynthetic Systems"	Join
9:50 – 10:00 Short Break		
10:00 – 11:00 Plenary Lecture 2 Chairman: Hiroaki Misawa	10:00-11:00 Prashant Kamat, University of Notre Dame "Halide Ion Migration in Halide Perovskites and Its Impact on the Stability"	Join
11:00-11:40 Session 7 Invited Lecture Chairman: Hiroaki Misawa	11:00-11:40 Invited Lecture 11 Challapalli Subrahmanyam, IIT Hyderabad "Nanostructures with Novel Configurations for Photoelectrochemical Water Splitting"	Join
11:40 – 12:00 Poster Award Ceremony and Closing Remarks		Join

Best Poster Award

P014 Minori Ishihara
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P095 Takuya Chiba
(Graduate School of Life Science, Hokkaido University)

P105 Sota Takahashi
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