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Preface

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Organizing Committee

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Keynote Speaker

Onsite

Prof. Takashi Matsuoka [Speaker's information](#)

New Industry Creation Hatchery Center, Tohoku University

Dr. Yoon G. Kim

Prof. Takashi Matsuoka Speaker's information

New Industry Creation Hatchery Center, Tohoku University

Photonics and Optical Science



Speaker's information

Spacecraft Engineering Department, Naval Research Laboratory



Prof. Shigeki Takeuchi Speaker's information

Department of Electronic Science and Engineering, Kyoto University



Associate Prof. Akihiro Suzuki [Speaker's information](#)

Research Institute for Electronic Science, Hokkaido University

Dr. Henning Helmers [Speaker's information](#)

Department "III-V Photovoltaics and Concentrator Technology", Fraunhofer Institute



Prof. Hikaru Kobayashi [Speaker's information](#)

The Institute of Scientific and Industrial Research, Osaka University



Associate Prof. Michihiko Yamanouchi [Speaker's information](#)

Graduate School of Information Science and Technology, Hokkaido University

Associate Prof. Tsung-Ren Huang [Speaker's information](#)

Department of Psychology, National Taiwan University



Prof. Kaoru Tamada Speaker's information

Institute for Materials Chemistry and Engineering, Kyushu University



Associate Prof. Ryota Uehara [Speaker's information](#)

Faculty of Advanced Life Science, Hokkaido University

Prof. Sheng-Fu Liang **Speaker's information**

Institute of Medical Informatics, National Cheng Kung University



Associate Prof. Hiroshi Yabu [Speaker's information](#)

Institute of Multidisciplinary Research for Advanced Materials, Tohoku University

Assistant Prof. Yukinori Nishigami [Speaker's information](#)

Research Institute for Electronic Science, Hokkaido University

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The 23rd RIES-HOKUDAI International Symposium

拓
[Taku]

Preface

On behalf of the organizing committee of the 23rd RIES-HOKUDAI International Symposium, I am honored to invite and welcome you to this multidisciplinary, as well as interdisciplinary, symposium from 5 to 6 December 2022. Your participation, presentation, and discussion are indispensable for the success of the Symposium. Research Institute for Electronic Science (RIES), enjoying the 30th anniversary this year, had started its voyage as “Research Institute of Ultrashort Waves” in 1943 (this fiscal year is its 80th anniversary, also). RIES is now aiming to develop new interdisciplinary fields by conducting diverse research and education programs, including optical science, materials science, life science, and mathematical science. To promote the multidisciplinary and cross-disciplinary programs, we organize the RIES-HOKUDAI International Symposium every year.

Thus, the RIES-HOKUDAI International Symposium has been held annually in December since 1999. It is our tradition to select a Chinese character (Kanji) for, in a sense, unifying the multidisciplinary Symposium. The Kanji selected for the 2022 Symposium is “拓” (Taku), meaning ‘open up frontiers’ or ‘cultivate a new land’.

Due to Covid-19 outbreak, last two symposiums were held online, but this year we are holding the 23rd RIES-HOKUDAI International Symposium as a hybrid symposium so that we can enjoy the face-to-face Q&A’s as well as on-line discussions worldwide. I hope this hybrid Symposium on “拓” will help us know the state-of-the-art technologies and current research frontiers.

We are pleased to support as many participants as possible by offering free-of-charge registrations and participations. I would like you to join the hybrid Symposium, present your R&D outcomes, and actively participate in Q&A’s and discussions. I am looking forward to having you all in the Symposium.

On behalf of the Symposium organizing committee
The 23rd RIES-HOKUDAI International Symposium “拓”

Akira Ishibashi
Chairman, the 23rd RIES-HOKUDAI International Symposium
Professor, Research Institute for Electronic Science
Hokkaido University

Joint with the 7th International Symposium of [Crossover Alliance to Create the Future with People, Intelligence and Materials](#)(Five-Star Alliance)



The 23rd RIES-HOKUDAI International Symposium 	
Program December 5th (Japan Standard Time)	
Hybrid meeting 09:20 – 09:25 Onsite Opening talk Kuniharu Ijro, Director of RIES 09:25 – 09:30 Onsite Intorductory talk Akira Ishibashi, Chairman of the 23rd RIES International Symposium	
Session 1 Photonics and Optical Science Chairman:Atsushi Shibukawa 09:30 – 10:05 Online Chris DePuma, Naval Research Laboratory "Optical Wireless Power Transmission (tentative)" 10:05 – 10:35 Onsite Shigeki Takeuchi, Kyoto University "Quantum science and technology using entangled photons" 10:35 – 11:00 Onsite Akihiro Suzuki, Hokkaido University "Focused coherent X-rays open up new opportunities in microscopy"	
11:00 – 11:20 Break	
Session 2 Mathematical Science Chairman:Toshiyuki Nakagaki 11:20 – 11:55 Onsite Sheng-Fu Liang, National Cheng Kung University "Artificial Intelligence of Things and Compact Clean Unit System Platform for Improving Quality of Life" 11:55 – 12:25 Onsite (canceled) Hiroshi Yabu, Tohoku University "Experimental and Theoretical Approaches for Understanding Phase Separation of Polymers under 3D Confinement" 11:55 – 12:20 12:25 – 12:50 Onsite Yukinori Nishigami, Hokkaido University "Behavior of the ciliate <i>Tetrahymena</i> in response to the extracellular environment."	
12:50 – 14:00→12:20 – 14:00 Lunch	
Poster Session Zoom Meeting using Breakout Rooms. Chairman:Toshiyuki Nakagaki 14:00 – 15:00 Online Poster session (odd number posters) 15:00 – 16:00 Online Poster session (even number posters)	
Session 3 Material and Molecular Sciences Chairman:Hideyuki Mitomo 16:30 – 17:05 Online Henning Helmers, Fraunhofer Institute "Pushing the Boundaries of Photovoltaic Light to Electricity Conversion with III-V Based Photonic Power Converters" 17:05 – 17:35 Online Hikaru Kobayashi, Osaka University "Challenge to pharmaceutical application of the semiconductor" 17:35 – 18:00 Online Michihiko Yamanouchi "Observation of topological Hall torque in the ferromagnetic oxide SrRuO₃"	
December 6th (Japan Standard Time)	
Plenary Lecture Chairman:Akira Ishibashi 09:00 – 10:00 Onsite Takashi Matsuoka, Tohoku University "Progress of Compound Semiconductors for the Last Half Century —from GaAs to GaN,and from Epitaxial Growth to Devices—"	
10:00 – 10:10 Break	
Session 4 Biology and Life Sciences Chairman:Hideharu Mikami 10:10 – 10:45 Online Tsung-Ren Huang, National Taiwan University "Person-identifying brainprints are stably embedded in EEG/MEG mindprints" 10:45 – 11:15 Onsite Kaoru Tamada, Kyushu University "High Spatiotemporal Resolution Live Cell Imaging on a Plasmonic Metasurface" 11:15 – 11:40 Onsite Ryota Uehara, Hokkaido University "Centrosome homeostasis as a critical determinant of ploidy dynamics in animals"	
Hybrid meeting 11:40 – 12:00 Online Poster Award Ceremony 12:00 – 12:05 Onsite Closing Remark	
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The 23rd RIES-HOKUDAI International Symposium



Poster Session

No.	Posters (*Student Poster Award Candidates)
P01*	Photoinduced Electron Transfer from Isolated MAPbBr ₃ Nanocrystals and Their Self-Assembled Films to C ₆₀ -based Ligands <u>Akter Rumana</u> , Bhagyashree Mahesha Sachit, Palyam Subramanyam, Yuta Takano, Vasudevanpillai Biju
P02	Engineering Phenylazothiazole (PAT)-Based Photoswitches for Biological Applications Ammathnadu S. Amrutha, Nobuyuki Tamaoki
P03*	Room Temperature Insulator-to-Metal Transition of Strained VO ₂ /TiO ₂ Multilayered Films <u>Binjie Chen</u> , Hiromichi Ohta
P04*	Sleep Quality Associated with Academic Performance in College Students: an Actigraph Research <u>Chen-Ta Lin</u> , Fu-Zen Shaw, Sheng-Fu Liang
P05*	Roles of Additives and Solvent in the Formation of Homogeneous MAPbBr ₃ Microcrystals <u>Dong Zhang</u> , Okamoto Takuya, Vasudevanpillai Biju
P06	Investigation of nano-prodrugs intracellular dynamics toward highly efficient anticancer drug delivery systems <u>Farsai Taemaitree</u> , Beatrice Fortuni, Yoshitaka Koseki, Eduard Fron, Susana Rocha, Johan Hofkens, Hiroshi Uji-i Tomoko Inose, Hitoshi Kasai
P07	A novel platform of the neurofeedback training of alpha activity in rats <u>Fu-Zen Shaw</u> , Wen-Hsiu Yeh, Sheng-Fu Liang
P08*	π-Extended Porphyrin-based Photosensitizers for Singlet Oxygen Generation <u>Hanjun Zhao</u> , Yuta Takano, Yukiko Miyatake, Vasudevanpillai Biju
P09*	Origin of High-Mobility in Transparent Oxide Semiconductor Thin Film Transistors toward Super High-Definition Displays <u>Hui Yang</u> , Yuqiao Zhang, Yasutaka Matsuo, Yusaku Magari, Hiromichi Ohta
P10*	Length-controlled silver nanowire TERS probe <u>Jiangtao Li</u> , Han Wen, Tomoko Inose, Kenji Hirai, Farsai Taemaitree, Hiroshi Uji-i
P11*	Photoinduced Electron Transfer from FAPbI ₃ PNCs to Cyano Benzoquinones <u>Kangjian Xu</u> , Palyam Subramanyam, Vasudevanpillai Biju
P12*	Exploration of the controllability of the atomic structure of thin film SiO ₂ using crystal surfaces <u>Katelyn A. Kirchner</u> , Melbert Jeem, Sohei Ogasawara, Hiromichi Ohta, Akihiro Suzuki, Tsukasa Katayama, Shinji Kohara, Tomoyuki Koganezawa, Rosantha Kumara, Masaya Fujioka, Junji Nishi, Yasutaka Matsuo, Madoka Ono
P13*	A Study of Elliptical Skyrmions <u>Kazuto Takahashi</u> , Takahiko Naruse, Kenji Kondo
P14*	Cooperative molecular motion and dielectric response in crystals composed of branched-chain alkylammonium/Dibenzo [18] crown-6 <u>Kazuya Kanamaru</u> , Kiyonori Takahashi, Rui- kang Huang, Chen Xue, Takayoshi Nakamura
P15*	Near-Infrared Light Absorbing Dye Molecules for Photothermal Cancer Therapy <u>Kazuya, Yoshida</u> ; Yuta, Takano; Vasudevan Pillai, Biju
P16*	Large magnetocapacitance beyond 420% in epitaxial Fe/MgAl ₂ O ₄ /Fe magnetic tunnel junctions <u>Kenta Sato</u> , Hiroaki Sukegawa, Kentaro Ogata, Gang Xiao Hideo Kaiju
P17*	Crystal Size-Dependent Photoluminescence of Methylammonium Lead Bromide Perovskite <u>Lei Duan</u> , Takuya Okamoto, Vasudevanpillai Biju
P18	Numerical simulations and mathematical consideration for reproducing the cylinder structure of hair follicles <u>Makoto Okumura</u> , Yasuaki Kobayashi, Masaharu Nagayama, Hironobu Fujiwara, Yusuke Yasugahira, Kota Ohno
P19*	Crystal Structure and Negative thermal expansion of [Ni(dmit) ₂] Salts with 2,2'-Oxybis(ethylaminium)- [18] crown-6 Supramolecular cation <u>Masato Haneda</u> , Kiyonori Takahashi, Naohiro Hasuo1, Ruikang Huang, Chen Xue, Takayoshi Nakamura
P20*	Na Extraction from NaAlB ₁₄ by Anisotropic Ion Diffusion <u>Mihiro Hoshino</u> , Suguru Iwasaki, Haruhiko Morito, Masaya Kumagai, Yukari Katsura, Madoka Ono, Junji Nishii, Masaya Fujioka
P21*	Low Voltage Operation of Solid-State Thermal Transistors <u>Mitsuki Yoshimura</u> , Qian Yang, Zhiping Bian, Hai Jun Cho, Hiromichi Ohta
P22*	Observation of spin signal in molecular nanojunctions utilizing magnetic thin-film edges at room temperature <u>Mizuki Matsuzaka</u> , Yuma Sasaki, Kyohei Hayashi, Takahiro Misawa, Takashi Komine, Tomoyuki Akutagawa, Masaya Fujioka, Junji Nishii, Hideo Kaiju
P23*	Controlling Excitonic Recombination in Halide Perovskite Assemblies using Polymer Microenvironment <u>Most Farida Khatun</u> , Takuya Okamoto, Vasudevan Pillai Biju
P24	Chaperonin GroEL can hydrolyse Ortho-Nitrophenyl-β-galactoside <u>Padinhare, K Hashim</u>
P25	Electric Field Thermopower Modulation Analyses of Operation Mechanism of InGaO ₃ (ZnO) _m Thin Film Transistors <u>Prashant Ghediya</u> , Hui Yang, Takashi Fujimoto, Yuqiao Zhang, Yasutaka Matsuo, Yusaku Magari, Hiromichi Ohta
P26*	Photoinduced Electron Transfer from FAPbI ₃ PNCs to Chloro Benzoquinones <u>Qiankun Wang</u> , Palyam Subramanyam, Vasudevanpillai Biju
P27	Morphologies of <i>Bacillus subtilis</i> communities responding to environmental variation Sohei Tasaki, <u>Madoka Nakayama</u> , Izumi Takagi, Wataru Shoji
P28*	Switching behavior in narrow environments, in <i>Stentor coeruleus</i> <u>Syun Echigoya</u> , Katsuhiko Sato, Osamu Kishida, Toshiyuki Nakagaki, Yukinori Nishigami
P29*	Application of Antiferromagnetic Skyrmions for Logic Gates <u>Takahiko Naruse</u> , Kenji Kondo
P30*	Fabrication of Tunable Gold Nanoprism Array with Thermo- responsive Hydrogel for a Sensitive Plasmonic Sensor <u>Tianxu Gao</u> , Hideyuki Mitomo, Yusuke Yonamine, Kuniharu Ijiro
P31	Identification of Critical Elements for Forehand Stroke Through Wearable Devices and Video Recordings <u>Tsung-Hao Hsieh</u> , Shian-Liang Huang, Fu- Zen Shaw, Sheng-Fu Liang
P32*	Cylindrical-waveguide-based two-Dimensional PhotoRecepto- Conversion Scheme (2DPRCS) for Solar Cells <u>Wu Dan</u> , Yubo Wang, Xingbai Hong, Wu He, Akira Ishibashi
P33*	Flow-rate dependence of cleanliness in a new clean unit system platform (CUSP), CAQLEA <u>Wu He</u> , Shengfu Liang, Wu Dan, Ziling Zhou Akira Ishibashi
P34	Autonomous oscillations of chemically driven elastic sheets <u>Yasuaki Kobayashi</u> , Yoshiyuki Kageyama
P35*	Modification of an Algal Cell with Long DNA chains elongated by DNA Polymerases Aiming for a Functionalized Cell <u>Yingqi Mu</u> , Yusuke Yonamine, Hideyuki Mitomo, Kuniharu Ijiro
P36	Parameter estimation for the compartmental model of systemic circulation describing the Glucose, Insulin and C-peptide dynamics <u>Yueyuan Gao</u> , Hiroshi Suito, Hayato Chiba, Masaharu Nagayama, Hideki Katagiri
P37*	Analysis of angular momentum conversion with plasmonic multimer nanoantennas <u>Yuji Sunaba</u> , Keiji Sasaki
P38*	Development of a 3D real-time cell tracking and light irradiation system for all-optical neural circuit control <u>Yuki Yoneyama</u> , Atsushi Shibukawa, Hideharu Mikami
P39*	Bending dependence of magnetic properties in Ni and Ni ₇₈ Fe ₂₂ thin films on polycarbonate for flexible magnetic sensors <u>Yuri Ohashi</u> , Yu Matsushima, Hideo Kaiju
P40*	Ion conductivity of highly proton injected alumino-silico phosphate glasses <u>Yuya Yamada</u> , Masaya Fujioka, Madoka Ono, Junji Nishii
P41*	Thermal Conductivity Modulation in SrCoO _y – SrFeO _y Solid Solution by Electrochemical Redox Reaction <u>Zhiping Bian</u> , Qian Yang, Mitsuki Yoshimura, Joonhyuk Lee, Hyoungjeen Jeen, Jinghuang Lin, Bin Feng, Yuichi Ikuhara, Hai Jun Cho, Hiromichi Ohta
P42*	Emergent magneto-inductance effect in Ni ₇₈ Fe ₂₂ thin films on glass substrates <u>Zijing Zhang</u> , Yu Matsushima, Yuri Ohashi, Mizuki Matsuzaka, Kyohei Hayashi, Hideo Kaiju
P43*	Metabolism study of bunashimeji using clean unit system platform (CUSP) <u>Ziling Zhou</u> , Sheng-fu Liang, Xiaohan Wang, Dan Wu, He Wu, Akira Ishibashi
P44*	Mechanism of GNR orientation changes on DNA brushes depending on NaCl concentration <u>Yuka Hasegawa</u> , Hideyuki Mitomo, Yu Sekizawa, Yusuke Yonamine , Kuniharu Ijiro
P45	A novel platform of the neurofeedback training of alpha activity in rats <u>Fu-Zen Shaw</u> , Wen-Hsiu Yeh, Sheng-Fu Liang
P46	<i>In vitro</i> synthesis and edition of kinesin biomolecular motors <u>Daisuke Inoue</u> , Keisuke Ohashi, Taichi Takasuka, Akira Kakugo
P47*	Creation of Silicon Vacancy Centers in Detonation Nanodiamonds by High Temperature Annealing <u>Konosuke Shimazaki</u> , Hiroki Kawaguchi, Hideaki Takashima, Takuya Fabian Segawa, Frederick T.-K. So, Daiki Terada, Shinobu Onoda, Takeshi Ohshima, Masahiro Shirakawa, Shigeki Takeuchi
P48*	Single crystal growth of A _{1/3} CoO ₂ (A = Ba, Sr) thermoelectric oxides via topotactic ion exchange of Na in Na _{3/4} CoO ₂ single crystals <u>Kungwan Kang</u> , Hiromichi Ohta, Hyoungjeen Jeen

Application Requirements

Holding format

Zoom Meeting using Breakout Rooms

Presentation material format

Power point

Total number of posters

100(max)

Presentation abstract template

Use "2022_RIES-Hokudai_Abstract_Template.docx" on the [Download site](#)

Submission e-mail address

ask_2022@m1.hokudai.ac.jp
Subject:Abstract
Abstract file name: "SURNAME_Given name.doc" [Example] "HOKUDAI_Taro.doc"

Deadline

October 24, 2022 (Mon.)

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Announcement For Attendees



English



Japanese

Abstract Book



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You will be asked "UserID" and "Password", so enter them as follows.

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Password	<i>(Attendees will be notified.)</i>

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Announcement For Attendees

■ ON-LINE POSTER SESSION (Monday 5th Dec., 2:00 ~ 4:00 p.m. JST)

POSTER SESSION will be held in **online ZOOM**. A **BREAKOUT ROOM** of ZOOM application, entitled by the poster presentation number and presenter's name (please find the number and name in the list of poster presentation), is prepared for each POSTER presentation. Poster presenters show your poster in the assigned BREAKOUT ROOM and wait for a visitor. Audience can visit a BREAKOUT ROOM you like from time to time.

Schedule of POSTER SESSION is divided into two parts:

2:00 ~ 3:00 p.m. JST for ODD numbers of poster presentation

3:00 ~ 4:00 p.m. JST for EVEN numbers of poster presentation

We recommend the poster presenters to give a **brief explanation** (e.g. 5 min or so) at the **initial sage** of presentation for visitors. More interactions between presenters and visitors may be expected. As we don't specify the format of poster, please present your poster in any format.

Voting for POSTER AWARD

POSTER PRESENTATION AWARDEES will be selected by participants. You, not only **teachers** but also **students**, can select **two excellent POSTER presentations**. Please notice that you **should NOT** vote for a POSTER presentation that is submitted from **the same laboratory** as you belong. We hope that you enjoy scientific interactions with more participants through this POSTER SESSION and vote for POSTER AWARD. Your voting will be done in the **google form** offered in the symposium, and should be finished **before 6:30 p.m. JST on Monday 5th Dec.**

■ For onsite participants:

On day 1 (Dec. 5th) afternoon, the Symposium is held **completely online**. Thus, the onsite participants, also, are to attend the sessions online using **individual terminals/PCs**.

Internet environment

- ✧ If you are from Hokkaido University, please participate online from your laboratory room.
- ✧ For those who are not from Hokkaido University, we will prepare a few units at the venue (Suzuki Akira Hall) and also at RIES Bldg., so please ask at the reception on the day.
- ✧ Onsite invited speakers are scheduled to participate online from RIES Bldg., so please ask at the reception desk as well.

Preparation of terminals such as laptops (including cameras and headsets)

- ✧ A wired connection is recommended. If you are planning to give a poster presentation, please participate with a wired connection as much as possible.
- ✧ If you are using a portable device, please check if there is an opening for the LAN cable. In the case of wireless, please inquire at the reception on the day.

■ For invited speakers

Those who participate online

are to make presentation using the Zoom Meeting.

Those who participate onsite

are to make presentation with the following procedure.

- ✧ HDMI connection is required for video sharing.
- ✧ LAN connection is not required (as you will not join the Zoom Meeting).
- ✧ The venue microphone is to be used for audio sharing.
- ✧ Prepared is a table for the next speaker.
- ✧ In case the video from the brought-in PC cannot be well displayed via the switcher, the presentation material should be copied via USB to the organizer's PC, with which the presentation is to be made.
- ✧ Especially if the video is embedded, it may not show well, so please send the presentation materials in advance.

参加者へのご案内

■ オンライン ポスターセッション（12月5日(月曜日) 午後 2:00～4:00）

ポスターセッションは、**オンライン ZOOM**で行います。ポスター発表ごとに、ポスター発表番号と発表者名（番号と発表者名はポスター発表一覧でご確認ください）を表題とした **BREAKOUT ROOM** が用意されます。ポスター発表者は、割り当てられたブレイクアウトルームにポスターを提示して、訪問者を待ちます。視聴者は、好きなブレイクアウトルームに随時アクセスできます。

POSTER SESSION のスケジュールは 2 つに分かれています。

午後 2:00～3:00 奇数ポスターの発表

午後 3:00～4:00 偶数ポスターの発表

ポスター発表者には、来場者を迎えた最初の段階で簡単な説明（例：5 分程度）を行うことをお勧めします。発表者と来場者の間のより多くの相互作用が期待されるからです。

ポスター賞の投票

ポスター発表賞は、参加者によって選ばれます。**先生だけでなく学生も、優れた POSTER 発表を 2 つ選ぶことができます。同じ研究室のポスター発表者には投票しないでください。**この POSTER SESSION を通じて、より多くの参加者と科学的な交流を楽しみ、POSTER AWARD への投票を考えていただければ幸いです。投票は、シンポジウム中に提供される **Google フォーム**で行い、**5 日（月曜日）午後 6:30 までに終了**して下さい。

■ 1 日目に会場参加される皆様へ

1 日目、12 月 5 日(月)の午後は**完全オンライン**になります。

会場参加者も個別端末からのオンライン参加となります。

ネット環境の確保について

☆北大の方は居室などから参加ください。

☆北大以外の方は、数台分ですが鈴木章ホールに用意いたしますので、当日、受付でお声掛けください。

☆招待講演者は電子研棟を予定しておりますので、同じく受付でお声掛けください。

ノート PC など端末の準備について（カメラ・ヘッドセットも含みます）

☆ネット接続は有線が推奨です。ポスター発表を予定されている方は、できるだけ有線接続でご参加ください。

☆持ち運び端末の場合は、LAN ケーブルの口があるかご確認ください。無線の場合は、当日受付でご相談ください。

■ 招待講演者の方へ

オンライン参加される方

Zoom Meeting でのご講演になります。

会場参加される方

☆映像共有には HDMI 接続が必要となります。

☆Zoom Meeting には入らないため LAN 接続は不要です。

☆音声共有には会場のマイクを使用します。

☆次のご講演者が準備するテーブルをご用意しております。

☆持ち込んだ PC の映像がスイッチャー経由で映らない場合は、USB でプレゼン資料を主催者側の端末にコピーして行います。

☆特に動画を埋め込んでいる場合は、上手く映らない可能性があるので、事前にプレゼン資料の送付をお願いします。

The 23rd RIES-Hokudai International Symposium

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5-6 December 2022
Sapporo, Japan



Prof. Takashi Matsuoka
New Industry Creation Hatchery Center
Tohoku University

PRAM co-leader Chris Depuma
Spacecraft Engineering Department
Naval Research Laboratory

Prof. Shigeki Takeuchi
Department of Electronic Science and Engineering
Kyoto University

Assoc. Prof. Tsung-Ren Huang
Department of Psychology
National Taiwan University

Assoc. Prof. Ryota Uehara
Faculty of Advanced Life Science
Hokkaido University

Prof. Sheng-Fu Liang
Institute of Medical Informatics
National Cheng Kung University

Prof. Hikaru Kobayashi
The Institute of Scientific and Industrial Research
Osaka University

Assoc. Prof. Hiroshi Yabu
Institute of Multidisciplinary Research for
Advanced Materials
Tohoku University

Asst. Prof. Yukinori Nishigami
Research Institute for Electronic Science
Hokkaido University

Dr. Henning Helmers
Department "III-V Photovoltaics and Concentrator Technology"
Fraunhofer Institute

Prof. Kaoru Tamada
Institute for Materials Chemistry and Engineering
Kyushu University

Assoc. Prof. Michihiko Yamanouchi
Graduate School of Information Science and Technology
Hokkaido University

Assoc. Prof. Akihiro Suzuki
Research Institute for Electronic Science
Hokkaido University

30th Anniversary of Foundation of Research Institute for Electronic Science



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National Cheng Kung University

Prof. Hikaru Kobayashi
The Institute of Scientific and Industrial Research
Osaka University

Assoc. Prof. Hiroshi Yabu
Institute of Multidisciplinary Research for
Advanced Materials
Tohoku University

Asst. Prof. Yukinori Nishigami
Research Institute for Electronic Science
Hokkaido University

Dr. Henning Helmers
Department "III-V Photovoltaics and Concentrator Technology"
Fraunhofer Institute

Prof. Kaoru Tamada
Institute for Materials Chemistry and Engineering
Kyushu University

Assoc. Prof. Michihiko Yamanouchi
Graduate School of Information Science and Technology
Hokkaido University

Assoc. Prof. Akihiro Suzuki
Research Institute for Electronic Science
Hokkaido University

30th Anniversary of Foundation of Research Institute for Electronic Science



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Zoom Meeting Registration Flow

Zoom Meeting pre-registration URL will be sent to your email address that you have used for Symposium registration in late November or in early December.



Access the Zoom Meeting pre-registration URL and register your name and email address you used in the Symposium registration form.



Once your Zoom Meeting registration is approved, you will be redirected to another site with a URL where you can participate. At the same time, the Zoom Meeting URL, ID, and Passcode will be sent to your registered email address.



You can participate by accessing the URL of the Zoom Meeting you received. It is also possible to participate using ID and Passcode.

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Announcement For Attendees

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ON-LINE POSTER SESSION (Monday 5th Dec., 2:00 – 4:00 p.m. JST)

POSTER SESSION will be held in **online ZOOM**. A **BREAKOUT ROOM of ZOOM** application, entitled by the poster presentation number and presenter’s name (please find the number and name in the list of poster presentation), is prepared for each POSTER presentation. Poster presenters show your poster in the assigned BREAKOUT ROOM and wait for a visitor. Audience can visit a BREAKOUT ROOM you like from time to time.

Schedule of POSTER SESSION is divided into two parts:

2:00 – 3:00 p.m. JST for ODD numbers of poster presentation
3:00 – 4:00 p.m. JST for EVEN numbers of poster presentation

We recommend the poster presenters to give a **brief explanation** (e.g. 5 min or so) at the **initial sage** of presentation for visitors. More interactions between presenters and visitors may be expected. As we don’t specify the format of poster, please present your poster in any format.

Voting for POSTER AWARD

POSTER PRESENTATION AWARDEEs will be selected by participants. You, not only **teachers** but also **students**, can select **two excellent POSTER presentations**. Please notice that you **should NOT** vote for a POSTER presentation that is submitted from **the same laboratory** as you belong. We hope that you enjoy scientific interactions with more participants through this POSTER SESSION and vote for POSTER AWARD. Your voting will be done in the **google form** offered in the symposium, and should be finished **before 6:30 p.m. JST on Monday 5th Dec.**

For onsite participants:

On day 1 (Dec. 5th) afternoon, the Symposium is held **completely online**. Thus, the onsite participants, also, are to attend the sessions online using **individual terminals/PCs**.

Internet environment

- If you are from Hokkaido University, please participate online from your laboratory room.
- For those who are not from Hokkaido University, we will prepare a few units at the venue (Suzuki Akira Hall) and also at RIES Bldg., so please ask at the reception on the day.
- Onsite invited speakers are scheduled to participate online from RIES Bldg., so please ask at the reception desk as well.

Preparation of terminals such as laptops (including cameras and headsets)

- A wired connection is recommended. If you are planning to give a poster presentation, please participate with a wired connection as much as possible.
- If you are using a portable device, please check if there is an opening for the LAN cable. In the case of wireless, please inquire at the reception on the day.

For invited speakers

Those who participate online

are to make presentation using the Zoom Meeting.

Those who participate onsite

are to make presentation with the following procedure.

- HDMI connection is required for video sharing.
- LAN connection is not required (as you will not join the Zoom Meeting).
- The venue microphone is to be used for audio sharing.
- Prepared is a table for the next speaker.
- In case the video from the brought-in PC cannot be well displayed via the switcher, the presentation material should be copied via USB to the organizer’s PC, with which the presentation is to be made.
- Especially if the video is embedded, it may not show well, so please send the presentation materials in advance.

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参加者へのご案内

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[Japanese](#)

オンライン ポスターセッション (12月5日(月曜日) 午後 2:00 – 4:00)

ポスターセッションは、**オンラインZOOM**で行います。ポスター発表ごとに、ポスター発表番号と発表者名（番号と発表者名はポスター発表一覧でご確認ください）を表題とした**BREAKOUT ROOM**が用意されます。ポスター発表者は、割り当てられたブレイクアウトルームにポスターを提示して、訪問者を待ちます。視聴者は、好きなブレイクアウトルームに随時アクセスできます。

POSTER SESSION のスケジュールは2つに分かれています。

午後 2:00 – 3:00 奇数ポスターの発表

午後 3:00 – 4:00 偶数ポスターの発表

ポスター発表者には、来場者を迎えた最初の段階で簡単な説明（例：5分程度）を行うことをお勧めします。発表者と来場者の間のより多くの相互作用が期待されるからです。

ポスター賞の投票

ポスター発表賞は、参加者によって選ばれます。**先生だけでなく学生も、優れたPOSTER発表を2つ選ぶことができます。同じ研究室のポスター発表者には投票しないでください。**この POSTER SESSION を通じて、より多くの参加者と科学的な交流を楽しみ、POSTER AWARD への投票を考えていただければ幸いです。投票は、シンポジウム中に提供される**Google フォーム**で行い、**5日（月曜日）午後 6:30までに終了**して下さい。

1日目に会場参加される皆様へ

1日目、**12月5日(月)の午後は完全オンライン**になります。**会場参加者も個別端末からのオンライン参加**となります。

ネット環境の確保について

- 北大の方は居室などから参加ください。
- 北大以外の方は、数台分ですが鈴木章ホールに用意いたしますので、当日、受付でお声掛けください。
- 招待講演者は電子研棟を予定しておりますので、同じく受付でお声掛けください。

ノートPCなど端末の準備について（カメラ・ヘッドセットも含みます）

- ネット接続は有線が推奨です。ポスター発表を予定されている方は、できるだけ有線接続でご参加ください。
- 持ち運び端末の場合は、LANケーブルの口があるかご確認ください。無線の場合は、当日受付でご相談ください。

招待講演者の方へ

オンライン参加される方

- Zoom Meetingでのご講演になります。

会場参加される方

- 映像共有にはHDMI接続が必要となります。
- Zoom Meetingには入らないためLAN接続は不要です。
- 音声共有には会場のマイクを使用します。
- 次のご講演者が準備するテーブルをご用意しております。
- 持ち込んだPCの映像がスイッチャー経由で映らない場合は、USBでプレゼン資料を主催者側の端末にコピーして行います。
- 特に動画を埋め込んでいる場合は、上手く映らない可能性があるので、事前にプレゼン資料の送付をお願いします。

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RIES

Research Institute for
Electronics and Interdisciplinary
Science

IMRAM

Interdisciplinary Materials
Research and Application
Materials

Chubu-RI

Chubu-RI Center for
Innovation in Materials
Research

ISIR

Interdisciplinary Science
Institute for Research

IMCE

Interdisciplinary Materials
Center for Excellence

Five-Star Alliance

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- ISHIBASHI Akira(Chair)
- MIKAMI Hideharu
- NAKAGAKI Toshiyuki
- AKERA Hiroshi(Faculty of Engineering)
- KONDO Kenji
- SHIBUKAWA Atsushi
- MITOMO Hideyuki
- NISHIGAMI Yukinori
- ISHIJIMA Ayumu
- IMAMURA Itsuko
- KOBAYASHI Kentaro
- HIRAI Naomi
- MORI Yuko
- ISHIDA Mami(Secretary)
- FUJIWARA Yumie(Secretary)
- SUZUKI Miku(Secretary)
- (SASAKI Ayano(Secretary))

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