

## News/Events 2023

**ITB-RIKEN Mini symposium on “Biomolecular Engineering for Functional Materials” was held at Institut Teknologi Bandung , Bandung, Indonesia on November 30 and December 1, 2023.**

December 13, 2023\_ Institut Teknologi Bandung is the first technical university in Indonesia that was established on March 2, 1959 in West Java, with a mission to serve science and technology to develop the nation .

During this mini symposium, RIKEN Singapore Director Dr Kawabe introduced RIKEN’s activity and collaboration in the Southeast Asia as well as RIKEN’s program for junior researchers. Prof Keiji Numata from Biomacromolecules Research Team, RIKEN Center for Sustainable Resource Science(CSRS) made a keynote speech on his research projects for new functional biomaterials. This was followed by research introduction presentations by nine researchers from RIKEN and ITB in the two-day symposium.

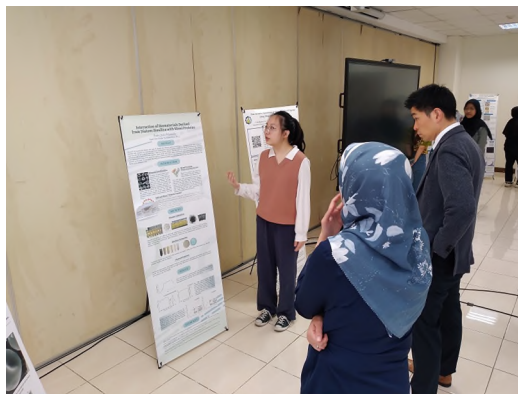
In the Student Session, ten ITB students gave poster presentations and participated in an active Q&A session.

In total, about 40 people attended the symposium (about 16 people also attended online). Many of them were students (whether PhD, Master, or Bachelor) who were interested in research life and opportunities abroad.

RIKEN Singapore Office, which promotes international cooperation in the Southeast region, will provide support for personnel exchange and research collaboration with ITB.



ITB-RIKEN Mini symposium at Institut Teknologi Bandung(ITB)



ITB students gave poster presentations and participated in an active Q&A session.

**A\*STAR – RIKEN Joint Workshop was held at Biopolis, Singapore on November 22, 2023, to promote interdisciplinary research collaborations.**

December 13, 2023\_ RIKEN and Agency for Science, Technology and Research (A\*STAR) has 18 years of fruitful collaboration history since MOU between the two institutions was signed in 2005. RIKEN Singapore Representative Office, RIKEN’s first overseas office, was opened at Biopolis, A\*STAR’s biomedical research hub, in 2006 and the MOU has been extended and included more research areas. The mutual partnership between two institutions has flourished over the years.

During this one-day joint workshop, 24 senior and junior researchers from both institutions discussed orally their technical presentations on four key topics: (1) AI for Social Outcomes, (2) Quantum Computing, (3) Translational Neuroscience and Immunology and (4) Chemistry for Sustainability. In addition, more than 30 junior researchers from both institutions displayed their research posters and exchanged their ideas with other participants actively.

The purpose of this joint workshop is to promote the expansion of the researchers' networks and discussions on research collaboration as well as communication among researchers in various fields and discover innovative strategies.

The workshop was successful and meaningful, with active interactions and discussions across disciplines among workshop participants, initiating many ideas and discussions for actual interdisciplinary research collaboration in the future.

About seventy researchers from both institutions participated in this workshop. RIKEN Singapore Office was a member of the organising committee of this workshop. We would like to thank all the participants and all the other committee members who make this workshop a success.



Gift exchange by Mr. Yoshiaki Takahashi, Minister of the Embassy of Japan in Singapore and Prof Ng Huck Hui, Assistant Chief Executive, Research and Talent Development, A\*STAR after their opening speeches



Active discussion at the poster presentation session, A\*STAR after their opening speeches



Group photo at A\*STAR – RIKEN Joint Workshop

## **RIKEN Alumni Meeting in Singapore was held at New RIKEN Singapore Representative Office**

April 18, 2023\_ The 14<sup>th</sup> RIKEN Alumni Meeting in Singapore was held at newly relocated RIKEN Singapore Representative Office on 10 April 2023. This meeting was hosted by Prof Makiko NAKA, RIKEN Executive Director in charge of International Relations, and organized by RIKEN Singapore Representative Office.

In the seminar session of the meeting, several research topics and key updates were presented by some Alumni members and RIKEN HQ staffs. Then all participants enjoyed free discussion in an open and friendly atmosphere. We look forward to the next get together opportunity!



The seminar session of the meeting



Group photo of the meeting participants

## **We have moved!**



April 7, 2023\_ RIKEN Singapore Representative Office has moved to the Proteos building from the Helios building at Biopolis.

Our new location is [here](#).

RIKEN Singapore Representative Office

61 Biopolis Drive, #02-02 Proteos, Singapore 138673

Tel:+65-6478-9940

## **8th USM-RIKEN Collaboration (URICAS) Symposium was held at Universiti Sains Malaysia (USM), Penang, Malaysia on March 7-8, 2023**

March 16, 2023

[USM-RIKEN Interdisciplinary Collaboration for Advanced Sciences \(URICAS\)](#) was established as a collaborative program by Universiti Sains Malaysia (USM) and RIKEN in February 2015 to undertake interdisciplinary research as well as to promote further exchange of young researchers. The fruitful collaboration between RIKEN and USM, which was started in 1993, is one of the successful models of the collaboration between RIKEN and the research institutions in the Southeast Asia.

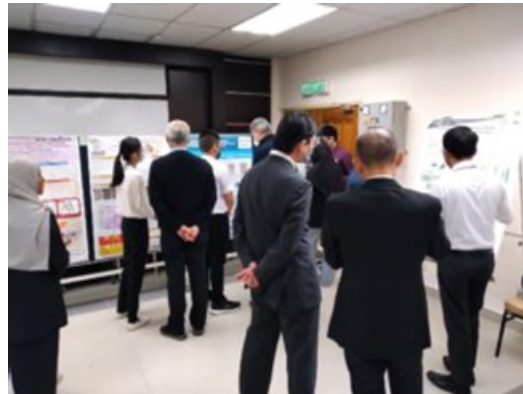


During this 2-day symposium, 14 researchers from RIKEN and USM presented their collaborative research works. In addition, RIKEN Singapore Director Dr Kawabe and other research support staffs from RIKEN introduced RIKEN's activity and collaboration in the Southeast Asia. There were also impressive presentations by 13 USM students in the conference. Through [RIKEN's International Program Associate \(IPA\)](#) program, RIKEN has hosted more than 50 USM PhD students over the past 20 years, and nurtured the talents under RIKEN scientists' guidance.

Through both research collaborations and exchange program of young researchers, the partnership between RIKEN and USM will continue to grow stronger and more flourishing.



The conference was held at Auditorium at Institute for Research in Molecular Medicine (INFORMM), USM.



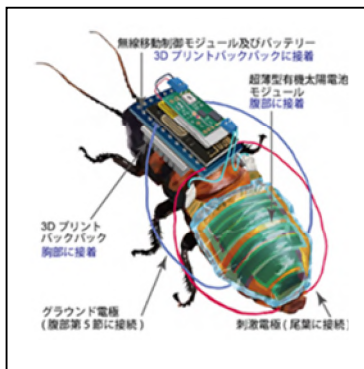
Active discussion between USM students and RIKEN researchers at the poster presentation session



Group photo of the conference participants

## News/Events 2022

**In research collaboration with NTU Singapore, RIKEN developed Robobug: a rechargeable, remote-controllable cyborg cockroach**



September 08, 2022\_In collaboration with Nanyang Technological University (NTU) in Singapore and Waseda University in Japan, RIKEN has developed a technology that allows thin, soft solar cells and electronic components to be placed on the backs of insects for recharging and wireless communication. This technology allows cyborg insects with sensors to detect people without worrying about running out of battery power, such as when searching for victims in inaccessible areas.

>>Read more

at [https://www.riken.jp/en/news\\_pubs/research\\_news/pr/2022/20220905\\_2/index.html](https://www.riken.jp/en/news_pubs/research_news/pr/2022/20220905_2/index.html)

>> RIKEN press release in Japanese: 再充電可能なサイボーグ昆虫

– 昆虫の基本動作を損なわない超薄型有機太陽電池の実装 –

[https://www.riken.jp/press/2022/20220905\\_2/index.html](https://www.riken.jp/press/2022/20220905_2/index.html)

>>Supplementary movies are provided in the article:

Integration of body-mounted ultrasoft organic solar cell on cyborg insects with intact mobility <https://www.nature.com/articles/s41528-022-00207-2>

### **Celebrating the mutual research collaborations between RIKEN and NTU**

RIKEN – NTU Neuroscience Workshop held in Singapore

September 08, 2022 \_ Celebrating the 10th anniversary of the mutual research collaboration agreement and showcasing of the research works by the members of the RIKEN – NTU Joint Research Centres, RIKEN – NTU Neuroscience Workshop was held by hybrid form at Nanyang Technological University (NTU) Lee Kong Chang School of Medicine (LKC Medicine) in Singapore on September 05, 2022. At the on-site workshop, which was co-organised by RIKEN and NTU LKC Medicine, having Mr Yoshiaki TAKAHASHI, Minister, Embassy of Japan in Singapore as a guest of honour, five RIKEN scientists presented their research works together with their research collaborators in Singapore. The workshop spanned a wide range of disciplines, not only in medicine and biology, but also in chemistry and engineering. At the end of the lively and successful workshop, the RIKEN – NTU Joint Research Centre co-Directors Prof Atsushi IRIKI from RIKEN and Prof Kah Leong LIM from NTU promised to further deepen their cooperation, both in terms of research and the exchange of young researchers between the two research institutions.



RIKEN – NTU Neuroscience Workshop onsite



Workshop participants group photo taken at the workshop venue at LKCMedicine

The two co-Directors of the RIKEN – NTU Joint Research Centre: (from the right in the front row in the photo) Prof Atsushi IRIKI, Head of Laboratory for Symbolic Cognitive Development, RIKEN Centre for Biosystems Dynamics Research, RIKENJapan, and Prof Kah Leong LIM, President’s Chair in Translational Neuroscience. Vice-Dean (Research).

### Fourier Intelligence visited RIKEN Singapore Office



(From left to right) Ms. Sarah LIM, Fourier Intelligence; Dr. Takashi KAWABE, Director, RIKEN Singapore; Mr. Jake KEE, Fourier Intelligence

May 30, 2022 \_ On April 21, 2022, Ms. Sarah LIM, Assistant Director, Support Services and Mr. Jake KEE, Assistant Director, Operations from Fourier Intelligence International visited RIKEN Singapore Office and discussed a potential collaboration with RIKEN with Dr. Takashi KAWABE, Director, RIKEN Singapore Office. Fourier Intelligence group focuses on rehabilitation robotics solutions, including upper and lower limb exoskeletons. With many joint research laboratories around the world, the group is building a network of engineers, researchers, and clinicians to chart the new frontier of innovative medical technologies.

### RIKEN joined SuperComputing Asia 2022 in Singapore

March 1-3, 2022 \_ From 1 March to 3 March 2022, RIKEN participated in the SuperComputing Asia 2022 (SCA2022) .The annual conference was held as a hybrid event at Suntec Singapore Convention and Exhibition Centre in Singapore. Co-organised by supercomputing centres of the region including those in Australia, Japan, Singapore and Thailand and anchored by the National Supercomputing Centre (NSCC) Singapore, the SuperComputing Asia incorporates a number of important supercomputing and allied events that together aim to promote a vibrant and shared high-performance computing (HPC) ecosystem, for both the public and private sectors, in Asia.

In the conference, Prof. Satoshi Matsuoka, Director, RIKEN Center for Computational Science (R-CCS) joined as a steering committee member and virtually as one of key speakers in five sessions. Also from R-CCS, Prof. Makoto Tsubokura, Team Leader, contributed to the conference opening ceremony as a keynote speaker, while Dr. Fumiyoshi Shoji, Division Director and Unit Leader, gave an brief introduction on Fugaku operation and services. At the conference venue, RIKEN R-CCS set up a booth featuring the world’s fastest supercomputer Fugaku and received various inquiries about Fugaku and possible international research collaborations.



RIKEN R-CCS Fugaku booth at SCA 2022 venue is ready to receive visitors.



Booth display to access information about Fugaku.



At SCA 2022 venue: (left) Mr. Eugene LOW, Deputy Director, Marketing & Engagement, NSCC (right) Dr. Takashi KAWABE, Director, RIKEN Singapore Office



At SCA 2022 venue: (left) Dr. Takashi KAWABE, Director, RIKEN Singapore Office (right) Mr. Kyota INOUE, Second Secretary, Embassy of Japan in Singapore/ Japan Creative Centre