



Contents

- 02 Message from Director, International Institute
for Advanced Science and Technology
- 03 Overview
- 04 Three Missions
- 05 Researchers
- 06 Visiting Professors/
Visiting Associate Professors
- 08 Research Topics
- 10 Research Clusters
- 12 All about IROAST
- 13 Collaborating Universities,
Research Institutes, etc.
- 14 Symposia & Seminars
- 15 Salons and Workshop
- Research Internship Program

Message

Kumamoto University, one of Japan's leading research universities, promotes world-leading research. The International Research Organization for Advanced Science and Technology (IROAST) was established in April 2016 with the aim of strengthening the University's international research capabilities in the fields of science and engineering.

IROAST has two major missions: one is to foster talented and internationally active young researchers who will be leading the future of the University; the other is to promote international collaborative research with overseas top-class universities and research institutions. For the development of young researchers, we operate a tenure-track system and send them to overseas universities and research institutions for long periods of time in order to build an international network. As for international joint research, we invite leading researchers from overseas universities and research institutes as distinguished professors to promote collaborative research and to provide research guidance for graduate students. These efforts have produced excellent results.

The first phase of IROAST was completed in March 2022, and the second phase began in April of the same year. In the second phase, we aim to become an international co-creation research center that produces world-class innovations for realizing a well-being focused society, based on experience obtained in the first phase. To this end, we would like to further promote interdisciplinary fusion research that transcends departmental boundaries, not only within the framework of science and engineering, but also by collaborating with medical and pharmaceutical sciences and social and cultural sciences.

This brochure summarizes previous activities of IROAST. If you are interested in our activities and collaborative research, please contact us. We look forward to new partnerships.

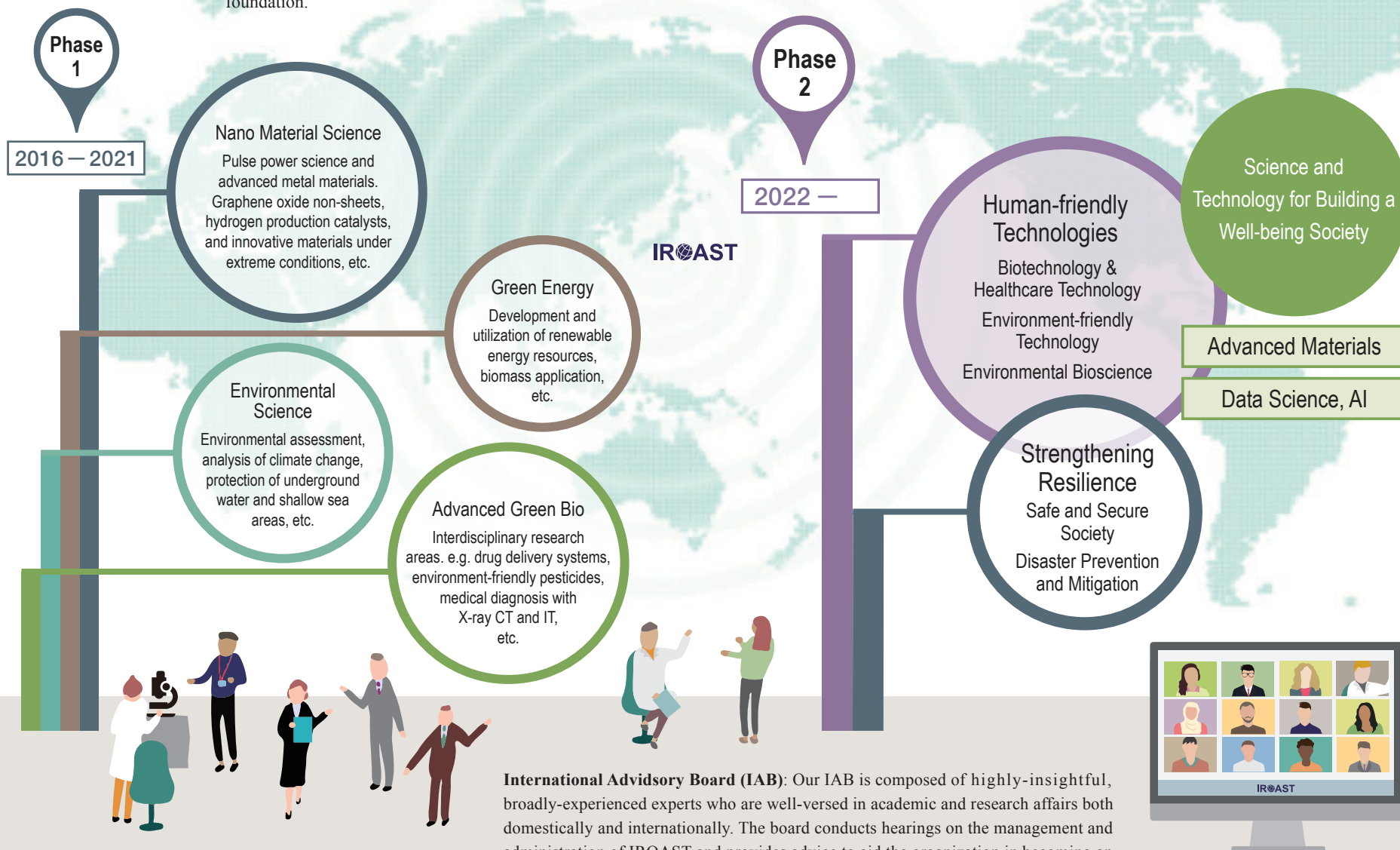
Kazuki TAKASHIMA, Director, IROAST



Overview

We had designated the four areas listed below as the priority research areas for **Phase 1**, a period of six years beginning from 2016. Our goals during this phase were to enhance our international competitiveness in terms of research by developing distinctive, leading-edge research projects, and to foster creative young researchers to serve as the driving force for international research based on our internationally superior research foundation.

During **Phase 2**, beginning from 2022, we further develop and enhance our projects as an international research hub for the natural sciences, and engage in international research activities focused on the science and technology needed to build a society that provides safety, security, and well-being, with the goal of realizing Society 5.0, which will support the next generation of natural sciences.



Three Missions

01

The cultivation of talented young researchers to lead the future

Under our tenure-track system, we recognize and foster talented young researchers through an international open call for participants. During the tenure-track period, participants serve as Principal Investigators (PI) by personally leading international joint research projects, establish international joint research networks with overseas researchers and researchers in different fields, and enhance their skills in research and educational activities by participating in joint research projects with postdoctoral researchers and providing research guidance to graduate students. We are also working to foster young researchers with a high level of international competence via our Program for Young Faculty Members for International Joint Research, through which we send young researchers overseas, as well as by aiding participants in submitting academic papers in English and offering internship programs to provide research guidance to graduate students and young researchers from overseas.



02

The establishment of strong international joint research networks and promotion of international joint research

In collaboration with research organizations in the natural sciences at the university, we promote international joint research with world-class universities and research institutions. We hire the world's leading researchers as distinguished professors, and grant internationally renowned researchers the title of visiting professor or visiting associate professor, and we contribute to the promotion and development of the university's research activities from an international perspective by engaging in joint research, holding international seminars, and providing intensive lectures for graduate students. In addition, with the aim of establishing academic, cutting-edge international joint research networks, we also promote joint research by aiding IROAST tenure-track faculty members, other Kumamoto University faculty members, distinguished professors and visiting professors in forming research units.



03

The development of leading, cutting-edge research projects through interdisciplinary integration

Research units led by young researchers are attracting the attention of researchers in other fields due to research into the development of wearable sensors for monitoring cardiac functions as well as the multifaceted application of imagery in collaboration with universities and medical institutions in Singapore. In addition, in collaboration with researchers from Australia and South Korea, we advanced research into functional nano materials for efficient treatment of tumors, and published the co-authored findings in top-level international journals. Furthermore, joint research conducted by researchers affiliated with both organizations is now underway, including holding joint seminars with the International Research Center for Medical Sciences (IRCMS). We have also begun collaborations with the humanities and social sciences.



Researchers (as of January 1, 2023)

Director



Dr. Kazuki TAKASHIMA
International Research Organization
for Advanced Science and Technology

Vice Director



Dr. Kei TODA
Professor,
Faculty of Advanced Science
and Technology

Postdoctoral Researchers



Dr. Jonas Karl N. AGUTAYA
International Research Organization
for Advanced Science and Technology



Dr. Prafulla Bahadur MALLA
International Research Organization
for Advanced Science and Technology

Distinguished Professors



Dr. U Rajendra ACHARYA
Senior faculty member,
Ngee Ann Polytechnic,
Singapore



Dr. Dmitri Aleks MOLODOV
Professor,
Institute of Physical Metallurgy
and Metal Physics,
RWTH Aachen University, Germany



Dr. Reetu Rani
International Research Organization
for Advanced Science and Technology



Dr. László PUSZTAI
Scientific Advisor,
Wigner Research Centre for Physics,
Hungary



Dr. Yufeng ZHENG
Professor,
Department of Materials Science and
Engineering, College of Engineering,
Peking University, China

International Joint Research Faculty Members



Dr. Takumi HIGAKI
Professor,
Faculty of Advanced Science and
Technology



Dr. Takahiro HOSONO
Professor,
Faculty of Advanced Science and
Technology

Tenure-track Associate Professors



Dr. Gaochuang CAI
International Research Organization
for Advanced Science and Technology



Dr. Masahiko FURUTANI
International Research Organization
for Advanced Science and Technology



Dr. Kei ISHIDA
Associate Professor,
Center for Water Cycle, Marine
Environment and Disaster Management



Dr. Makiko KOBAYASHI
Professor,
Faculty of Advanced Science and
Technology



Dr. Hiroki MATSUO
International Research Organization
for Advanced Science and Technology



Dr. Zhongyue ZHANG
International Research Organization
for Advanced Science and Technology



Dr. Ruda LEE
Associate Professor,
Institute of Industrial Nanomaterials
(IINa)



Dr. Yuta NAKASHIMA
Associate Professor,
Faculty of Advanced Science and
Technology



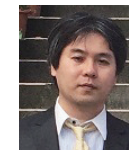
Dr. Shin-Ichi OHIRA
Professor,
Faculty of Advanced Science and
Technology



Dr. Atsushi SAINOKI
Associate Professor,
Faculty of Advanced Science and
Technology



























Dr. Mitsuru SASAKI
Associate Professor,
Institute of Industrial Nanomaterials
(IINa)




Dr. Keitaro TAKAHASHI
Professor,
Faculty of Advanced Science and
Technology

Visiting Professors / Visiting Associate Professors (as of January 1, 2023)

■ Visiting Professors


-  ① Dr. José E. ANDRADE
Professor
California Institute of Technology (Caltech), USA
-  ② Dr. Suttichai ASSABUMRUNGRAT
Professor
Center of Excellence in Catalysis and Catalytic Reaction Engineering, Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University, Thailand
-  ③ Dr. Josep-Lluís BARONA-VILAR
Professor
Institute of History of Medicine and Science López Piñero (IHMC), University of Valencia, Spain
-  ④ Dr. Jorge Norberto BELTRAMINI
Professor
Queensland University of Technology (QUT), Australia
-  ⑤ Dr. Pouyan BOUKANY
Associate Professor
Delft University of Technology, Netherlands
-  ⑥ Dr. Olivier BOUTIN
Professor
Deputy Director M2P2, Director Master Chemical Engineering, M2P2 Laboratory, Aix Marseille University, France
-  ⑦ Dr. Paul BOWEN
Professor
School of Metallurgy and Materials, University of Birmingham, UK
-  ⑧ Dr. Pierre BREUL
Professor
Polytech Clermont-Ferrand/ Institute Pascal/ University of Clermont Auvergne, France
-  ⑨ Dr. Maria Jose COCERO
Professor
Chemical Engineering & Environmental Technology, The University of Valladolid, Spain
-  ⑩ Dr. Patrice DELMAS
Associate Professor
Department of Computer Science, The University of Auckland, New Zealand
-  ⑪ Dr. Martin DIENWIEBEL
Heisenberg-Professor
Applied Nanotribology, Karlsruhe Institute for Technology (KIT), Germany
-  ⑫ Dr. Martino DI SERIO
Professor
University of Naples Federico II, Italy
-  ⑬ Dr. Derek ELSWORTH
Professor
Department of Energy and Mineral Engineering and of Geosciences, The Pennsylvania State University, USA
-  ⑭ Dr. Carolina ESCOBAR
Professor
Department of Environmental Sciences University of Castilla La Mancha, Spain
-  ⑮ Dr. Amir A. FARAJIAN
Professor
Department of Mechanical and Materials Engineering, Wright State University, USA
-  ⑯ Dr. Mohammad FARD
Professor
School of Engineering, RMIT University, Australia
-  ⑰ Dr. Bruno FAVERY
INRAE senior scientist (DR2)
UMR 1355-7254, INRAE-Université Côte d'Azur-CNRS, Institut Sophia Agrobiotech (ISA), France
-  ⑱ Dr. Etsuko FUJITA
Senior Chemist
Chemistry Division, Brookhaven National Laboratory, USA
-  ⑲ Dr. Tomonari FURUKAWA
Professor
Department of Mechanical and Aerospace Engineering, University of Virginia, USA
-  ⑳ Dr. Hamid GHANDEHARI
Professor
Director of Utah Center for Nanomedicine, Professor of Department of Pharmaceutics and Pharmaceutical Chemistry and Bioengineering, University of Utah, USA
-  ㉑ Dr. Jens HARTMANN
Professor
Institute for Geology, Universität Hamburg, Germany
-  ㉒ Dr. Ryushiro KASAHARA
Professor
Department of Life Science, Fujian Agriculture and Forestry University, China
-  ㉓ Dr. Ick Chan KWON
Principal Research Scientist
Biomedical Research Institute, Korea Institute of Science and Technology (KIST), Korea
-  ㉔ Dr. Youn-Woo LEE
Professor
School of Chemical and Biological Engineering, Seoul National University, Korea
-  ㉕ Dr. Pavel LEJČEK
Professor
Institute of Physics, Academy of Sciences of the Czech Republic, Czech Republic
University of Chemistry and Technology, Prague, Czech Republic
-  ㉖ Dr. Bo LIU
Professor
Department of Plant Biology, 2167 Life Sciences, University of California Davis, USA


 27 Dr. Viren Ivor MENEZES
Professor
Department of Aerospace Engineering,
Indian Institute of Technology Bombay, India


 28 Dr. Reiko ODA
Research Director
CBMN (UMR5248), CNRS-University of Bordeaux, France

 29 Dr. Shie-Ming PENG
Distinguished Research Professor
National Taiwan University, Taiwan


 30 Dr. Christian RENTENBERGER
Associate Professor
Faculty of Physics,
University of Vienna, Austria


 31 Dr. Stelios RIGOPOULOS
Reader in Thermofluids
Department of Mechanical Engineering,
Imperial College London, UK


 32 Dr. Parasuraman SELVAM
Professor
Department of Chemistry, Indian Institute of
Technology-Madras, India


 33 Dr. Shirley SHEN
Principal Research Scientist
Commonwealth Scientific and Industrial Research
Organisation (CSIRO), Australia


 34 Dr. Amir SI LARBI
Professor
ENISE, University of Lyon, France


 35 Dr. Konstantinos Daniel TSAVDARIDIS
Full professor
School of Mathematics, Computer Science and Engineering,
City, University of London, UK

 36 Dr. Gioacchino (Cino) VIGGIANI
Professor
Solid Mechanics and Civil Engineering,
Université Grenoble Alpes, France


 37 Dr. Thomas WAITZ
Associate University Professor
Faculty of Physics, University of Vienna, Austria

 38 Dr. Andrew WHITTLE
Professor
Department of Civil and Environmental Engineering,
Massachusetts Institute of Technology, USA


 39 Dr. Zhenghe XU
Dean
College of Engineering,
Southern University of Science and Technology, Shenzhen, China

 40 Dr. Firuz ZARE
Professor
Power and Energy Group,
The University of Queensland, Australia

■ Visiting Associate Professors

 41 Dr. Tomoyasu MANI
Assistant Professor
Department of Chemistry, University of Connecticut, USA

 42 Dr. Agus Pulung SASMITO
Associate Professor
McGill University, Canada

 43 Dr. Daniel P. ZITTERBART
Assistant Scientist
Woods Hole Oceanographic Institution, USA



Research Topics

case 01

Bioimaging analysis of stomatal movement

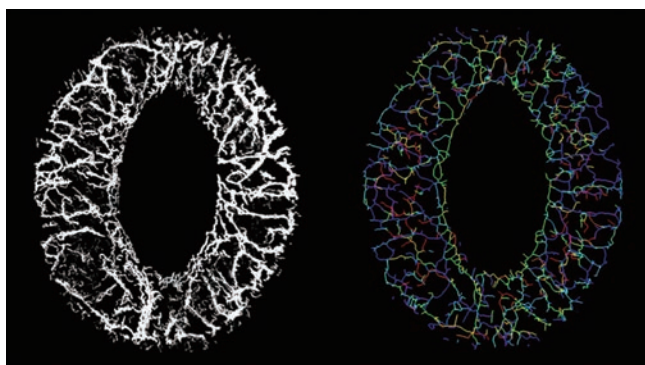


Professor
Takumi HIGAKI

The stomata on plant leaf and stem surfaces are essential to plant survival as they are responsible for gaseous exchange and transpiration. The stomatal apertures open and close in response to environmental cues. We are aiming for a better understanding of the cell biological basis of stomatal movement using advanced bioimaging and image analysis techniques.

Research Keywords

Stomatal movement
Bioimaging
Bioimage analysis



case 02

Theranostic nanoplatforms for disease treatment

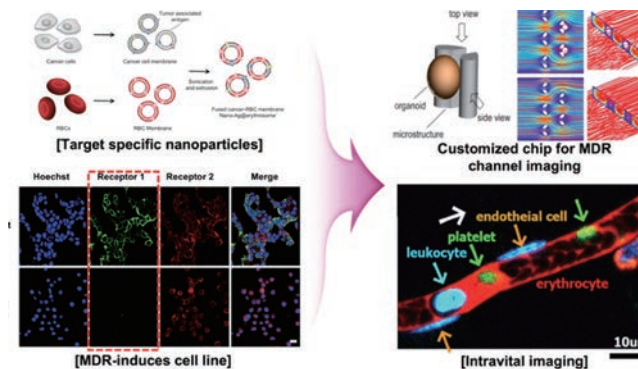


Associate Professor
Ruda LEE

Theranostics is a rapidly developing field that combines the unique opportunities offered by nanotechnology with precision medicine to provide significantly improved treatment efficacy with reduced off-target effects. This is accomplished through the specific delivery of therapy to diseased areas. By imaging, the diseased tissue, diagnosing conditions, and detecting inflamed cancer cells at an earlier stage, while simultaneously being able to treat the disease.

Research Keywords

Nanomedicine
Drug Delivery System (DDS)
Theranostics



Sustainable Development Goals (SDGs) are a set of 17 international goals and 169 targets for the period from 2016 to 2030 established with the aim of addressing globally-shared social challenges and realizing a sustainable world. IROAST researchers engage in interdisciplinary research that transcends the barriers between fields of study as well as original research projects related to energy, environmental issues, materials, resources, safety, and security. Their results are capable of contributing to solving the global issues indicated by the SDGs. IROAST is committed to contributing to the establishment of a society that provides safety, security, and well-being by broadly reapplying our vast stock of knowledge gained through research activities in ways that benefit society.



case 03

Palm-sized medical device achieving cancer diagnosis from 1 mL whole blood

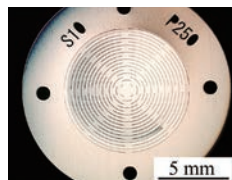


Associate Professor
Yuta NAKASHIMA

Detecting cancer at an early stage is essential to effective treatment. Our research group has developed a palm-sized medical device that can offer a cancer diagnosis from 1mL of whole blood. This device was developed by mechanical and chemical means. Currently, we are gathering experimental data for actual clinical use. The practical application of this device will make it possible to detect cancer easily and earlier, and is expected to contribute significantly to cancer treatment.

Research Keywords

Cancer diagnosis
Cancer detection
Biomicrodevice
Palm-sized device
Biomedical engineering



case 04

Environmental dynamics analysis on a regional scale



Professor
Takahiro HOSONO

Earth environmental changes are critical concerns in today's world. Natural disasters such as flooding that are linked to these environmental changes are increasingly occurring. To tackle these issues and mitigate the damage to society, it is essential to accurately understand the causes and mechanisms of the systems that generate these problems. Our laboratory investigates a variety of issues involved based on aspects of earth system sciences by introducing multidisciplinary approaches.

Research Keywords




















Environmental changes
Natural disasters
Earth system sciences



IROAST Research Clusters















































Young Researchers (13)

- ① **Ferroelectric Photovoltaics**
Cluster coordinator
Dr. Hiroki MATSUO
 
- ② **Next-Generation Design of Building Structures-DfX**
Cluster coordinator
Dr. Gaochuang CAI
  

- ③ **Plant Stem Cells and Regeneration**
Cluster coordinator
Dr. Mitsuhiro AIDA
  
- ④ **Overcoming Multi-Drug Resistance Breast Cancer for Women's Health and Quality of Life**
Cluster coordinator
Dr. Ruda LEE
  
- ⑤ **Development of Microbially-Aided Carbon Sequestration Technology**
Cluster coordinator
Dr. Atsushi SAINOKI
 
- ⑥ **Digital Plant Cell Biology**
Cluster coordinator
Dr. Takumi HIGAKI
 
- ⑦ **Deep Learning for Hydrology**
Cluster coordinator
Dr. Kei ISHIDA
  

- ⑧ **Study of first-generation objects in the universe with radio telescopes**
Cluster coordinator
Dr. Keitaro TAKAHASHI
 
- ⑨ **Separation, Synthesis, and Detection by Means of Ionic Solutes Handling**
Cluster coordinator
Dr. Shin-Ichi OHIRA
  
- ⑩ **Advanced Biomedical Evaluation System**
Cluster coordinator
Dr. Makiko KOBAYASHI
 
- ⑪ **Environmentally Promising Processes for Medical and Skincare Nanomaterials**
Cluster coordinator
Dr. Mitsuru SASAKI
  
 
- ⑫ **Environmental Diagnosis on Earth Surface Systems**
Cluster coordinator
Dr. Takahiro HOSONO
  
- ⑬ **Novel Cancer Medical Technology Using Liquid Biopsy**
Cluster coordinator
Dr. Yuta NAKASHIMA




World-leading Researchers (12)

- ⑭ **Development of Nano and Supramolecular Materials**
Cluster coordinator
Dr. Shinya HAYAMI
  
 
- ⑮ **Plant Cell and Developmental Biology**
Cluster coordinator
Dr. Shinichiro SAWA
  
- ⑯ **Nano-Organics and Nano-Hybrids**
Cluster coordinator
Dr. Makoto TAKAFUJI
  
 
- ⑰ **Nano-medicine and Drug Delivery System**
Cluster coordinator
Dr. Hamid HOSANO
  
  
- ⑱ **Nano-medicine and Theranostics**
Cluster coordinator
Dr. Takuro NIIDOME
 
- ⑲ **Multiscale Modeling of Soil and Rock Materials Using X-ray CT**
Cluster coordinator
Dr. Jun OTANI
  
- ⑳ **Quantification of Three Dimensional Vascular Network**
Cluster coordinator
Dr. Toshifumi MUKUNOKI
 
- ㉑ **MicroCT-based Quantification of Fibrosis and Vascularization in Pancreatic Tumor**
Cluster coordinator
Dr. Toshifumi MUKUNOKI
 
- ㉒ **Advanced Structural Materials**
Cluster coordinator
Dr. Yoji MINE
  
 
- ㉓ **Microstructure Analysis and Grain Boundary Engineering**
Cluster coordinator
Dr. Sadahiro TSUREKAWA
  

- ㉔ **Structure and Dynamics of Materials Using Quantum Beams and Data-Driven Sciences**
Cluster coordinator
Dr. Ichiro AKAI
  
 
- ㉕ **Nano-materials for Energy Applications and Environmental Protection**
Cluster coordinator
Dr. Tetsuya KIDA
 

Cluster 01



Associate Professor
Kei ISHIDA

Members:
Dr. Motoki AMAGASAKI, Japan
Dr. Masato KIYAMA, Japan
Dr. Ali ERCAN, Turkey
Dr. Tongbi TU, China



Research Keywords

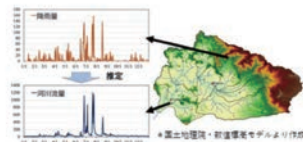
Deep learning
Hydrology
Meteorology



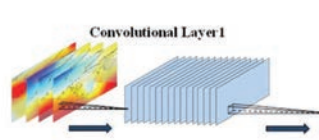
Deep Learning for Hydrology

We are working on interdisciplinary collaborative studies involving researchers in hydrology and information science. By sharing skills and knowledge, we are applying the latest deep-learning architectures to various issues in hydrology and meteorology, for which we are also working to develop new deep-learning architectures. Our research will serve to assist in resilient flood management and sustainable water resource management.

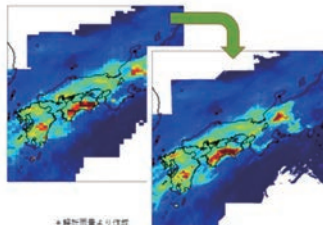
Rainfall-runoff Analysis using LSTM



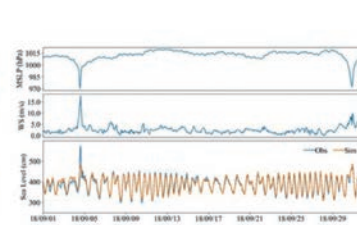
Rainfall Estimation from Standby Data by CNN



Improving the Accuracy of Precipitation Data by CNN



Sea Level Estimation by LSTM



Cluster 02



Professor
Makiko KOBAYASHI

Members:
Dr. Toshitaka YAMAKAWA, Japan
Dr. Masayuki TANABE, Japan
Dr. Rajendra Udyavara ACHARYA, Singapore
Dr. Shu Lih OH, Singapore
Dr. RU San TAN, Singapore



Research Keywords

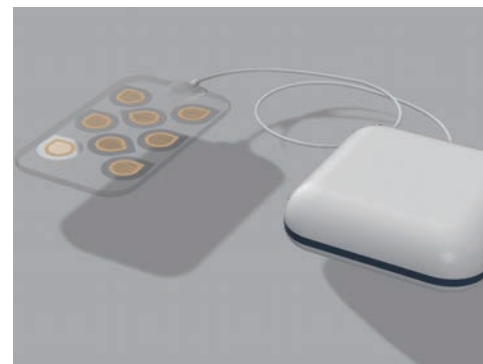
Flexible ultrasonic sensor
Flexible electronic circuit
Automatic evaluation of
medical ultrasound image



Advanced Biomedical Evaluation System

Heart disease is one of the main causes of death worldwide. Undiagnosed and untreated heart disease will progress and cause irreversible myocardial damage.

Our unit's team activities are aimed at achieving the early diagnosis of heart disease by processing information obtained by flexible ultrasonic sensors and flexible electronic circuit systems with an automatic diagnostic system using deep-learning algorithms.



All about IROAST

IROAST fosters young researchers who have the potential to perform internationally and to contribute to joint research and exchange with researchers in different fields or departments in Kumamoto University and overseas universities.

(as of January 1, 2023)

Members

Tenure-track Professors/ Associate Professors	4
Distinguished Professors	4
International Joint Research Faculty Members	10
Postdoctoral Researchers	3
Visiting Professor/ Associate Professor	43

Achievements

Number of International
Internship Students



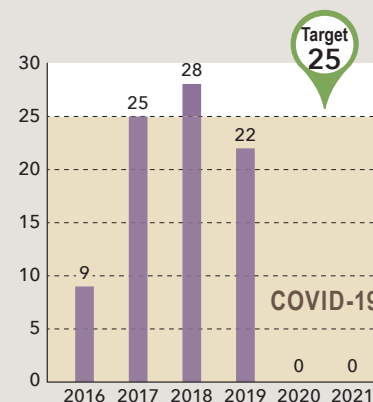
Number of
International Symposia/Seminars

107 in total

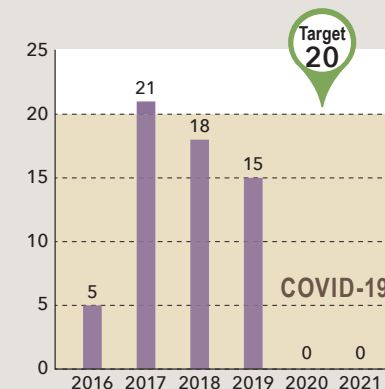
Number of People
who have Joined International
Symposia/Seminars



Number of Invited Researchers



Number of Researchers dispatched
to Overseas Universities

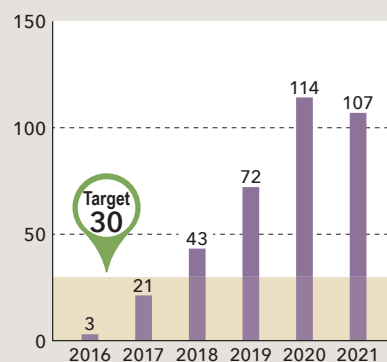


Research Achievements

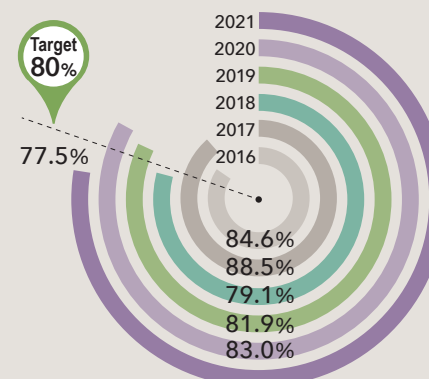
IROAST has exceeded the targets it set when it was first established. Its performance indicators are the highest in this university, and IROAST has achieved results that can strengthen and advance the university's international research competitiveness.



Number of Papers



Rate of Internationally Co-authored Papers

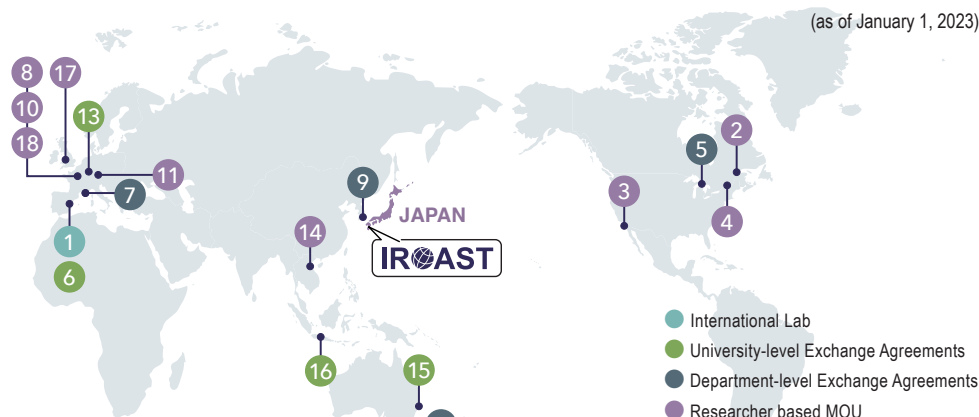


Tenured Faculty

Duration of Appointment to IROAST	Research Area
Name & Previous Job Title	Current Affiliation & Incumbent Name
Jan. 2017 – Mar. 2021 Dr. Atsushi SAINOKI Associate Professor	Green Energy Faculty of Advanced Science and Technology, Kumamoto University, Associate Professor
Jun. 2016 – May 2021 Dr. Takashi ISHIDA Assistant Professor	Advanced Green Bio Faculty of Advanced Science and Technology, Kumamoto University, Associate Professor
Aug. 2017 – Sep. 2021 Dr. Takumi HIGAKI Professor	Advanced Green Bio Faculty of Advanced Science and Technology, Kumamoto University, Professor
Jan. 2017 – Dec. 2021 Dr. Ruda LEE Associate Professor	Nano Material Science Institute of Industrial Nanomaterials, Kumamoto University, Associate Professor
Jul. 2017 – Jun. 2022 Dr. Mitsuhiro AIDA Professor	Advanced Green Bio Faculty of Advanced Science and Technology, Kumamoto University, Professor

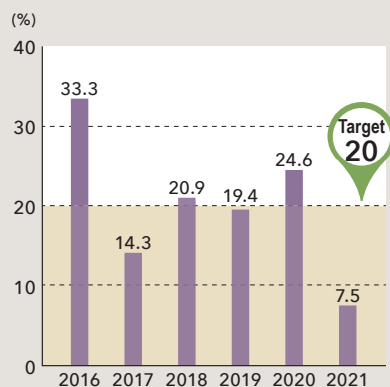
Collaborating Universities, Research Institutes, etc.

(as of January 1, 2023)

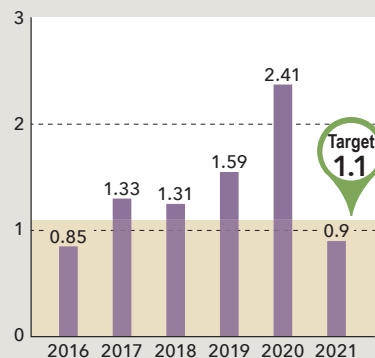


- 1 Universitat de València, **Spain**
- 2 Mine Multiphysics Laboratory, McGill University, **Canada**
- 3 Liu Laboratory, Dept. of Plant Biology, University of California, Davis, **USA**
- 4 G3 Center, The Pennsylvania State University, **USA**
- 5 Michigan State University, **USA**
- 6 Valladolid University, **Spain**
- 7 School of Biology, Faculty of Biology and Medicine, University of Lausanne, **Switzerland**
- 8 Laboratoire 3SR, Université Grenoble Alpes, **France**
- 9 College of Health Science and Institute of Biomedical Engineering, Yonsei University at Wonju, **Republic of Korea**
- 10 Groupe MSMG of Institut Pascal, Université Clermont Auvergne, **France**
- 11 Główny Instytut Górnictwa (GIG), **Poland**
- 12 CSIRO Manufacturing, The Commonwealth Scientific and Industrial Research Organisation (CSIRO), **Australia**
- 13 RWTH Aachen University, **Germany**
- 14 Doan Dinh Hung lab, Vietnam National Museum of Nature, Vietnam Academy of Science and Technology, **Viet Nam**
- 15 Queensland University of Technology, **Australia**
- 16 Institut Teknologi Bandung (ITB), **Indonesia**
- 17 Tsavdaridis Laboratory, Department of Civil Engineering, City, University of London, **UK**
- 18 Si Larbi Laboratory, LTDS, École Nationale d'Ingénieurs de Saint-Étienne (ENISE), École Centrale de Lyon (ECL), Université de Lyon, **France**

Rate of Top 10% Papers



Field Weighted Citation Index



International Symposia & Seminars

IROAST provides international symposia to share research results both domestically and internationally. Researchers discuss issues across different fields, leading to the launch of new interdisciplinary research and international collaboration. Though international exchange has been made difficult by COVID-19 pandemic restrictions, the symposia have continued online.

The 88th and 89th IROAST Seminars

The seminars were held organized by Prof. Makoto Takafuji (FAST), inviting Prof. Josep Lluís Barona-Vilar of the University of Valencia, Spain (Visiting Professor at IROAST) on November 29 and December 2, 2022.



Prof. Josep Lluís BARONA-VILAR



Prof. Makoto TAKAFUJI

88th IROAST Seminar

November 29, 2022 15:00~

@203 LECTURE ROOM
KUROKAMI SOUTH W3 (ACADEMIC COMMONS KUROKAMI BLDG. 1)

"HISTORICAL-ECOLOGY OF THE COVID PANDEMIC"



89th IROAST Seminar

December 2, 2022 11:00~

"THE INTERNATIONAL IMPACT OF JAPANESE NUTRITIONAL SCIENCE AND POLICY (1920-1945)"



Lecturer: Prof. Josep Lluís Barona-Vilar
University of Valencia, Spain

Organizer: Takafuji Makoto, Fast, KU

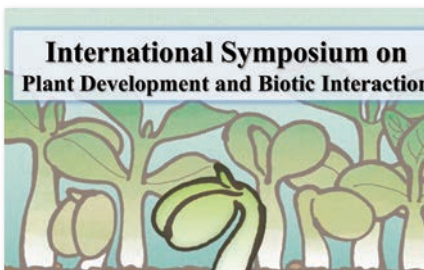
CONTACT IROAST
Phone: 096-342-3362 E-mail: info@iroast.kumamoto-u.ac.jp
Web site: <https://iroast.kumamoto-u.ac.jp/>



*FAST: Faculty of Advanced Science and Technology

The 14th IROAST International Symposium on Plant Development and Biotic Interaction

The symposium, organized by Prof. Shinichiro SAWA (FAST) and Associate Prof. Masahiko FURUTANI (IROAST), was held on December 13, 2022. Approximately 60 researchers, including IROAST Visiting Professors, gathered to exchange the latest information. During the lunch break, graduate students of Kumamoto University gave poster presentations.



**International Symposium on
Plant Development and Biotic Interaction**

Date & Time: December 13th, 2022 : 9:30 – 17:00
**Conference Site: Center for International Education
North campus, Kurokami, 2-39-1, Kumamoto 860-8555**
-Sponsored by IROAST-

<p>Opening remarks Kazuki Takashina (IROAST)</p> <p>Invited Speakers Soung Unyong¹ (Univ. of Montpellier, France) Hideoh Fukaki (Kobe University, Japan) Ryushiro Kasahara (FAHU, China : IROAST, Japan) Bruno Favery (INRAE, France; IROAST, Japan) Michael Quattre (INRAE, France) Stephanie Jacobson-Davies (INRAE, France) Solome Schale (INRAE, France) Sarah Rattay-Roby (INRAE, France) Sophie Hamel (INRAE, France) Cyril Van-Gelder (INRAE, France) Yoshiaki Kadota (Riken, Japan) Kazuki Sato (Riken, Japan) Erika Iino (Riken, Japan)</p>	<p>From Kumamoto University Shinichiro Sawa (IRCAEB, GSST) Masahiko Furutani (IRCAEB, GSST) Takumi Higaki (IRCAEB, GSST)</p> <p>Supported by • International Research Organization for Advanced Science and Technology (IROAST) • Plant Structure Opt. research group (MEXT; KAKENHI) • International Research Center for Agricultural and Environment Biology (IRCAEB) • Bilateral Programs Joint Research Program (JSPS) • Fostering Joint International Research (B) (MEXT; KAKENHI)</p>
---	---



Dr. Bruno FAVERY (IROAST Visiting Professor)



Prof. Shinichiro SAWA



The IROAST Salon for the Future Cross-Disciplinary Research

From the phase 2, IROAST hold the Salon almost monthly to promote ongoing exchanges among researchers and to develop intra-university joint research. Each salon meeting is planned by an IROAST faculty member, and each IROAST faculty members present their research and exchanges opinions. As several research presentations in different fields are made at each salon meeting, the salons serve as a forum for the exchange of information among researchers across disciplines.



The IROAST Workshop for Research Capability Building

IROAST conducted IROAST held Workshop for faculties and students in the university to aim for polishing their Research skills by inviting expert lectures Outside the university. In this workshop, three topics which are necessary to leapfrog as world-leading Researchers was talked in English.

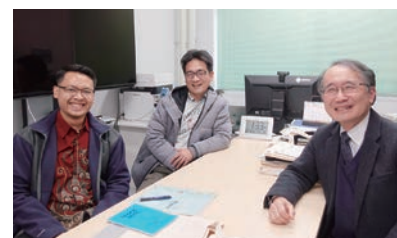


We offer research internships to graduate students and young researchers enrolled in foreign universities and research institutes for short-term assignments, mainly to provide them with research guidance.

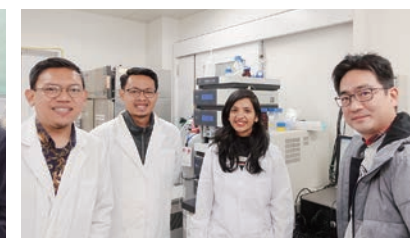
Mr. Rahmat HIDAYAT (Politeknik Negeri Lampung, Indonesia)

Internship period: November 25, 2022 - January 31, 2023 (including online internship period)

Host faculty: Prof. Shin-ichi OHIRA (FAST, IROAST International Joint Research Faculty Member)



Meeting with Director TAKASHIMA, Prof. OHIRA, and Mr. HIDAYAT

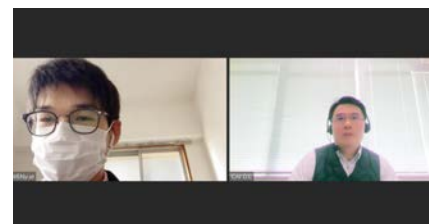


Mr. FADILLAH, Mr. HIDAYAT, Dr. RANI, and Prof. OHIRA

Mr. Yue WEN (Nanjing University of Technology, China)

Internship period: January 17, 2022 – February 18, 2022 (online internship only)

Host faculty: Assoc. Prof. Gaochuang CAI (IROAST)



Online internship



Entered the Doctoral Course of the Graduate School of Science and Technology in April 2022, and awarded a certificate of completion of internship.



IROAST, Kumamoto University



International Research Organization
for Advanced Science & Technology



IROAST Kumamoto University



IROAST, Kumamoto University



International Research Organization for
Advanced Science and Technology (IROAST), Kumamoto University

2-39-1 Kurokami, Chuo-ku, Kumamoto 860-8555, Japan

Phone: +81-96-342-3497 / 3362 / 3979

Fax: +81-96-342-3320

E-mail: szk-kiko@jimu.kumamoto-u.ac.jp

<https://iroast.kumamoto-u.ac.jp/>

