

4-1. IROAST Symposium

No.	Symposium Title	Organizer
	Date	
4-1-1	The 10th IROAST Symposium - CSIRO Manufacturing engagement with Kumamoto University IROAST on science innovation-	Kazuki TAKASHIMA IROAST
	July 4, 2022	Robert WILSON CSIRO, Clayton
4-1-2	The 11th IROAST Symposium for data-driven approach on EXAFS analysis	Ichiro AKAI IINa
	September 9, 2022	
4-1-3	The 12th IROAST symposium ~Japan-Korea Joint symposium of Nano-inorganic / organic and supramolecular Materials~	Shinya HAYAMI FAST
	November 11, 2022	
4-1-4	The 13th IROAST symposium ~Japan-France Joint Seminar on “Nano-Organics and Nano-Hybrids” and “Chiral Nanoobjects for Photonic Application”~	Makoto TAKAFUJI FAST
	November 9, 2022	
4-1-5	The 14th IROAST International Symposium on Plant Development and Biotic Interaction	Masahiko FURUTANI IROAST
	December 13, 2022	
4-1-6	The 15th IROAST Symposium -1st International Symposium on advanced materials and design for structural safety and sustainability (1st ADS3)	Gaochuang CAI IROAST
	January 30, 2023 January 31, 2023	Amir SILARBI University of Lyon Konstantinos Daniel TSAVDARIDIS City, University of London

FAST: Faculty of Advanced Science and Technology

IINa: Institute of Industrial Nanomaterials

IROAST Symposium Report

No.1-1 Symposium Title	10th IROAST Symposium - CSIRO Manufacturing engagement with Kumamoto University IROAST on science innovation-			
Organizer 1	Name	Kazuki TAKASHIMA		
	Affiliation	IROAST	Title	Director
Organizer 2	Name	Robert WILSON		
	Affiliation	CSIRO, Clayton	Title	Principal Research Scientist
Style	Online			
Time & Date	13:00-16:30 JST, July 4, 2022			
Speaker's Name/ Title/Affiliation	CSIRO Kathie McGregor, Robert Wilson, Daniel East, Peter King, Daniel Liang/Shiqin Yan, Haopeng Shen and Kazuki Kuhlmann Kumamoto University Kazuki Takashima, Kwangsik Kwak, Hiromoto Kitahara and Ryusuke Masunaga			
Number of Participants	<u>Total: 31</u> (Int'l participants: 20) Invitees: 0 (Int'l participants: 0)			

1. Symposium Overview

IROAST has been conducting an international collaboration with the CSIRO, Clayton (Australia) since 2017. This research aims to strengthen international collaboration on new areas of materials research, including metal and composite additive manufacturing.

The 10th IROAST Symposium was held from 13:00 JST on July 4th with participants of 31 (jointly organized by CSIRO and IROAST). As several important results have been obtained through this joint research, and researchers from each institution presented their research in an online format. The program consisted of presentations by researchers from both IROAST and CSIRO as shown below.

Dr. McGregor gave an overview of CSIRO's ADP, followed by Dr. Wilson's Introduction to CSIRO Alloys Forming and Processing team, Dr. East's Introduction to CSIRO Surfaces and Metallic Composites team by Dr. East. After that, Dr. Takashima gave a talk on Introduction of Kumamoto University and IROAST. Thereafter, each researcher introduced their research according to the following program. After each speaker's presentation, a lively discussion ensued. Finally, a general discussion on the symposium was held.

Overview of AMP program/group.	CSIRO-Kathie McGregor
Introduction to CSIRO Alloys Forming and Processing team	CSIRO-Robert Wilson
Introduction to CSIRO Surfaces and Metallic Composites team	CSIRO-Daniel East
Introduction of Kumamoto University and IROAST	KU-Kazuki Takashima
Introduction of Micromechanical Characterization Research Group in Kumamoto University	KU-Kazuki Takashima
Introduction to CSIRO Deposition and Additive Structures team	CSIRO-Peter King

Mechanical characterisation of lath martensite in steels using micro-tensile testing and nanoindentation	KU-Kwangsik Kwak
Near-rapidly-solidified Mg alloys for biomedical applications	CSIRO-Daniel Liang/Shiqin Yan
Structure of Pure Zinc Deformed by SPD Process	KU-Hiromoto Kitahara
Additive manufacturing of shape memory alloy using laser powder deposition of elemental powder mixture	CSIRO-Haopeng Shen
Effects of Zinc Addition in Deformation of Rolled Magnesium Alloys	KU-Ryusuke Masunaga, Hiromoto Kitahara
Laser metal deposition of non-equiatomic CrFeCoNiMo High Entropy Alloy	CSIRO-Kazuki Kuhlmann
Closing Address	CSIRO/Kumamoto

2. Symposium Outcomes and Future Plan

At this symposium, we were able to exchange information on the latest research being conducted at IROAST and CSIRO. In particular, both parties agreed that additive manufacturing is a research theme, and agreed to work toward strengthening international joint research in the future. In addition, it was decided to prepare an international co-authored paper on the results of the joint research in the future.

CSIRO Manufacturing engagement with Kumamoto University IROAST on science innovation

IROAST-CSIRO WORKSHOP

13:00-16:30 JST

VIA ONLINE

JULY 4

Introduction to CSIRO
Introduction to IROAST

CSIRO TEAMS:

- Alloys Forming and Processing
- Surfaces and Metallic Composites
- Deposition and Additive Structures
- Powder characterization

KU GROUPS:

- IROAST
- Micromechanical Characterization

Online Workshop via Webex

Please contact IROAST for log-in URL

Contact: IROAST Sato
Tel: 096-342-3362
E-mail: szk-kiko@jimmu.kumamoto-u.ac.jp

Anyone interested is welcome to join us!
No registration required

The 10th IROAST Symposium



Introduction of Kumamoto University and IROAST, and Micromechanical Characterization Research Group in Kumamoto University, IROAST-Kazuki Takashima



Scene at the CSIRO venue

IROAST Symposium Report

No.1-2 Symposium Title	11th IROAST Symposium for data-driven approach on EXAFS analysis			
Organizer 1	Name	Ichiro AKAI		
	Affiliation	Institute of Industrial Nanomaterials (IINa)	Title	Professor
Style	Hybrid Online: Zoom Onsite: D201 Lect. Room, Faculty of Science, Kumamoto University			
Time & Date	13:00-15:45 JST, September 9, 2022			
Speaker's Name/ Title/Affiliation	Professor A. Di-CICCO, The University of Camerino Dr. F. IESARI, Aichi-SR Distinguished Professor L. PUSZTAI, IROAST, Kumamoto University Dr. H. KUMAZOE, Kumamoto University			
Number of Participants	<u>Total: 110</u> (Int'l participants: 18) Invitees: 4 (Int'l participants: 3)			

On September 9, 2022, IROAST held the 11th IROAST symposium for data-driven approach on EXAFS analysis at Kumamoto University.

In the Akai project of the Core Research for Evolutionary Science and Technology (CREST) area for “Intelligent Measurement Analysis” aims to deepen data-driven analysis methods for EXAFS in international collaboration with the University of Camerino, Italy.

As part of the international collaboration, we invited Prof. A. Di-Cicco (the University of Camerino) and Prof. L. Pusztai, developer of RMC (Distinguished Prof. of IROAST in Kumamoto University) for special lectures in this symposium. In addition, topics of our new data-driven researches for EXAFS analysis was presented.

In this symposium, we had 110 participants both inside and outside the university. Every lecture were very interesting and advanced contents and we had a fruitful discussion time. In near future, we will publish many papers with collaborated results.



Opening address by Prof. Akai



At the venue



Professor A. Di-Cicco



Dr. F. Iesari



Distinguished Professor L. Pusztai



Dr. H. Kumazoe





11TH IROAST SYMPOSIUM

**MINI-SYMPOSIUM FOR DATA-DRIVEN APPROACH
ON EXAFS ANALYSIS**

13:00-15:45, Sept. 9, 2022.

Venue: D201 Lect. Room, Faculty of Science, Kumamoto University
Simultaneous delivery with Webinar

URL: https://us02web.zoom.us/webinar/register/WN_00JEh1S7QGmi8oOXYnz29Q

 Prof. A. Di-Cicco The University of Camerino	 Dr. F. Iesari Aichi-SR	 Distinguished Prof. L. Pusztai IROAST, Kumamoto University	 Dr. H. Kumazoe Kumamoto University
13:00-13:45	13:45-14:15	14:30-15:15	15:15-15:45
Special Lecture: Advances in x-ray absorption spectroscopy: simulations and experiments under extreme conditions	Data-driven methods for EXAFS analysis	Special Lecture: RMC and EXAFS (and AXS): a nearly outsider's view	Investigation of interstitial oxygen positions in an yttrium oxyhydride epitaxial thin film by Bayesian sparse modeling for extended X-ray absorption fine structures

ORGANIZER AND CONTACT: ICHIRO AKAI (IAKAI@KUMAMOTO-U.AC.JP)
PROFESSOR, INST. INDUSTRIAL NANOMATERIALS, KUMAMOTO UNIVERSITY

IROAST Symposium Report

No.1-3 Symposium Title	12th IROAST symposium ~Japan-Korea Joint symposium of Nano-inorganic / organic and supramolecular Materials~			
Organizer 1	Name	Shinya HAYAMI	Title	Professor
	Affiliation	Faculty of Advanced Science and Technology (FAST)		
Venue	KKR Hotel Kumamoto 2F Gohou room			
Time & Date	10:00-17:25, November 11, 2022			
Speaker's Name/ Title/Affiliation	Ok-Sang JUNG (Pusan National University) Shinya HAYAMI (Kumamoto University) Songyi LEE (Pukyong National University) Hitoshi MIYASAKA (Tohoku University) Kil Sik MIN (Kyungpook National University) Yoshihiro SEKINE (Kumamoto University) Minyoung YOON (Kyungpook National University) Mina SAKURAGI (Sojo University) Eunsung LEE (POSTECH) Shintaro IDA (Kumamoto University)			
Number of Participants	Total: 41 (Int'l participants: 12) Invitees: 7 (Int'l participants: 5)			

In this symposium, outstanding domestic and Korean scientists in various scientific fields are invited and discussed their research. The final goal is to construct an international collaboration between Kumamoto University and Korean scientists, and we have discussed the future plan of an international fund from JSPS or another government project. The main topics are the chemistry fields, especially, nanomaterials, inorganic coordination chemistry, supramolecular materials, and catalytic phenomena. In addition, the student flash presentation is organized and five young students had a presentation about their research and had a discussion with participants.

We have discussed future plans and collaborative research. In addition, one student from the domestic invited speaker group will be visiting a Korean research group to do experiments and measurements for the publication of international collaborative papers. This is one of the results of organizing this international symposium.



Opening Remarks by IROAST Director,
Kazuki Takashima



Ok-Sang Jung



Shinya Hayami



Songyi Lee



Hitoshi Miyasaka



Kil Sik Min



Yoshihiro Sekine



Minyoung Yoon



Mina Sakuragi



Eunsung Lee



Shintaro Ida



Group Photo

Japan-Korea Joint symposium of Nano-inorganic / organic and supramolecular Materials

Date&Venue / 10th~12th, November 2022
KKR Hotel Kumamoto

Schedule

10th 17:00~	Table Discussion
11th 10:00-10:05	Opening Remarks
10:05-10:30	Ok-Sang Jung • Pusan National University
10:30-10:55	Shinya Hayami • Kumamoto University
10:55-11:20	Songyi Lee • Pukyong National University
11:20-11:45	Hitoshi Miyasaka • Tohoku University
11:45-13:00	Photo&Lunch&Table Discussion
13:00-13:25	Kil Sik Min • Kyungpook National University
13:25-13:50	Yoshihiro Sekine • Kumamoto University
13:50-14:15	Minyoung Yoon • Kyungpook National University
14:15-14:45	Break
14:45-15:45	Student Flash Presentation
15:45-16:00	Break
16:00-16:25	Mina Sakuragi • Sojo University
16:25-16:50	Eunsung Lee • POSTECH
16:50-17:15	Shintaro Ida • Kumamoto University
17:15-17:25	Closing Remarks
12th 10:00~	Table Discussion

Inquiries

Priority Organization for Innovation and Excellence
(Kumamoto University)

E-mail sekine@kumamoto-u.ac.jp



12th IROAST Symposium

IROAST Symposium Report

No.1-4 Symposium Title	13th IROAST symposium ~Japan-France Joint Seminar on “Nano-Organics and Nano-Hybrids” and “Chiral Nanoobjects for Photonic Application”~			
Organizer 1	Name	Makoto TAKAFUJI	Title	Professor
	Affiliation	Faculty of Advanced Science and Technology (FAST)		
Style	Kusunoki Hall, reception room			
Time & Date	14:30-17:30, November 9, 2022			
Speaker's Name/ Title/Affiliation	Yann FERRAND (CNRS, University of Bordeaux) Emilie POUGET (CNRS, University of Bordeaux) Sylvain NLATE (University of Bordeaux) Celine OLIVIER (CNRS, University of Bordeaux) Brice KAUFFMANN (CNRS, University of Bordeaux) Tsuyoshi FUKAMINATO (Kumamoto University) Yutaka KUWAHARA (Kumamoto University)			
Number of Participants	<u>Total: 38</u> (Int'l participants: 18) Invitees: 7 (Int'l participants: 6)			

IROAST & LIA/IRP-CNPA Joint Meeting on "Nano-Organics and Nano-Hybrids" and "Chiral Nanoobjects for Photonic Application" (13th IROAST symposium) was held on November 9th, 2021 at the Reception room of the Kusunoki Hall (Kumamoto University). This international symposium was planned and held on the occasion of the visit of seven researchers from the French side (Dr. Reiko ODA and Dr. Dario BASSANI in addition to five speakers) to Kumamoto University for the discussion on joint researches. About 40 participants, including the speakers, attended the joint meeting and engaged in lively discussions. At the symposium, seven speakers presented their latest research findings, which was very attractive in creating opportunities for future collaboration. The day after the symposium, we went on an excursion to the reconstructed Kumamoto Castle. Young researchers and students were invited to join the excursion, and we toured the castle while talking freely about not only research but also history and culture.

The "Nano-Organic/Nano-Hybrid" research cluster of IROAST is most strongly promoting collaborative research with the University of Bordeaux, France, and has published more than 30 co-authored papers in international journals. It continues to promote joint research projects on an ongoing basis, sending young researchers as JSPS researchers and exchange students. During the past two years under the COVID-19 pandemic, we have been discussing on the collaborative research works through remote meetings and e-mail. At this symposium, opinions were exchanged for future expansion of exchanges. It also raised awareness of international exchange among young researchers and students on the Japanese side and provided a great stimulus in terms of research. We expect that the symposium will lead to more active exchanges among young researchers using the internship program and the overseas exchange program in the future.



Opening Remarks by organizer,
Makoto TAKAFUJI



Yann FERRAND



Emilie POUGET



Sylvain NLATE



Celine OLIVIER



Brice KAUFFMANN



Tsuyoshi FUKAMINATO



Yutaka KUWAHARA



At site



Excursion at Kumamoto Castle



***IROAST & LIA/IRP-CNPA Joint Meeting on
"Nano-Organics and Nano-Hybrids"
and
"Chiral Nanoobjects for Photonic Application"***

DATE: Start from 14:30, 9 (Wed), November, 2022
PLACE: Reception room of Kusunoki Hall, Kumamoto University

14:30 Opening
14:40~15:50

Session on "Chiral Nanoobjects for Photonic Application"

Yann FERRAND	CNRS, University of Bordeaux
Emilie POUGET	CNRS, University of Bordeaux
Sylvain NLATE	University of Bordeaux
Celine OLIVIER	CNRS, University of Bordeaux
Brice KAUFFMANN	CNRS, University of Bordeaux

Coffee break & Group photo

16:10~17:00

Session on "Nano-Organics and Nano-Hybrids"

Tsuyoshi FUKAMINATO	Kumamoto University
Yutaka KUWAHARA	Kumamoto University

17:00 Closing

Registration: Free
Contact: Research unit for "Nano-organics and Nano-hybrids" of IROAST (Makoto Takafuji)
e-mail: takafuji@kumamoto-u.ac.jp, Phone: +81-96-342-3662

IROAST Symposium Report

1-5 Symposium Title	14th IROAST International Symposium on Plant Development and Biotic Interaction			
Organizer 1	Name	Masahiko FURUTANI	Title	Associate Professor
	Affiliation	IROAST		
Organizer 2	Name	Shinichiro SAWA	Title	Professor
	Affiliation	Faculty of Advanced Science and Technology (FAST)		
Style	College of Cross-Cultural and Multidisciplinary Studies			
Time & Date	9:30-17:00, December 13, 2022			
Speaker's Name/ Title/Affiliation	<p>Soazig GUYOMARC'H, Lecturer, University of Montpellier, France</p> <p>Ryushiro KASAHARA, Professor, FAFU, China/ IROAST Visiting Professor, Japan</p> <p>Bruno FAVERY, Senior Scientist, INRAE, France/ IROAST Visiting Professor, Japan</p> <p>Miachael QUENTIN, Lecturer, INRAE, France</p> <p>Stephanie Jaubert-Possamai, Researcher, INRAE, France</p> <p>Salome SOLULE, PhD Student, INRAE, France</p> <p>Sarah RANRY-ROBY, PhD Student, INRAE, France</p> <p>Sophie MANTELIN, Researcher, INRAE, France</p> <p>Cyril VAN-GHELDER, Engineer Assistant, INRAE, France</p> <p>Yasuhiro KADOTA, Researcher, Riken, Japan</p> <p>Kazuki SATO, Special Postdoctoral Researcher, Riken, Japan</p> <p>Erika IINO, PhD Student, Riken, Japan</p> <p>Shin-ichiro SAWA, Professor, IRCAEB/ FAST, KU</p> <p>Mitsuhiro AIDA, Professor, IRCAEB/ FAST, KU</p> <p>Takumi HIGAKI, Professor, IRCAEB/ FAST, KU</p> <p>Nao KAMINO, PhD Student, FAST, KU</p>			
Number of Participants	<p><u>Total:</u> 58 (Int'l participants: 13)</p> <p style="padding-left: 40px;">Invitees: 12 (Int'l participants: 9)</p>			

1. Symposium Overview

The main objective of this symposium is to exchange the latest researches on plant development and biotic interaction and to promote friendship among plant researchers and IROAST visiting professors all over the world. The conference will cover the basic and applied researches on plant development and biotic interaction for a wide range of topics as follows; lateral root development, plant reproduction, plant embryogenesis, imaging of plant architecture, and nematode infection.

2. Symposium Outcomes and Future Plan (e.g. about contribution to the development of young researchers and the initiation of international collaborative research aiming for the publication of international collaborative papers, etc.)

The Symposium was organized with invited speakers all over the world and young poster presenters on each main topic to provide current views on plant development and biotic interaction. Throughout the symposium, speakers provided summarized information on the molecular mechanism of plant development and biotic interaction and new technologies in these research fields. A tight link between plant development and nematode interaction at the molecular level was described. During the lunch break of the symposium, graduate students, mainly from Kumamoto University, gave poster presentations. Students received advice from overseas researchers and exchanged opinions about their research, providing the students with a good experience. In addition, during coffee breaks, attendees enjoyed discussion and communications with invited speakers. Several possible international collaborations were discussed among attendees and invited speakers.

This symposium provided young researchers including graduate students a good chance to present their works in English and communicate with overseas researchers, and senior researchers to initiate international collaborations. Hopefully, we are going to hold this kind of symposium to promote deep friendship every two years.

3. Others

After the symposium, a banquet was held to communicate deeply among invited speakers and attendees. We all enjoyed local foods and sake in Kumamoto.

Photos from the symposium



At the entrance



Opening Remarks by IROAST Director,
Kazuki Takashima



Antoine Beckers



Ryushiro Kasahara



Bruno Favery



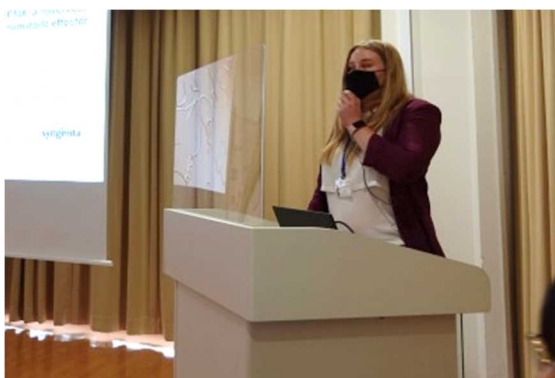
Michael Quentin



Stephanie Jaubert-Possamai



Salome Solule



Sarah Ranty-Roby



Sophie Mantelin



Cyril Van-Ghelder



Yasuhiro Kadota



Kazuki Sato



Erika Iino



Shin-ichiro Sawa



Mitsuhiro Aida



Takumi Higaki



Nao Kamino



Poster Session



At site

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-

Opening remarks

Kazuki Takashima (IROAST)

Invited Speakers

Soazig Guyomarc'H (Univ. of Montpellier, France)

Hidehiro Fukaki (Kobe University, Japan)

Ryushiro Kasahara (FAFU, China ; IROAST, Japan)

Bruno Favery (INRAE, France; IROAST, Japan)

Miachael Quentin (INRAE, France)

Stephanie Jaubert-Possamai (INRAE, France)

Salome Solule (INRAE, France)

Sarah Ranty-Roby (INRAE, France)

Sophie Mantelin (INRAE, France)

Cyril Van-Ghelder (INRAE, France)

Yasuhiko Kadota (Riken, Japan)

Kazuki Sato (Riken, Japan)

Erika Iino (Riken, Japan)

From Kumamoto University

Shinichiro Sawa (IRCAEB, GSST)

Mitsuhiro Aida (IRCAEB, GSST)

Takumi Higaki (IRCAEB, GSST)

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)

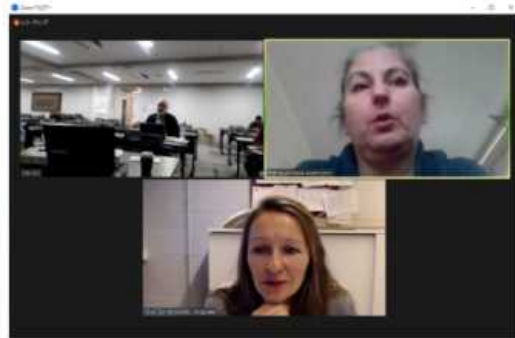
• Fostering Joint International
Research (B) (MEXT; KAKENHI)

IROAST Symposium Report

1-6 Symposium Title	The 15th IROAST Symposium -1st International Symposium on advanced materials and design for structural safety and sustainability (1 st ADS3)			
Organizer 1	Name	Gaochuang CAI	Title	Associate Professor
	Affiliation	IROAST		
Organizer 2	Name	Amir SI LARBI	Title	Professor
	Affiliation	IROAST Visiting Professor (University of Lyon)		
Organizer 3	Name	Konstantinos Daniel TSAVDARIDIS	Title	Professor
	Affiliation	IROAST Visiting Professor (City, University of London)		
Style	Kurokami South C2, 2F Room A Online via Zoom Webinar			
Time & Date	9:00-17:40, January 30, 2023 9:00-18:05, January 31, 2023			
Speaker's Name/ Title/Affiliation	<p>Takafumi NOGUCHI, Professor, University of Tokyo, Japan</p> <p>Barzin MOBASHER, Professor, Arizona State University, U.S.A</p> <p>Yan XIAO, China</p> <p>Feng XIONG, China</p> <p>Xiangcheng ZHANG, China</p> <p>Fuqiang SHEN, China</p> <p>Zhenyuan HANG, China</p> <p>Kazuo DAN, Professor, Kumamoto University, Japan</p> <p>Haihua ZHANG, China</p> <p>Daniele WALDMANN, Professor, Technischen Universität Darmstadt, Germany</p> <p>Yue WEN, Master Student, Kumamoto University, Japan</p> <p>Tine TYSMANS, Professor, Belgium</p> <p>Marano G. CARLO, Professor, Politecnico di Torino, Italy</p> <p>Xi CHEN, Germany</p> <p>A. DANSOU, France</p> <p>Dimitrios AGGELIS, Professor, Belgium</p> <p>Jianfei CHEN, Professor, China</p> <p>Leonardo M. MASSONE, Chile</p> <p>Jiandong WU, China</p> <p>Prafulla Bahadur MALLA, Kumamoto University, Japan</p> <p>Man ZHANG, Japan</p> <p>Yixi LIU, China</p>			

	<p>Yuping SUN, Japan Chong REN, China Xiaoshuai SHI, China Catherine PAPANICOLAOU, Associate Professor, Greece I. IVANOVA, France Nouredine BOURAHLA, France Ali Yacine SAHNOUN, France Mohammed Yacine FERROUKHI, France</p>
Number of Participants	<p>Total: 65 (Int'l participants: 48) Invitees: 16 (Int'l participants: 14)</p>
<p>1. Symposium Overview Symposium name: 1st International Symposium on Advanced Materials and Design for Structural Safety and Sustainability (1st AMDS3) Basic info.: The 1st AMDS3, is an annual meeting organized with the intention of being a platform for researchers, engineers, academicians as well as industrial experts from all over the world to present their research results and development activities in Advanced Materials and Design for Structural Safety and Sustainability. Aims of the symposium: -provide a communication platform for researchers and engineers to present their advanced research results in advanced and sustainable Infrastructure and Civil Engineering. -offer scholars crucial opportunities to improve their work and learn from their colleagues. -serve as a vehicle that strengthens relationships between industry and universities interested in the subject.</p> <p>2. Symposium Outcomes and Future Plan (e.g. about contribution to the development of young researchers and the initiation of international collaborative research aiming for the publication of international collaborative papers, etc.)</p> <p>-Symposium Outcomes This symposium has invited 16 presentations and has received more than 20 abstract submissions. After consideration and deep discussion, 14 normal presentations were accepted. The topics the submissions involved include seismic engineering, eco materials, high-performance materials, green structures, etc. Two of the submissions were selected to be suggested to in Journal of Buildings (IF: 3.324).</p> <p>-Future Plan (1). The 2nd AMDS3 will be held in France next year. The official website is being prepared now. (2). Three of Cai's group members will visit the professors who attend the symposium this year.</p> <p>3. Others -Activities report with visiting (associate) professor- The co-organizers, Professor Si Larbi and TSAVDARIDIS visited our research lab. with another visitor with Dr. Cai for discussing the possibility of new research topics in the future. On the other hand, Professor Zhao also visited our lab. for discussing</p> <p>4. Research achievements during his/her stay in Kumamoto University. J. Zhao, Y. Jiang, G. Cai*, ... (2023). Experimental and theoretical investigation on the flexural behavior of concrete beams reinforced with high-strength steel bars after exposure to elevated temperatures, Construction and Building Materials, Under review.</p> <p>5. Prospect for further research collaboration. The further research collaborations developed on the basis of the symposium are here,</p>	

- (1) Collaborator: Takafumi Noguchi, Professor, University of Tokyo, Japan
Collaboration research topic: 3D-printed concrete
- (2) Collaborator: Barzin MOBASHER, Professor, Arizona State University, U.S
Collaboration research topic: Textile reinforced concrete for seismic strengthening
- (3) Collaborator: Leonardo M. Massone, Professor, University of Chile, Chile
Collaboration research topic: Design and optimization of reinforced concrete walls under strong earthquakes
- (4) Collaborator: J. Zhao, Professor, Zhengzhou University, China
Collaboration research topic: Safety of Ultra-high rebar reinforced concrete under fire exposes



Symposium photos, Kumamoto University



Lab Visiting, Professor Zhao and his group members