

4-1. IROAST Symposia

No.	Symposium Title	Organizer
	Date	
4-1-1	The 16th IROAST Symposium, AFJ Symposium “Concept to deployment of thin wall/cellular structure based system/components by additive manufacturing”	Kazuki TAKASHIMA IROAST Kun YANG CSIRO
	June 15, 2023	
4-1-2	The 17th IROAST Symposium ~Advanced Concepts for Intelligent Vision Systems (Acivs) 2023~	Toshifumi MUKUNOKI FAST
	August 21-22, 2023	
4-1-3	The 18th IROAST Symposium “Cutting-edge Research on Disaster Prevention and Mitigation – Understanding Nature, Harmonizing with Nature, and Leading to a Safe and Secure Future”	Kazuki TAKASHIMA IROAST
	November 21, 2023	
4-1-4	The 19th IROAST Symposium ~ Post PDSTM International Conference on Spin Transition ~	Shinya HAYAMI FAST
	December 2-5, 2023	

FAST : Faculty of Advanced Science and Technology

CSIRO : Commonwealth Scientific and Industrial Research Organisation

IROAST Symposium Report

No.4-1-1	16th IROAST Symposium, AFJ Symposium “Concept to deployment of thin wall/cellular structure based system/components by additive manufacturing”			
Organizer 1	Name	Kazuki TAKASHIMA		
	Affiliation	IROAST	Title	Director
Organizer 2	Name	Kun YANG		
	Affiliation	CSIRO	Title	Research Scientist
Style	Online			
Time & Date	8:30-14:10, June 15, 2023			
Speaker's Name/ Title/Affiliation	Dr. Daniel EAST, CSIRO, Australia Dr. Robert WILSON and Dr. Kun YANG, CSIRO, Australia Prof. Martin LEARY, RMIT, Australia Prof. Guoxing LU, Swinburne University of Technology, Australia Dr. Haopeng SHEN, CSIRO, Australia Assist. Prof. Fiona SPIRRETT, Osaka University, Japan Dr. Ali Ramezan NEJAD, CSIRO, Australia Dr. Vu NGUYEN, CSIRO, Australia Prof. Kazuki TAKASHIMA, IROAST, Kumamoto University, Japan Assist. Prof. Kwangsik KWAK, FAST, Kumamoto University, Japan Dr. Hoang Phu NYUYEN, University of Medicine and Pharmacy, Cho Ray hospital, Vietnam Mr. Stuart DOUGLAS, Maxoniq, Australia			
Number of Participants	Total: 28 (Int'l participants: 21)			
<p>1. Symposium Overview</p> <p>Additive manufacturing, also known as 3D printing, enables the production of final-shaped structures without the need for joining or assembly of parts. This innovative manufacturing method holds great promise in various fields, ranging from small-scale components to large-scale structures. However, there are numerous challenges to overcome for its practical implementation. In this symposium, we aim to address these challenges by inviting experts in materials, processing, and medical fields as a relevant application area. The symposium provided a platform for discussing the latest trends and exchanging information in this rapidly advancing field.</p> <p>2. Symposium Outcomes and Future Plan</p> <p>In this symposium, a wide range of presentations were delivered from various fields, covering the current status of additive manufacturing, approaches from the perspectives of materials and mechanical engineering, and its application in the medical field. These presentations provided valuable insights into the cutting-edge information in this field. Furthermore, during the final roundtable discussion, urgent challenges that need to be addressed in additive manufacturing, opportunities for student and young researcher exchanges, and collaboration with industry were thoroughly examined. In particular, the</p>				

importance of the Japan-Australia exchange was emphasized, and an agreement was reached to further deepen the cooperative relationship between IROAST and CSIRO.

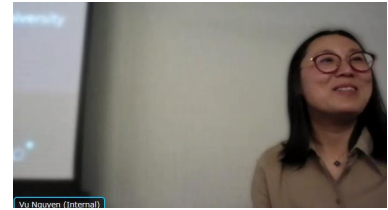
3. Others



Director TAKASHIMA



At CISIRO side



Organizer, Dr. YANG

16th IROAST Symposium, AFJ Symposium

“Concept to deployment of thin wall/cellular structure based system/components by additive manufacturing” Program

JST

- | | |
|-------------|--|
| 8:30-8:50 | Opening remark, Advanced Manufacturing and Metals.
Dr. Daniel EAST, CSIRO, Australia |
| 8:50-9:00 | Introduction, and agenda for the day
Dr. Robert WILSON and Dr. Kun YANG, CSIRO, Australia |
| 9:00-9:25 | Prof. Martin LEARY
“Challenges and opportunities for medical AM lattice design”
RMIT, Australia |
| 9:25-9:50 | Prof. Guoxing LU
“Origami Structures and Materials: Energy Absorption and Impact Mechanics”
Swinburne University of Technology, Australia |
| 9:50-10:10 | Dr. Haopeng SHEN
“Using Micro CT to accelerate certification in additive manufacturing”
CSIRO, Australia |
| | Break |
| 10:25-10:50 | Assist. Prof. Fiona SPIRRETT
“Computational Modelling for Ceramic Stereolithography Process Optimisation”
Osaka University, Japan |
| 10:50-11:15 | Dr. Ali Ramezan NEJAD
“Additive Manufacturing of Shape Memory Alloys – Opportunities for
Collaboration”
CSIRO, Australia |
| 11:15-11:40 | Dr. Vu NGUYEN
“Thin wall and lattice-embedded medical implants in the treatment of
bone defects”
CSIRO, Australia |
| | Lunch break |
| 12:30-12:55 | Prof. Kazuki TAKASHIMA
“Proposal of a fatigue test method using small ring specimens and its
application to fatigue crack propagation testing of additively
manufactured materials”
IROAST, Kumamoto University, Japan |

- 12:55-13:20 Assist. Prof. Kwangsik KWAK
 “Micromechanical testing of additively manufactured materials”
 FAST, Kumamoto University, Japan
- 13:20-13:45 Dr. Hoang Phu NYUYEN
 “The effectiveness in the treatment of long bone defect in adults using
 3D-printed titanium alloy implant: a case study”
 University of Medicine and Pharmacy, Cho Ray hospital, Vietnam
- 13:45-14:10 Mr. Stuart DOUGLAS
 “Clinical Insights and Patient Outcomes”
 Maxoniq, Australia

Break

-- Only for related researchers --

- 14:45-15:45 Round-table discussion
- 15:45-16:00 Closing remark
 Prof. Kazuki TAKASHIMA, IROAST, Japan

16th IROAST Symposium
 AFJ Symposium

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

CSIRO-IROAST

*Concept to deployment of thin wall/
 cellular structure based system/components by additive manufacturing*

8:30-14:10 JST
 Thursday, June 15, 2023
 Online Workshop via Webex

Presenters;

- Prof. Martin Leary, RMIT, Australia
- Prof. Guoxing Lu, Swinburne University of Technology, Australia
- Dr. Haopeng Shen, CSIRO, Australia
- Assist Prof. Fiona Spirrett, Osaka University, Japan
- Dr. Ali Ramezan Nejad, CSIRO, Australia
- Dr. Vu Nguyen, CSIRO, Australia
- Prof. Kazuki Takashima, IROAST, Kumamoto University
- Assist Prof. Kwangsik Kwak, FAST, Kumamoto University
- Dr. Hoang Phu Nyuyen, University of Medicine and Pharmacy,
 Cho Ray hospital, Vietnam
- Mr. Stuart Douglas, Maxoniq, Australia

Organizer; Prof. Kazuki Takashima, IROAST
 Ext. 3098 E-mail: takashik@gpo.kumamoto-u.ac.jp
 Please contact the organizer for log-in URL

IROAST Symposium Report

No.4-1-2 Symposium Title	17th IROAST Symposium ~Advanced Concepts for Intelligent Vision Systems (Acivs) 2023~			
Organizer 1	Name	Toshifumi MUKUNOKI		
	Affiliation	FAST	Title	Professor
Organizer 2	Name	Patrice DELMAS		
	Affiliation	The University of Auckland, NZ	Title	Associate Professor
Style	On site: KKR Hotel Kumamoto			
Time & Date	August 21-22, 2023			
Speaker's Name/ Title/Affiliation	IROAST session Alexander Mark WOODWARD, Riken, Japan Patrice DELMAS, Associate Professor, The University of Auckland, NZ			
Number of Participants	<u>Total:</u> 30 (Int'l participants: 29)			

1. Symposium Overview

The symposium was held as part of the international conference ACIVS (Advanced Concepts for Intelligent Vision Systems) 2023, and brought together researchers from a wide range of countries. The symposium called IROAST session in ACIVS 2023 was chaired by Prof. Mukunoki, and started with an overview of Kumamoto University and IROAST by Prof. Takashima, Director of IROAST. Then, Prof. Mukunoki presented Introduction of the X-Earth Center and shared his latest some research topics. In the oral presentation section, two presenters including Dr. Patrice DELMAS, visiting professor of IROAST, gave talks on their original and high-quality research results. The poster session provided an opportunity for the participating researchers to casually exchange ideas and engage in lively discussions over a cup of coffee.



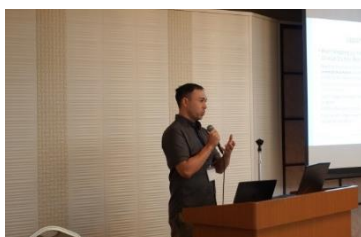
At venue



Prof. TAKASHIMA,
IROAST



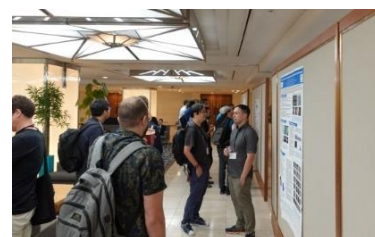
Prof. MUKUNOKI, KU



Dr. WOODWARD, RIKEN



Assoc. Prof. Patrice DELMAS



IROAST Poster Session

2. Symposium Outcomes and Future Plan

Participants were 29. They could know the potential to apply their techniques to Civil Engineering field though this symposium. After this symposium, some young researchers contacted Prof. Mukunoki and they were interested in visiting Kumamoto University as researchers. As Future plan, we discussed the collaboration to have this kind of symposium with Department of Computer Science and Electrical engineering.

ACIVS 2023 Program

Monday, August 21

08:30-12:00	Registration
09:00-09:15	Opening Session
09:15-10:30	Computer Vision (1/2): 120, 115, 104
10:30-10:45	Coffee break
10:45-12:00	Affective Computing and Human Interactions (1/2): 118, 140, 138
12:00-12:30	Lunch break
12:30-14:30	Visit to Kumamoto Castle
14:30 - 16:00	IROAST session (invited IROAST presentations)
16:00 - 18:00	POSTER SESSION
18:00-18:30	Springer Award of the Best Student Paper
19:30-20:30	Opening Reception (Included in the registration fee)

Tuesday, August 22

09:00-10:40	Computer Vision (2/2): 105, 124, 108, 131
10:40-11:00	Coffee break
11:00-12:05	Managing the Biodiversity: 151, 142, 106
12:05-12:40	Lunch break
12:40-14:45	Robotics and Drones: 119, 121, 122, 130, 145
14:45-15:00	Coffee break
15:05-16:20	Machine Learning: 152, 127, 137
16:20-17:10	Affective Computing and Human Interactions (2/2): 153, 125
17:15	End of ACIVS Conference
19:00	Conference dinner (Included in the registration fee)

Mon, August 21, 2023
@Rose room, KKR Hotel Kumamoto

Advanced Concepts for Intelligent Vision Systems
Acivs 2023
17th IROAST Symposium

This conference is packed with a variety of ideas and opportunities.

Those who are involved in the
**development of image analysis methods, using existing
methods, and searching for methods**
in your research, or anyone who is interested, please join us.

Organizer:

Assoc. Prof. Patrice Delmas, IROAST Visiting Professor,
The University of Auckland, New Zealand

✉ p.delmas@auckland.ac.nz

Inquiry contact

Prof. Toshifumi Mukunoki, FAST, KU

☎ 096-342-3535 ✉ mukunoki@kumamoto-u.ac.jp

IROAST

Phone: 096-342-3362 E-mail: szk-kiko@jimu.kumamoto-u.ac.jp

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



IROAST Symposium Report

No.4-1-3	18th IROAST Symposium “Cutting-edge Research on Disaster Prevention and Mitigation – Understanding Nature, Harmonizing with Nature, and Leading to a Safe and Secure Future”			
Organizer 1	Name	Kazuki TAKASHIMA		
	Affiliation	IROAST	Title	Director
Style	Hybrid Venue: The 100th Anniversary Memorial Hall, Kumamoto University Online: Zoom			
Time & Date	13:30-15:30, November 21, 2023			
Speaker’s Name/ Title/Affiliation	Presenters; Prof. Takahiro HOSONO, FAST, KU Assoc. Prof. Atsushi SAINOKI, FAST, KU Assoc. Prof. Gaochuang CAI, IROAST, KU Assoc. Prof. Kei ISHIDA, CWMD, KU Poster presenters; Dr. Reetu Rani, IROAST Dr. Prafulla Bahadur MALLA, IROAST Dr. Jonas Karl N. AGUTAYA, IROAST Dr. Mohammad Atiqur RAHMAN, IROAST			
Number of Participants	<u>Total: 115</u> (Int’l participants: 17)			
<p>The International Research Organization for Advanced Science and Technology (IROAST), Kumamoto University, held the 18th symposium on November 21 in hybrid style under the theme of “Cutting-edge Research on Disaster Prevention and Mitigation – Understanding Nature, Harmonizing with Nature, and Leading to a Safe and Secure Future.”</p> <p>This symposium was held as part of the National University Fest 2023 to introduce research on disaster prevention and mitigation from among the international collaborative research and interdisciplinary research promoted by IROAST, to raise public awareness of IROAST, and to widely distribute research results to society.</p> <p>In his opening remarks, President Hisao Ogawa emphasized that “strengthening resilience is becoming increasingly important for building a safe and secure society. Then, Director Kazuki Takashima, IROAST, introduced IROAST and the many excellent results obtained through international collaborative research with world-class universities and research institutions and interdisciplinary research projects such as medical-engineering collaborations. He also presented his vision on how future research can contribute to the establishment of a well-being society, with new science and engineering that is friendly to people, safe, and secure.</p> <p>Four researchers then presented the results of their international collaborative research supported by IROAST and exchanged opinions with the participants. In between the research presentations, four postdoctoral researchers gave poster presentations, where they talked about their research and had a chance to get to know the participating researchers and graduate students.</p> <p>In the end, 115 people from education and industry registered to the symposium special website, which provided an opportunity to widely share the IROAST research achievements and to actively exchange opinions with the participants.</p>				



Moderator: Prof. TODA,
Vice director of IROAST



President OGAWA



Prof. TAKASHIMA,
Director of IROAST



At the venue



Prof. HOSONO



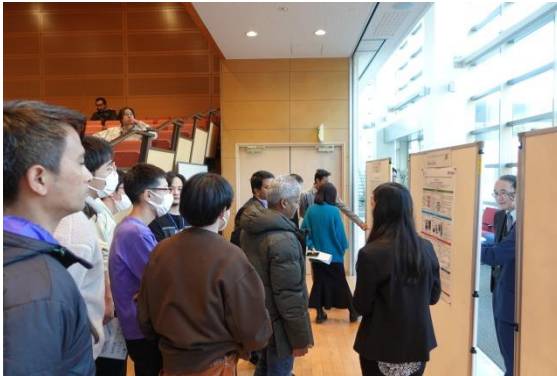
Assoc. Prof. SAINOKI (Online)



Q&A



Q&A



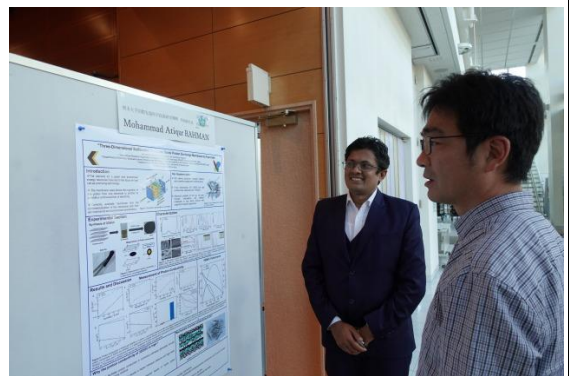
Poster Session



100th Anniversary Hall



Poster presenter: Dr. Reetu Rani



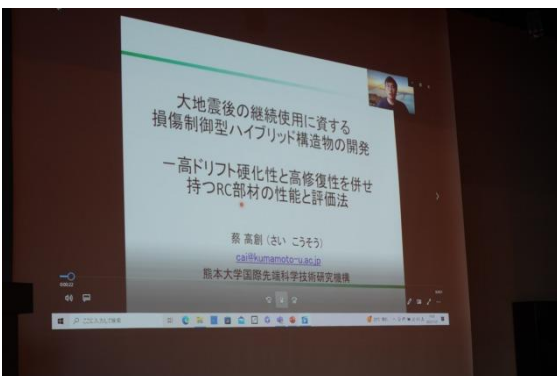
Poster presenter: Dr. RAHMAN



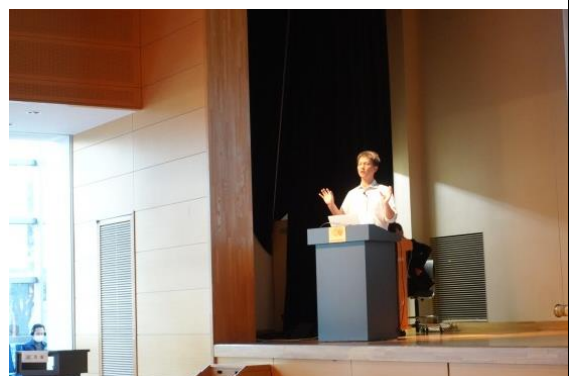
Poster presenter: Dr. MALLA



Poster presenter: Dr. AGUTAYA



Assoc. Prof. CAI (Video Streaming)



Assoc. Prof. ISHIDA

18th IROAST Symposium

“Cutting-edge Research on Disaster Prevention and Mitigation – Understanding Nature, Harmonizing with Nature, and Leading to a Safe and Secure Future” Program

JST

- 13:30-13:35 Opening Remarks
Hisao Ogawa, President, Kumamoto University
- 13:35-13:45 Introduction of IROAST
Kazuki TAKASHIMA, IROAST Director
- 13:45-14:05 Prof. Takahiro HOSONO
“Effects of a major earthquake on groundwater environment: learning from the 2016 Kumamoto earthquake”
FAST, Kumamoto University

- 14:05-14:25 Assoc. Prof. Atsushi SAINOKI
“Development of earthquake disaster prevention technology using induced earthquakes”
FAST, Kumamoto University
- 14:25-14:45 Break + Poster Session by IROAST Postdoctoral Research Fellows
Dr. Reetu Rani
“Utilizing Zirconium Based Metal-Organic Framework for Water Remediation Applications”
Dr. Prafulla Bahadur MALLA
“Resilient Reinforced Concrete Shear Wall with Ultimate High Strength Bars (SBPD)”
Dr. Jonas Karl N. AGUTAYA
“Insights into the ethanol gas sensing mechanism of ZnO from a combined experimental and DFT-based approach”
Dr. Mohammad Atiqur Rahman
“Three-Dimensional Sulfonated Graphene Oxide Proton Exchange Membrane for Fuel Cells”

- 14:45-15:05 Assoc. Prof. Gaochuang CAI
“Development of damage-controlled hybrid structures for continuous use after major earthquakes -Performance and evaluation of RC members with high drift hardenability and high restorability”
IROAST, Kumamoto University
- 15:05-15:25 Assoc. Prof. Kei ISHIDA
“AI-based prediction of heavy rainfall and flooding”
CWMD, Kumamoto University
- 15:25-15:30 Closing Remarks
Kei TODA, Vice director of IROAST, Prof. FAST, Kumamoto University



第18回熊本大学IROASTシンポジウム

自然を知り、共生する 未来につなぐ 最先端の防災・減災研究



2023年11月21日（火） 13:30～15:30
熊本大学工学部百年記念館
Zoomによるオンライン配信あり

参加費無料
ご来場も歓迎いたします

【お問い合わせ】
熊本大学 国際先端科学技術研究機構 (IROAST)
sik-kiko@jmu.kumamoto-u.ac.jp
https://iroast.kumamoto-u.ac.jp

国際先端科学技術研究機構 (IROAST)の研究者が行っている安全・安心社会の構築や防災・減災に関する国際研究の成果と今後の展望を紹介いたします

プログラム

- 13:30 - 13:35 開会挨拶 (熊本大学長 小川久雄)
- 13:35 - 13:45 IROAST紹介 (研究機構長 高島和典)
- 13:45 - 14:05 巨大地震が地下水環境に及ぼす影響：2016年熊本地震からの学び (堀野高寿)
- 14:05 - 14:25 誘発地震を利用した地震防災技術の開発 (オノ木 敦士)
- 14:25 - 14:45 Break + Poster Presentation by IROAST特別研究員 (Sainoki Atsushi, Hosono Takahiro)
IROASTは熊本大学工学部内に設置されています。研究を支援しています。
IROAST Fellow (sainoki@iroast.kumamoto-u.ac.jp) has been confirmed and supports their research.
+ Utilizing Zirconium Based Metal-Organic Framework for Water Remediation Applications (Rani, Reetu)
+ Resilient Reinforced Concrete Shear Wall with Ultra-High Strength Bars (SBPD) (Prafulla Bahadur MALLA)
+ Insights into the ethanol gas sensing mechanism of ZnO from a combined experimental and DFT-based approach (Jonas Karl N. AGUTAYA)
+ Three-Dimensional Sulfonated Graphene Oxide Proton Exchange Membrane for Fuel Cells (Mohammad Atiqur RAHMAN)
- 14:45 - 15:05 大地震後の継続使用に資する損傷制御型ハイブリッド構造物の開発 (蔡 高創)
一層リフト剛化性と高伸縮性を併せ持つRC部材の性能と評価法
- 15:05 - 15:25 AIを用いた大雨・洪水予測 (石田 健)
- 15:25 - 15:30 閉会挨拶 (副研究機構長 戸田 俊)

講演者紹介

 堀野 高寿 熊本大学国際先端科学技術研究部 (工学部) 教授・IROAST国際共同研究員 (兼任)	 高 和典 熊本大学国際先端科学技術研究機構 機構長
 オノ木 敦士 熊本大学国際先端科学技術研究部 (工学部) 准教授・IROAST国際共同研究員 (兼任)	 石田 健 熊本大学・東と北連携推進・減災連携研究センター 准教授・IROAST国際共同研究員 (兼任)

Poster Presentation by IROAST特別研究員

 Reetu Rani 熊本大学工学部 博士課程後期 特別研究員 (兼任)	 Prafulla Bahadur MALLA 熊本大学工学部 博士課程後期 特別研究員 (兼任)	 Jonas Karl N. AGUTAYA 熊本大学工学部 博士課程後期 特別研究員 (兼任)	 Mohammad Atiqur RAHMAN 熊本大学工学部 博士課程後期 特別研究員 (兼任)
---	--	--	---

講演者や参加者皆様とのつながりを
QRコードから開始してください。
シンポジウム終了後には講演者
会合があります。

【お問い合わせ】
熊本大学 国際先端科学技術研究機構 (IROAST)
sik-kiko@jmu.kumamoto-u.ac.jp
https://iroast.kumamoto-u.ac.jp

IROAST Symposium Report

No.4-1-4	19th IROAST Symposium ~ Post PDSTM International Conference on Spin Transition ~			
Organizer 1	Name	Shinya HAYAMI		
	Affiliation	FAST	Title	Professor
Style	On site: ARK Hotel Kumamoto			
Time & Date	December 2-5, 2023			
Speaker's Name/ Title/Affiliation	Appendix			
Number of Participants	<u>Total: 100</u> (Int'l participants: 43)			

1. Symposium Overview

Since the first observation of state crossover between spin isomers in 1931, this intriguing phenomenon, namely spin crossover (SCO), has often been observed for coordination complexes containing transition metal cations, such as Fe(II), Fe(III), Co(II), and Mn(III). To date, a vast number of metal complexes with SCO properties have been prepared, and the rational synthetic strategies, understanding of mechanisms, and broadening of SCO functions are still the main challenges in the field.

2. Symposium Outcomes and Future Plan

With a significant population of researchers, the SCO community still does not have a specific meeting of our own. In addition, this research field urged us to take a further step in the development and incubation of young researchers in the SCO field. Given the fact that the discussions and the exchange of ideas about SCO studies are usually only a small portion of most molecular magnetism meetings, which is far from sufficient and satisfying, we have organized a new international conference series focusing on molecular spin transition phenomena, including SCO, valence tautomerism (VT), electron transfer (ET) and other related topics. This conference series aims to bring about in-depth discussions, boost collaborations within the community and attract young researchers to jump into the pool. With these motivations in mind, we hold the international conference on Spin Transition as Post PDSTM in Kumamoto. This conference was a family meeting with deep discussions, new compounds, phenomena, and applications for the next generation. Furthermore, this conference encouraged the younger generation of researchers.

Furthermore, all speakers have many ideas, we also discussed about magnetic molecular materials research. We will start a collaboration about magnetic compound with not only many functions but also quantum effects. Our collaboration is very strong society and each researcher is also very high level in the world. For some our results, we have submitted and published in top class journals. We will also collaborate in this project each other from now.

3. Others

Finally, I would like to thank kind support of IROST for our research collaborations.



At the venue



Prof. HAYAMI



Prof. Birgit WEBER



Prof. Shangda JIANG



Prof. Azzedine BOUDDRSOU



Group Photo

(Program)

Saturday, December 2

No.	Time	Chair	Program
	9:00-9:10		OP (Shinya Hayami)
A-1	9:10-9:35	Zhang Zhongyue	O ₂ -induced spin state switching of a porous molecular crystalline cobalt(II) complex Manabu Nakaya, Josai University
A-2	9:35-10:00		Elucidating Predictable Tuning by Ligand Design and Surface Immobilisation of Coordinatively Elastic Multifunctional Fe(II) Spin Switches Sriram Sundaresan, Johannes Gutenberg University of Mainz
A-3	10:00-10:25		Hydrogen-bonding Assembly-induced Thermally Driven Electron Transfer in Cyanide-bridged Complexes Yoshihiro Sekine, Kumamoto University
A-4	10:25-10:50		Modulation of the Charge Distribution in Co-dimine complexes to Achieve Valence Tautomerism Jett Janetzki, The University of Melbourne
A-5	10:50-11:15		Spin crossover semiconductors composed of pyrazolate-bridged dinuclear iron(II) complex and partially reduced TCNQ radicals Ryuta Ishikawa, Fukuoka University
	11:15-11:35		CB
A-6	11:35-12:00	Manabu Nakaya	Interplay between spin-state change and symmetry-breaking phase transition on cooperative spin-crossover materials Francisco Javier Valverde Munoz, University of Rennes
A-7	12:00-12:25		Unique Hofmann-type CPs with 4-methylpyrimidine and Au cyanide Kosuke Kitase, Toho University
A-8	12:25-12:50		Simultaneous photo-induced magneto-dielectric switching in cyano-bridged molecular assemblies Yin-Shan Meng, Dalian University of Technology
A-9	12:50-13:15		Proton conductive hydrogen-bonded architectures constructed by cobalt(II) spin crossover complexes Fumiya Kobayashi, Tokyo University of Science
	13:15-14:25		Lunch
A-10	14:25-15:05	Takuya Shiga	The effect of isomorphous dopants on spin-crossover crystals does not simply depend on the dopant ionic radius Malcolm Halcrow, University of Leeds
A-11	15:05-15:45		Spin crossover nano(hybrid)particles: from synthesis to time-resolved characterization of individual particle by ultrafast transmission electron microscopy Guillaume Chastanet, University of Bordeaux
A-12	15:45-16:10		Spin crossover phenomena of Ni(cyclam)I ₂ : Comparison between two polymorphs Motohiro Nakano, Osaka University
	16:10-16:30		CB
A-13	16:30-17:10	Tetsuro Kusamoto	Spin-state switching in dynamic molecules and chiral cages Sanjit Konar, Indian Institute of Science Education and Research Bhopal
A-14	17:10-17:35		Photoinduced hidden state in the metal-organic framework (NPr ₄) ₂ [Fe ₂ (Cl ₄ AN) ₂] Tadahiko Ishikawa, Tokyo Institute of Technology
A-15	17:35-18:00		Spin-crossover Iron Complexes with imidazole-Imine Ligands Yukinari Sunatsuki, Okayama University
A-16	18:00-18:25		Multistep conversion of spin-crossover behaviour of a Fe(II) mononuclear complex by desorption of lattice solvents Takuya Shiga, University of Tsukuba
			Welcome Party

Sunday, December 3

No.	Time	Chair	Program
B-1	9:00-9:40	Hitoshi Miyasaka	Molecular Spin Crossover Phenomenon: From molecules to mechanical actuators Azedine Bousseksou, LCC - University of Toulouse
B-2	9:40-10:20		Molecular Spin Crossover Devices Ruben Mario, KIT Karlsruhe Strasbourg Jena
B-3	10:20-10:45		On-off switching and control of spin crossover in iron(III) complexes Zhao-yang Li, Nankai University
	10:45-11:05		CB
B-4	11:05-11:30	Fumiya Kobayashi	Type-I multiferroics via supramolecular strategies Takayoshi Nakamura, Hokkaido University
B-5	11:30-11:55		Spin Crossover coupled with an Electron Transfer in Hofmann-Type Coordination Polymers Saioa Cobo, Université Grenoble Alpes
B-6	11:55-12:20		Spin state-dependent photoluminescence of assembled radicals Tetsuro Kusamoto, Osaka University
	12:20-13:30		Lunch
B-7	13:30-14:10	Tadahiko Ishikawa	Quest for multi-stimuli responsive spin-crossover materials based on the Fe(II)-Re(V) frameworks Barbara Sieklucka, Jagiellonian University
B-8	14:10-14:50		Symmetry breaking in spin crossover compounds Eric Collet, University of Rennes
B-9	14:50-15:15		Chemo-Switchable MOF Magnets Hitoshi Miyasaka, Tohoku University
B-10	15:15-15:40		Valence Tautomerism in Cobalt Verdazyl Compounds David Brook, San Jose State University
	15:40-16:00		CB
B-11	16:00-16:40	Ho Chol Chang	Spin State Ordering and Domain Wall Dynamics in Ferroelastic Spin Crossover Complexes Grace Morgan, University College Dublin
B-12	16:40-17:05		π -Topology, Spin Alignment, and Excited-State Dynamics of Photoexcited Organic Multi-Spin Systems Yoshio Teki, Osaka Metropolitan University
B-13	17:05-17:30		oma-Iwamoto-type Spin Crossover Compounds with Supramolecular Frameworks Takafumi Kitazawa, Toho University
			Group Photo
			Dinner

Monday, December 4

No.	Time	Chair	Program
C-1	9:00-9:40	Shang Da Jiang	Switchable Molecules in Polymers Birgit Weber, University of Bayreuth
C-2	9:40-10:05		Manipulation of transition temperatures in cyanide-bridged FeCo complexes Hiroki Oshio, Dalian University of Technology
C-3	10:05-10:30		Strong coupling between spin crossover, fluorescence and viscoelasticity in soft nanocomposites Zhang Zhongyue, Kumamoto University
	10:30-10:50		CB
C-4	10:50-11:15	Zhao-yang Li	Molecular Lattice Engineering for Valence Tautomerism: connecting molecular and macroscopic worlds Ho Chol Chang, Chuo University
C-5	11:15-11:40		Spin Manipulation in Magnetic Molecules Shang Da Jiang, South China University of Technology
C-6	11:40-12:05		A possibility of single-molecule transistor by spin coupling states Yasutaka Kitagawa, Osaka University
	12:05-13:15		Lunch
C-7	13:15-13:55	Takafumi Kitazawa	Multi-Switchability in Bis(Dioxolene)-Bridged Co and Fe Complexes Colette Boskovic, The University of Melbourne
C-8	13:55-14:35		Strong coupling between spin crossover, fluorescence and viscoelasticity in soft nanocomposites Small Triki, University of Brest
C-9	14:35-15:00		Two-step Spin Crossover Behavior of the Iron(II) Complex with a Novel Tridentate Schiff-Base Ligand Derived from Aminonaphthol Takayoshi Kuroda-Sowa, Kindai University
C-10	15:00-15:25		Spin-crossover Nanostructure: Scope Beyond Expectation Pradip Kumar Chakraborty, Indian Institute of Technology Kharagpur
	15:25-15:45		CB
C-11	15:45-16:25	Yoshihiro Sekine	Thermal, optical and electric control of spin-crossover/metallic interface Amandine Bellec, Université Paris Cité
C-12	16:25-16:50		Spin crossover behaviors of iron(III) complexes with 2,4-dichloro-6-((quinoline-8-ylimino)methyl)phenolate Kil Sik Min, Kyungpook National University
C-13	16:50-17:15		Chemical Manipulation of the Spin-Crossover Dynamics via Judicious Metal-Ion Dilution in a Mononuclear FeII Complex Xin Bao, Nanjing University of Science and Technology
C-14	17:15-17:55		Control of magnetic and electric polarization via electron transfer in molecular crystals Osamu Sato, Kyushu University
	17:55-18:05		Closing Remarks
			Banquet

Tuesday, December 5

Excursion for Aso

(Poster)



19th IROAST Symposium



Date & Time / Venue:

Sat, December 2, 9:00 - 18:10

100th Anniversary Hall, Kurokami South Campus,
Kumamoto University

Sun, December 3, 9:00 - 18:10

Mon, Decemebr 4, 9:00 - 18:35

Room Tsubaki & Asagao, Arc Hotel Kumamotojomae



Post PDSTM HP

Organizer: Prof. Shinya Hayami

Faculty of Advanced Science and Technology

E-mail: hayami@kumamoto-u.ac.jp

[Registration is required. Please contact Organizer](#)

IROAST

Phone: 096-342-3362 E-mail: szk-kiko@jimu.kumamoto-u.ac.jp

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