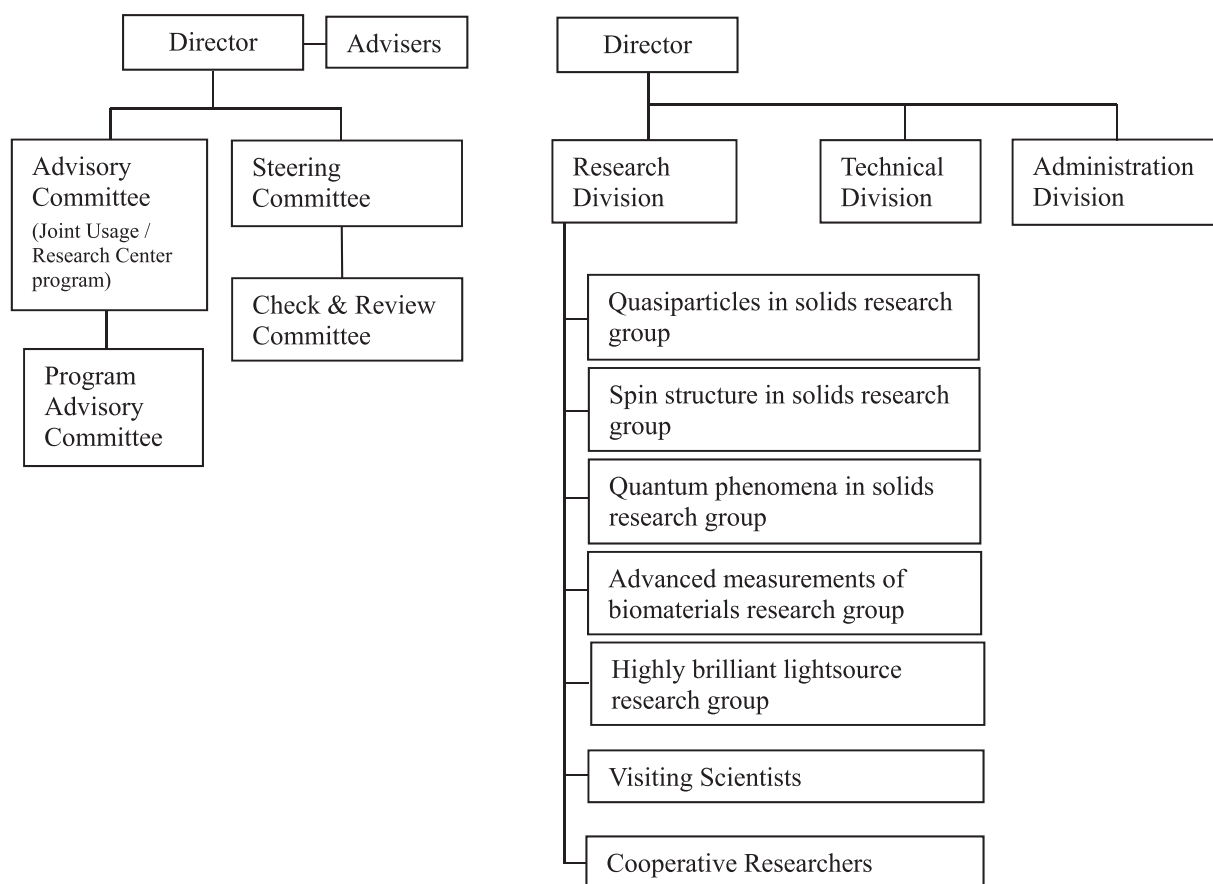


# Appendices



# Organization



**Fig. 1:** Organization chart of HiSOR

## Director

SHIMADA, Kenya

Hiroshima Synchrotron Radiation Center, HiSOR

## Adviser

OHTA, Toshiaki

Emeritus Professor, The University of Tokyo

KAKIZAKI, Akito

Emeritus Professor, The University of Tokyo

SATO, Shigeru

Emeritus Professor, Tohoku University

TANIGUCHI, Masaki

Emeritus Professor, Hiroshima University

FUJIMORI, Atsushi

Emeritus Professor, The University of Tokyo

## **Staff Members**

SHIMADA, Kenya	Director, Professor
OKUDA, Taichi	Vice Director, Professor
NAMATAME, Hirofumi	Professor
KATOH, Masahiro	Professor
SATO, Hitoshi	Associate Professor
SAWADA, Masahiro	Associate Professor
MATSUO, Koichi	Associate Professor
MIYAMOTO, Kouji	Associate Professor
IDETA, Shin-ichiro	Associate Professor
SHIMADA, Miho	Associate Professor (Special Appointment)
MIYAUCHI, Hiroshi	Associate Professor (Special Appointment)
Mohamed Ibrahim	Assistant Professor
Shiv Kumar	Assistant Professor
INO, Akihiro	Visiting Professor
Zhang Ke	Researcher
Amit Kumar	Researcher
Hou Xueyao	Researcher
Lu Yao	Researcher
GOTO, Kiminori	Engineer
ARITA, Masashi	Engineer
ARAMOTO, Katsuhiko	Supervisor, Academic Support Group
SHINNO, Naoko	Secretary
SHIMOKUBO, Harumi	Secretary
TAMURA, Yasuka	Secretary

## **Steering Committee**

SHIMADA, Kenya*	HiSOR
OKUDA, Taichi	HiSOR
NAMATAME, Hirofumi	HiSOR
KATOH, Masahiro	HiSOR
SATO, Hitoshi	HiSOR
SAWADA, Masahiro	HiSOR
MATSUO, Koichi	HiSOR
MIYAMOTO, Kouji	HiSOR
IDETA, Shin-ichiro	HiSOR
KURIKI, Masao	Graduate School of Advanced Science and Engineering
TATE, Shinichi	Graduate School of Advanced Science and Engineering
HAYAKAWA, Shinjiro	Graduate School of Advanced Science and Engineering



YABUTA, Hikaru	Graduate School of Advanced Science and Engineering
YOKOYA, Takayoshi	Okayama University
DAIMON, Hiroshi	Toyota Physical and Chemical Institute

*\*Chair Person*

### **Check & Review Committee**

SHIMADA, Kenya	HiSOR
OKUDA, Taichi*	HiSOR
NAMATAME, Hirofumi	HiSOR
KATOH, Masahiro	HiSOR
SATO, Hitoshi	HiSOR
SAWADA, Masahiro	HiSOR
MATSUO, Koichi	HiSOR
MIYAMOTO, Kouji	HiSOR
IDETA, Shin-ichiro	HiSOR
DAIGO, Souichi	Academic Support Group
ARAMOTO, Katsuhiko	Academic Support Group

*\*Chair Person*

### **Advisory Committee**

SHIMADA, Kenya	HiSOR
OKUDA, Taichi	HiSOR
KIMURA, Akio	Graduate School of Advanced Science and Engineering
NAMATAME, Hirofumi*	HiSOR
KATOH, Masahiro	HiSOR
SATO, Hitoshi	HiSOR
SAWADA, Masahiro	HiSOR
MATSUO, Koichi	HiSOR
MIYAMOTO, Kouji	HiSOR
IDETA, Shin-ichiro	HiSOR
ABUKAWA, Tadashi	Tohoku University
ISHIZAKA, Kyoko	The University of Tokyo
KIMURA, Shin-ichi	Osaka University
TOBIYAMA, Makoto	High Energy Accelerator Research Organization
AIURA, Yoshihiro	National Institute of Advanced Industrial Science and Technology
SENO, Yoshiki	Kyushu Synchrotron Light Research Center
QIAO, Shan	Shanghai Institute of Microsystems and Information Technology, Chinese Academy of Sciences
MATOKA, Yasuyuki	Yasuda Women's University

YOKOYAMA, Toshihiko	Institute for Molecular Science
KINOSHITA, Toyohiko	Japan Synchrotron Radiation Research Institute

*\*Chair Person*

### **Program Advisory Committee**

SHIMADA, Kenya	HiSOR
OKUDA, Taichi	HiSOR
SATO, Hitoshi	HiSOR
SAWADA, Masahiro	HiSOR
MATSUO, Koichi	HiSOR
MIYAMOTO, Kouji*	HiSOR
HAYAKAWA, Shinjiro	Graduate School of Advanced Science and Engineering
SAITOH, Tomohiko	Tokyo University of Science
AMEMIYA, Kenta	High Energy Accelerator Research Organization
SAKAMOTO, Kazuyuki	Osaka University
YAGI, Shinya	Nagoya University
FUJIMORI, Shin-Ichi	Japan Atomic Energy Agency
MIZOKAWA, Takashi	Waseda University
MAKI, Yasuyuki	Kyusyu University

*\*Chair Person*

### **Visiting Scientists**

IWASAWA, Hideaki	National Institutes for Quantum and Radio Science and Technology
IZUMI, Yudai	National Institutes for Quantum and Radio Science and Technology
DONATH, Markus	University of Münster
QIAO, Shan	Chinese Academy of Sciences Shanghai Institute of Microsystems and Information Technology
ZHOU, Xingjiang	Institute of Physics, Chinese Academy of Sciences
SOKOLOV, Nikolai	Ioffe Physical-Technical Institute of the Russian Academy of Sciences
SHIKIN, Alexander	St. Petersburg University

### **Cooperative Research Staffs (Faculty Members)**

INUI, Masanori	Graduate School of Advanced Science and Engineering
KUROIWA, Yoshihiro	Graduate School of Advanced Science and Engineering
MORIYOSHI, Chikako	Graduate School of Advanced Science and Engineering
YABUTA, Hikaru	Graduate School of Advanced Science and Engineering

SEKITANI, Tetsuji	Graduate School of Advanced Science and Engineering
OKADA, Kazumasa	Graduate School of Advanced Science and Engineering
NAKAJIMA, Nobuo	Graduate School of Advanced Science and Engineering
WADA, Shin-ichi	Graduate School of Advanced Science and Engineering
YOSHIDA, Hiroaki	Graduate School of Advanced Science and Engineering
ISHIMATSU, Naoki	Graduate School of Advanced Science and Engineering
TANAKA, Arata	Graduate School of Advanced Science and Engineering
HAYAKAWA, Shinjiro	Graduate School of Advanced Science and Engineering
HIKICHI, Yousuke	Town & Gown Promotion Joint Research Course

### **Cooperative Researchers (Visiting Researchers)**

MIMURA, Kojiro	Osaka Prefecture University
YOKOYA, Takayoshi	Okayama University
MURAOKA, Yuji	Okayama University
WAKITA, Takanori	Okayama University
SENBA, Shinya	Ube National College of Technology
TANIDA, Hajime	Japan Atomic Energy Agency
YAMAGUCHI, Katsuhiko	Fukushima University
ISHIHARA, Yuichiro	Higashihiroshima City

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  40. S. A. A. Ghani, A. A. M. El-Sayed, M. I. A. Ibrahim, M. M. Ghobashy, M. A. Shreadah, S. Shabaka, “Characterization and distribution of plastic particles along Alexandria beaches, Mediterranean Coast of Egypt, using microscopy and thermal analysis techniques”, *Sci. Total Environ.* **834**, 155363/10p (2022).
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## List of Accepted Research Proposals

- |         |                   |   |   |
|---------|-------------------|---|---|
| 22AG001 | Shiv Kumar        | Hiroshima University  | High-resolution angle-resolved photoemission study of transition-metal dipnictides $TMPn_2$                         |
| 22AG002 | Kazuyuki Sakamoto | Osaka University  | Electronic structure of magnetic molecule adsorbed atomic layer superconductor TIPb                                 |
| 22AG003 | Mohamed Ibrahim   | Hiroshima University  | Synchrotron radiation circular dichroism study of exopolysaccharides from marine resources                          |
| 22AG004 | Masanori Wakisaka | Tohoku University   | Elucidation of the electronic state of halogen-bridged metal complexes by angle-resolved photoelectron spectroscopy |
| 22AG005 | Shin-ichiro Ideta | Hiroshima University  | Electronic structure of cuprate superconductors under uniaxial strain   |
| 22AG006 | Shin-ichiro Ideta | Hiroshima University  | Reexamination of phase diagram of high- $T_c$ cuprates studied by Super high-resolution ARPES                       |
| 22AG007 | Toshirou Hata     | Hiroshima University  | XAFS analysis of the Calcium based low- $CO_2$ emission geomaterials  |
| 22AG008 | Nao Tsunoji       | Hiroshima University  | XAFS characterization of transition metal and noble metal in metal oxide catalysts                                  |
| 22AG009 | Kentaro Fujii     | National Institutes for Quantum and Radiological Science and Technology | Observation of nuclear creation process of liquid-liquid phase separation using VUV-CD spectroscopy                 |
| 22AG010 | Hitoshi Sato      | Hiroshima University  | Angle resolved photoemission spectroscopy of $4f$ chiral magnet   |
| 22AG011 | Hitoshi Sato      | Hiroshima University  | Angle resolved photoemission spectroscopy of valence transition compounds $YbInCu_4(100)$                           |
| 22AG012 | Koichi Matsuo     | Hiroshima University  | Structural analysis of $\alpha$ -synuclein induced with membrane  |
| 22AG013 | Koichi Matsuo     | Hiroshima University  | Structural stability of proteins induced by disaccharides   |
| 22AG014 | Koichi Matsuo     | Hiroshima University  | Time-resolved measurements of structural change of protein  |
| 22AG015 | Masashi Arita     | Hiroshima University  |   |

- Angle-resolved photoemission study of MnSi
- 22AG016 Koji Miyamoto Hiroshima University  
Study of thickness-dependent electronic structure on Bi/Ni hetero bilayer
- 22AG017 Taichi Okuda Hiroshima University  
Study of CISS effect on the chiral crystal NbSi<sub>2</sub>
- 22AG018 Taichi Okuda Hiroshima University  
Study of spin-electronic structure of chiral polarized two-dimensional organic/inorganic hybrid perovskite
- 22AG019 Jayita Nayak Indian Institute of Technology Kanpur  
Band structure engineering of some magnetic topological semimetals
- 22AG020 Takashi Komesu University of Nebraska-Lincoln  
The electronic structure investigation of dimensionality driven iridates
- 22AG021 Osamu Takahashi Hiroshima University  
XAS study of light damaged organic film
- 22AG022 Hiroaki Anzai Osaka Prefecture University  
Temperature dependence of the heavy-fermion bands in YbAgCu<sub>4</sub>
- 22AG023 Hiroaki Anzai Osaka Prefecture University  
Temperature dependence of the heavy-fermion behavior in quadruple perovskite oxides
- 22AG024 Yoshihisa Matsumoto Tokyo Institute of Technology  
Effects of variants of DNA repair proteins on the secondary structure and its temperature sensitivity
- 22AG025 Shin-ichi Wada Hiroshima University  
Electronic relaxation dynamics depending on molecular conductivity probed by electron spectroscopy
- 22AG026 Shin-ichi Wada Hiroshima University  
Exploring functional organic molecules assembled on Au nanoparticles by X-ray absorption spectroscopy
- 22AG027 Markus Donath University of Münster  
Magnons in ultrathin Ni films
- 22AG028 Takayoshi Yokoya Okayama University  
Angle resolved photoemission spectroscopy in  $R_{1-x}\text{Ce}_x\text{OBiS}_2$  ( $R=\text{La, Pr, Nd}$ ): Direct observation of the  $c$ - $f$  mixed band
- 22AG029 Takayoshi Yokoya Okayama University  
Electronic structure study in layered nitride chloride superconductor by SR-ARPES
- 22AG030 Takayoshi Yokoya Okayama University

- Electronic structure study of functional materials at BL-5 (FY2022 First half)
- 22AG031 Kazumasa Okada Hiroshima University  
Study on intermolecular interactions of the water-acetone binary system observed in its near ultraviolet absorption spectra (Part 2)
- 22AG032 Shinjiro Hayakawa Hiroshima University  
Improvements in XAFS measurements at BL11
- 22AG033 Akari Takayama Faculty of Science and Engineering, School of Advanced Science and Engineering, Waseda University  
Study of Electronic state of topological heterojunction in Sb/Bi by spin-resolved ARPES
- 22AG034 Friedrich Reinert Universitaet Wuerzburg  
Investigation of the spin texture in epitaxially grown Te-based thin film quantum materials
- 22AG035 Friedrich Reinert Universitaet Wuerzburg  
Mapping the temperature dependence of the magnetic gap in a ferromagnetically extended topological insulator: high-resolution ARPES at low temperatures and low photon energies
- 22AG036 Chang Liu Southern University of Science and Technology  
Study of Fermi Surface Topology on CoP-Based ThCr<sub>2</sub>Si<sub>2</sub> Structural Compounds  $ACo_2P_2$  ( $A = Ca, Sr, La, Ce, Pr, Nd, Eu$ )
- 22AG037 Chang Liu Southern University of Science and Technology  
Spin-resolved ARPES study on magnetic topological insulator  $Mn(Bi_{1-x}Sb_x)_2Te_4$
- 22AG038 Chang Liu Southern University of Science and Technology  
Co-modulation of Dirac point and gap size in magnetic topological insulators  $Sn_xMn_{1-x}(Sb_yBi_{1-y})_2Te_4$
- 22AG039 Akio Kimura Hiroshima University  
Site-specific quantitative evaluation of electron-electron interaction in CoFe-based half-metallic ferromagnetic alloys
- 22AG040 Akio Kimura Hiroshima University  
Topological surface states and carrier tuning in the loop-node superconductor  $ZrP_{2-x}Se_x$
- 22AG041 Akio Kimura Hiroshima University  
Exploration of spin-polarized topological band structures in ferrimagnetic Mn based alloys
- 22AG042 Akio Kimura Hiroshima University  
Observation of Hopf-links and drumhead spin-polarized surface states in Heusler-type ferromagnets
- 22AU001 Meng Wang CEMS, RIKEN

XAS and XMCD study of the relationship between spin-state and magnetoresistivity in  $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$  film.

- 22AU002 Shiv Kumar Hiroshima University  
High-resolution angle-resolved photoemission study of nodal line topological semimetal
- 22AU003 Tomohide Saio Tokushima University  
Unraveling molecular mechanism for protein quality control system
- 22AU004 Yasuyuki Matoba Yasuda Women's University  
YUVCD measurements of O-acetyl-L-homoserine sulfhydrylase from *Lactobacillus plantarum*
- 22AU005 Shiv Kumar Hiroshima University  
X-ray magnetic circular dichroism (XMCD) study of magnetic topological materials
- 22AU006 Hitoshi Sato Hiroshima University  
Laser ARPES on new 4f chiral magnet  $\text{YbNi}_3\text{Al}_9$

22BG001	Tatsuhito Matsuo	National Institutes for Quantum and Radiological Science and Technology	Secondary structure analysis of amyloid polymorphic fibrils with distinct cytotoxicity using vacuum-ultraviolet circular dichroism
22BG002	Yuji Muraoka	Okayama University	Verification of magnetic property for room temperature ferromagnet Q-carbon by using X-ray MCD method
22BG003	Susumu Mineoi	Hiroshima University	Development of chemical state evaluation analysis methods for automotive functional materials by XAFS measurement
22BG004	Shin-ichiro Ideta	Hiroshima University	Reexamination of phase diagram of high- $T_c$ cuprates studied by super high-resolution ARPES II
22BG005	Shin-ichiro Ideta	Hiroshima University	Spin-resolved photoemission spectroscopy study of the antiferromagnetic metal $\text{NiS}_{2-x}\text{Se}_x$ II
22BG006	Toshirou Hata	Hiroshima University	Experimental study on the geological $\text{CO}_2$ deposit via biofilm DAC(Direct Air Capture)
22BG007	Masahiro Sawada	Hiroshima University	Magnetic properties at the interface between hexagonal boron nitride and magnetic intercalated layers
22BG008	Masahiro Sawada	Hiroshima University	Magnetic coupling between transition metal layers through monolayer hexagonal boron nitride
22BG009	Hiroyuki Ikemoto	University of Toyama	Electronic state of the chalcogen chains encapsuled in carbon nanotubes
22BG010	Daiki Ootsuki	Kyoto University	Low-energy electronic structure analysis of transition metal chalcogenides with high thermoelectric performance
22BG011	Cai Liu	Southern University of Science and Technology	ARPES Study on Antiferromagnetic topological semimetal $\text{Tb}_2\text{CuGe}_6$
22BG012	Cai Liu	Southern University of Science and Technology	Laser-based Angle-Resolved Photoemission Spectroscopy Study on $\text{MnBi}_{10}\text{Te}_{16}$
22BG013	Hitoshi Sato	Hiroshima University	Electronic structure of new 4f chiral magnet studied by angle resolved photoemission spectroscopy

22BG014	Hitoshi Sato	Hiroshima University	Angle resolved photoemission spectroscopy of new 4 <i>f</i> chiral magnet
22BG015	Hitoshi Sato	Hiroshima University	Study on spin texture of new 4 <i>f</i> chiral magnet YbNi <sub>3</sub> Al <sub>9</sub>
22BG016	Koichi Matsuo	Hiroshima University	Circular dichroism measurements of film proteins prepared by spin coater
22BG017	Masahiro Kobayashi	National Institute for Fusion Science	Circular dichroism analysis of molecular structure in amino acid specimen by vacuum-ultraviolet circularly-polarized light irradiation
22BG018	Ryota Akiyama	The University of Tokyo	Modulation of band dispersions by Yb-intercalation into graphene
22BG019	Kentaro Fujii	National Institutes for Quantum and Radiological Science and Technology	Observation of nuclear creation process of liquid-liquid phase separation using VUV-CD spectroscopy
22BG020	Kentaro Fujii	National Institutes for Quantum and Radiological Science and Technology	Analysis of antibody-drug conjugate in tumor cells utilizing synchrotron soft X-ray spectroscopy
22BG021	Masahiro Hara	Kumamoto University	XAS/XMCD measurements of anatase nanoparticles converted from titanium oxide nanosheets
22BG022	Koji Miyamoto	Hiroshima University	Spin Hall effect in Pt(001) probed by spin- and angle-resolved photoemission spectroscopy
22BG023	Ke Deng	Southern University of Science and Technology	ARPES Study of a low dimensional chiral Dirac material
22BG024	Chaoyu Chen	Southern University of Science and Technology	ARPES Study on Antiferromagnetic topological semimetal SmAlSi
22BG025	Chaoyu Chen	Southern University of Science and Technology	High resolution ARPES study on Si-terminated and Gd-terminated surfaces of GdIr <sub>2</sub> Si <sub>2</sub>
22BG026	Chaoyu Chen	Southern University of Science and Technology	Investigating the electronic structure and CDW gap structure of Cs(V <sub>1-x</sub> Ti <sub>x</sub> ) <sub>3</sub> Sb <sub>5</sub> by ARPES
22BG027	Chaoyu Chen	Southern University of Science and Technology	Spin-resolved ARPES study on antiferromagnetic topological material CeBi
22BG028	Shiv Kumar	Hiroshima University	

	High-resolution ARPES study of room temperature skyrmion ferromagnetic van der Waals semimetal	
22BG029	Ke Deng	Southern University of Science and Technology
	Revealing the electronic structure of a metallic magnetic van der Waas compound	
22BG030	Akio Kimura	Hiroshima University
	Dirac Velocity and carrier-tuning in the loop-node superconductor $\text{XrP}_{2-x}\text{Se}_x$ (X=Zr, Hf)	
22BG031	Akio Kimura	Hiroshima University
	Exploration of topological band structures in Fe based ferromagnetic alloy films utilizing UHV suitcase	
22BG032	Mohamed Ibrahim	Hiroshima University
	Impacts of polysaccharides on protein	
22BG033	Naoyuki Maejima	Rikkyo University
	Magnetic property analysis of transition metal phosphide thin film	
22BG034	Fayuan Zhang	Shanghai Institute of Microsystem and information Technology, CAS
	The electronic structure study on an air-stable, high mobility van der Waals material $\text{TaCo}_2\text{Te}_2$ by ARPES	
22BG035	Fayuan Zhang	Shanghai Institute of Microsystem and information Technology, CAS
	The electronic structure study on $\text{MnBi}_{12}\text{Te}_{19}$ by laser-based angle-resolved photoemission spectroscopy	
22BG036	Kenta Kuroda	Hiroshima University
	Exploring low-carrier charge ordered phase by ARPES	
22BG037	Kenta Kuroda	Hiroshima University
	Peculiar photoelectron intensity angular distribution through band transition investigate by low-energy synchrotron radiation ARPES	
22BG038	Hikaru Yabuta	Hiroshima University
	Structural analysis of prebiotic depsipeptides by circular-dichroism spectroscopy	
22BG039	Masashi Arita	Hiroshima University
	ARPES study of strain-induced topological phase transitions in $\text{Pb}_{1-x}\text{Sn}_x\text{Te}$	
22BG040	Yognqing Cai	Southern University of Science and Technology
	ARPES study on antiferromagnetic topological semimetal $\text{Sm}_2\text{CuGe}_6$	
不採択	Yognqing Cai	Southern University of Science and Technology
	Investigating the electronic structure and spin polarization of $\text{MnBi}_{10}\text{Te}_{16}$ by ARPES	
22BG042	Shin-ichi Wada	Hiroshima University
	Soft X-ray spectroscopy of substrate supported phospholipid membranes	



- 22BG043 Shin-ichi Wada Hiroshima University  
Exploring functional organic molecules assembled on Au on of aromatic molecules probed by soft X-ray absorption spectroscopy II
- 22BG044 Shin-ichi Wada Hiroshima University  
Electronic relaxation dynamics depending on molecular conductivity probed by electron spectroscopy II
- 22BG045 Guodong Liu Institute of Physics, Chinese Academy of Sciences  
A study on the nature of exotic Fermi arc state and magnetic topological states in Rare-earth Monopnictides RX (R = Ce, Nd; X = Sb, Bi) by using spin-resolved ARPES
- 22BG046 Takeshi Kondo University of Tokyo  
Light-polarization dependent bulk band dispersions in a transition metal dichalcogenide
- 22BG047 Hongtao Rong Southern University of Science and Technology  
ARPES study on Co-based magnetic Heusler compound Co<sub>2</sub>TX (T=transition metals ; X=Si, Ge, Sn, Al and Ga)
- 22BG048 Hongtao Rong Southern University of Science and Technology  
Electronic structure study on Mn-doped (Ge<sub>1-x</sub>Mn<sub>x</sub>)Sb<sub>2</sub>Te<sub>4</sub>
- 22BG049 Chang Liu Southern University of Science and Technology  
ARPES study on a novel surface state in obstructed atomic insulators
- 22BG050 Chang Liu Southern University of Science and Technology  
Probing the spin structure of antiferromagnetic-induced fermi-arc-like split bands in NdBi
- 22BG051 Akio Kimura Hiroshima University  
Observation of Weyl cones and surface Fermi arc of Weyl semimetals with broken time-reversal and space-inversion symmetries
- 22BU001 Shinya Hosokawa Kumamoto University  
Conduction-band electronic states of La-Ni-Al metallic glass alloys having thermal rejuvenation effect II
- 22BU002 Shinya Hosokawa Kumamoto University  
Conduction-band electronic states of La-Ni-Al metallic glass alloys having thermal rejuvenation effect II
- 22BU003 Zhang Ke University of Electronic Science and Technology of China  
Uncovering nonsymmorphic symmetry protected hidden spin polarization in inversion-symmetric multiphase superconductor Ce(RhAs)<sub>2</sub>
- 22BU004 Zhang Ke University of Electronic Science and Technology of China  
Observation of fully spin-polarized Weyl monoloop surface states in rutile-type metal fluorides LiV<sub>2</sub>F<sub>6</sub>



- 22BU005 Yoshinori Okada      Okinawa Institute of Science and Technology Graduate University  
Investigation of orbital-dependent band structure of spinel oxide superconductor  $\text{LiTi}_2\text{O}_4$  epitaxial films
- 22BU006 Naohisa Happo      Hiroshima City University  
Ca K-edge EXAFS of Graphite-Intercalation-Compound  $\text{K}_{0.7}\text{Ca}_{0.3}\text{C}_8$
- 22BU007 Kazuyuki Sakamoto      Osaka University  
Investigation of the electronic structures of magnetic molecule adsorbed topological insulators
- 22BU008 Nao Tsunoji      Hiroshima University  
XAFS characterization of transition metal and noble metal in metal oxide catalysts
- 22BU009 Martin Andersson      Chalmers University of Technology  
Far UV-CD spectroscopy of protein-nanomaterials interaction
- 22BU010 Hideaki Iwasawa      National Institutes for Quantum and Radiological Science and Technology  
Elucidation of spin-electronic states of high-Tc cuprate superconductors
- 22BU011 Chaoyu Chen      Southern University of Science and Technology  
ARPES Study on intrinsic magnetic topological insulator  $\text{CVT-MnBi}_2\text{Te}_4$
- 22BU012 Shinya Hosokawa      Kumamoto University  
Conduction-band electronic states of La-Ni-Al metallic glass alloys having thermal rejuvenation effect III
- 22BU013 Shin-ichiro Ideta      Hiroshima University  
Symmetry reduction of the electronic structure in heavily overdoped Pb-Bi2201 observed by ARPES

## Symposium

The 27th Hiroshima International Symposium on Synchrotron Radiation  
March 9–10, 2023, Faculty Club, Hiroshima University

## Workshop

- 11th International Workshop on Spectroscopy and Microscopy with Accelerator Based Sources, Oct. 6-9, 2022, Grand Prince Hotel Hiroshima

## HiSOR Seminar

- Kaustuv Manna (Indian Institute of Technology Delhi)  
Chiral topology: from discovery to recent developments  
Feb. 28. 2023
- Uwe Bovensiepen (Faculty of Physics and Center for Nanointegration (CENIDE), University of Duisburg-Essen))  
Local and Nonlocal electron and Spin Dynamics of Au/Fe/MgO(001) Analyzed by Pump-Probe Experiments  
Feb. 3. 2023
- Samuel Poncé (Université catholique de Louvain)  
Electron-phonon coupling from first-principles  
Nov. 24. 2022
- Thomas Petrus van Waas (Université catholique de Louvain)  
Bayesian inference study of electron-phonon interaction from angle-resolved photoemission spectroscopy  
Oct. 27. 2022
- Takashi Mizokawa (Waseda University)  
Peculiar electronic states in IrTe<sub>2</sub> probed by synchrotron radiation spectroscopy  
July 26. 2022
- Philipp Kagerer (University of Würzburg)  
Two-dimensional Ferromagnetic Extension of a Topological Insulator  
July 11. 2022
- William Sacks (Sorbonne University – Science and Engineering / Okayama University)  
Contradictions and conundrums of the cuprate phase diagram  
July 8. 2022

# The 27th Hiroshima International Symposium on Synchrotron Radiation

## Shin-ichiro Ideta

Hiroshima Synchrotron Radiation Center, Hiroshima University

We have held the 27th Hiroshima International Symposium on Synchrotron Radiation entitled “Materials Science using VUV-SX Synchrotron Radiation: Towards the HiSOR II project”, aiming to promote the international and interdisciplinary exchange of information about materials science utilizing synchrotron radiation and to consider the direction of future researches using VUV-SX light and appropriate light sources for that.

Although the 26th symposium was held in a hybrid format of both online and face-to-face meetings, the 27th symposium was held via the same way due to the COVID-19 pandemic. The two days program was started with a greeting from Mr. S. Hayashi (deputy director, MEXT, Japan) and Prof. S. Kaneko (executive vice president (global initiatives and research and academia-government-community collaboration), Hiroshima University, Japan). After that, an overview of HiSOR activity was given by Prof. K. Shimada, the director of HiSOR. After the opening session, the recent scientific results on the following topics were presented by invited speakers (see the list of invited speakers).

- High-resolution photoemission spectroscopy
- Spin-resolved photoemission spectroscopy
- Soft x-ray magnetic circular dichroism of nanomaterials
- VUV-CD spectroscopy of biomolecules
- Light source accelerators and insertion devices

The list of invited speakers and general speakers

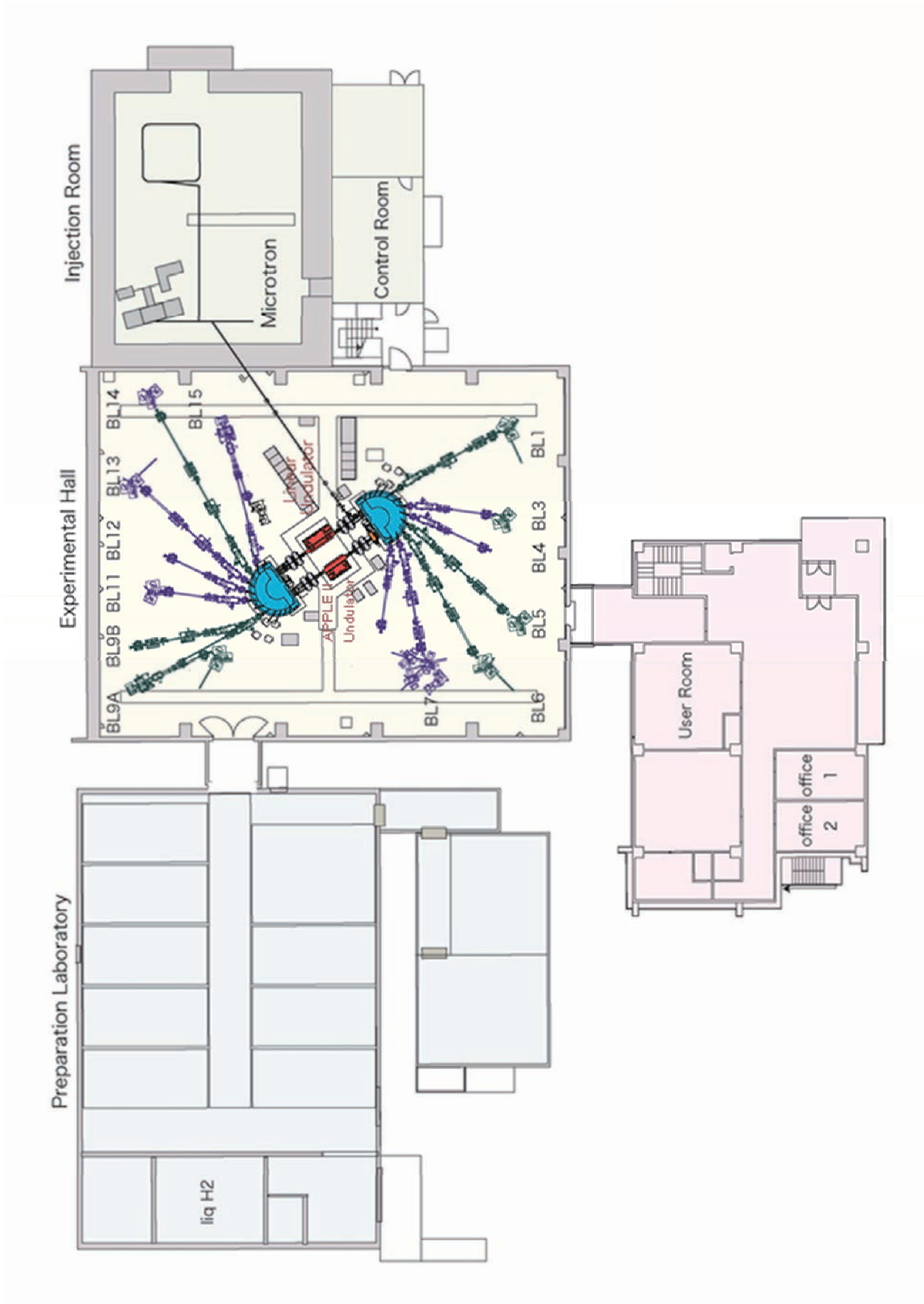
- Martin ANDERSSON (Chalmers University of Technology, Sweden)
- Marie-Christine AVERLANT-PETIT (The Laboratoire de Chimie-Physique Macromoléculaire (LCPM), Lorraine University, France)
- Yuita FUJISAWA (Okinawa Institute of Science and Technology Graduate University, Japan)
- Masahiro KATOH (Hiroshima University, Japan)
- Takayuki ICHIKAWA (Hiroshima University, Japan)
- Akira MOCHIIHASHI (The Karlsruhe Institute of Technology, Germany)
- Shan QIAO (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, China)
- Meng WANG (RIKEN, Japan)
- Hirofumi YANAGISAWA (The University of Tokyo, Japan)
- Teppei YOSHIDA (Kyoto University, Japan)
- Dongfang ZHANG (Shanghai Jiao Tong University, China)

In addition to these oral presentations, the poster session was also held onsite only, in which 29 presenters including 15 students presented their results which are mainly obtained in the joint usage and research in the fiscal year 2022.

Among them, the best student poster awards were selected by evaluation by all the participants except for students. And three students were awarded (Hiroshima University 3) in the closing session.

The symposium ended successfully and the total participants were 66 (23 on-campus, 30 off-campus, and 13 from abroad). Finally, I, the chair of the symposium, would like to thank all the participants for their contributions as well as Particle Accelerator Society of Japan and the Japanese Society for Synchrotron Radiation for their support of this symposium.

# Plan of the Building



## Location

