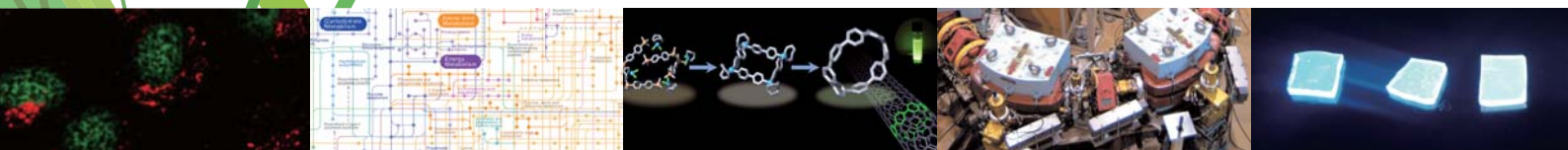




2011
Institute for Chemical Research,
Kyoto University
京都大学化学研究所



He																		
4.003																		
2 Helium																		
		B	C	N	O	F	Ne											
		10.81	12.01	14.01	16.00	19.00	20.18											
		5 Boron	6 Carbon	7 Nitrogen	8 Oxygen	9 Fluorine	10 Neon											
		Al		Si	P	S	Cl	Ar										
		26.98		28.09	30.97	32.07	35.45	39.95										
		13 Aluminum		14 Silicon	15 Phosphorus	16 Sulfur	17 Chlorine	18 Argon										
		Cr		Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr			
		72		55	56	59	58.7	63.5	65.4	69.72	72.64	74.92	78.96	79.90	83.80			
		24 Chromium		25 Manganese	26 Iron	27 Cobalt	28 Nickel	29 Copper	30 Zinc	31 Gallium	32 Germanium	33 Arsenic	34 Selenium	35 Bromine	36 Krypton			
		Mo		Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe			
		94		98	101	102	106.4	107.87	112.4	114.8	118.7	121.8	127.6	126.9	131.3			
		42 Molybdenum		43 Technetium	44 Ruthenium	45 Rhodium	46 Palladium	47 Silver	48 Cadmium	49 Indium	50 Tin	51 Antimony	52 Tellurium	53 Iodine	54 Xenon			
		W		Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Fr			
		74		75	77	78	79	80	200.6	204.4	207.2	209.0	(210)	(210)	(223)			
		72 Tungsten		75 Rhenium	77 Osmium	78 Iridium	79 Platinum	80 Gold	80 Mercury	81 Thallium	82 Lead	83 Bismuth	84 Polonium	85 Astatine	86 Francium			
		Sg		Bh	Hs	Mt	Ds	Rg	112	113								
		106 Seaborgium		107 Bohrium	108 Hassium	109 Meitnerium	110 Darmstadtium	111 Roentgenium	112 Copernicium	113 Nihonium								
		Lu		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	
		70		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
		70 Ytterbium		71 Lutetium	72 Hafnium	73 Tantalum	74 Tungsten	75 Rhenium	76 Osmium	77 Iridium	78 Platinum	79 Gold	80 Mercury	81 Thallium	82 Lead	83 Bismuth	84 Polonium	85 Astatine
		Er		Tm	Yb													
		167.3		168.9	173.0													
		68 Erbium		69 Thulium	70 Ytterbium													

Our Goal Is to Create Novel Fields of Research by Integrating the Wisdom in Our Various Research Fields. ICR at Kyoto University Continues Its Challenge to Reveal Novel Findings for the Human Society.

Preface



Director
TOKITOH, Norihiro

Institute for Chemical Research, launched in 1926 as the first research institute at Kyoto University, will celebrate its 85th anniversary in 2011, but its true roots date back to 1915 (Special Institute of Chemical Research founded at Kyoto Imperial University, College of Science for the study of special medicinal substances, “Salvarsans”). In 2004, we have reached the current large-scale organization of five research divisions and three centers. Currently, 100 faculty members and 210 graduate students are engaged in research activities in 32 laboratories supervised by full-time professors and 5 laboratories supervised by visiting professors.

The research within the Institute encompasses the fields of chemistry, physics, biology, and informatics. The chemical studies core covers fields including physical chemistry, inorganic chemistry, organic chemistry, materials chemistry, and biochemistry. The graduate schools to which our laboratories belong cover diverse fields of science, engineering, agriculture, pharmaceutical sciences, medicine, informatics, and human/environmental studies. The laboratories at the graduate schools are spearheading leading-edge research, and yielding outstanding results in their own research areas. Our founding vision is to “Excel in the Investigation of Basic Principles of Chemistry and Their Applications.” This legacy continues to the present day and describes the essence of our research activities. With this

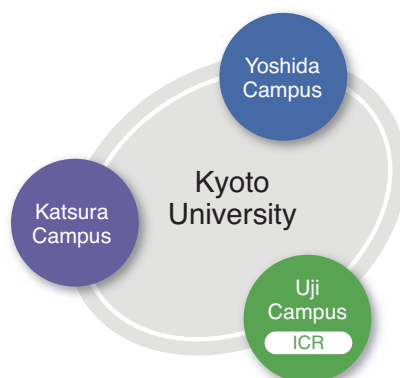
vision in mind, we have entrusted our scientists to choose and pursue research topics at the forefront of advanced chemistry with bottom-up paradigms; this has resulted in substantial contributions to the development of scientific technology. Such accomplishments are proof of our vision of freedom and a bottom-up approach in chemical research. Whether or not the human race can generate sustainable growth is a key issue of the 21st century. In order to contribute to the future of our society, we encourage our scientists to be actively involved in research projects with bottom-up approach in mind, and to value the emergence of unique interdisciplinary research projects.

The Institute is currently collaborating with domestic/overseas universities and research organizations (with 52 official international collaboration agreements) and is functioning as a Joint Usage/Research Center supported by MEXT (2010-2016). In addition, the Institute participates the MEXT Project of Integrated Research on Chemical Synthesis (2010-2016) as one of the key members of core research institutions. The strong collaboration basis so far constructed in-house and also with outside ensures the Institute to serve as the core of global research propellers in chemistry-oriented fields.

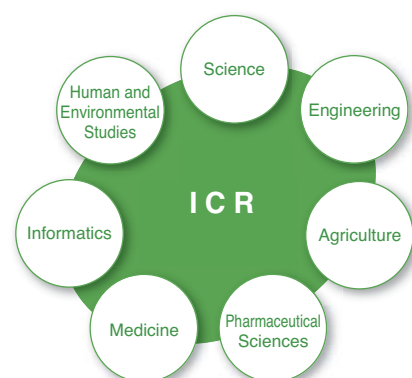
Finally, we appreciate your continued encouragement and support.

Education

Every laboratory in ICR is affiliated with one of the Graduate Schools and has contributions to education.



3 Campuses of Kyoto University



Education in the Graduate Schools

Research

ICR is located in the Uji Campus of Kyoto University. 32 Laboratories constitute the system of "5 Research Divisions and 3 Research Centers" and more than 100 faculties and many researchers are engaging various research of science.



Organic Chemistry



Inorganic Chemistry



Biology



Physics

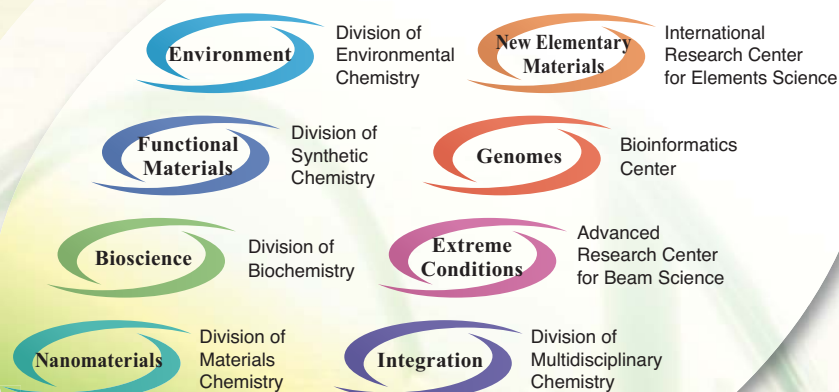


Informatics

Challenge and Innovation

Novel Fields of Research in Boundary Area

Material Control for the Development of Society













Basic Research for the Development of Science and Technology

Diverse Research Fields
ICR = Spring of Wisdom
 To Excel in the Investigation of Basic Principles of Chemistry and Their Applications (since 1926)

History

Over the 80 years of its history, ICR has continued the challenge to uncover the basis of chemistry and answer the frontier quests.

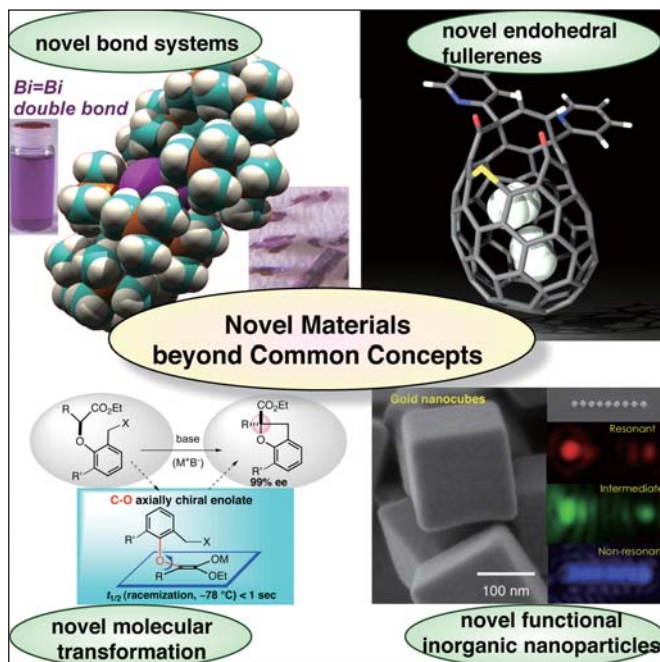
1915	Specialized Center for Chemical Research, a predecessor of Institute for Chemical Research was founded.	
1926	Institute for Chemical Research (ICR) was chartered with the founding philosophy, to "Excel in the Investigation of Basic Principles of Chemistry and Their Applications."	
1929	The Main Building of ICR was constructed in Takatsuki, Osaka.	
1949	ICR became the first affiliated institute of Kyoto University.	
1962	ICR established graduate schools to offer the advanced education for graduate students.	
1964	The Division System was introduced. ICR organization was divided into 19 research divisions and 1 satellite facility. Nuclear Science Research Facility was established in Awataguchi, Sakyo-ku, Kyoto.	
1968	High-Voltage Electron Microscopy was located at Gokasho, Uji (Uji Campus). ICR was moved to Uji Campus.	
1971	Low-Temperature Laboratory was established.	
1983	Nucleic Acids Laboratory was built.	
1985	Biotechnology Laboratory was established.	
1987	The Division System was revised. ICR organization became 19 research divisions and 2 satellite facilities.	
1988	Nuclear Science Research Facility was moved to Gokasho, Uji. Accelerator Laboratory and Research Building were completed.	
1989	High-Resolution Electron Spectromicroscope was established.	
1992	ICR was reorganized into 9 research divisions and 2 satellite facilities. Supercomputer Laboratory was established.	
1999	Joint Research Laboratory Building was constructed.	
2000	Administration Departments of ICR and other institutes in Uji Campus were integrated.	
2001	Bioinformatics Center was established.	
2003	ICR was reorganized into 9 research divisions and 3 satellite facilities. International Research Center for Elements Science was established.	
2004	ICR was reorganized into 5 research divisions and 3 centers. Advanced Research Center for Beam Science was established. Uji Research Building was constructed.	
2005	Laser Science Laboratory was built.	
2007	The Alumni Association of ICR "Hekisuikai" was inaugurated.	
2009	Laboratory of Water Chemistry Energy (AGC) was endowed.	
2010	ICR started to function as a Joint Usage / Research Center.	
2011	Laboratory of Nano-Interface Photonics (SEI Group CSR Foundation) was endowed. Bioinformatics Center was reorganized.	

Division of Synthetic Chemistry

Functional Materials

Research is conducted for the creation of "Novel Materials" from viewpoints irrespective of disciplines of organic and inorganic chemistry and for clarification of their structures, functions, and properties.

Original research is conducted in individual laboratories across scientific disciplines toward the creation of novel materials beyond common concepts. Clarification of structures and intrinsic properties of the novel materials are expected to provide impact in the scientific fields including material science, synthetic organic and inorganic chemistry.



Organoelement Chemistry

Prof. **TOKITOH, Norihiro** (D.Sc.)
 Assoc. Prof. SASAMORI, Takahiro (D.Sc.)
 Assist. Prof. MIZUHATA, Yoshiyuki (D.Sc.)
 Assist. Prof. AGOU, Tomohiro (D.Sc.)
 Techn. HIRANO, Toshiko



Structural Organic Chemistry

Prof. **MURATA, Yasujiro** (D.Eng.)
 Assoc. Prof. WAKAMIYA, Atsushi (D.Eng.)
 Assist. Prof. MURATA, Michihisa (D.Eng.)



Synthetic Organic Chemistry

Prof. **KAWABATA, Takeo** (D.Pharm.Sc.)
 Assoc. Prof. FURUTA, Takumi (D.Pharm.Sc.)
 Assist. Prof. YOSHIMURA, Tomoyuki (D.Pharm.Sc.)
 Techn. FUJIHASHI, Akiko



Advanced Inorganic Synthesis

Prof. **TERANISHI, Toshiharu** (D.Eng.)

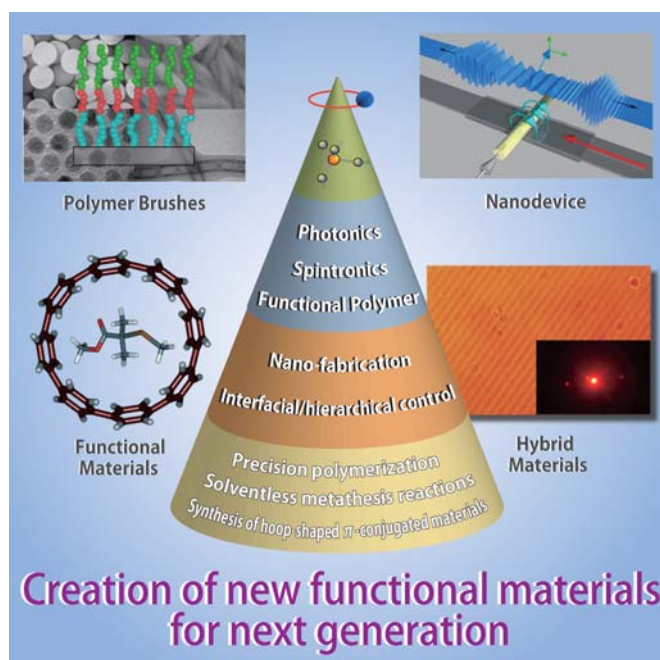


Division of Materials Chemistry

Nanomaterials

Creation of new functional materials for next generation by hybridization, conjugation, and integration of different materials and by nano-miniaturization.

The aim of this research area is to develop a controlled synthetic method for nano-sized macromolecules and its applications to novel precision fabrication of polymeric materials. This area also emphasizes creation and development of new functional materials by controlling electronic, photonic, and spin states through hybridization of organic-inorganic materials, creation of novel surfaces with high-density polymer brushes, development of nano-fabrication of artificial multi-layers, and utilization of size- and quantum effects.



Chemistry of Polymer Materials

Prof. **TSUJII, Yoshinobu** (D.Eng.)
 Assoc. Prof. OHNO, Kohji (D.Eng.)
 Assist. Prof. SAKAKIBARA, Keita (D.Agr.)



Polymer Controlled Synthesis

Prof. **YAMAGO, Shigeru** (D.Sc.)
 Assoc. Prof. TSUJII, Masaki (D.Eng.)
 Assist. Prof. TOSAKA, Masatoshi (D.Eng.)
 Assist. Prof. NAKAMURA, Yasuyuki (D.Sc.)
 PS* Assist. Prof. KAYAHARA, Eiichi (D.Eng.)



Inorganic Photonics Materials

Prof. **YOKO, Toshinobu** (D.Eng.)
 Assoc. Prof. TOKUDA, Yomei (D.Eng.)
 Assist. Prof. MASAI, Hirokazu (D.Eng.)



Nanospintronics

Prof. **ONO, Teruo** (D.Sc.)
 Assoc. Prof. KOBAYASHI, Kensuke (D.Sc.)
 Assist. Prof. CHIBA, Daichi (D.Eng.)
 PS* Assist. Prof. SEKIGUCHI, Koji (D.Sc.)
 Techn. KUSUDA, Toshiyuki

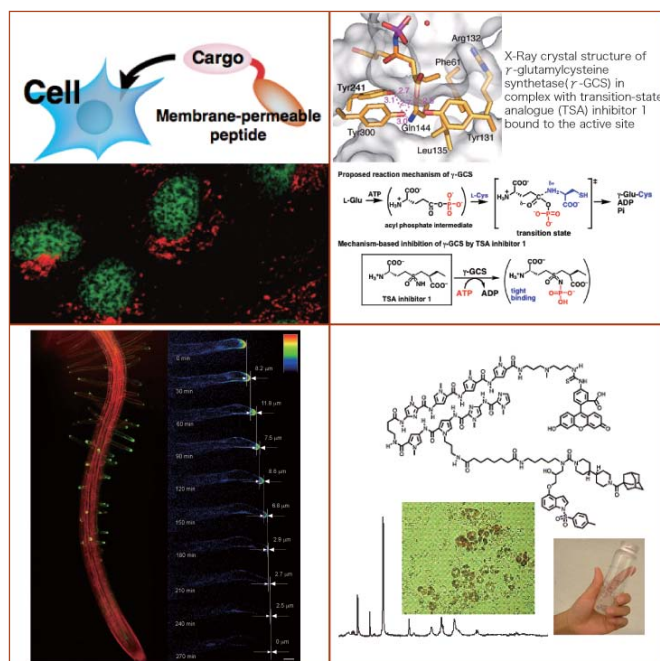


Division of Biochemistry

BioScience

Biology meets Chemistry; this division elucidates the mechanisms behind intra/inter-cellular recognition, stimuli response, and biomolecular synthesis in living organisms, leading to the development of pioneering novel materials.

This division sets its goals on (i) Design and creation of bioactive peptides/proteins controlling cellular and gene functions, (ii) Chemical understanding of the reaction mechanisms and physiological significance of biocatalysts, (iii) Unveiling the framework of regulatory network between genetic programs and environmental stimulus responses in higher plants, and (iv) Discovery of bioactive small organic molecules and their use in biomedical research.



Bifunctional Design-Chemistry

Prof. **FUTAKI, Shiroh** (D.Pharm.Sc.)
 Assist. Prof. IMANISHI, Miki (D.Pharm.Sc.)
 Assist. Prof. NAKASE, Ikuhiko (D.Pharm.Sc.)



Chemistry of Molecular Biocatalysts

Prof. **HIRATAKE, Jun** (D.Agr.)
 Assist. Prof. WATANABE, Bunta (D.Agr.)
 Assist. Prof. KOEDUKA, Takao (D.Agr.)



Molecular Biology

Prof. **AOYAMA, Takashi** (D.Sc.)
 Assoc. Prof. SUGISAKI, Hiroyuki (D.Sc.)
 Assist. Prof. TSUGE, Tomohiro (D.Sc.)
 Techn. YASUDA, Keiko



Chemical Biology

Prof. **UESUGI, Motonari** (D.Pharm.Sc.)
 Assist. Prof. KAWAZOE, Yoshinori (D.Med.Sc.)
 Assist. Prof. SHIMOGAWA, Hiroki (D.Sc.)

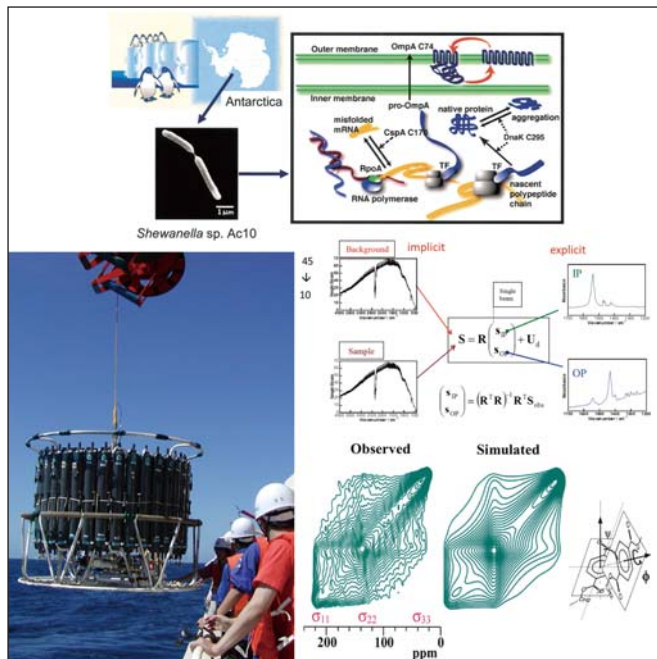


Division of Environmental Chemistry

Environment

This research group aims to contribute to the development of a sustainable society through fundamental studies such as structural characterization and dynamics of solutions and polymers, biogeochemistry in the hydrosphere, and biotechnology with useful enzymes and microorganisms.

Main research subjects are as follows: (1) Syntheses, structure, and functionality of well-organized organic EL devices, organic solar-cells, and polymer materials. (2) Biogeochemistry of trace elements in the hydrosphere, Ion recognition. (3) Structural analysis of functionalized ultrathin films and molecules at an interface using vibrational spectroscopy coupled with multivariate analysis, and intermolecular interactions in solution with nanoscale inhomogeneity and/or tunable reactivity. (4) Physiology of extremophilic microorganisms and their applications to production of useful compounds and bio-remediations. Biochemistry of trace elements.



Molecular Materials Chemistry

E Prof. **KAJI, Hironori** (D Eng)
 Assoc Prof. GOTO, Atsushi (D Eng)
 Techn. OHMINE, Kyoko
 Techn. MAENO, Ayaka



Hydropheric Environment Analytical Chemistry

S Prof. **SOHRIN, Yoshiki** (D Sc)
 Assoc Prof. UMETANI, Shigeo (D Sc)
 Assit Prof. NORISUYE, Kazuhiro (D Sc)
 Techn. MINAMI, Tomoharu (D Eng)



Solution and Interface Chemistry

S Prof. **HASEGAWA, Takeshi** (D Sc)
 Assoc Prof. MATUBAYASI, Nobuyuki (Ph D)
 Assit Prof. WAKAI, Chihiro (D Sc)
 Assit Prof. SHIMOAKA, Takafumi (D Sc)



Molecular Microbial Science

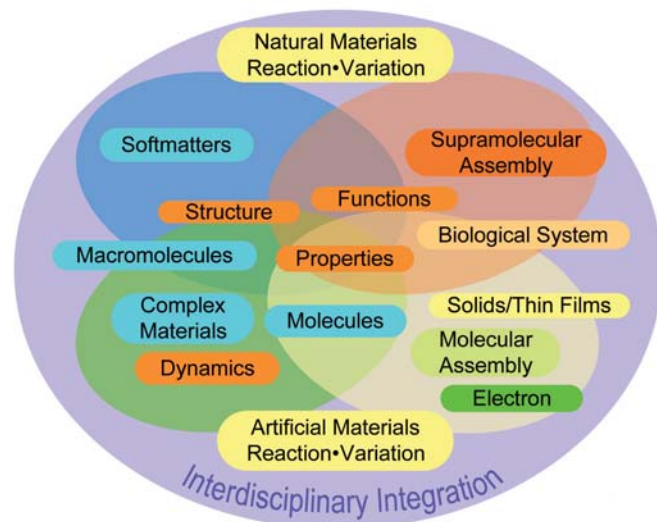
A
 Assoc Prof. KURIHARA, Tatsuo (D Eng)
 Assit Prof. KAWAMOTO, Jun (D Agr)

Division of Multidisciplinary Chemistry

Integration

Integrating viewpoints of science and engineering, we aim at developing basis in the interdisciplinary area among chemistry, physics, and biology. We will carry out fundamental, exploratory researches through cooperation with other divisions/centers in ICR to establish a novel aspect of the advanced materials science.

This division makes basic researches that aim to achieve molecular understanding of various phenomena of natural/artificial materials, develop an interdisciplinary integration view of natural science based on chemistry, and establish a new aspect of material science. The researches are being conducted with a multidisciplinary methodology through collaboration within this division as well as with the other divisions/centers in ICR.



Polymer Materials Science

E Prof. **KANAYA, Toshiji** (D Eng)
 Assoc Prof. NISHIDA, Koji (D Eng)
 Assit Prof. INOUE, Rintaro (D Eng)



Molecular Rheology

E Prof. **WATANABE, Hiroshi** (D Sc)
 Assoc Prof. MASUBUCHI, Yuichi (D Eng)
 Assit Prof. MATSUMIYA, Yumi (D Eng)
 PS* Assit Prof. UNEYAMA, Takashi (D Sc)



Molecular Aggregation Analysis

S Prof. **SATO, Naoki** (D Sc)
 Assoc Prof. ASAMI, Koji (D Sc)
 Assit Prof. YOSHIDA, Hiroyuki (D Sc)
 Assit Prof. MURDEY, Richard (Ph D)



Supramolecular Biology

S

Interdisciplinary Chemistry for Innovation

E Prof. **TOSHIMITSU, Akio** (D Eng)

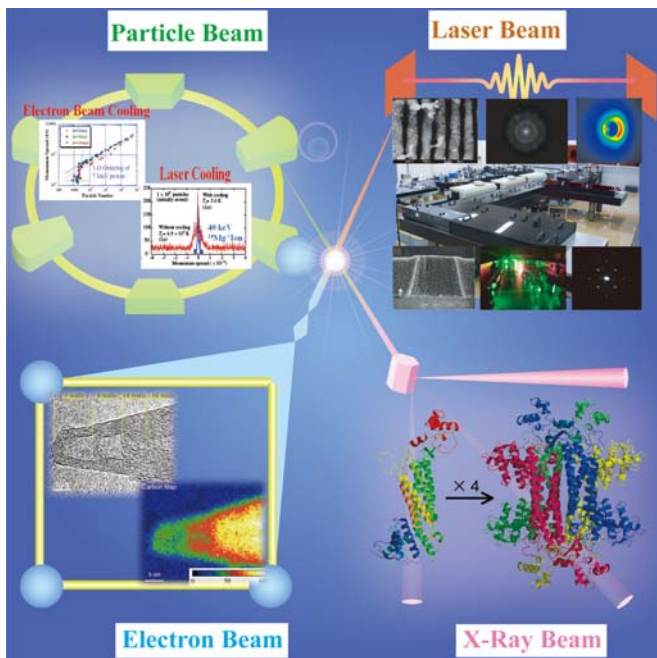


Advanced Research Center for Beam Science

Extreme Conditions

Development of new capabilities with combination of various beams, Development of new methods for space-time analysis with extreme resolution, Multi-dimensional analysis of functional chemical materials oriented for application, and Preparation for collaborative research scheme.

The Advanced Research Center aims at creation of advanced material science in nano space/time scale by combining various beams (particle, laser, electron and X-ray beams) to understand and control nano-space/time phenomena from physical, chemical and biological aspects. The present subjects are researches on dynamics of particle beams and improvement of their characteristics, physics of intense short pulse laser-matter interactions and its applications, high-resolution dynamical structure visualization of nano-materials, analysis of chemical reaction pathways, and dynamical analysis of vital phenomena based on molecular structures.



Particle Beam Science

S Prof. **NODA, Akira** (D Sc)
 Assoc Prof. IWASHITA, Yoshihisa (D Sc)
 Assit Prof. SOUDA, Hikaru
 Techn. TONGU, Hiromu



Laser Matter Interaction Science

S Prof. **SAKABE, Shuji** (D Eng)
 Assoc Prof. HASHIDA, Masaki (D Eng)
 Assit Prof. TOKITA, Shigeki (D Eng)



Electron Microscopy and Crystal Chemistry

S
 Assoc Prof. KURATA, Hiroki (D Sc)
 Assit Prof. OGAWA, Tetsuya (D Sc)
 Assit Prof. NEMOTO, Takashi (D Sc)

Structural Molecular Biology

H Prof. **HATA, Yasuo** (D Sc)
 Assoc Prof. ITO, Yoshiaki (D Sc)
 Assit Prof. FUJII, Tomomi (D Sc)

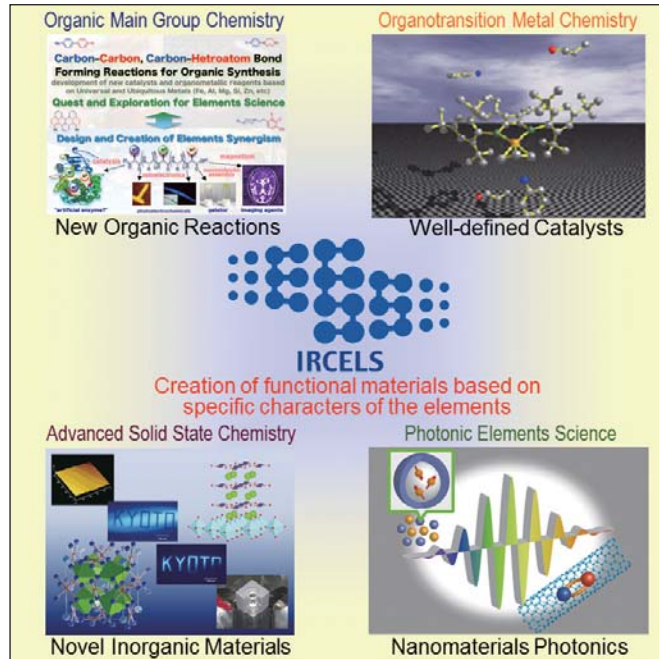


International Research Center for Elements Science

New Elementary Materials

Proposal of a guideline for the creation of novel elementary materials through uncovering the role of key elements which determine the functions of materials.

Our research interests are centered on the development of Elements Science for creation of new functional materials and innovative chemical transformations. We are trying to design and synthesize new inorganic and organic compounds and to seek for their new functionalities from the viewpoints of fundamental science and industrial applications.



Organic Main Group Chemistry

Prof. **E** **NAKAMURA, Masaharu** (D.Sc.)
 Assoc. Prof. **TAKAYA, Hikaru** (D.Eng.)
 Asst. Prof. **HATAKEYAMA, Takuji** (D.Sc.)



Advanced Solid State Chemistry

Prof. **S** **SHIMAKAWA, Yuichi** (D.Sc.)
 Asst. Prof. **KAN, Daisuke** (D.Sc.)
 Asst. Prof. **SAITO, Takashi** (D.Sc.)
 PS* **Asst. Prof. ICHIKAWA, Noriya** (D.Eng.)



Organotransition Metal Chemistry

Prof. **E** **OZAWA, Fumiyuki** (D.Eng.)
 Asst. Prof. **NAKAJIMA, Yumiko** (D.Eng.)
 Asst. Prof. **WAKIOKA, Masayuki** (D.Eng.)



Photonic Elements Science

Prof. **S** **KANEMITSU, Yoshihiko** (D.Eng.)
 Assoc. Prof. **TAYAGAKI, Takeshi** (D.Sc.)
 Asst. Prof. **IHARA, Toshiyuki** (D.Sc.)

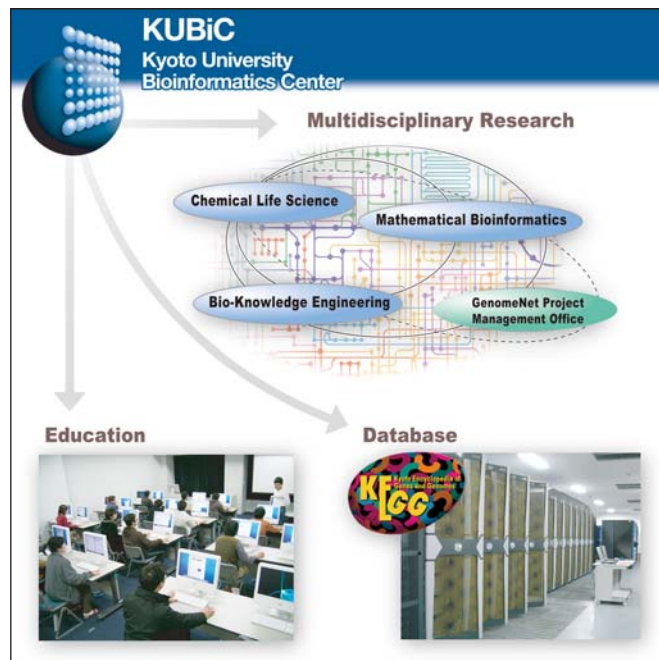


Bioinformatics Center

Genomes

Our laboratories promote research in Bioinformatics and the development of the foundation for an integrated and extensive resource for the Bioscience.

In order to understand and utilize the information encoded in the genome, a blueprint of life, it is necessary to develop both state-of-the-art informatics technologies and excellent human resources. The Bioinformatics Center is involved in basic research on the analysis of genomic and molecular information towards understanding design principles of the biological systems, applications of bioinformatics methods to pharmaceutical and medical sciences, development of the KEGG database for deciphering the genome, and bioinformatics education and training of young scientists.



Chemical Life Science

Prof. **S** **P** **KANEHISA, Minoru** (D.Sc.)
 Assoc. Prof. **GOTO, Susumu** (D.Eng.)
 PS* **Asst. Prof. TOKIMATSU, Toshiaki** (D.Agr.)
 PS* **Asst. Prof. KOTERA, Masaaki** (D.Sc.)



Mathematical Bioinformatics

Prof. **I** **AKUTSU, Tatsuya** (D.Eng.)
 Asst. Prof. **HAYASHIDA, Morihiro** (D. Inf.)
 Asst. Prof. **TAMURA, Takeyuki** (D. Inf.)



Bio-knowledge Engineering

Prof. **P** **MAMITSUKA, Hiroshi** (D.Sc.)
 Asst. Prof. **TAKIGAWA, Ichigaku** (D.Eng.)
 Asst. Prof. **HANCOCK, Timothy Peter** (Ph.D.)

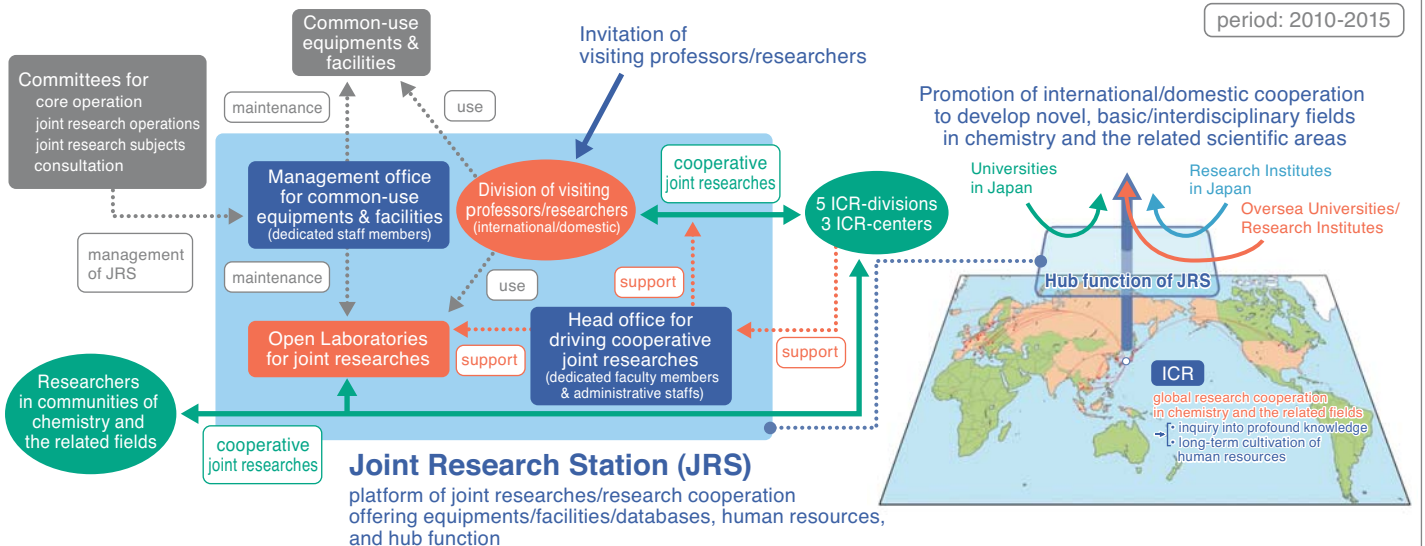


GenomeNet Project Management Office

Prof. **MAMITSUKA, Hiroshi** (D.Sc.)

Frontier/Interdisciplinary Research Core in ICR for Deepening Investigation and Promoting Cooperation in Chemistry-Oriented Fields

period: 2010-2015



Visiting Professors

Division of
Synthetic Chemistry,
Organoelement Chemistry

Prof **IWAMOTO, Takeaki**

Professor, Graduate School of Science,
Tohoku University

Division of Biochemistry,
Chemistry of Molecular
Biocatalysts

Prof **FUJII, Ikuo**

Professor, Graduate School of Science,
Osaka Prefecture University

Division of
Multidisciplinary Chemistry,
Molecular Aggregation Analysis

Prof **AWAGA, Kunio**

Professor, Research Center for
Materials Science, Nagoya University

International Research Center
for Elements Science,
Photonic Elements Science

Prof **ASHIDA, Masaaki**

Professor, Graduate School of
Engineering Science, Osaka University

Division of Materials Chemistry,
Chemistry of Polymer Materials

Assoc Prof **MORITA, Hiroshi**

Group Leader, National Institute of
Advanced Industrial Science and Technology

Division of
Environmental Chemistry,
Molecular Microbial Science

Assoc Prof **ABE, Fumiyoishi**

Associate Professor, College of Science and
Engineering, Aoyama Gakuin University

Advanced Research Center
for Beam Science,
Structural Molecular Biology

Assoc Prof **HISANO, Tamao**

Senior Research Scientist, RIKEN

Bioinformatics Center,
Mathematical Bioinformatics

Assoc Prof **NACHER DIEZ, Jose Carlos**

Associate Professor, School of Systems
Information Science, Future University Hakodate

Endowed Research Section

**Division of Water Chemistry Energy (AGC)
has been opened in April 2009, donated by Asahi Glass Co., Ltd. (AGC).**

The research aim is to develop new earth-friendly technology in order to reduce the green-house gas CO₂ emission that can induce some climate changes. Hydrogen is an ultimately clean fuel needed for efficient fuel cells. However, the drawback of the hydrogen fuel arises from the low liquefaction temperature. This results in a high cost and delays the realization of the clean hydrogen age. Fuel compactness and fluidity, as attained in the liquid state, are necessary for the low-cost transportation and storage. This can be overcome by taking advantage of formic acid that is found as an intermediate in the well-known water-gas shift reaction: $\text{CO} + \text{H}_2\text{O} \rightleftharpoons \text{HCOOH} \rightleftharpoons \text{CO}_2 + \text{H}_2$. The group engaged in this mission consists of Masaru Nakahara (visiting professor) and Yasuo Tsujino.

Water Chemistry Energy (AGC)

Visiting Prof
NAKAHARA, Masaru (D.Sc.)
PS*
Assistant Prof TSUJINO, Yasuo



**Division of Nano-Interface Photonics (SEI Group CSR Foundation)
has been opened in April 2011, donated by Sumitomo Electric Industries Group CSR Foundation.**

Our research aim is to open up new research field of nanomaterials science, by focusing on nano-interface as a platform to develop novel optical functionalities. We study optical properties of semiconductor nanomaterials, leading to new solar energy conversion technologies.

Nano-Interface Photonics (SEI Group CSR Foundation)

PS*
Assoc Prof YAMADA, Yasuhiro
PS*
Assistant Prof OKANO, Makoto
Prof (Supporting Faculty Member) KANEMITSU, Yoshihiko



Our Vision

The founding philosophy of the Institute for Chemical Research is to "Excel in the Investigation of Basic Principles of Chemistry and Their Applications." Research is grounded on the core values of freedom, independence, and harmony. As a key part of Kyoto University, the institute is committed to contributing to the harmonious development of the global community by solving fundamental chemical issues.

1. Research

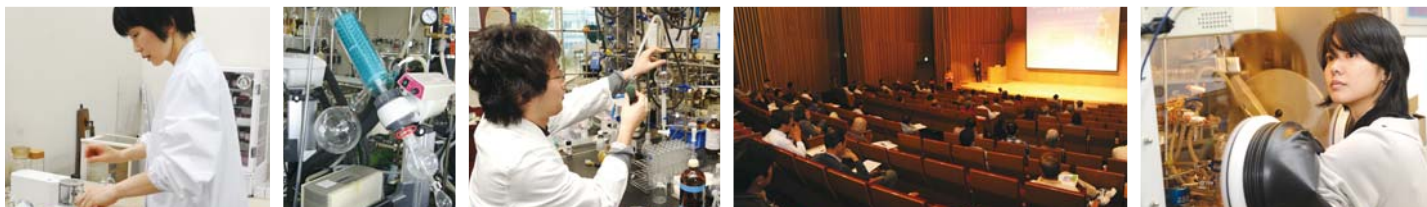
We regard chemistry as a broad area of the natural sciences, and strive for balanced development: the platform of basic research into the true nature of matter serves as a foothold for more applied studies that strive to be flexible and responsive to the challenges of our global society.

2. Education

Through research in an integrated environment of world-class laboratories, we aim to train and develop talented people with broad experience and a high level of problem solving skills, capable of providing leadership towards the harmonious development of the global community.

3. Relationship with Society

As researchers and educators of chemistry, we endeavor to deepen our exchanges with local communities and the Japanese society. We envision contributing to solving global problems through active scientific exchange with international researchers and institutions. Lastly, we commit to our accountability to society through internal review and information disclosure.



Research and Education Funding

Joint Usage / Research Center : Frontier/Interdisciplinary Research Core in ICR for Deepening Investigation and Promoting Cooperation in Chemistry-Oriented Fields

Representative from ICR : TOKITOH, Norihiro / Term : 2010-2015

MEXT Project of Integrated Research on Chemical Synthesis

Joint Project with CRC (Hokkaido Univ), RCMS (Nagoya Univ), IMCE (Kyushu Univ)
Representative from ICR : OZAWA, Fumiyouki / Term : 2010-2015



Global COE Programs

International Center for Integrated Research and Advanced Education in Materials Science

Joint Program with Graduate School of Science and Graduate School of Engineering
Representative from ICR : TOKITOH, Norihiro / Term : 2007-2011



Center of Excellence for Education and Research on Photonics and Electronics Science and Engineering

Joint Program with Graduate School of Engineering and Graduate School of Informatics
Representative from ICR : KANEMITSU, Yoshihiko / Term : 2007-2011



The Next Generation of Physics, Spun from Universality & Emergence -Developing Independent Researchers to Explore New Frontiers-

Joint Program with Graduate School of Science (Division of Physics and Astronomy), Kwasan and Hida Observatories, YITP and Research Center for Low Temperature and Materials Sciences
Representative from ICR : SAKABE, Shuji / Term : 2008-2012



Open Advanced Facilities Initiative for Innovation

Kyoto-Advanced Nanotechnology Network

Joint Program with Kyoto University, JAIST and NAIST
Representative from ICR : SHIMAKAWA, Yuichi / Term : 2007-2011

Grants-in-Aid for Creative Scientific Research

Strategic State-of-the-Art Solid State Chemistry for New Functional Materials : Exploring for New Multi-Functional Materials

Research Leader : SHIMAKAWA, Yuichi / Term : 2007-2011

JSPS International Training Program

International Research and Training Program on Bioinformatics and Systems Biology

Program Director : MAMITSUKA, Hiroshi / Term : 2009-2013

Life Science Database Integration Project

Genome-based Integrated Resource for Diseases, Drugs, and Environmental Substances

Research Leader : KANEHISA, Minoru / 2011-2013

Key Technology Development for Data Integration and Application to Emerging Fields

Research Leader : GOTO, Susumu / 2011-2013

University Staff

The number in () represents Visiting Professors.

Professor	Associate Professor	PS* Associate Professor	Assistant Professor	PS* Assistant Professor	Technician	PS* Researcher	Sub-total	Researcher**	Other Staff	Sub-total	Total
29	22	1	39	8	9	8	116	23	33	56	172
(5)	(4)						(9)				(9)

*PS: Program Specific ** from Japan and foreign countries As of August 1, 2011

Researchers(PD) from Foreign Countries

Australia	1	Brazil	1	China, P. R.	3	Egypt	1
France	1	India	1	Poland	1	Spain	2
Sri Lanka	1	Taiwan	1	Vietnam	1	Total	14

As of July 1, 2011

Research Students, Fellows and Associates

Research Student	Research Fellow	Postdoctoral Fellow of JSPS	Research Associate	Total
2	2	1	6	11

As of May 1, 2011

Graduate Students

The number in () represents students from foreign countries.

	Science	Engineering	Agriculture	Pharmaceutical Sc.	Medicine	Informatics	Human & Environm. Studies	Total
Master's Course	36	55	8	17	1	6	2	125
	(1)	(3)		(4)		(3)		(11)
Doctoral Course	38	18	8	18	1	4	1	88
	(3)	(3)	(5)	(4)	(1)	(1)		(17)
Total	74	73	16	35	2	10	3	213
	(4)	(6)	(5)	(8)	(1)	(4)		(28)

As of April 15, 2011

Graduate Students from Foreign Countries

China, P. R.	15	France	1	India	1	Iran	1
Korea, R.	2	Philippines	2	Taiwan	5	Vietnam	1
						Total	28

As of April 15, 2011

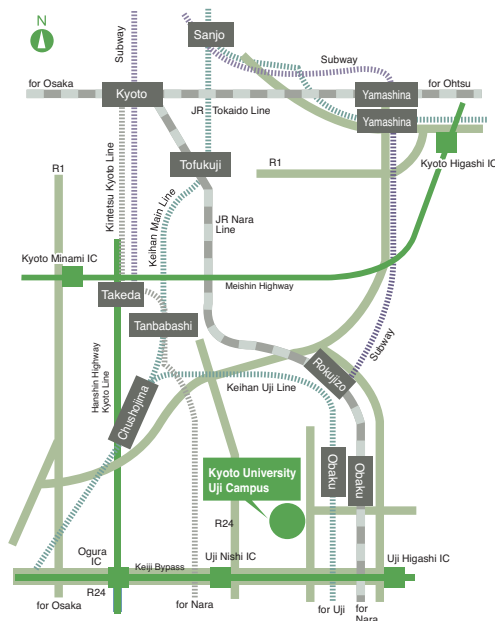
Visitors from Foreign Countries in 2010

Armenia	1	Australia	5	Belgium	1	Brazil	1
Canada	4	China, P. R.	48	Czech	1	France	13
Germany	14	Greece	1	India	1	Israel	2
Italy	1	Korea, R.	35	Mexico	1	Netherlands	3
Norway	1	Poland	6	Singapore	3	Spain	2
Sweden	7	Switzerland	4	Taiwan	6	Thailand	3
UK	3	USA	20	Vietnam	4	Total	191
						From 27 countries	



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Access

From Obaku Station on the JR Nara Line: 7min by walk (from Kyoto Station to Obaku Station: 20min)
From Obaku Station on the Keihan Uji Line: 10min by walk (from Keihan-Sanjo Station to Obaku Station: 35min)
From Kyoto-Minami IC: 20min by car
From Uji-Higashi IC: 10min by car / From Uji-Nishi IC: 10min by car



The latest information of ICR is on the web
www.kuicr.kyoto-u.ac.jp