

ICR

Division of Synthetic Chemistry
Division of Materials Chemistry
Division of Biochemistry
Division of Environmental Chemistry
Division of Multidisciplinary Chemistry
Advanced Research Center for Beam Science
International Research Center for Elements Science
Bioinformatics Center

2010
Institute for Chemical Research,
Kyoto University
京都大学化学研究所



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
TOKITO, Norihiro

Institute for Chemical Research, launched in 1926 as the first research institute at Kyoto University, will celebrate its 84th anniversary in 2010, 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, 99 faculty members and 240 graduate students are engaged in research activities in 31 laboratories supervised by full-time professors and 5 laboratories supervised by visiting professors.

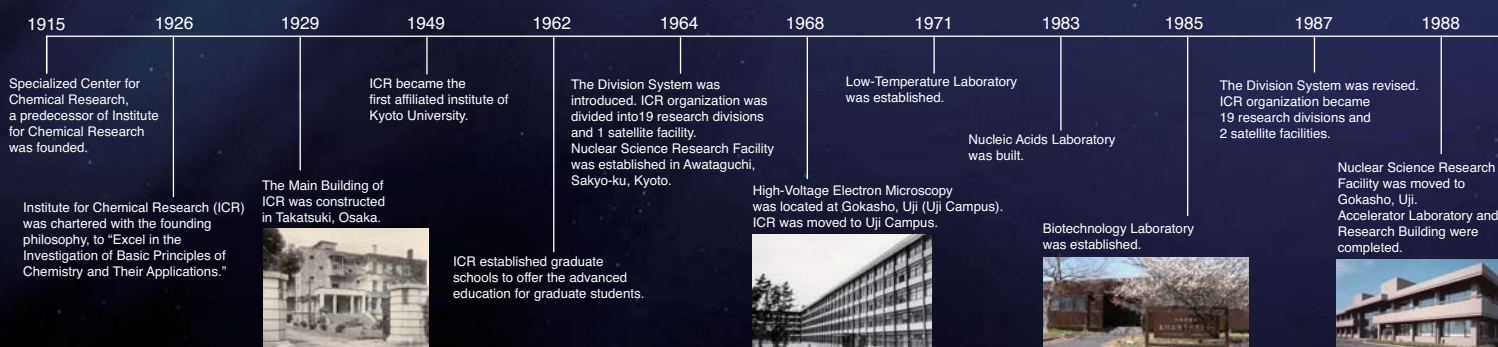
The research within the Institute encompasses the fields of chemistry, physics, biology, and informatics. The chemical studies core covers fields including physical chemistry, inorganic chemistry, organic chemistry, materials chemistry, and biochemistry. The graduate schools to which our laboratories belong cover diverse fields of science, engineering, pharmaceutical sciences, agriculture, 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/oversea universities and research organizations (with 45 official international collaboration agreements) and just started to function 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.

History

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



Research

ICR is located in the Uji Campus of Kyoto University. 31 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.

Novel Fields of Research in Boundary Area

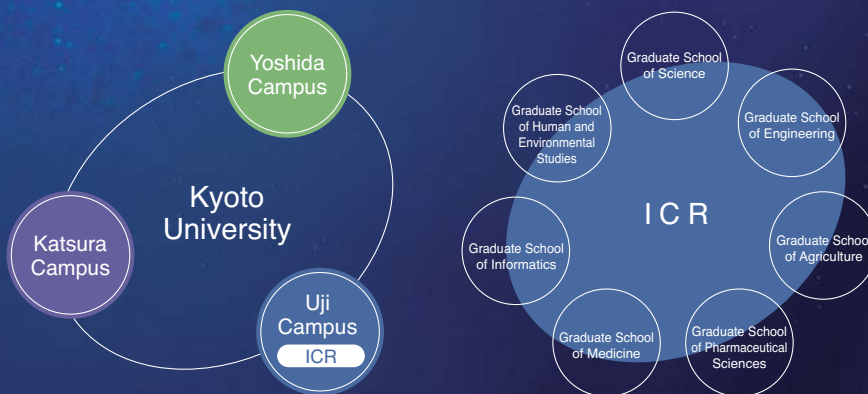
Challenge and Innovation



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

Education

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



1989 1992 1999 2000 2001 2003 2004 2005 2007 2009 2010

High-Resolution Electron Spectromicroscope was established.



ICR was reorganized into 9 research divisions and 2 satellite facilities. Supercomputer Laboratory was established.



Joint Research Laboratory Building was constructed.



Administration Departments of ICR and other institutes in Uji Campus were integrated.

ICR was reorganized into 9 research divisions and 3 satellite facilities. International Research Center for Elements Science was established.

Bioinformatics Center was established.

ICR was reorganized into 5 research divisions and 3 centers. Advanced Research Center for Beam Science was established. Uji Research Building was constructed.



Laser Science Laboratory was built.



The Alumni Association of ICR "Hekisuikai" was inaugurated.

Laboratory of Water Chemistry Energy (AGC) was endowed.

ICR started to function as a Joint Usage / Research Center.

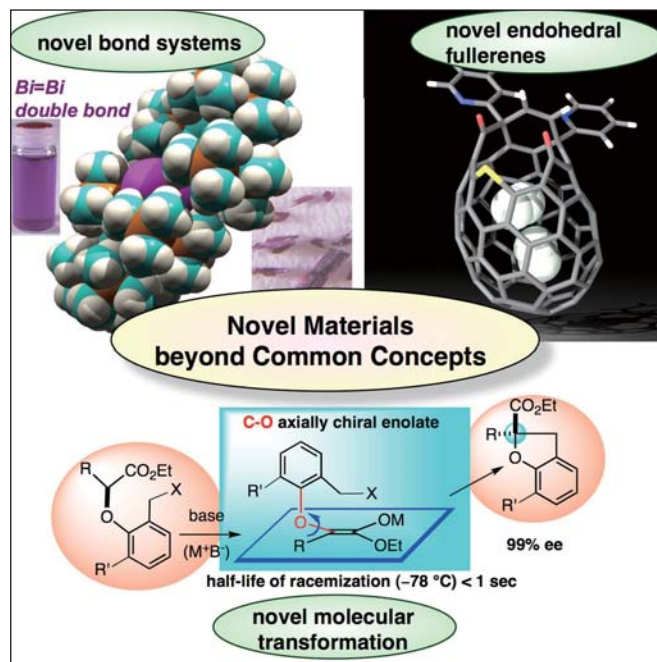


Division of Synthetic Chemistry

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.)
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. FUJHASHI, Akiko



Advanced Inorganic Synthesis

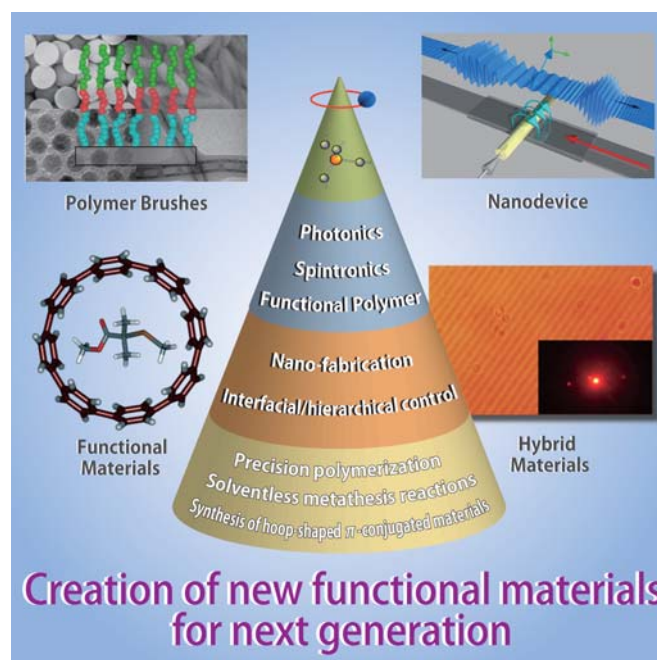
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Division of Materials Chemistry

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.)



Polymer Controlled Synthesis

Prof. **YAMAGO, Shigeru** (D.Sc.)
Assoc. Prof. TSUJI, Masaki (D.Eng.)
Assist. Prof. TOSAKA, Masatoshi (D.Eng.)
Assist. Prof. NAKAMURA, Yasuyuki (D.Sc.)



Inorganic Photonics Materials

Prof. **YOKO, Toshinobu** (D.Eng.)
Assist. Prof. TOKUDA, Yomeji (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.)
Program-Specific Assist. Prof. SEKIGUCHI, Koji (D.Sc.)
Techn. KUSUDA, Toshiyuki

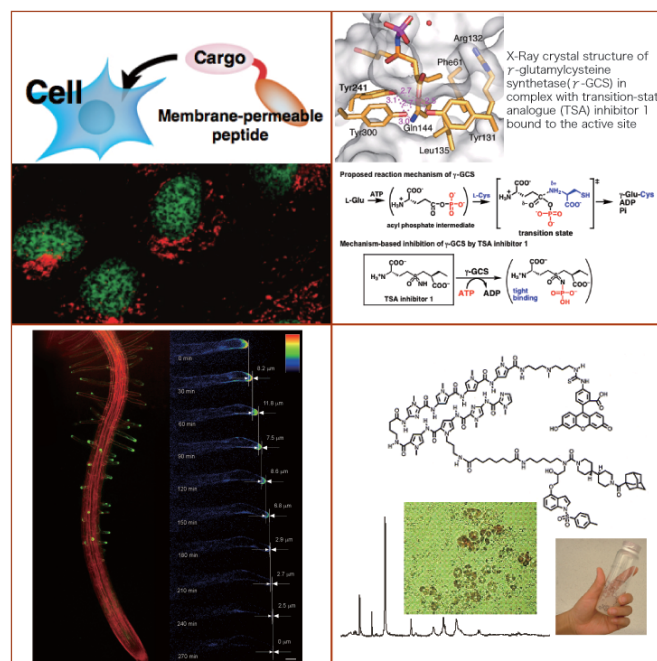


Division of Biochemistry

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.)



Molecular Biology

Prof. **AOYAMA, Takashi** (D.Sc.)
Assoc. Prof. SUGISAKI, Hiroyuki (D.Sc.)
Assist. Prof. TSUGE, Tomohiko (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.)

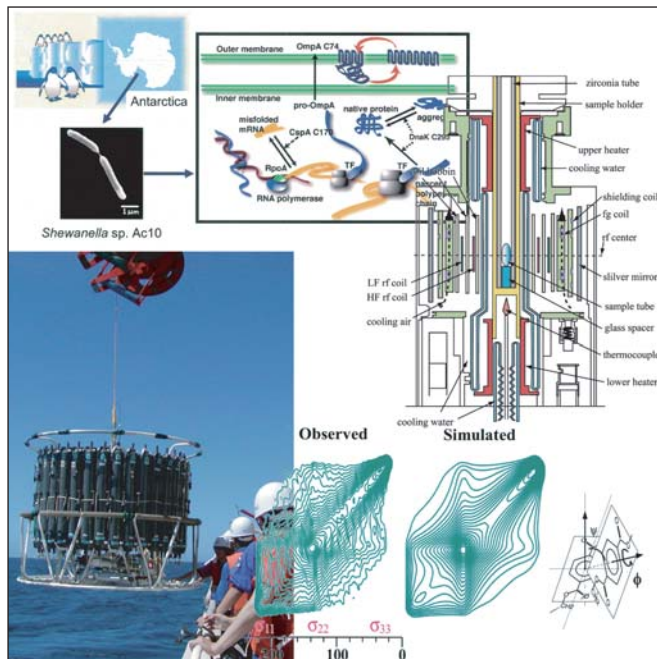


Division of Environmental Chemistry

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, in particular under extreme conditions, biogeochemistry in the hydrosphere, and biotechnology with useful enzymes and microorganisms.

Main research subjects are as follows: (1) Synthesis, 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) Properties and reactions of ionic liquids and supercritical water and drug binding into membrane. (4) Physiology of extremophilic microorganisms and their applications to production of useful compounds and bioremediations. Biochemistry of trace elements.



Molecular Materials Chemistry

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



Hydrospheric Environment Analytical Chemistry

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



Solution and Interface Chemistry

Prof. **S MATUBAYASI, Nobuyuki** (Ph D)
 Assist Prof. WAKAI, Chihiro (D Sc)

Molecular Microbial Science

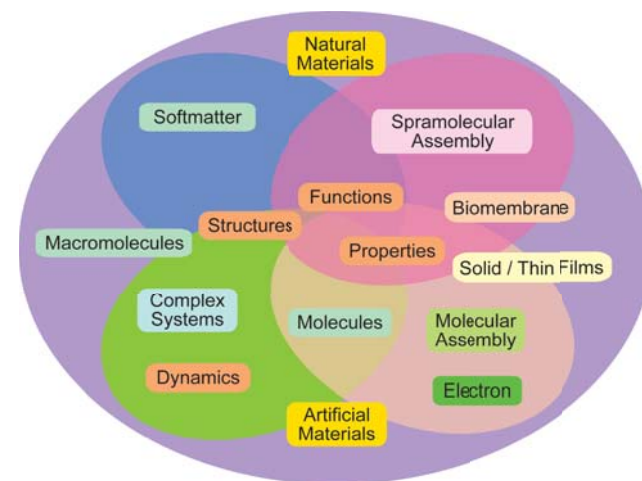
Prof. **A KURIHARA, Tatsuo** (D Eng)
 Assist Prof. KAWAMOTO, Jun (D Agr)

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 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

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



Molecular Rheology

Prof. **E WATANABE, Hiroshi** (D Sc)
 Assoc Prof. MASUBUCHI, Yuichi (D Eng)
 Assist Prof. MATSUMIYA, Yumi (D Eng)
 Program-Specific Assist Prof. UNEYAMA, Takashi (D Sc)
 Techn. OKADA, Shinichi



Molecular Aggregation Analysis

Prof. **S SATO, Naoki** (D Sc)
 Assoc Prof. ASAMI, Koji (D Sc)
 Assist Prof. YOSHIDA, Hiroyuki (D Sc)



Supramolecular Biology

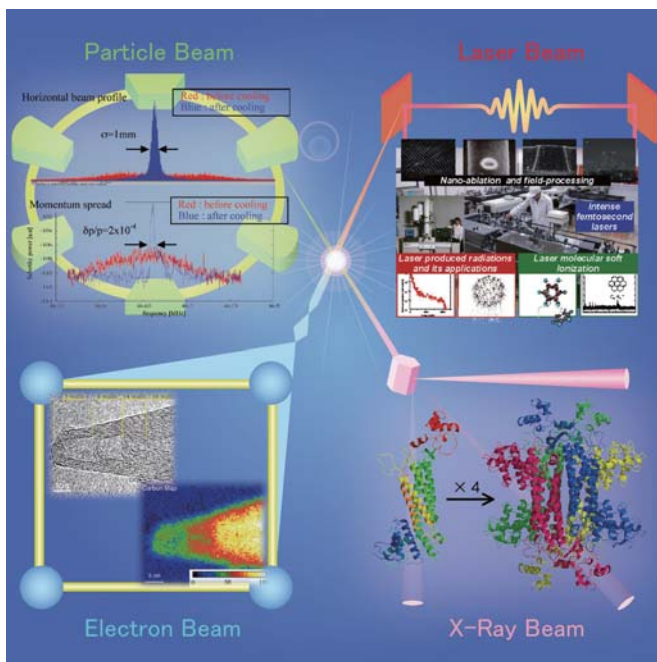
Prof. **S KATO, Utako** (D Sc)

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, Multidimensional 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

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



Laser Matter Interaction Science

Prof. **S SAKABE, Shuji** (D Eng)
 Assoc Prof. HASHIDA, Masaki (D Eng)
 Assist Prof. TOKITA, Sigeki (D Eng)



Electron Microscopy and Crystal Chemistry

Prof. **S KURATA, Hiroki** (D Sc)
 Assist Prof. OGAWA, Tetsuya (D Sc)
 Assist Prof. NEMOTO, Takashi (D Sc)

Structural Molecular Biology

Prof. **H HATA, Yasuo** (D Sc)
 Assoc Prof. ITO, Yoshiaki (D Sc)
 Assist 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
Carbon-Carbon, Carbon-Heteroatom Bond Forming Reactions for Organic Synthesis
development of new catalysts and organometallic reagents based on Unusual and Unconventional Methods (P, Al, Si, Sn, etc.)
Quest and Exploration for Elements Science
Design and Creation of Elements Synergism

Organotransition Metal Chemistry
Well-defined Catalysts

IRCELS
Creation of functional materials based on specific characters of the elements

Advanced Solid State Chemistry
Novel Inorganic Materials

Photonic Elements Science
Nanomaterials Photonics

Organic Main Group Chemistry

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



Advanced Solid State Chemistry

Prof. **SHIMAKAWA, Yuichi** (D.Sc.)
Assoc. Prof. **AZUMA, Masaki** (D.Sc.)
Asst. Prof. **KAN, Daisuke** (D.Sc.)
Asst. Prof. **SAITO, Takashi** (D.Sc.)
Program-Specific Asst. Prof. **ICHIKAWA, Noriya** (D.Eng.)



Organotransition Metal Chemistry

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



Photonic Elements Science

Prof. **KANEMITSU, Yoshihiko** (D.Eng.)
Assoc. Prof. **MATSUDA, Kazunari** (D.Eng.)
Asst. Prof. **TAYAGAKI, Takeshi** (D.Sc.)
Program-Specific Asst. Prof. **YAMADA, Yasuhiro** (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.

KUBiC
Kyoto University Bioinformatics Center

Multidisciplinary Research

- Bioknowledge Systems
- Biological Information Networks
- Pathway Engineering
- Integrated Database Unit
- International Training Program
- Supercomputer Laboratory

Education

Database

KEGG

Bioknowledge Systems

Prof. **KANEHISA, Minoru** (D.Sc.)
Assoc. Prof. **GOTO, Susumu** (D.Eng.)
Program-Specific Asst. Prof. **TOKIMATSU, Toshiaki** (D.Agr.)
Program-Specific Asst. Prof. **KOTERA, Masaaki** (D.Sc.)



Biological Information Networks

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



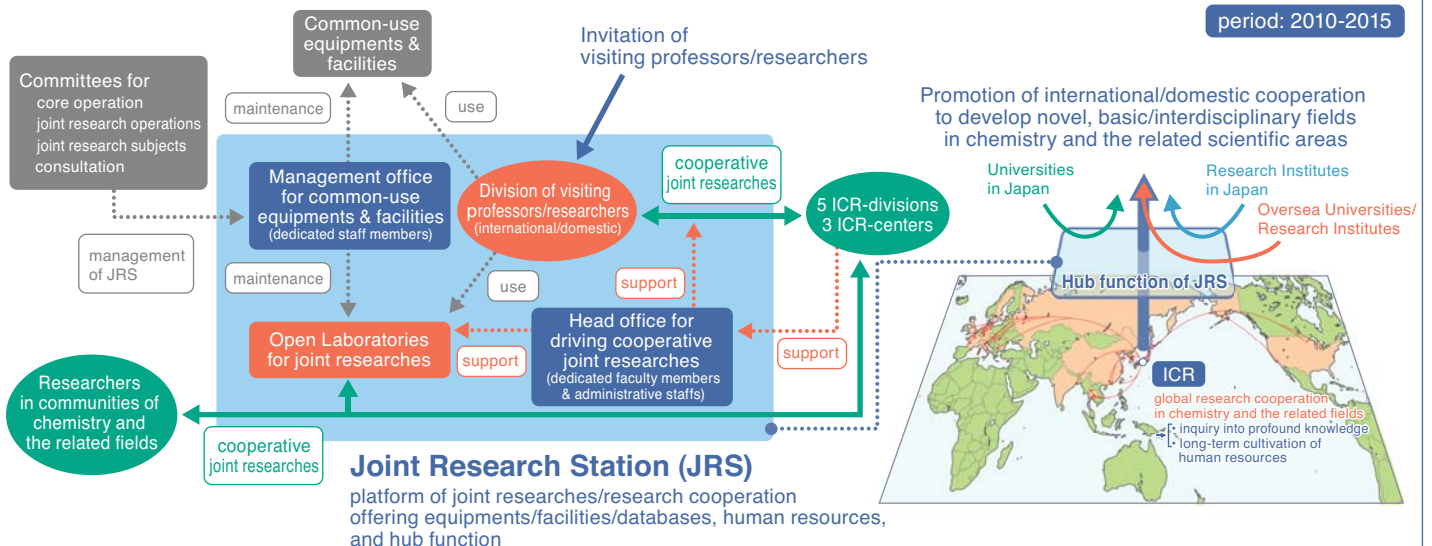
Pathway Engineering

Prof. **MAMITSUKA, Hiroshi** (D.Sc.)
Asst. Prof. **TAKIGAWA, Ichigaku** (D.Eng.)
Asst. Prof. **SHIGA, Motoki** (D.Eng.)



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

period: 2010-2015



Visiting Professors

Division of
Materials Chemistry,
Inorganic Photonics Materials

Prof **FUJIWARA, Takumi**

Professor, Graduate School of
Engineering, Tohoku University

Division of
Environmental Chemistry,
Molecular Materials Chemistry

Prof **ADACHI, Chihaya**

Professor, Center for
Future Chemistry, Kyushu University

Advanced Research Center for
Beam Science,
Laser Matter Interaction Science

Prof **AWAZU, Kunio**

Professor, Graduate School of
Engineering, Osaka University

Bioinformatics Center,
Pathway Engineering

Prof **ASAI, Kiyoshi**

Professor, Graduate School of
Frontier Sciences, The University of Tokyo

Division of Synthetic Chemistry,
Synthetic Organic Chemistry

Assoc Prof **ARAI, Midori**

Associate Professor, Graduate School of
Pharmaceutical Sciences, Chiba University

Division of Biochemistry,
Molecular Biology

Assoc Prof **HAYASHI, Ken-ichiro**

Associate Professor, Faculty of
Science, Okayama University of Science

Division of
Multidisciplinary Chemistry,
Polymer Materials Science

Assoc Prof **MATSUBA, Go**

Associate Professor, Graduate School of
Science and Engineering, Yamagata University

International Research Center for
Elements Science,
Advanced Solid State Chemistry

Assoc Prof **HAYASHI, Katsuro**

Associate Professor, Materials and
Structures Laboratory, Tokyo Institute of Technology

Endowed Research Section

**The 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), Yasuo Tsujino, (specially assigned assistant professor) and Akira Isobe (visiting researcher from AGC).

Water Chemistry Energy (AGC)

Visiting Prof
NAKAHARA, Masaru (D.Sc.)



Program-Specific Assist Prof
TSUJINO, Yasuo



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.



**SCIENCE FOR SCIENCE
AND SCIENCE FOR SOCIETY**

Research and Education Funding

Inter-University Network for Common Utilization of Research Equipments

Representative from ICR : FUTAKI, Shiroh / Term : 2007-2011

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

Special Coordination Funds for Promoting Science and Technology

Creation of Innovation Centers for Advanced Interdisciplinary Research Areas : Photo-Medical Valley

Joint Project among JAEA/KPSI (The Core Institute), 10 Collaborative Industries - in cooperation with ICR and Graduate School of Medicine (Kyoto Univ.), ILE (Osaka Univ.), NIRS, Graduate School for the Creation of New Photonics Industries, Doshisha University and other institutions.
Representative from ICR : NODA, Akira / Term : 2007-2016

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

BIRD Grant Program

Deciphering Systemic Biological Functions by Integration of Genomic and Environmental Information

Research Leader : KANEHISA, Minoru / Term : 2006-2010

JSPS International Training Program

International Research and Training Program on Bioinformatics and Systems Biology

Program Director : KANEHISA, Minoru / Term : 2009-2013

Integrated Database Project

Hierarchical Structuring and Integration of Knowledge in Life Sciences

Research Leader : GOTO, Susumu / Term : 2007-2010

University Staff

The number in () represents Visiting Professors.

Professor	Associate Professor	Assistant Professor	PS* Assistant Professor	Technician	PS* Researcher	Sub-total	Researcher**	Other Staff	Sub-total	Total
26	22	36	7	8	10	109	20	35	55	164
(5)	(4)					(9)				(9)

*PS: Program Specific ** from Japan and foreign countries As of August 1, 2010

Researchers(PD) from Foreign Countries

Country	Number	Country	Number	Country	Number	Country	Number
Australia	1	China, P. R.	5	Egypt	1	Indonesia	1
Korea, R.	2	Poland	1	Spain	2	Sri Lanka	1
Taiwan	1	Thailand	1	Vietnam	1	Total	17

As of July 1, 2010

Research Students, Fellows and Associates

Research Student	Research Fellow	Postdoctoral Fellow of JSPS	Research Associate	Total
3	3	1	8	15

As of May 1, 2010

Graduate Students

The number in () represents students from foreign countries.

	Science	Engineering	Agriculture	Pharmaceutical Sc.	Medicine	Informatics	Human & Environment Studies	Total
Master's Course	44	45	13	17	1	7	3	130
	(1)	(2)	(1)	(3)		(3)		(10)
Doctoral Course	42	22	11	22	2	4	1	104
	(2)	(3)	(6)	(4)	(1)	(1)		(17)
Total	86	67	24	39	3	11	4	234
	(3)	(5)	(7)	(7)	(1)	(4)		(27)

As of May 1, 2010

Graduate Students from Foreign Countries

Country	Number	Country	Number	Country	Number	Country	Number
China, P. R.	13	Egypt	1	France	1	India	1
Iran	1	Korea, R.	2	Nepal	1	Philippines	1
Taiwan	3	Thailand	1	Turkey	1	Vietnam	1
						Total	27

As of May 1, 2010

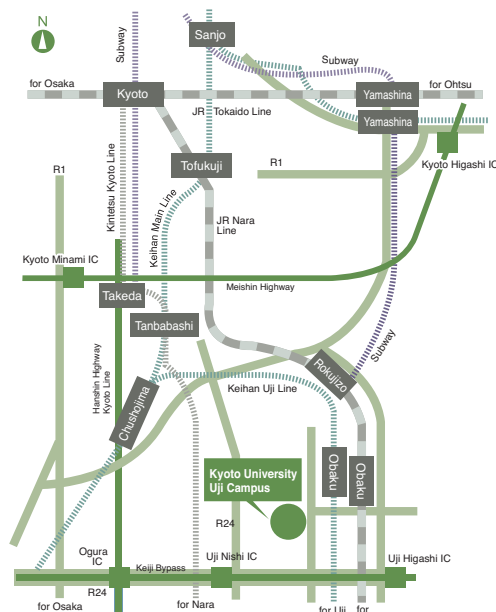
Visitors from Foreign Countries in 2009

Country	Number	Country	Number	Country	Number	Country	Number
Argentina	1	Australia	1	Belgium	1	Canada	2
China, P. R.	19	Czech	7	France	24	Germany	11
Iceland	1	India	2	Israel	2	Italy	3
Korea, R.	6	Netherlands	1	Poland	1	Russia	2
Singapore	4	Spain	3	Sweden	4	Taiwan	9
Thailand	4	UK	6	USA	13	Total	127
						From 23 countries	



Institute for Chemical Research, Kyoto University

Gokasho, Uji, Kyoto, Japan 611-0011
Tel: +81-774-38-3344 Fax: +81-774-38-3014
E-mail: koho@scl.kyoto-u.ac.jp



Access

From Obaku Station on the JR Nara Line: 7min by walk (from Kyoto Station to Obaku Station: 25min)
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