

Hiroshima University

Graduate School of Science

INFORMATION for APPLICATION to
HIROSHIMA UNIVERSITY

(Master's Program)

October 2012 Enrollment

Graduate School of Science
HIROSHIMA UNIVERSITY
1-3-1 Kagamiyama, Higashi-Hiroshima
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The Department of Chemistry and the Department of Mathematical and Life Sciences of the Graduate School of Science, Hiroshima University, are seeking foreign student applicants for the Master's program for enrollment in October 2012.

Preliminary selections will be done to reduce the number of applicants to within 30 by evaluating submitted application documents. Those selected are required to take a written examination after the briefing session. For the Department of Chemistry, the subject of Chemistry is obligatory, whereas a choice among Mathematics, Physics, Chemistry, and Biology according to the applicant's undergraduate major can be made for the Department of Mathematical and Life Science. The test can be taken either in English or in Japanese. Applicants will be further reduced to within 10 by this test according to scores and those selected will proceed to the oral examination (interview) held the next day. Those qualifying are to contact supervisors-to-be and carry out discussions. Those who pass this final process will be sent enrollment application forms.

Since lectures in the Master's program will be held in Japanese, successful applicants are to take Japanese training courses provided by the Hiroshima University Beijing Research Center, located on the campus of Capital Normal University.

Among acceptees, those who have already received a Bachelor's degree or are expected to receive one by March 31, 2012, and also have efficient Japanese language skills may be exempted from the Japanese training course and may enroll in April, 2012.

Schedule until enrollment

2011	October	1 to 21	Application period for the Briefing Session
	November	7	Invitations to the Briefing Session will be distributed.
		21	Briefing Session and Written Examination
		22	Interview
	December	1	Announcement of examination results
2012		1 to 22	Discussion period
	January	4 to 20	Application period for admission
	February	7	Announcement of admission
	July		Japanese language training (till September)
	September		Arrival in Hiroshima and enrollment procedures
	October	1	Enrollment

[1] Enrollment Capacity

Department of Chemistry: up to 3.

Department of Mathematical and Life Sciences: up to 3

[2] Enrollment Application Requirements

A person of non-Japanese citizenship fulfilling one of the following conditions:

- (1) Has received a Bachelor's degree at a four-year university or college.
- (2) Is expected to receive a Bachelor's degree by the end of September 2012.

[3] Briefing Session

A briefing session will be held for prospective applicants for the Master's Program of the Department of Chemistry and the Department of Mathematical and Life Sciences, Graduate School of Science.

Place	The Hiroshima University Beijing Research Center (on the campus of Capital Normal University), Beijing, People's Republic of China
Date	Nov. 21(Mon.) Briefing Session and Written Examination Nov. 22(Tues.) Interview

The maximum number of participants for the briefing session is 30. Preliminary selections based upon the submitted application documents will be carried out if the number of applications exceeds this number.

- (1) Application period for the briefing session: Oct. 1 to 21, 2011.
- (2) Where the application documents should be sent to:
Student Affairs Office, Graduate School of Science, Hiroshima University
1-3-1 Kagamiyama, Higashi-Hiroshima 739-8526 Japan
- (3) Required documents for Application (All documents are to be filled in English unless specified otherwise.)

Documents	Remarks
Application Form	Use the official form provided by the Graduate School of Science, Hiroshima University. Download from the homepage of the Graduate School of Science. A photo taken within three months must be attached in the upper right-hand corner for identification.
Grade Transcript	Official document(s) issued by the institution from which the applicant graduated or is expected to graduate.
Certificate of Graduation or Expected Graduation	Official document(s) issued by the institution from which the applicant graduated or is expected to graduate.
Grade Certificate(s) for Foreign Language Tests	TOEFL(R) scores, Japanese Language Proficiency Test scores, and/or certified material of equivalence.

Besides the documents listed above, the following documents are additionally required for applicants to the Department of Mathematical and Life Sciences.

Documents	Remarks
Letter of Recommendation	A letter of recommendation using the official form provided by the Graduate School of Science, Hiroshima University, filled out by the applicant's supervisor for the Bachelor's thesis or the head of the department from which the applicant graduated or is expected to graduate.
Statement Sheet	Use the official form provided by the Graduate School of Science, Hiroshima University. Download from the homepage of the Graduate School of Science.

Note 1: Official documents written in languages other than English or Japanese must be translated into English or Japanese. Submit both the original and the translated documents.

Note 2: Submitted documents will not be returned.

Note 3: Qualifiers of the examinations carried out following the briefing session will be asked to submit additional documents.

- (4) Invitations will be sent around Nov. 7. If the number of applications exceeds 30, a preliminary selection process based upon the submitted documents will be held. Those invited may participate free of charge.
- (5) Results of the written examination will be posted at 10 am, Nov. 22 on a bulletin board at the Beijing Research Center.
- (6) Results of the interview will be posted similarly around Dec. 1. Enrollment application forms will be sent out to all qualifiers.
- (7) Qualifiers are to contact supervisors-to-be and carry out discussions during the period of Dec. 1 to 22. Those who are accepted are to receive recommendations from the staff member.
- (8) Those who have passed and wish to enroll are to proceed according to the procedure given in the following section.

[4] Application for Enrollment

- (1) Application period for enrollment: Jan. 4 to 20, 2012. Mail including all required documents must arrive by the deadline.
- (2) Required documents (All documents are to be filled in English)

Documents	Remarks
Application Form	Use the official form provided by the Graduate School of Science, Hiroshima University.
Letter of Recommendation	Letter of recommendation from the supervisor-to-be.
Application Fee	¥30,000. Only Japanese Yen is acceptable. The method of payment will be informed to the applicant at a later date.

Note 1: No changes in application materials will be allowed after submission.

Note 2: Submitted documents and fees cannot be returned.

- (3) Where the application documents should be sent to:
Student Affairs Office, Graduate School of Science, Hiroshima University
1-3-1 Kagamiyama, Higashi-Hiroshima 739-8526 Japan

[5] Selection Procedure and Admission Notice

The submitted enrollment application documents will be reviewed.

Admission will be announced on Feb. 7, 2012. Notices will be sent to admittees.

[6] Enrollment Fees

Entrance Fee: ¥282,000

Tuition: ¥535,800 per year (or ¥267,900 per semester)

Notes

- (1) The entrance fee is not refundable.
- (2) Entrance and tuition fees are those as of April 2011 and are subject to change without prior notice.
- (3) The enrollment procedure must be completed during a specified period that will be notified later.
- (4) After enrollment, students having financial difficulties may apply for exemption of the tuition fee.
However, there is no guarantee of an exemption.

[7] Japanese Training and Inquiries

- (1) Admittees are to take Japanese language training courses at the Hiroshima University Beijing Research Center, located on the campus of Capital Normal University. (See p. 2 for conditions for exemption.)

(2) Details on Japanese language training and procedures on coming to Japan will be given along with the admission notice.

For further information, please contact:

Student Affairs Office of the Graduate School of Science, Hiroshima University

1-3-1 Kagamiyama, Higashi-Hiroshima 739-8526 JAPAN

Fax : +81-82-424-0709

E-mail: ri-gaku-daigakuin@office.hiroshima-u.ac.jp

Inquiries by phone are unacceptable.

Or look up the homepage of the Graduate School of Science: <http://www.hiroshima-u.ac.jp/en/sci-en/>

Majors, Academic Staff, Research Subjects

Graduate School of Science, Hiroshima University

As of June 1, 2011

Department of Chemistry

Laboratory	Academic Staff	Research Subjects
Structural Physical Chemistry	EBATA, Takayuki (Professor) INOKUCHI, Yoshiya (Assoc. Prof.) OKADA, Kazumasa (Assoc. Prof.)	Studies on the structure and dynamics of molecular complexes and functional molecules by uses of nonlinear laser spectroscopy and ab initio molecular orbital calculations.
Solid State Chemistry	INOUE, Katsuya (Professor) NISHIHARA, Sadafumi (Assoc. Prof.)	Synthesis, crystal structure, magnetic, optical, and conducting properties for molecule-based materials, studied by SQUID, magnetic resonance, MCD, and X-ray diffraction.
Coordination Chemistry	MIZUTA, Tsutomu (Assoc. Prof.)	Preparation, structures, and properties of transition metal complexes having phosphorus ligand(s) with novel functionality.
Analytical Chemistry	FUJIWARA, Terufumi (Professor)	Reverse micelle as a microreactor, chemical separation coupled to chemiluminescence and atomic spectrometries, and microspectroscopic measurements of reactions at liquid-liquid interface.
Structural Organic Chemistry	HAINO, Takeharu (Professor)	Studies on molecular recognition and self-assembly of supramolecular structures.
Photochemistry of Advanced Materials	SAITOW, Ken-ichi (Professor) *	Spectroscopic study on supercritical fluid. Advanced nanomaterials fabricated by laser ablation. High-density molecular storage in confined systems.
Physical Chemistry of Kinetics	YAMASAKI, Katsuyoshi (Professor) KOHGUCHI, Hiroshi (Assoc. Prof.)	Studies on the kinetics and dynamics of the chemical reactions and energy transfer processes. Experiments based on the selective detection of a single quantum state by laser spectroscopy and theoretical studies by quantum chemical calculation.
Quantum Chemistry	AIDA, Misako (Professor) ISHIBASHI, Taka-aki (Assoc. Prof.)	Chemical reactions in solution or specific recognition reactions in biological systems using quantum mechanical and molecular dynamics simulations. Structures and dynamics of molecules at surfaces and interfaces using linear and nonlinear vibrational spectroscopies.
Organic Main Group Chemistry	YAMAMOTO, Yohsuke (Professor) KAWACHI, Atsushi (Assoc. Prof.) KOJIMA, Satoshi (Assoc. Prof.)	Studies on the synthesis and reaction mechanism of organic compounds of main group elements. Chemistry of hypervalent molecules.
Organic Reaction Chemistry	ABE, Manabu (Professor) HIRAGA, Yoshikazu (Assoc. Prof.)	Reactive intermediate chemistry, including singlet and triplet diradicals. Stereoselective synthesis of functional molecules..
Radiation Reaction Chemistry	NAKASHIMA, Satoru (Professor) *	Chemistry related to radiation or studied by Mössbauer spectroscopy. Control of mixed-valence state and spin state by crystal construction.

*Staff member of the Natural Science Center for Basic Research and Development

Department of Mathematical and Life Sciences

Laboratory	Academic Staff	Research Subjects
Nonlinear Studies	SAKAMOTO, Kunimochi (Professor) OHNISHI, Isamu (Assoc. Prof.)	Theory and application of nonlinear evolution equations, Infinite dimensional dynamical system theory, Geometric singular perturbations, Nonlinear analysis of mathematical models, Functional analytic approaches to nonlinear phenomena.
Phenomenology and Mathematics	NISHIMORI, Hiraku (Professor)	Nonequilibrium nonlinear phenomenology, Theoretical biophysics and complex systems.
Complex Systems	KOBAYASHI, Ryo (Professor) SENO, Hiromi (Assoc. Prof.)	Phase transitions and nonlinear dynamics far from equilibrium, Mathematical Biology.
Mathematical Analysis	NAKAKI, Tatsuyuki (Professor) IIMA Makoto (Assoc. Prof.) IRIE, Haruyuki (Assoc. Prof.) *	Mathematical analysis for natural phenomena. System of differential equations, Dynamical system, Analysis for chaotic phenomena.
Molecular Biophysics	TATE, Shin-ichi (Professor) KATAYANAGI, Katsuo (Assoc. Prof.)	Biophysical studies of protein structure, dynamics and their relations to the biological function. Structural biology by NMR and X-ray crystallography of proteins.
Chemistry on Self-organization	NAKATA, Satoshi (Professor) FUJIWARA, Yoshihisa (Assoc. Prof.)	Spatio-temporally developed phenomena under nonequilibrium conditions (Self-motion and mode-switching, chemical oscillation, and artificial sensation). Magneto-Science (Magnetic field and magnetically simulated microgravity and hypergravity effects on phenomena in chemistry, physics, and biology and on advanced nano- and micro-materials).
Biological Chemistry	IZUMI, Shunsuke (Professor)	Biological Chemistry; Natural Product Chemistry; Biocatalytic Chemistry; Bioorganic Chemistry; Protein Chemistry.
Molecular Genetics	YAMAMOTO, Takashi (Professor) SAKAMOTO, Naoaki (Assoc. Prof.)	Elucidation of a cascade of transcription factors regulating temporal as well as spatial expression of genes in sea urchin embryo. Study on genes related to cell fate determination in sea urchin embryo. Comparative and evolutionary studies on function of transcription factors related to vertebrate morphogenesis.
Molecular Plant Biology	SAKAMOTO, Atsushi (Professor) SHIMADA, Hiroshi (Assoc. Prof.)	Molecular biology, biochemistry and physiology of plant function and metabolism; Chloroplast development; Molecular genetic and metabolic engineering for improved plant performance.
Gene Chemistry	IDE, Hiroshi (Professor)	Molecular and cell biology of DNA repair and mutagenesis.

* Staff of the Information Media Center

Application Form for Participation to the Briefing Session

Department of Chemistry, Graduate School of Science
(Master's Program), Hiroshima University

Firmly attach
your photo
here

Application Number	M			
Name in both English and Chinese	In English	Family name	First name	Middle name
	In Chinese			
Current Mailing Address	E-mail address Telephone/Fax number			
Permanent Address	E-mail address Telephone/Fax number			
Date of birth		sex	<input type="checkbox"/> Male <input type="checkbox"/> Female	
Age as of Oct. 1, 2012		nationality		
Name of Institution (University)				
Expected date of graduation				
Priorities list of staff members whom the applicant wishes to have as academic supervisor (refer to the list of academic staff) *All of three choices must be indicated.				
	Name of Laboratory	Name of Academic Staff		
First choice				
Second choice				
Third choice				
Provide reasons for choosing the master's program of the Graduate School of Science, Hiroshima University				