

Department of Chemistry(Seoul)

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The Department of Chemistry consists of faculty members and students who actively engage in a broad range of educational activities, centered around chemical research.

Here, knowledge of chemistry is enhanced through intensive course work, laboratory experiments, and individual research. The programs offered by the Department of Chemistry aim to make the students creative and productive scientists. They are tailored largely to the interest of each student, giving each student freedom to arrange his or her schedule for course work and research activity. Moreover, as proficiency in the use of scientific instruments is an essential aspect a career in chemistry, the Department of Chemistry provides students with the opportunity to learn about and use instrumentation through course work and individual research activities.

The Department of Chemistry is a place where the faculty members and students actively interact with each other in an open and friendly environment.

| Degree Requirements |

- Candidates seeking the master's degree must publish at least one research paper in an SCIE journal. Candidates for the doctoral degree and candidates for the unified degree must publish three research papers in SCIE journals.
- Candidates for the master's degree must present their research results at a departmental seminar more than twice.
- Candidates for the doctor's degree and candidates for the unified degree must present their research results at a departmental seminar more than three times.
- Candidates for the doctor's degree are subject to a qualifying examination. The examining board, a committee of two to four faculty members, is appointed to examine the student for general competence in the area of interest. The qualifying examination is centered around the defense of the individual research project.
- Master's and doctoral candidates must complete an original, scholarly contribution to science and write a thesis or dissertation on the subject.
- Any student who majored in another field must complete basic undergraduate subjects as approved by the department chair.

| Courses |

Advanced Inorganic Materials, Advanced Materials Chemistry, Advanced Molecular Spectroscopy, Advanced Organic Chemistry, Advanced Physical Chemistry, Advanced Polymer Chemistry I,2, Advanced Quantum Chemistry, Applied Biochemistry, Applied Computational Chemistry I,2, Chemistry of Optoelectronic Devices, Computational Chemistry I,2, Contemporary Electroanalytical Chemistry, Drug Design and Synthesis, Enzymology, Heterogeneous Inorganic Catalysts, Introduction to Optoelectronic Devices, Medicinal Chemistry, Nano/Bio Polymer Chemistry, Nano-physical

Chemistry, Organic and Hybrid Semiconductors, Organometallic Chemistry, Photochemistry, Polymer Nano-chemistry, Recent Advances Inorganic Chemistry, Reversible Deactivation Radical Polymerization, Special topics for functional polymers I, Special Topics in Analytical Chemistry(Nano/Bio), Special Topics in Biochemistry 1,2, Special Topics in Organic Chemistry, Special Topics in Organic Semiconductors, Special Topics in Organic Synthesis, Special Topics in Physical Chemistry, Special Topics in Polymer Chemistry, Special Topics on Reactions of Polymers, Synthetic Medicinal Chemistry.

| Faculty |

- ___ Minserk Cheong, Professor, Ph.D. Ohio State University, 1987, Inorganic Chemistry, mcheong@khu.ac.kr
- ___ Seung Min Park, Professor, Ph.D. Brown University, 1989, Physical Chemistry, smpark@khu.ac.kr
- ___ Ho-Jung Kang, Professor, Ph.D. Ohio State University, 1991, Organic Chemistry, hjkang@khu.ac.kr
- ___ Hai Dong Kim, Ph.D.
- ___ Hoon Sik Kim, Professor, Ph.D. Yale University, 1986, Green Chemistry, khs2004@khu.ac.kr
- ___ Jungahn Kim, Ph.D.
- ___ Jae Yeol Lee, Professor, Ph.D. Korea University, 1997, Organic Chemistry, Medicinal Chemistry, ljj@khu.ac.kr
- ___ Hyun-Joo Koo, Professor, Ph.D. Sungkyunkwan University, 1997, Physical Chemistry, hjkoo@khu.ac.kr
- ___ Jae Kyu Song, Professor, Ph.D. Seoul National University, 2002, Physical Chemistry, jaeksong@khu.ac.kr
- ___ Sang Soo Hah, Professor, Ph.D. Seoul National University, 2001, Biochemistry and Bioorganic Chemistry, sshah@khu.ac.kr
- ___ Joocheon Kim, Professor, Ph.D. The University of Texas at Austin, 2007, Analytical Chemistry, jkim94@khu.ac.kr
- ___ Youngmi Kim, Professor, Ph.D. Massachusetts Institute of Technology, 2005, Organic Chemistry, youngmi.kim@khu.ac.kr
- ___ Je Seung Lee, Associate Professor, Ph.D. Korea University, 2004, Inorganic Chemistry, leejs70@khu.ac.kr
- ___ Jeewoo Lim, Assistant Professor, Ph.D. Massachusetts Institute of Technology, 2011, Polymer Chemistry, jeewoo@khu.ac.kr
- ___ Bright Walker, Assistant Professor, Ph.D. The University of California at Santa Barbara, 2012, Material Chemistry, walker@khu.ac.kr
- ___ Sung Yul Lim, Assistant Professor, Ph.D. Seoul National University, 2016, Analytical Chemistry, limsy@khu.ac.kr
- ___ Jieun Yang, Assistant Professor, Ph.D. Ulsan National Institute of Science and Technology, 2015, Energy Engineering, jey@khu.ac.kr

| Laboratories |

Inorganic Chemistry Laboratory

URL : <http://web.kyunghee.ac.kr/~greenchem>
Director : Dr. Minserk Cheong(mcheong@khu.ac.kr)

Nano-Bio Spectroscopy Laboratory

URL : <http://web.khu.ac.kr/~mdpld>
Director : Dr. Seung Min Park(smpark@khu.ac.kr)

Organic Synthesis Chemistry Laboratory

URL : <http://web.kyunghee.ac.kr/~chemi/org/home.htm>
Director : Dr. Ho-Jung Kang(hjkang@khu.ac.kr)

Green Chemistry Laboratory

URL : <http://web.kyunghee.ac.kr/~greenchem>

Director : Dr. Hoon Sik Kim(khs2004@khu.ac.kr)

Medicinal Chemistry Research Laboratory

URL : <http://medchem.khu.ac.kr>

Director : Dr. Jae Yeol Lee(ljy@khu.ac.kr)

Computational Solid State Chemistry Laboratory

URL : <http://web.khu.ac.kr/~soacom>

Director : Dr. Hyun-Joo Koo(hjkoo@khu.ac.kr)

Nano Physical Chemistry Laboratory

Director : Dr. Jae Kyu Song(jaeksong@khu.ac.kr)

Molecular Biochemistry Laboratory

URL : <http://biochemistry.khu.ac.kr>

Director : Dr. Sang Soo Hah(sshah@khu.ac.kr)

Naon/Bio-Analytical Chemistry Laboratory

URL : <http://analchem.khu.ac.kr>

Director : Dr. Joohoon Kim(jkim94@khu.ac.kr)

Energy & Materials Sciences Laboratory

Director : Dr. Je Seung Lee(leejs70@khu.ac.kr)

Functional Materials Laboratory

URL : <https://sites.google.com/site/ymklabfml>

Director : Dr. Youngmi Kim(Youngmi.Kim@khu.ac.kr)

Photoelectrochemistry Laboratory

URL : <https://khuphotoelectrochemistry.com>

Director : Dr. Sung Yul Lim(limsy@khu.ac.kr)

Low-Dimensional Nanomaterials Laboratory

Director : Dr. Jieun Yang(jey@khu.ac.kr)

Energy Conversion Materials Laboratory

Director : Dr. Bright Walker(walker@khu.ac.kr)