For information about admission to the Chemistry Graduate Program at Indiana University please contact us by email (preferred), phone or mail:

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Department of Chemistry
Chemistry Building Room C121
Indiana University
800 E Kirkwood Avenue
Bloomington, IN 47405-7102

Telephone: (812) 855-2069
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Email: chemgrad@indiana.edu

www.chem.indiana.edu/grad/admission.asp

And check out our website and faculty information at:

www.chem.indiana.edu
The future is bright for chemists trained in the fundamentals of their disciplines, but fully capable of contributing at the cutting edge of modern interdisciplinary science. Enormous and diverse challenges continue to face us from the treatment and diagnosis of human disease to energy self-sufficiency and a reduced dependence on hydrocarbon-based fuels. Chemistry will always be central in solving these complex problems. Now more than ever, these solutions will require synthetic chemists working with analytical chemists, physical chemists working with biologists, materials chemists working with physicists, and experimentalists working with theoreticians. This is exactly the kind of research environment you'll find as a graduate student in Chemistry at Indiana University.

The University, the State of Indiana and important private foundations, notably the Lilly Endowment, continue to make major investments in facilities and people in our department. These investments have allowed us to expand the scope of interdisciplinary activities in chemical biology and materials science, while enhancing the strength of nationally ranked disciplines in analytical chemistry and more recently, inorganic chemistry. We have also made important new additions to our faculty in the traditionally strong areas of physical, organic and biological chemistry over the past several years and these trends will continue.

We’ve built from scratch a core division of materials chemistry that has flourished not by working alone, but by working closely with investigators in all other traditional disciplines of chemistry, as well as in physics. The Nanoscience Center and associated research facilities provide state-of-the-art imaging of new materials, photovoltaics, and biomaterials, all under one roof.

On the flip side, the life sciences continue to thrive on the Bloomington campus. Our analytical chemists have invented new technology platforms and developed diagnostic and discovery-based methods geared toward the identification of proteins, metal speciation, oligosaccharides and metabolites in complex biological mixtures. Our biochemists have designed and synthesized new medically important biomolecules used to treat human disease, and have assembled world-class facilities in high field NMR spectroscopy, cryo-electron microscopy, x-ray crystallography and single-molecule detection to gain insight into important biological processes.

Beyond the science in the laboratory lies our campus as a nationally recognized “work of art” situated in the woods on the edge of the Hoosier National Forest in the rolling hills of southern Indiana. Bloomington is a hiking, biking and water sports mecca and a fantastic place to live if one enjoys the outdoors. The athletic facilities on campus are superb as well. In town, Bloomington is in many ways a typical Midwestern city, but a unique and vibrant one that benefits not only from its Big Ten University, but a host of small organic farms that drive a quality-of-life and restaurant scene that belies our modest size. A major contributor to the cultural scene is the truly world-class Jacobs School of Music that offers over 1200 performances a year to suit virtually any taste in music, opera, ballet and dance.

Take a careful look at Indiana University. We promise a rich interdisciplinary and highly collaborative research training environment that is perfect for those highly talented students anxious to reach a little higher. Enjoy the materials in this brochure, and be sure to look us up on the web at chem.indiana.edu.
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Justin Orlando, a graduate student in the Cauliton lab, is working up an air-sensitive osmium complex in a glovebox purged with argon.

Joe Pinchman, a graduate student in the Williams Group, is purifying a reaction sample by HPLC.
The Department of Chemistry at Indiana University offers an internationally recognized Ph.D. program that integrates independent research; an advanced curriculum taught by some of the world’s most renowned chemists; and state-of-the-art instruments, equipment, and labs, with research facilities that are available 24 hours a day. Our students have the opportunity to collaborate closely with professors and scientists who are doing life-changing work, from studying virus assembly to monitoring airborne PCBs. Our newest research facility, Simon Hall, provides laboratories and offices with the finest equipment and resources available for interdisciplinary research in chemistry, biology, and physics.

The many research projects that chemistry scientists have completed or are currently working on include:

- Developing drugs currently being used to treat diabetes, human growth disorders, postoperative sepsis, and spontaneous bone fracture
- Inventing a method for background correction in atomic-absorption spectrometry and coupling of time-of-flight mass spectrometry to atomic ion sources
- Investigating the melting of ultrasmall particles containing a precisely known number of atoms
- Determining whether drug-resistant HIV can be combated
- Studying protein molecules in the human body to learn how to prevent cancer from spreading or even developing
- Developing new high-resolution and ultra-sensitive bioanalytical separation techniques

The Chemistry Program at Indiana University, Bloomington reflects the ever-changing nature of science. As science evolves, our curriculum and facilities incorporate state-of-the-art innovations, supported by university and external funding for developing the latest methods and instrumentation. From internationally renowned resources to professors who are among the most brilliant scientific minds today, our program provides an unparalleled support network for graduate research.

In recent years, the Department of Chemistry has enhanced IU Bloomington’s reputation among the world’s scientists by making breakthroughs in the areas of health and medicine, analytical chemistry, organic chemistry, biochemistry, inorganic chemistry, materials science, and physical chemistry. The Indiana University Chemistry Department is widely regarded as an excellent place to work and learn, as evidenced by the international diversity of its faculty, graduate students and postdoctoral fellows.

Our outstanding resources and leadership in the field of chemistry, combined with the State of Indiana’s commitment to the advancement of life sciences, will bring the world to your doorstep, enabling you to achieve all of your educational and professional objectives.

For more information about the Department of Chemistry and what we have to offer, please see our web site:

www.chem.indiana.edu
The Department of Chemistry at Indiana University offers a Ph.D. in chemistry that is internationally well-respected in both industry and academia. At Indiana University, Bloomington, graduate students may choose to specialize in one of the traditional areas of chemistry or in one of the emerging interdisciplinary or interdepartmental programs that provide a natural conduit between our department and our industrial and academic partners around the world.

Traditional areas of study include:

- Analytical Chemistry
- Biological Chemistry
- Inorganic Chemistry
- Materials Chemistry
- Organic Chemistry
- Physical Chemistry

Interdepartmental and Interdisciplinary areas of study include:

- Biochemistry
- Bioinorganic Chemistry
- Bioorganic Chemistry
- Biophysics
- Catalysis
- Chemical Biology
- Chemical Education
- Chemical Informatics
- Chemical Instrumentation
- Chemical Physics
- Computational Chemistry
- Environmental Chemistry
- Nanotechnology
- Natural Product Synthesis
- Nuclear Chemistry
- Organometallic Chemistry
- Photochemistry
- Polymer Chemistry
- Proteomics
- Synthetic Chemistry
- Theoretical Chemistry
Even before you visit the Department of Chemistry at Indiana University, you have most likely seen our faculty quotes in respected newspapers or magazines, read of our listing as one U.S. News & World Report’s “Best Graduate Schools,” or heard that the National Academy of Sciences placed us among the top 20 in a recent ranking of doctoral programs.


Department of Chemistry faculty have been elected to the National Academy of Sciences in the United States and the Royal Society of Chemistry in Great Britain. They have been named fellows of organizations such as the Alexander von Humboldt Foundation, the Alfred P. Sloan Foundation, the American Academy of Arts and Sciences, the Fulbright Program, the Japanese Society for the Promotion of Science, and the Guggenheim Foundation, to name just a few. Our faculty’s research has been recognized by numerous awards from the American Chemical Society in areas such as analytical chemistry, chromatography, computers in chemistry, environmental technology, nuclear chemistry, separations science, and theoretical chemistry.

Members of our faculty also author some of the most widely used chemistry textbooks, and nearly all teach graduate students and direct their research. In other words, our faculty are both highly celebrated and highly accessible to students.

For detailed information about individual faculty members, see www.chem.indiana.edu/faculty/. If you have questions about research, contact the appropriate faculty member, but all other inquiries should be directed to chemgrad@indiana.edu.

Chun-Li Cao, from the Van Nieuwenhze lab, is checking column fractions.
Angela Peverly, a graduate student from the Peters Lab, is injecting a sampling into a Klein cell containing electro-generated nickel (I) salen.
During your study at IU, you will take four courses in one major area of chemistry, which you choose as well as two courses in other areas. You’ll demonstrate your abilities through a series of exams, a research proposal, or a literature seminar. In the third year, you will take a rigorous exam for admission to doctoral candidacy. The program culminates with your dissertation, which you will write based on your research and will defend orally.

In your first-year as a chemistry graduate student you will begin intensive research immediately through the two-semester C500 Introduction to Research course. C500 is unique among chemistry graduate programs in that students focus on one short-term problem for two semesters. The experience will enable you to test your abilities and interests, and you’ll get firsthand knowledge of the faculty research group of your choice, as well as the department’s instrumentation facilities and services. At the conclusion of the two-semester project, you may choose to work on the same problem or in the same area, or you may decide to pursue a different area.

Financial Support

Indiana University believes in supporting our graduate students financially, and offer teaching/research assistantships as well as a variety of fellowships. A number of sources for fellowships exist for well qualified students. Additionally, we offer multi-year fellowships to our top applicants in all fields of chemistry. These fellowships range from $1,000 to $5,000 per year in addition to a generous base stipend.

Joseph teaches Sonja fast-scan cyclic voltammetry in the Peters’ Lab.
“I came to IU after 10 years of working in the pharmaceutical industry to pursue a Ph.D. in synthetic organic chemistry. Upon being accepted into the program, I visited IU and was taken by how well equipped the department was. IU Students have a wonderful opportunity to study in any field of chemistry they desire due to the diversity of the programs. The teaching and research faculty go above and beyond to make sure students are exposed to all the necessary tools to become successful and independent thinkers. For the short time I have been here, my experiences have been challenging, but amazing. I have met some really nice people who surely will become my best friends for life. My family and I have enjoyed the rich diversity the University and the city of Bloomington offer and we would not have had it any other way.”

First-year Graduate Student

“"My goal for graduate school was to attend a university that was at the top of its field and had a welcoming environment. I already knew IU was a great school for analytical chemistry, and when I visited IU, the faculty and staff helped me to feel comfortable from the beginning. Now I am doing mass spectrometry instrumentation, something I've been interested in since my undergraduate career, and I have great classmates which are both helping to make graduate school a great experience.”

First-year Graduate Student

The Williams Research Group

The Hiejtfe Research Group
“The graduate chemistry program is both challenging and rewarding. The course work teaches not only the basic principles but goes a step further by presenting students with practical problems that encourages innovative thought. I am pursuing a Ph. D. in biological chemistry with a focus on peptide chemistry. Working in Dr. DiMarchi’s group has given me a strong background in diabetes and the development of new therapies to treat the condition. Dr. DiMarchi and his associates bring many years of industrial experience to the laboratory. Interacting with this experienced team has been the greatest learning opportunity of my academic career. Being a part of the chemistry program has fostered confidence in my academic abilities and laboratory skills. The chemistry department is flexible with regards to the student’s academic interests and helps design a schedule geared towards obtaining the desired advanced degree. Most importantly, I have gained a sense of direction for my future career as a scientist.”

Third-year Graduate Student

“...I was applying for graduate schools, Indiana University stuck out as a hidden gem within the Midwest. Having previously obtained a masters of research in organometallics from a terminal masters program, I was interested in continuing my study of inorganic chemistry at a large, competitive university, which had a discrete focus on teaching and immediate immersion into research. The IU Department of Chemistry not only satisfied all my requirements, but surprised me with its strong sense of camaraderie between the students and the professors. The department boasts an extremely diverse faculty (both in research and academic approach) and equally diverse student body, which leads to an environment ripe with learning opportunities for chemists at all levels of experience. The NMR, X-ray, and mass spectroscopy facilities here are second to none and make acquisition of data both efficient and easy. The instruments are at the cutting edge of technology and the staff who maintains them are amazing. For my career, the IU Department of Chemistry has delivered on every level and will prepare me, in the best way, for whatever path I choose to pursue.”

Third-year Graduate Student
“When I first came to IU as an exchange student I was planning on staying for only one year. I joined the Dragnea group and started working on optics and instrumentation for microscopy and time-resolved spectroscopy. I soon learned to appreciate how easily ideas can be transformed into real-life instrumentation with the help of excellent resources like colleagues and the electronic and mechanical instrument facilities at IU. To have those opportunities in an environment that enables doing exciting, cutting-edge research at the interface of chemistry, materials and life sciences made me stay at IU.”

Third-year Graduate Student

“Coming to IU is the most important decision I have made so far. I still remember how excited I was on my first day here-----across the ocean! I was deeply impressed by the faculty members here. We have had lots of in depth discussions about science, research and even more about life outside the lab. Also, I made friends from all over the world in this past year and half. Learning about their different cultures and backgrounds definitely gave me a wider view of life. As a member in Professor Novotny’s lab, I’m currently working on the separation and structural analysis of sulfated glycans. This year, I had opportunities to present my work in ASMS and Turkey Run analytical conference. I met many great scientists in the conference, and we are still keeping in touch. I spend a lot of time in lab, but my outside life is truly colorful. IU has abundant sports facilities and what I like most, the amazing ballet and opera performances. I would say, here in IU, research is fun, and life is fun!”

Second-year Graduate Student
“Hi, my name is Niya, and I am a first year graduate student majoring in analytical chemistry. For a long time I have known about the strong research performed by the IU Chemistry Department. It is a good place to study and the campus is beautiful. The first year courses here are thorough, and the lectures are wonderful. I also found a lot of benefits from the interesting seminars held by the department each week. Professors here are helpful and willing to talk with students about their research. For the first year graduate students we were given the opportunity to talk with all professors and then make the decision to join a research group. Students can benefit a lot from talking and learning with the different professors. I am happy and proud to be part of IU Chemistry.”

First-year Graduate Student

“The chemistry graduate program at IU has given me many unique opportunities. The chemistry department's association with the School of Public and Environmental Affairs has allowed me to supplement the excellent graduate-level chemistry courses with the opportunity to learn about environmental science and do research in atmospheric chemistry. My research involves the investigation of gas-phase chemistry in forested environments via measurements of total hydroxyl radical reactivity and has taken me to nearby Morgan-Monroe State Forest and the University of Michigan Biological Station to do field work. I have also worked with the highly skilled staff of the chemistry department's machine, electronics, and glass shops. In assisting me with component design and fabrication, they have taught me a lot about design and engineering. When I haven't been doing research, I have partaken of the cultural institutions and parks that Bloomington has to offer, including a community band and farmers' market.”

Third-year Graduate Student

The Baker Research Group

The Stevens Research Group
Albert Felten, a graduate student in the Aron lab is emptying the collection flask on a rotary evaporator after concentrating the product.
The facilities are available around the clock, each under the direction of a professional staff member. The Chemistry Library also plays a major role in supporting research, housing more than 200 major journals, 15,000 books, and 2,500 reference titles. In addition, the library subscribes to hundreds of electronic journals of interest to chemists.

Inside the Chemistry Building, you’ll find both expertly staffed, up-to-the-minute laboratories and high-tech lecture halls. Outside, the stately limestone building opens onto Dunn’s Woods, the green heart of the campus, providing opportunities for quiet reflection, casual conversation, and inspiration.

Beyond the excellent resources in the Chemistry Department, Indiana University’s stellar information technology environment offers outstanding support. Yahoo! Internet Life magazine recently named IU Bloomington among the nation’s top 10 “most wired” campuses and in 2004 Intel named Indiana University the “number 1 wireless university”. Among other benefits, all IU students enjoy:

- Technology labs and research facilities
- Free and low-cost software
- Digital libraries
- More than 2,000 campus workstations
- Wireless networking
- Online learning systems

As a Ph.D. student in IU’s Department of Chemistry, you will have ready access to the resources on the following pages, many of which have international reputations for excellence. For more information, see www.chem.indiana.edu/facilities.
Edward J. Bair Mechanical Instrument Services
The Mechanical Instrument Services (MIS) are organized to encourage students to learn to think-outside the-box – beyond instrumentation that is available to instrumentation that is cutting-edge.

MIS is a well-equipped machine shop staffed by seven instrument makers and is available to researchers in the Chemistry Department. In addition to mechanical lathes and milling machines, three computer-driven (CNC) milling machines are used in the construction of original, unique, or commercially unavailable instrumentation for the department. Apparatus design, sheet metal shops, and heliarc welding, as well as high vacuum construction and leak testing facilities, are also available.

A fully equipped student shop is available, and instruction is given to students who wish to construct their own equipment.

Electronic Instrument Services
The Electronic Instrument Services (EIS) designs, modifies, constructs, and repairs chemical and electronic instrumentation. Particular expertise includes high voltage pulse generators, light-path apparatus (IR, VIS, UV), opto-electronic transducers, DC to sub-nanosecond signal conditioning, high-voltage systems, electrochemical instrumentation, temperature control, and analog signal conditioning electronics. In addition, this group operates a Student Electronics Shop equipped with modern test and construction equipment.

Adjacent to the large room housing most of the construction and test equipment, there is a Student Electronics Shop. Individual instruction and bench space are available to students and researchers who are interested in designing, building, or repairing their own equipment. A comprehensive collection of electronic components and specification sheets are available to aid researchers in their own projects. Short-term loans of test equipment are encouraged to allow researchers investigation of different ideas.

Glass Shop
Both routine and unique glassware are fabricated in the Glass Shop, staffed by a professional glassblower. Specialized equipment includes two lathes, drills, saws, and glass grinding and polishing equipment.
Mass Spectrometry Laboratory
Since 1965, the Mass Spectrometry Facility (MSF) has existed to provide top-quality mass spectrometry support to the research groups of the IUB Chemistry Department. The MSF specialize in walk-up mass spectrometry and accurate mass spectrometry support.

Services include:
- Electrospray ionization (ESI) and matrix-assisted laser desorption/ionization (MALDI) mass spectrometry for both small molecules and biological samples
- High resolution, high accuracy (±5 parts per million, ppm) mass spectrometry of small molecules by electron impact, chemical ionization, and electrospray ionization
- High mass resolution, high mass accuracy gas chromatographic mass spectrometry
- Capillary-scale (minimum column i.d. = 0.3 mm) high performance liquid chromatographic mass spectrometry (HPLC-MS) with simultaneous detection of up to two UV-VIS wavelengths
Molecular Structure Center
The Molecular Structure Center (IUMSC) has an international reputation in small molecule crystallography and is used extensively by faculty and students in the Chemistry Department. The Indiana University Molecular Structure Center laboratory has a full complement of single crystal and powder diffraction equipment used to characterize crystalline materials using the techniques of X-ray crystallography. Researchers in the laboratory can determine the three-dimensional structure of nearly any material that can be crystallized.

Nuclear Magnetic Resonance Laboratory
The NMR Facility provides seven high resolution Varian NMR spectrometers for a variety of solution-state experiments and a Bruker EPR spectrometer. Several offline workstations are available for post-acquisition data processing and analysis. The Simon Hall facility consists of state-of-the-art Varian Direct Drive 800 MHz and 600 MHz 4 channel spectrometers with cold probes dedicated to biological NMR experiments. Varian BioPack experiments are heavily used on these instruments.

Inside the Chemistry NMR facility is a 500 MHz Varian Inova NMR spectrometer with 3D gradients open to all users for a wide variety of experiments including multidimensional inverse detection, broadband detection for most accessible organic and inorganic nuclei as well as diffusion and even 3D microimaging. Also, within the NMR facility are two 400 MHz Varian Inova NMR spectrometers with Z axis gradients and a Gemini 2000 300 MHz spectrometer, all equipped with Four Nucleus probes which can observe 1H, 19F, 31P, or 13C without assistance from the facility staff. Other probes are also available for these instruments including a 400 MHz broadband probe for observation of other heteronuclei. All spectrometers have variable temperature capability.

The undergraduate teaching laboratory contains a Mercury Plus 200 MHz instrument with a dual and Four Nucleus gradient probe. The NMR Facility also licenses ACD NMR packages including 1H and 13C NMR chemical shift prediction and the 1D NMR processing program.

Physical Biochemistry Instrumentation Facility
Over the past several years there has been a rapid increase on the IUB campus of research into the structures, stabilities and interactions of biomolecules. The Physical Biochemistry Instrumentation Facility was established to facilitate and encourage these research endeavors and to provide a centralized resource for training and education in modern physical biochemistry. Located in the new, state-of-the-art Simon Hall, the facility includes:

- Perkin-Elmer LS50B Luminescence Spectrometer
- Beckman Coulter Optima XL-I Analytical Ultracentrifuge
- Microcal VP-ITC Isothermal Titration Calorimeter
- Amersham Biosciences Typhoon 9210 Variable Mode Imager
- Jasco J-715 Circular Dichroism Spectropolarimeter
- Varian Cary 100 Bio UV/Visible Spectrometer
- Malvern Instruments Zetasizer Nano-S Dynamic Light Scatterer
- BIACORE 3000
- Packard 1600TR Liquid Scintillation Counter

Nikolay Tsvetkov is using a gas line to transfer and activate inert greenhouse gases with a highly reactive osmium based complex in the Caulton lab.
Jennifer Hass, a graduate student from the Carlson Lab, performs a Kaiser test to see if the amine was de-protected for the next step in her reaction.
**Electron Paramagnetic Resonance Room**
The Electron Paramagnetic Resonance Room provides support to research projects in the Chemistry Department as well as Physics, Material Science, and Biology. Electron Paramagnetic Resonance is a spectroscopic technique for studying molecules that contain unpaired electrons, typically transition-metal ions and organic radicals, yielding structural and dynamic information.

The Electron Paramagnetic Resonance Room is equipped with a Bruker EMX X-band EPR spectrometer with liquid-helium low temperature (down to 4K) accessories.

**METACyt Biochemical Analysis Center**
The mission of the METACyt Biochemical Analysis Center (MBAC) is to provide access and training for research in state-of-the-art biochemical analysis. These activities promote best use of a wide variety of modern bioanalytical techniques including high resolution chromatography and multi-dimensional mass spectrometry. MBAC operates in widely diverse areas, such as proteomics, metabolomics and chemical structure elucidation.

Primary users of MBAC are: METACyt Nodes/Centers, their collaborators, faculty and students at IUB, the School of Medicine, and the IU system as a whole. Because of the unique nature of the center, and the wide applicability of biochemical analysis to many areas of scientific inquiry, special efforts are made at making the center accessible to as wide a range of scientists as possible.

**National Center for Glycomics and Glycoproteomics**
The NIH National Center for Glycomics and Glycoproteomics (NCGG) is devoted to the development of new methodologies and instrumentation in glycomics, proteomics, and glycoproteomics. In collaboration with researchers in biology and biomedical sciences at both national and international levels, the center promotes applications of new methodologies in medical research and clinical diagnosis. The NCGG houses a number of instruments that are used by staff scientists, post-doctors, graduate students and undergraduates.

The aim of the NCGG is to utilize the analytical expertise at IU to advance breast cancer and neuroscience research; mobilize the nationally recognized strength of IU bioanalytical chemistry to advance measurement methodologies in functional glycomics, glycoproteomics, and proteomics; train and educate in these areas; provide dissemination of glycomic and proteomic expertise and analytical services throughout the geographical region; and to develop a liaison with other leading research centers under the recently formed Human Disease Glycomics/Proteome Initiative (HGPI) and Human Proteome Organization (HUPO).

**Center for Cell and Virus Theory**
The Center for Cell and Virus Theory (CCVT) is a research institute, with the main objective of developing mathematical and computational models of the physical and chemical processes for underlying cell and virus behavior. The CCVT addresses the challenge of understanding the workings of life on multi-, single- and sub-cellular scales. The interdisciplinary approach of the CCVT integrates methods from statistical mechanics, quantum chemistry, chemical kinetics, cell physiology, virology, biochemistry and computational sciences. Information theory is used to integrate models with data to produce a revolutionary automated model development, calibration and risk assessment approach.
Linda and Jack Gill Center for Biomolecular Science
The Linda and Jack Gill Center for Biomolecular Science (GCBS) was established to advance the understanding of complex biological processes and to train next generation scientists in state-of-the-art biomolecular measurements, especially in the field of neuroscience. Collaborations include Indiana University's world-class Departments of Biology, Chemistry, Physics, Psychological and Brain Science, Neuroscience, and the School of Medicine.

Specific GCBS Goals:
• Bring together multidisciplinary teams of world-class faculty interested in state-of-the-art biomolecular measurements to understand complex biological processes, especially neuroscience
• Provide training to graduate students from a range of disciplines in the use and development of measurement techniques and instrumentation
• Provide undergraduate students an opportunity to be involved in cutting-edge research projects
• Encourage interaction with industry in order to identify important problems and to commercialize advances
• Widely disseminate advances in complex biomolecular measurement techniques and instrumentation

Indiana Instrumentation Institute
The long-standing strengths in chemical instrumentation and analytical chemistry at both Indiana University and Purdue University led to the founding of the Indiana Instrumentation Institute (III). III was established to formalize and strengthen existing relationships between Purdue University, Indiana University, and State industry in the area of scientific instrumentation. The focus is on development of new instrumentation, improvement in instrumentation infrastructure, and partnerships with industries involved in chemical measurements.

Key objectives of the institute consist of: accelerating the transfer of advanced instrumentation and technology from university laboratories into marketable products; diversifying Indiana's economy by focusing investment in biomedical research and biotechnology, information technology, and other high technology industry clusters requiring high skill, high wage employees; assisting graduate students and others in founding start-ups companies based on research work done at Purdue and IU; developing programs of research in mass spectrometry and optical imaging; creating specialized facilities and infrastructures needed for development of new types of instruments; and encouraging an environment of innovation and cooperation among universities and businesses to promote research activity.
It’s no surprise that Bloomington routinely graces “top-ten” lists of all sorts. Money magazine calls it one of the 10 best places to live and Psychology Today recognizes it as one of the 10 cities with the lowest stress levels. USA Today cited IU as one of the country’s top-ten places for campus culture. Rand McNally cited Bloomington as one of the eight most desirable places to live in the nation. Bicycling magazine named Bloomington one of the 10 best places to cycle in the United States. Sports Illustrated on Campus calls it one of the nation’s top-ten college sports towns. Bloomington has appeared on the New York Times list of the top-ten college towns in America.

B-town as it is affectionately called by students is a wonderful blend of big-city amenities and college-town charm. The annual Lotus World Music Festival showcases performers and musical styles from around the world, while the renowned School of Music and Department of Theatre and Drama offer a full calendar of musical and theatrical events, often free or heavily discounted for students. International and natural food restaurants complement the array of cosmopolitan cuisine options, and a weekly farmers market offers fresh produce, meat, cheese and live music.

It’s easy to see why Indiana University was deemed one of America’s five most beautiful campuses in the book The Campus as a Work of Art. Far more than a place for research and academics, IU Bloomington is an oasis of beauty and culture. Take a stroll through Dunn’s Woods; enjoy the flowers on the way to grabbing lunch or a cappuccino, haircut, movie, or new outfit at one of the world’s largest student union building. You can kick off your shoes and dip your toes in the Jordan River, the stream that snakes through campus. The Department of Theatre and Drama presents a year-round schedule of professional-quality productions. The Neal-Marshall Black Culture Center, home to nationally renowned performance groups such as the IU Soul Revue, is one of several centers offering programs and support to the campus community.

As a graduate student at Indiana University, Bloomington, you’ll enjoy many amenities:

- IU’s Division of Recreational Sports is one of the leading campus recreational sports programs in the country. It’s facilities and programs include:
  1. Courts for basketball, tennis, quash, volleyball, and racquetball
  2. More than 100 pieces of strength-training equipment and 120 pieces of cardiovascular equipment at two different locations
  3. Indoor and outdoor pools and tracks
  4. Consultants and personal trainers

  Go to www.recsports.indiana.edu for more information

- Students get up to 50 percent discount on tickets to events at the IU Auditorium and the Musical Arts Center, sporting events, and other theatrical and musical events on campus
- Indiana University athletic teams provide a wide variety of spectator sports, including soccer, football, basketball, gymnastics, swimming, track, and wrestling.

IU students are as diverse as the majors available, with students from all 50 states and more than 135 countries. Student support systems range from an Asian Culture Center, Latino Cultural Center, Neal-Marshall Black Culture Center, International Center, for more information on diversity at IU.

- Diversity Resources www.indiana.edu/~asd/diversity/resources.html
- Programs and Services www.indiana.edu/~asd/diversity/programs.html

Come join us and see why so many chemistry students cite this beautiful campus, bursting with activity, as one of the factors that led them to choose Indiana University, Bloomington for graduate study.
We gratefully acknowledge the financial support of the Baxter Fellowships, the Bernard Berk Fellowship, the Campagne Chemistry Award in Graduate Studies, the Jack Crandall Award, the Chester Davis Award, the Felix Haurowitz Endowment Fund, the William Klinkenberg Award, the E. M. Kratz Fellowship, the Henry R. Mahler Memorial Fund, the Theodore C. Mays Fellowship, the John and Dorothy McKenzie Endowment Fund, the Wendell P. Metzner Memorial Fund, the William H. Nebergall Memorial Fund, the Pfizer Fellowship, the David A. Rothrock Award, the Raymond Siedle Fellowship, Chemistry Alumni and friends, and the following organizations:

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Equal Opportunity/Affirmative Action Policy of Indiana University
Indiana University pledges itself to continue its commitment to the achievement of equal opportunity within the university and throughout American society as a whole. In this regard, Indiana University will recruit, hire, promote, educate, and provide services to persons based upon their individual qualifications. Indiana University prohibits discrimination based on arbitrary consideration of such characteristics as age, color, disability, ethnicity, gender, marital status, national origin, race, religion, sexual orientation, or veteran status.

Students who may need disability support services should visit the Office of Disability Services for Students Web site at www.indiana.edu/~iubdss or phone (812)855-7578; TTY, (812) 855-2264.
For information about admission to the Graduate Program in Chemistry at Indiana University, please email us at: chemgrad@indiana.edu

or call toll free: 1-800-227-2158

And check out our Web site at: www.chem.indiana.edu