

Student Guide



USI Chemistry Department

Dear New Students:

I would like to extend a warm welcome to you from the Board of the American Chemical Society, USI Student Chapter and thank you for choosing to pursue your college education with the Chemistry Department at USI. As a senior chemistry major and the 2014-2015 ACS President, I believe that you are about to embark on an educational journey that will combine the best of both academics and community!

The USI ACS Student Chapter is a part of an award-winning national organization and is dedicated to improving the overall experience of every chemistry student. This is an educational and fun way of meeting and becoming more involved with the Chemistry faculty and current students. In the past years, ACS members have had opportunities to attend and present at regional and national ACS meetings and conferences, participate in service activities both on-campus and in the Evansville community, and enjoy social activities such as our fall and spring picnics.

In the coming academic year, ACS wants to continue enhancing the educational and social aspects of being a chemistry student. We will be very involved with National Chemistry Week both on-campus and at local high schools and middle schools. Members may also consider attending the National ACS Meeting in the spring of 2015. Finally, many social activities have been planned, including a Fall Semester Kickoff Ice Cream Social, game nights, picnics, and seminars.

As you can see, there are a lot of exciting things happening this year! I am delighted and honored that I will get to meet and work with all of you to enhance your experience at USI and also to better chemistry awareness in the community.

The entire Board is excited to help make the transition into college and the Chemistry Department the best one possible. Join our Facebook Group, USI American Chemical Society Student Members, as we will be posting much information through that site. If you have any questions or concerns throughout the year, feel free to stop me in the halls or contact me emtaylor3@eagles.usi.edu.

The best way to ensure a great year is working together. I look forward to another wonderful school year and meeting all of you at some point!

Sincerely yours,

Evan Taylor

ACS, USI Chapter President, 2014-15

Message from the Chair

Greetings and welcome to the USI Chemistry family. As a new student, I am sure you have some uncertainty about how this first year at USI will progress as well as questions about the chemistry program and the university in general. I would like to assure you that you couldn't be in better hands with the faculty in program as well as the upper classmen (welcome back returning students). Hopefully this brochure will answer many of your questions, introducing you to the faculty, department, and the program. As the year moves along, feel free to stop by and visit with the faculty or introduce yourself to the returning students. We will be more than happy to answer questions and discuss curricular and career opportunities.

The Chemistry Department is one of seven in the Pott College of Science, Engineering, and Education. We offer several degree tracks including an American Chemical Society (ACS) approved degree. All of the major disciplines in chemistry, Analytical, Biochemistry, Inorganic, Organic, Physical, and Polymer Chemistry are represented by faculty and courses. The department has significant state-of-the-art instrumentation and students will gain hands-on experience with these instruments throughout course work and undergraduate research.

I encourage you to get involved in research early. Please meet with the faculty to learn more about the projects that they have available to you. Through research you will apply knowledge from courses as well as learn new material. Many students will have the opportunity to present their work at regional and national meetings. USI has supported student travel to national ACS meetings in Boston, Chicago, New Orleans, Philadelphia, Washington D.C. and other cities. These conferences also provide an opportunity to meet undergraduates from other universities, investigate graduate programs, learn about vendors of instrumentation and other tools for chemists, as well as touring the sites in the cities. Throughout the year, we will share information about these and other opportunities through chemistry seminar and the ACS Student Affiliates organization on campus.

Your course work is a number one priority, but I encourage you to get involved with extracurricular activities. The ACS student affiliates group is a great place to start and get to know your fellow students and members of the chemistry family. On behalf of the faculty welcome and good luck this year!

Dr Jeff Seyler
Chair of Chemistry Dept

A Beginner's SURVIVAL GUIDE for Chemistry Classes

Directions:

1. Become more familiar with the periodic table of elements. (A "must" for all chemistry students!)

| | | | | | | | | | | | | | | | | | | | |
|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|--|
| IA | | | | | | | | | | | | VIII A | | | | | | | |
| 1 H 1.01 | IIA | | | | | | | | | | | | 5 B 10.8 | 6 C 12.0 | 7 N 14.0 | 8 O 16.0 | 9 F 19.0 | 10 Ne 20.2 | |
| 3 Li 6.94 | 4 Be 9.01 | | | | | | | | | | | 13 Al 27.0 | 14 Si 28.1 | 15 P 31.0 | 16 S 32.1 | 17 Cl 35.5 | 18 Ar 39.9 | | |
| 11 Na 23.0 | 12 Mg 24.3 | III B | IV B | VB | VIB | VII B | VIII B | | | IB | IIB | 31 Ga 69.7 | 32 Ge 72.6 | 33 As 74.9 | 34 Se 79.0 | 35 Br 79.9 | 36 Kr 83.8 | | |
| 19 K 39.1 | 20 Ca 40.1 | 21 Sc 45.0 | 22 Ti 47.9 | 23 V 50.9 | 24 Cr 52.0 | 25 Mn 54.9 | 26 Fe 55.8 | 27 Co 58.9 | 28 Ni 58.7 | 29 Cu 63.5 | 30 Zn 65.4 | 31 Ga 69.7 | 32 Ge 72.6 | 33 As 74.9 | 34 Se 79.0 | 35 Br 79.9 | 36 Kr 83.8 | | |
| 37 Rb 85.5 | 38 Sr 87.6 | 39 Y 88.9 | 40 Zr 91.2 | 41 Nb 92.9 | 42 Mo 95.9 | 43 Tc 98.9 | 44 Ru 101.1 | 45 Rh 102.9 | 46 Pd 106.4 | 47 Ag 107.9 | 48 Cd 112.4 | 49 In 114.8 | 50 Sn 118.7 | 51 Sb 121.8 | 52 Te 127.6 | 53 I 126.9 | 54 Xe 131.3 | | |
| 55 Cs 132.9 | 56 Ba 137.3 | 57 La 138.9 | 72 Hf 168.5 | 73 Ta 180.9 | 74 W 183.9 | 75 Re 186.2 | 76 Os 190.2 | 77 Ir 192.2 | 78 Pt 195.1 | 79 Au 197.0 | 80 Hg 200.6 | 81 Tl 204.4 | 82 Pb 207.2 | 83 Bi 209.0 | 84 Po (210) | 85 At (210) | 86 Rn (222) | | |
| 87 Fr (223) | 88 Ra 226.0 | 89 Ac (227) | 104 Rf (261) | 105 Db (262) | 106 Sg (266) | 107 Bh (264) | 108 Hs (269) | 109 Mt (268) | 110 | 111 | 112 | 114 | 116 | 118 | | | | | |

| | | | | | | | | | | | | | |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 58 Ce 140.1 | 59 Pr 140.9 | 60 Nd 144.2 | 61 Pm (145) | 62 Sm 150.4 | 63 Eu 152.0 | 64 Gd 157.3 | 65 Tb 158.9 | 66 Dy 162.5 | 67 Ho 164.9 | 68 Er 167.3 | 69 Tm 168.9 | 70 Yb 173.0 | 71 Lu 175.0 |
| 90 Th 232.0 | 91 Pa (231) | 92 U 238.0 | 93 Np (237) | 94 Pu (244) | 95 Am (243) | 96 Cm (247) | 97 Bk (247) | 98 Cf (251) | 99 Es (252) | 100 Fm (257) | 101 Md (258) | 102 No (259) | 103 Lr (260) |

() represents an isotope

2. Memorize faculty phone numbers and office locations for quick reference before quizzes and exams!

| IMPORTANT PHONE NUMBERS | |
|---|-----------------|
| Kim Schauss (Dept Admin Assistant) | 461-1701 |
| Dr. Blunt..... | 465-1617 |
| Dr. Bohrer..... | 464-1712 |
| Dr. Collins..... | 465-1267 |
| Mr. Glueckert..... | 465-1019 |
| Dr. Hewavitharange..... | 228-5009 |
| Dr. Hurst..... | 464-1716 |
| Dr. Krahling..... | 465-1268 |
| Dr. Millam..... | 465-1266 |
| Dr. Seyler..... | 464-1923 |
| Dr. Tucker..... | 464-1856 |

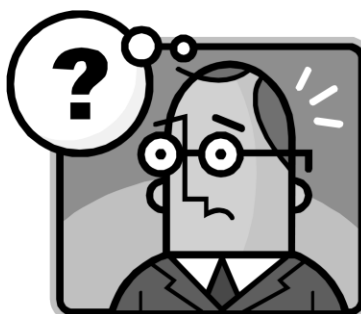
- Don't be afraid to visit your professors if you are having troubles. They are all very friendly and really DO want to help you do your best!
- Be aware of your fall schedule, especially:

| 2014 FALL CALENDAR | | |
|--------------------|-----------|--|
| AUG. 25 | MONDAY | Classes begin at 8:00 a.m. |
| SEPT. 2-5 | FRIDAY | Pass/No Pass Option Period |
| SEPT 30 | TUESDAY | Assessment Day |
| OCT 13-14 | MON/TUES | Fall Break |
| OCT. 24 | FRIDAY | Last day to drop with evaluation |
| NOV. 3-14 | MONDAY | Spring/Summer 2014 Priority Registration |
| DEC. 10 | WEDNESDAY | Last day to withdraw from fall classes |
| 10 | WEDNESDAY | No classes: Study Day |
| 11 | THURSDAY | FINAL EXAMS begin |
| 17 | WEDNESDAY | End of Fall Semester |

- Do all the assignments for your classes! It is extremely important to keep up with your readings and homework in order to do well on quizzes and tests. Also, take advantage of the old tests and quizzes professors post on Blackboard.



- Attend help sessions! Seek out tutors! Upperclassmen, who believe it or not, survived their chemistry courses, will be more than willing to help you through yours! Don't fall behind in your understanding of the material!



Become a **Student Member** of the

USI American Chemical Society!

- ❖ It's fun!
- ❖ It's easy to join!
- ❖ It's a great way to meet new people!

The USI ACS Chapter offers...

- Opportunities to attend regional and national scientific meetings
- Community service opportunities (including chemistry outreach to Evansville Vanderburgh Corporation Schools and Adopt-a-Spot)
- Numerous picnics, parties, get-togethers, and game nights
- Mentoring program
- The opportunity to become a student member of the National American Chemical Society

Dues:

\$10—USI Chapter only or

\$24—ACS National Dues (National member and USI)

(go to www.acs.org)

To join simply fill out the form below and return it with your money to SC 2255!

**CHECK FOR OUR FIRST MEETING OF THE FALL
TERM (email, chemistry office, Facebook)**

See you all there!

USI-ACS Membership Form

Name: _____

Address: _____

Phone Number: _____

Major: _____

Year: _____

USI Chapter only (\$10)

Please enclose a copy of your receipt for payment of National ACS membership dues

| <u>Class Title</u> | <u>Course Number</u> | <u>Requirements</u> |
|-----------------------------------|----------------------|--|
| Chemistry Seminar 1 | CHEM 218 | Coreq CHEM 353 |
| Chemistry Seminar 2 | CHEM 318 | CHEM 218 |
| Chemistry Seminar 3 | CHEM 418 | CHEM 318 |
| Organic/Biochemistry Principles | CHEM 241 | CHEM 261 and CHEM 262 (Not usually taken by CHEM or BIOCHEM majors) |
| General Chemistry 1 | CHEM 261 | MATH 111 or MATH 118 or CHEM 175 or consent of instructor |
| General Chemistry 2 | CHEM 262 | CHEM 261 |
| Quantitative Analysis | CHEM 321 | CHEM 262 or consent of instructor |
| Environmental Chemistry | CHEM 341 | CHEM 321 and CHEM 353, or consent of instructor |
| Polymer Chemistry | CHEM 351 | CHEM 354 or consent of instructor |
| Organic Chemistry 1 | CHEM 353 | CHEM 262 |
| Organic Chemistry 2 | CHEM 354 | CHEM 353 |
| Survey of Physical Chemistry | CHEM 361 | MATH 230, CHEM 321 and PHYS 176 or 206 |
| Instrumental Methods and Analysis | CHEM 421 | CHEM 321, CHEM 354, and PHYS 206 |
| Biochemistry 1 | CHEM 431 | CHEM 354, BIOL 334, or consent of instructor. Recommend CHEM 321 |
| Biochemistry 2 | CHEM 432 | CHEM 431 |
| Inorganic Chemistry | CHEM 441 | CHEM 354 or consent of instructor |
| Advanced Organic Chemistry | CHEM 453 | CHEM 354 |
| Physical Chemistry 1 | CHEM 461 | CHEM 321, MATH 330, and PHYS 206. Recommend MATH 335 |
| Physical Chemistry 2 | CHEM 462 | CHEM 461. Recommend MATH 335 |
| Introduction to Research | CHEM 499 | Consent of instructor and approval of department chair |

A native of Kirksville, Missouri, I graduated with a Bachelor of Science degree in chemistry from Truman State University (although at the time of graduation, the university was known as Northeast Missouri State University) in 1993.

Following in my father's footsteps (he is also an organic chemistry professor), I migrated north, became a Hawkeye fan, and completed my doctoral studies on natural product synthesis, under the direction of Dr. David F. Wiemer, at the University of Iowa in 1998. This led to a one-year (short but memorable) visiting lecturer position at Southern Illinois University in Carbondale, Illinois. At the end of the academic year, I came to USI as an Assistant Professor in Chemistry in the Fall of 1999. In the Fall of 2005, I was promoted to Associate Professor of Chemistry. I recently accepted the Assistant Provost for Academic Affairs position effective July of 2013. I look forward to the challenges this new position will bring.



sblunt@usi.edu

I enjoy teaching primarily organic chemistry courses for science majors and general, organic and biochemistry for allied health majors. I have recently started research projects with several undergraduate students (and always looking for more students) on the synthesis of novel nucleoside analogs as potential HIV drugs and on the synthesis of quinoline alkaloids as promising drugs for the treatment of breast cancer. If you are interested in working on these projects, I am always eager to discuss them.

I was born way up north in Michigan and moved to Mississippi with my family as a child. I attended the University of Southern Mississippi (home of Brett Favre - yes I did see him play at Southern Miss, before his big move to the N.F.L.). I earned my B.S. in Chemistry at U.S.M. and stayed on for my Ph.D. in Biochemistry working on plant DNA polymerases with Dr. Gordon Cannon and Dr. Sabine Heinhorst. I isolated both the protein and the gene for the DNA polymerase delta from soybeans. This was the first gene for a DNA polymerase isolated and characterized from a plant. There was considerable excitement when the plant protein was compared to the mammalian protein because the two proteins were very similar and this was not expected.

After completing my doctorate, I took a one-year position as visiting assistant professorship in Chemistry at Mercer University in Macon, Georgia. At the end of the academic year, I came to the University of Southern Indiana as an Assistant Professor in Chemistry in the Fall of 1999. In 2006, I was promoted to Associate Professor of Chemistry.



jcollins@usi.edu

I enjoy teaching biochemistry courses for science majors; general, organic and biochemistry for allied health majors; and chemistry for non-majors ("Molecules, Matter and Me" and "Elements of Everyday Chemistry"). I have research projects with several undergraduate students (and always looking for more students) on cytoskeletal proteins involved in cell movement in the environment (involved in cancer cell metastasis) and on protection from UV mutagenesis. If you are interested in working on these projects, I am always eager to discuss them.

I grew up in the small town of Algoma in northeastern Wisconsin. My interest in chemistry originated from a general curiosity about how things work. Any scientist is continually asking the question "Why?". I attended Rose-Hulman Institute of Technology and graduated in 1990. I attended graduate school at Southern Illinois University at Carbondale. It was at SIU while serving as a teaching assistant in chemistry labs that I knew that I wanted to teach chemistry. After earning my Master's degree from SIU, I taught at Georgia Southern University in Statesboro, Georgia for four years. I have been teaching at USI since 1998. My teaching career continues to be exciting and rewarding.

I mostly teach both lecture and laboratory sections of general chemistry and chemistry for non-science majors. I enjoy judging the annual science and engineering fair held at USI and participating in other community outreach programs that promote chemistry and science in general. My interests outside of chemistry include listening to music, sports, traveling and spending time with my family. I enjoy coaching youth baseball and soccer as well as watching professional sports.



sgluecke@usi.edu

I grew up in a beautiful, hill country area of Sri Lanka with my parents, and two younger brothers. I obtained my B.Sc. degree from the University of Kelaniya, Sri Lanka with an honors degree. After graduating I taught at the University of Kelaniya for nearly one year. Then I joined the Natural Product research group at the Department of Chemistry, University of Peradeniya, Sri Lanka to do an M.Phil degree. After completing the MPhil, I worked for two years as a research officer. Then I decided to come to the USA to obtain my PhD which I earned in 2005 from Bowling Green State University, Ohio. My dissertation research involved the synthesis of borate compounds as thermal and photoinduced polymerization initiators.

In 2006, I joined the Department of Chemistry, Ball State University in Muncie, Indiana, as an Assistant Professor. At Ball state I taught organic chemistry and a chemistry course for health science majors. I also conducted research with undergraduate students. In August 2008, I joined the Department of Chemistry, USI. The courses I teach at USI include CHEM 351 -Polymer chemistry, CHEM 241 - Principals of organic and biochemistry, and CHEM 103/107- Elements in Everyday Chemistry.



phewavith@usi.edu

My current research interest involves synthesis of organic compounds and polymers that can be used to manufacture energy efficient electronic devices for computers, television screens, and other display devices. I also have an ongoing research project on the synthesis of glowing (fluorescent) organic compounds that have potential use in cancer cell detection, and organic light emitting diodes. We intend to synthesize fluorescent dyes that emit light in the near-IR region. Near-IR dyes are ideal for *in vivo* fluorescence imaging of body tissues and organs. In addition, I conduct research on the "Synthesis of biodegradable polymers from renewable resources such as soybean oil." I also do applied research with local industries through the Center for Applied Research at USI.

I was born and raised in Cincinnati OH and attended undergraduate school at Centre College in Danville, Kentucky. One of the reasons that I decided to attend a small liberal arts college is because I was not certain of what I wanted to major in. It was a toss-up between chemistry and political science. After trying to major in both for a few years, chemistry won out, but I am still up for good political debates if anyone is interested.

I attended graduate school at the University of Cincinnati and majored in Analytical Chemistry with a minor in Biochemistry. My research involved the spectroelectrochemistry of cytochrome c oxidase and other biological enzymes. I enjoyed being a teaching assistant during graduate school and decided to go into academics. My first position was as an Assistant Professor at Niagara University located in Niagara Falls, NY. After three years at Niagara, I moved to Greensboro NC and obtained a position as visiting professor at UNC-Greensboro. Our family again made a geographical move and ended up in Akron Ohio. While here, I found employment as a manager of R&D for a small company dealing with new technology in the pulp and paper field. I really enjoyed this opportunity because I got involved with product development, pilot plant studies, and marketing as well as chemical research. It really pointed out all the different fields that can be opened to you with a good science background. While in the Akron area, I also worked for a few years as an Assistant Professor at Kent State University.



mhurst@usi.edu

About six years ago, family circumstances again changed and we found ourselves in Evansville, IN. I was fortunate to be able to join the chemistry department at USI. I teach CHEM 103, 175, 261 and 262, and have also taught Quantitative Analysis. I am primarily interested in developing new methods of instruction and techniques for chemistry classes and am developing an on-line CHEM 103 course. I hope to at some point also get time to get back to the lab and work on some projects that involved some of the concepts I worked with in the pulp field.

I grew up in northwest Iowa on a farm near the town of George (really, George!) I graduated (quite some time ago) from Southwest Minnesota State University in Marshall, Minnesota. There are lots of things at USI that remind me of SMSU. I intended to be a high school science teacher and was for a year after I graduated from college. While I enjoyed teaching high school chemistry and physics, I thought that it would be more interesting to work with university students. That led me to graduate school in chemistry at the University of Wisconsin in Madison (go Badgers!). My research work focused on building mass spectrometers. Ask me about Fourier Transform Ion Cyclotron Resonance Mass Spectrometry if you're interested.

Here at USI, you'll find me teaching courses in chemical analysis. These courses include CHEM 321 -Quantitative Analysis, CHEM 421 - Instrumental Analysis, The highlight for me each semester is helping students find answers to their own scientific questions by completing the analysis of their own samples. I still learn something new each semester. I also teach CHEM 341 - Environmental Chemistry and serve as the director of the University Core Curriculum at USI. In Summer 2013 I took on the position of Associate Dean of the Pott College of Science, Engineering and Education



mkrahlin@usi.edu

Our research group uses chromatographic and spectroscopic instrumental techniques to solve analytical problems. I currently have students using gas chromatography - mass spectrometry to characterize and, hopefully, quantify nonpolar organic molecules extracted from natural water systems. We are also collaborating with Dr. Durbin and USI geology students to make sensitive measurements of selenium and other metals in soil samples. These measurements will help us track the deposition plumes from coal fired power plants in southwest Indiana.

I received my Baccalaureate Degree in Chemistry from Hamline University in the spring of 1994 and my Ph.D. in Chemical Physics from the University of Minnesota in July of 1999. Upon graduation I was able to free myself from the tyranny of winter by moving to Evansville.

Like many scientists, my primary motivation is discovery. I have always had a deep interest in understanding and explaining natural phenomena. For me chemistry offers an appealing mixture of the minute and the practical. As a Chemical Physicist (Physical Chemist) I focus upon improving our understanding of the fundamental processes involved in chemical reactions and/or the basic properties of chemically relevant systems.



emillam@usi.edu

At the moment I am studying the melting properties of binary and ternary mixtures, the interaction of light with matter, and the shape and vibrational properties of various molecules. I suggest that students prepare themselves to take physical chemistry as soon as possible. It is beyond great.

My teaching commitments include Physical Chemistry I and II and Survey of Physical Chemistry as well as General Chemistry I and II and CHEM 103/107.

Growing up in Flint, Michigan in the 50s and 60s, I received a remarkable public school education in a very urban environment. My natural inclinations and abilities were encouraged very early, as I remember being assigned the construction of a weather station by the art teacher when I was 10 years old. I think she'd given up on teaching me to draw! I got my parents to buy some CoCl_2 crystals at the drug store (I guess they sold chemicals in those days) to make a barometer and used soda fountain paper cones and coat hangers to make a wind meter. I also remember a trip to Thomas Edison's Lab in Dearborn, Michigan. There were shelves in his lab covered with the various substances, all having interesting names and formulae, he had tried before he found that tungsten would work for his incandescent light bulbs. That is a memory that has always stuck with me. And no, I never had a chemistry set. After all, I was a girl!



mtucker@usi.edu

In college at the University of Michigan - Flint, I started as a math major, but soon switched to Chemistry since I seemed to be much better at it! Graduate school at the University of Illinois was very challenging, but I found that hard work can be very rewarding. My doctoral research was in the area of Environmental Analytical Chemistry and involved mercury speciation and water leaching of heavy metals from fly ash.

I began teaching Chemistry at USI in 1992, sometimes as an adjunct and sometimes full time depending on the needs of the department. Currently, I teach General Chemistry, Quantitative Analysis and various laboratory sections.

Dr. Seyler received his BS degree in Chemistry from the University of Nebraska-Omaha (UNO) in 1987 while also serving as an X-ray technician for the U.S. Army Reserve's 82nd Field Hospital (a MASH like unit). I have always been interested in science, so it is not surprising that my high school chemistry teacher (also my uncle) influenced my decision to consider chemistry as a career choice. UNO is very similar to USI and it was my experiences there that inspired me to continue my education to teach at a similar institution. I completed my Ph.D. in Inorganic Chemistry (actually a combination of analytical and organometallic chemistry) at Purdue University in 1992.

Following a one year post-doc position at the University of Utah, I accepted a position at USI and never looked back. I teach courses in general chemistry, inorganic chemistry, polymer chemistry, and assist with the chemistry seminar sequence. My research interests include transition metal catalyst complexes. Most of my efforts have involved the use of computation chemistry (molecular modeling) to examine the electron density of these complexes including transition states and reaction intermediates.



jseyler@usi.edu

Currently I am working with students on the modeling of iridium dehydrogenation catalysts.

I am originally from a little jewel in Central America called Belize. I attended St John's Junior College in Belize City where I majored in Chemistry, Physics and Mathematics. This is back when I thought I was going to be civil engineer but I met organic chemistry and thoroughly enjoyed it. I decided to engineer molecules. I earned a scholarship to complete an undergraduate degree in mathematics at Regis University in Denver, Colorado but ended up double majoring to obtain an undergraduate degree in mathematics and chemistry. After completing my undergraduate degree, I returned to Belize where I taught high school chemistry, physics and mathematics for three years. I was also a mathematics lecturer at the University of Belize for one year before deciding to pursue a graduate degree in chemistry. I enrolled in the doctoral program at the University of Denver where I spent the better part of five years synthesizing novel organo-sulfur compounds. After completing my doctoral degree in chemistry, I taught general and organic chemistry at Colorado College in Colorado Springs, Colorado.

I started at USI in August 2008. Here at USI, I have taught the Principles of Chemistry course and teach the organic chemistry sequence. I am also the Living and Learning Community Coordinator for the STEM floor.



eowade@usi.edu

My research interests involve synthesis of novel organo-sulfur molecules and the exploration of natural products. Currently, my research group is working on the synthesis of some novel organo-sulfur host molecules. We hope to show that these host molecules will be able to detect and/or transport other molecules.

As a child growing up in Belize we were given numerous herbal remedies. As an organic chemist my interests involve identifying and synthesizing the natural products present in some of these Belizean herbal remedies.

I was born and raised in Dublin, Ireland. I attended the University Of Bristol in the UK and graduated from there with a M.Sci. in Chemistry in 1998. During my undergraduate studies I did undergraduate research with Professor Guy Lloyd-Jones and Professor Tim Gallagher. I stayed on at Bristol for my Ph.D. in Organic Chemistry working on the synthesis of C-glycosides with Professor Tim Gallagher. After completing my Ph.D. studies I made the leap over the pond and did a post-doctoral fellowship with Professor David Lynn at Emory University in Atlanta working in the area of DNA-templated synthesis and the Origins of Life.

From there I took a two year Visiting Assistant Professor position at Sewanee: The University of the South in Sewanee, Tennessee. After two great years at Sewanee, teaching Organic Chemistry and some General Chemistry. I came to USI in August 2006. Here at USI I teach mainly the sophomore Organic Chemistry sequence and occasionally in the General, Organic and Biochemistry class. I also teach the Advanced Organic Chemistry class on rotation. I was promoted to Associate Professor in 2012.



walsh@usi.edu

My research interests are in carbohydrate chemistry, general organic synthesis and the development of new lab experiments for organic chemistry.

Outside of chemistry, I am an avid fan of football (and American throwball) and support two teams: Bohemians and Bristol City.

I was raised in Evansville, Indiana and graduated from the University of Southern Indiana with a B.S. in Chemistry in 2005. I decided to continue on to pursue my Ph.D. from Indiana University and completed my dissertation in Analytical Chemistry ("Developing Chemical Methods for Ion Mobility Spectrometry") under the guidance of Prof. David E. Clemmer in May 2011. While preparing my dissertation, I accepted a position within Valspar's Material Science Research Group in Minneapolis, MN as their resident expert on mass spectrometry analyses. The well-rounded analytical chemistry lab at Valspar's corporate R&D labs provided me with additional experience in other techniques, including gas chromatography, FT-IR, and Raman spectroscopy.

In the fall of 2013, I heard that my alma mater was seeking an analytical chemist for a tenure-track faculty position. I am very grateful for my industry experience, but upon graduating from USI, I had always thought that teaching at this kind of university setting would be something I would ultimately want to do as a career. So now, after walking a mile (or, more accurately, 3 years) down the industry path, I am starting my academic position in the fall of 2014 at USI. I hope that my hybrid background in industry and academia will serve the students at USI well in realizing the "real life" importance of chemistry and in identifying the opportunities a chemical education can provide in a variety of career paths.



bcbohrer1@usi.edu

My proposed research projects are associated with environmental chemistry, primarily of water-borne pollutants. I am interested in measuring the abundance of nitrates (originating from fertilizers) and pesticides in local waterways. Also of interest are the levels of pharmaceuticals, their metabolites, and their excipients in these same media. I plan to measure the levels of these species through a combination of spectrophotometric, electrochemical, and mass spectrometric techniques.

My teaching assignments primarily consist of Quantitative Analysis (Chem 321) and Instrumental Analysis (Chem 421), both of which focus on the techniques and instruments chemists use to measure, identify, and/or characterize chemical species.

Chris Hogue

LABORATORY SUPERVISOR

I graduated from the USI chemistry department in 1999 and began working in the chemistry department the same year. I am responsible for equipping and preparing all the chemistry labs and am a member of the University safety committee. You will get to see me a lot but bring your student ID !!!



I also have plenty of student worker opportunities. If you are interested please come and see me in the stockroom.

Chris Hogue, SC2226, chogue@usi.edu; Tel: 812 465-7022

Kim Schauss

ADMINISTRATIVE ASSISTANT

Hello!

I am Kim Schauss, the Administrative Assistant for the Chemistry, Geology, and Physics Departments.

You can find me in SC 2255, the Chemistry Department Office.

If you need assistance or have a question, feel free to stop by, call, or email.



During registration, when your advisor requests, I can assist with holds, pre-requisite overrides, and various other things. I will be happy to help you

Kim Schauss, SC2255, keschauss@usi.edu; Tel: 812 464-1701