

UWF Chemistry

2013 Department News



Department News

In the 18 months since our last department newsletter, there have been some exciting changes and additions to the Department of Chemistry at the University of West Florida. Just to name a few: the Department continues to increase research activities, experience a growth in the number of chemistry majors, has added new chemistry faculty, has updated several instruments, and added some new endowments. Unexpectedly, Dr. Michael Huggins was called on to lead the College of Arts and Sciences as the Interim Dean in August, 2013. Dr. Matthew Schwartz from the Department of Environmental Studies is now leading the Department of Chemistry as the Acting Chair until we can make a more permanent selection of the next Chair. Dr. Alan Schrock (UWF '79) is in the newly created position of Associate Chair of the Chemistry Department. Mike was only the third Chair in the 46 years since the creation of the Department of Chemistry and had been serving as Chair for the past eight years.

During the 2012-2013 academic year, Drs. Fred Hileman and Pam Vaughan were awarded an ITEP grant for the purchase of a new GC-MS. The ITEP grant is a UWF program funded from a technology fee that all students pay as part of their tuition, and is meant to enhance the technology used in the educational experiences at UWF. In November, 2013 the department took delivery of the new Thermo Scientific ISQ LT Single Quadrupole GC-MS. The new GC-MS will primarily function in service of the Analytical, Instrumental, Organic and Advanced Laboratory Techniques courses. It will also allow some of our increasing research demand to shift to instruments that had previously been working around the clock to keep up with both the academic labs as well as research needs.



In February, 2013 the department received a new Bruker 400MHz NMR. The purchase was possible thanks to support from the UWF College of Arts and Sciences Dean, Research and Sponsored Programs, Office of the Provost and the UWF Chemistry Department. The old Varian NMR served the department well for 12 years, but the new instrument is paying big dividends in the service of our growing Organic Chemistry labs, Advanced Laboratory course, and the ever-increasing research going on at UWF. Faculty research utilizing the instrument includes work by Dr. Alan Schrock (UWF '79) examining new heteroatoms and pulse sequences for Drs. Huggins and Royappa. Additionally, Advanced Laboratory students are able to gain hands on experience with numerous two-dimensional NMR techniques. The increased throughput of the instrument has also facilitated many interactions with local industry, leading to new opportunities for students to experience industrial projects.

The final report for the successful completion of the 2011 MeasureNet ITEP grant was submitted by Pamela Tanner in May 2013. The two year grant initiated the revitalization of the General Chemistry experiments by equipping the lab with an electronic measurement network and data collection system. With the aid of our student assistants, 25% of the labs have been converted to MeasureNet. A committee led by Dr. Christopher Nicholson is preparing an NSF grant to expand the MeasureNet system in the general chemistry program as well as analytical chemistry and organic chemistry labs.

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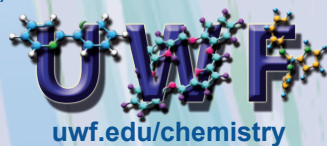
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Dr. Larry Manziek Scholarship Endowment

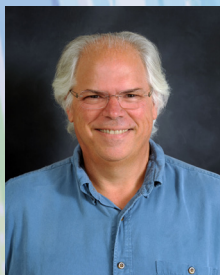
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New Faculty



Dr. Alan Schrock graduated from UWF's chemistry program in 1979 and then went to the University of Illinois for graduate school. He worked with Professor Schuster on physical organic chemistry problems, met and married Nancy Schrock (same group!), and graduated with his Chemistry PhD in 1984. He and Nancy joined Dow in Midland, Michigan, and spent 26 years back and forth between Michigan and Texas in Dow's R&D organization. After retiring from Dow ("I quit", says Alan), he moved to Pensacola and joined the UWF Chemistry department as an adjunct instructor. After 3 years of off-and-on teaching and research, he has accepted a full time Research Scientist and Associate Chair appointment, and "is very happy to lend my industrial experience to the group."



Hello alumni and friends of the UWF Department of Chemistry. My name is Matthew Schwartz and I am pleased to write to you as the Acting Chairperson of Chemistry, following the appointment of Mike Huggins to the role of Interim Dean of the College of Arts and Sciences. Dr. Huggins continues to ably serve the department, College, and University from that new position; it is a testament to his successes within UWF Chemistry that he was selected to lead the College through such an active time in our history. In fact, you can see (and support) his impact by standing up and being counted in the Argo Roll Call (aka the Mike Huggins Alumni Challenge), as noted later in this newsletter!

As Acting Chairperson, my job is to maintain the course of the well-constructed and maintained vessel that is your Department of Chemistry, while continuing my service as Chairperson of the UWF Department of Environmental Studies. In the months since I have made the move across campus, I have been impressed by the talent and dedication of your UWF Chemistry faculty and staff, the intelligence and vigor of current students, and the impact made by these people across the campus and throughout the broader Chemistry community.

The Department of Chemistry continues to grow and develop, with an increasing number of students enrolled in, and graduating from, Chemistry, all while serving the General Education needs of a UWF student body that has increased by 20% over the past five years. As you will see below, Dr. Alan Schrock (UWF '79) is now a Research Scientist and the Associate Chair for the department after previous service as an adjunct instructor and researcher; Dr. Christopher Nicholson, who previously served as an adjunct instructor, is a new Assistant Professor specializing in Chemistry Education and Informatics; and Dr. Tanay Kesharwani is our new assistant Professor specializing in Organic Chemistry.

These are exciting times in the University of West Florida and the Department of Chemistry is helping to lead the way via industry-focused undergraduate research; the Chem Scholars program; continued excellence in teaching; leading the Office of Undergraduate Research; the continuing Smart lecture series; and faculty guiding student-focused research that is presented at local, regional, and international meetings. Be proud of your Chemistry department!

William D. Smart Seminar Series in Chemistry

The William D. Smart Seminar Series in Chemistry was established in 2005 by Bill and Mary Smart. This endowment has enabled the Department of Chemistry to bring distinguished chemical scientists to campus to present and discuss cutting-edge scientific research as well as issues of interest to an educated public.

Professor Kenneth Raymond of the University of California, Berkeley, delivered the William D. Smart Seminar in Chemistry in November 2011. He spoke about the inorganic clusters synthesized in his labs that bound cationic guests selectively and strongly in water. These encapsulated guests showed unusual reactivity and catalytic activity in C-H activation, proton-catalyzed reactions and electrocyclic rearrangements. Some novel and interesting catalytic gold phosphine complexes were also encapsulated in his clusters.

Our 2014 Smart Lecturer was Prof. Geraldine Richmond, the Richard M. and Patricia H. Noyes Professor of Chemistry at the University of Oregon, who delivered her talk at UWF in February 2014. Dr. Richmond's area of research interest is in probing molecular structure and interactions at surfaces and interfaces by laser spectroscopic techniques and theoretical computational methods. She has also written extensively on women in science.



Tanay Kesharwani joined the chemistry department as an assistant professor beginning Fall 2013. He received a BS/MS (integrated) in chemistry from Indian Institute of Technology (IIT) Bombay, India, and a PhD in organic chemistry with Dr. Richard C. Larock at Iowa State University in the areas of heterocyclic synthesis and C-H activation. Thereafter, he worked at Newlink Genetics on the development and synthesis of small-molecule inhibitors for tryptophan catabolizing enzyme, indoleamine 2,3-dioxygenase (IDO), which may offer a drug-based strategy to more effectively attack systemic cancer. His keen interest in teaching and research brought him back to academia and he joined Northwestern University as a post-doctoral fellow, where he explored the synthesis and applications of novel porous materials in hydrogen storage, heterogeneous catalysis and heavy metal separation. Before joining UWF, he was engaged in undergraduate teaching and research at Bard College as a visiting assistant professor in organic chemistry. He brings in both industrial and academic experience. His research interests include development of new synthetic methods and their applications toward the synthesis of small molecules of biological interest; design and synthesis of novel porous organic polymers (POPs) and metal organic frameworks (MOFs); and developing greener methods in organic synthesis.

Faculty Updates and News

Chris Nicholson started a new position as Assistant Professor in the Fall of 2013 after two years in a visiting/lecturer role. His research interests are focused on conformational study of macrocyclic natural products, and also on the spectroscopic analysis and identification of conformational families. He is also interested in the practice of science education with particular emphasis toward modernizing the Organic Chemistry lab sequence and implementing modern data-collection techniques at all levels.

Dr. Alan Schrock (UWF '79) has been working on green chemistry challenges and on helping several industrial clients with process chemistry issues. We have several projects involving the conversion of sugars, like fructose and glucose, to 5-hydroxymethyl furfural and to levulinic acid. We also have projects on the synthesis of succinic acid and levulinic acid derivatives that will be useful in consumer applications. Succinic acid, levulinic acid, and furfural derivatives are in the list of 12 major raw materials available from renewable resources as defined by the US Department of Energy. We are also starting a new research project on conductive polymers with organic light emitting diodes as the target application.

Dr. Tim Royappa has continued the existing projects on hyperbranched polymers; however, his lab has now embarked on a new project in the inorganic chemistry of copper(I) oxalate complexes. These complexes are excellent candidates for the chemical vapor deposition of copper, and are expected to find use in the semiconductor industry for the manufacture of integrated circuits. He has also obtained a two-year subscription to the Cambridge Structural Database through an intramural grant, which will be helpful in crystallographic efforts associated with this new project.

Dr. Pam Vaughan continues to serve as the Director of the Office of Undergraduate Research which provides project and travel grants to undergraduate students from all majors. She is also serving as chair of the Pensacola Section of the American Chemical Society. Pam maintains an active research lab investigating photodegradation of petroleum products and other pollutants under varied environmental conditions. Research collaborations include Biology faculty and the National High Magnetic Field Lab. She continues to serve as Co-PI for the NSF Advance Program grant where she recently developed a faculty mentoring program for UWF ADVANCE Scholars.

Dr. Karen Molek has successfully rebuilt and calibrated what was a non-functional MALDI-ROTF-MS and has measured preliminary data using transition metal oxide nanopowders as surfaces for Surface Assisted Mass Spectrometry (SALDI-MS). Her goal is to determine the effects of surface size on sample detection. She recently received a ACS Petroleum Research Fund UNI grant for this research. Collaborations established as a result of this research include Dr. Alan Marshall and Dr. Amy McKenna at the National High Magnetic Field Lab; Departments of Chemistry and Physics at Florida State University, and Pall Corporation. Her lab, in collaboration with Dr. Alan Schrock and Dr. Pamela Vaughan, has also ventured into synthesizing and characterizing surface modified zinc oxide quantum dots which have applications as light-emitting diodes, biological probes, fluorescent biosensors and in solar cells. She has also been delighted to help our department successfully establish the Chem Scholars Program.

Dr. Pamela Tanner (UWF '89) continues to enjoy coordinating general chemistry labs and oversees the teaching labs in 58A. The "new" building isn't so new after 15 years of continuous use by biology and chemistry labs. Enrollment growth provides us with many opportunities to showcase the high quality of the department. We have outgrown the facilities and, in the fall of 2012, we began to offer Saturday labs. In addition, Pamela teaches general chemistry I and II lecture and labs and inorganic synthesis. She is also the department general studies assessment coordinator and has enjoyed analyzing the statistics that the department collects on our student learning.

Dr. Michael Huggins (UWF '96) has moved into a new role as the Interim Dean of the College of Arts and Sciences. With some much needed and appreciated assistance from Dr. Alan Schrock, he is continuing a research program while serving in the CAS Dean's Office. From a research perspective, he has developed several new collaborations over the past couple of years, which brought some exciting new projects to his lab. A new project involving the synthesis of potential inhibitors for the HIV capsid protein is underway with Dr. Mike Summers (UWF '80) at the University of Maryland, Baltimore County. In collaboration with Dr. Chandra Prayaga in the UWF Department of Physics, he has also initiated a project for the synthesis of some novel fluorescent liquid crystals. On a third new project, he is working with Karen Molek, Pam Vaughan and Alan Schrock on the synthesis and characterization of novel fluorescent materials. In addition to these traditional academic projects, he and Alan Schrock have been very active in attracting industrial contracts from a variety of regional and national chemical companies. These contracts typically involve the synthesis of new organic molecules where we incorporate UWF undergraduates in all aspects of the project, giving them unique experience in preparation for a career after graduation. In addition to all of these new projects, Mike has maintained some projects on molecular recognition, hydrogen bonding and anion binding.

Chem Scholars Program

The University of West Florida is encouraging high-achieving chemistry students to pursue doctoral studies through the Chemistry Scholars Program. Hailey Egido-Betancourt, a sophomore Chemistry Scholar, recently attended the prestigious DOW-MIT ACCESS Program at the Massachusetts Institute of Technology.

She was the first UWF student to participate in the weekend program this September, which introduces talented sophomores, juniors and seniors to the benefits of a graduate education in chemistry, chemical engineering and materials science. Students are advised on how to best compile a competitive graduate school application and are required to present a research oral presentation to MIT faculty and graduate students. Egido-Betancourt was accepted into the Chemistry Scholars program in January and has been conducting research with Dr. Karen Molek, assistant professor in the UWF Department of Chemistry.



Hailey Egido-Betancourt

“This experience was eye-opening for me, because I was unsure of what to expect from graduate school,” Egido-Betancourt said. “Now I look forward to visiting other graduate schools and eventually earning my doctorate degree.”

Egido-Betancourt said being involved in the UWF Chemistry Scholars Program has been a rewarding experience.

“The Chemistry Scholars program has provided me with scholarships and leadership experience,” she said. “It has also given me opportunities to develop as a scientist and to meet great scientists throughout the country.”

The UWF Chemistry Scholars Program was established in September 2011 to recruit and retain high-achieving chemistry students and to increase the number of chemistry students pursuing PhD or MD-PhD degrees, both with an emphasis on under-represented students. Students involved in the program meet monthly to hear guest speakers discuss summer research programs and post-baccalaureate opportunities, receive career advice, participate in peer-to-peer mentoring and receive professional development and mentoring from faculty in the Department of Chemistry.

The learning community is modeled after the Meyerhoff Scholars Program, which was established by Dr. Freeman Hrabowski, president of the University of Maryland, Baltimore County and the Meyerhoff Graduate Fellows Program directed by Dr. Michael Summers, a UWF Chemistry alumnus. The program incorporates four key components: academic and social integration; knowledge and skill development; support and motivation; and monitoring and advising.

Since the UWF Chemistry Scholars Program was established, the number of under-represented chemistry students pursuing PhD or MD-PhD degrees has increased from 2 percent during the 2009-2012 academic years to 26 percent in 2012-2013.

“The success of the Chemistry Scholars Program is a direct reflection of our chemistry faculty's passion to educate students through intense mentoring in combination with our students' fervent motivation to achieve their goals,” said Molek. “This combination creates an environment where students learn about research, scholarship and outreach opportunities, how to distinguish themselves from their peers and how to network with scientists at national conferences.”

American Chemical Society Scholars

Two University of West Florida students were recently invited to join the American Chemical Society Scholars Program, a prestigious accomplishment awarded to approximately 82 students nationwide per year. Since 2012, five UWF students have been named ACS Scholars and have received a total of \$25,000 in annual scholarships.

Freshman Amanda Tonnaer and sophomore Chiena Witt were awarded a total of \$6,000 in renewable scholarships through the ACS Scholars Program this fall. They will also have the opportunity to work with a mentor through the program and network with fellow scholars and scientists at future ACS National Meetings.

“Being selected as an ACS Scholar has provided me the opportunity to pursue an education in my preferred field of science, as well as the potential for future internships,” Tonnaer said. “It has given me the encouragement needed to succeed in college. I'm excited about this golden opportunity to grow as a person and obtain the knowledge necessary to do well in my future career as an analytical chemist.”

Both students are also part of the UWF Chemistry Scholars Program, which was established in September 2011 to recruit and retain high-achieving chemistry students and to increase the number of chemistry students pursuing PhD or MD-PhD degrees, with an emphasis on under-represented students.

Witt is currently conducting research under the direction of Dr. Pamela Vaughan, associate professor in the UWF Department of Chemistry. She credits both the ACS Scholars Program and her academic experience at UWF with impacting her future career goals.

“Dr. Karen Molek has been a great help to me at UWF, and without her encouragement I never would have applied for the American Chemical Society scholarship or changed my career path,” Witt said. “This experience has introduced me to the world of research, and it has inspired me to pursue an MD-PhD in Oncology in the near future. The ACS Scholars Program helps students become successful in their related fields and gives them the tools needed to thrive in a scientific environment, as well as become well-rounded and successful individuals.”

The ACS Scholars Program was established in 1994 to attract African American, Hispanic and American Indian students considered underrepresented in the chemical sciences by the National Science Foundation to pursue careers in the field. The program also aims to help build awareness of the value and rewards associated with careers in chemistry and assist students in acquiring skills and credentials needed for success. For additional information about the ACS Scholars Program, visit www.acs.org.



Amanda Tonnaer

RESEARCH UPDATES

2012-2013 EXTERNAL GRANTS & CONTRACTS AWARDED

External Competitive Grants Awarded

- Molek, 2013 ACS Petroleum Research Fund (PRF), Undergraduate New Investigator (UNI), \$50,000.

External, Non-competitive Contracts Awarded

- Since 2011, industrial partnerships with 11 different companies brought more than \$144,000 into the chemistry department. These projects help support students and provide hands-on experience with practical chemical applications.

Departmental Papers

A. T. Royappa, J. R. Stepherson, O. D. Vu, A. D. Royappa, C. L. Stern and P. Müller, “Tetrakis(acetonitrile)copper(I) hydrogen oxalate-oxalic acid-acetonitrile (1/0.5/0.5),” *Acta Crystallographica*, 2013, E69, m544.

A. T. Royappa, M. R. Vashi, C. L. Russo, and A. C. Blackwell, “A comparison of the cationic ring-opening polymerizations of 3-oxetanol and glycidol,” *Macromolecular Research*, 2013, 21, 1069.

A. T. Royappa, J. A. Golen, A. L. Rheingold and A. T. Royappa, “ μ -Oxalato-bis[bis(triphenylphosphine)copper(I)] dichloromethane disolvate,” *Acta Crystallographica*, 2013, E69, m126.

P. P. Vaughan, M. P. Bruns, C. L. Beck and M. Cochran “Removal Efficiency of Heavy Metals Using Various Resins and Natural Materials” *Journal of Applied Sciences*, 2012, 12(19), 2065-2070.

K. Aou, A. K. Schrock, V. V. Ginsburg, P. C. Price “Characterization of polyurethane hard segment length distribution using soft hydrolysis/MALDI and Monte Carlo simulation” *Polymer*, 2013, 54(18), 5005-5015.

Ward, Patrick; Chandler, Rebecca R; Huggins, Michael T. “Dipyrrinone Imines as Molecular Receptors”, *Supramolecular Chemistry*, 2013, 25, 286-291.

Walton, Ian; Davis, Marauo; Munro, Lyndsay; Catalano, Vincent J.; Cragg, Peter J.; Huggins, Michael T.; Wallace, Karl J. “A Fluorescent Dipyrrinone Oxime for the Detection of Pesticides and Other Organophosphates” *Organic Letters*, 2012, 14, 2686-2689.

Conference Presentations

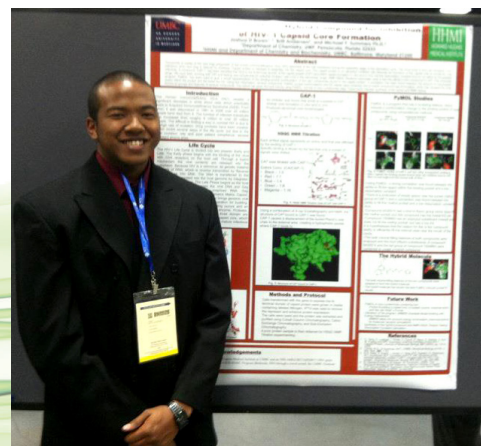
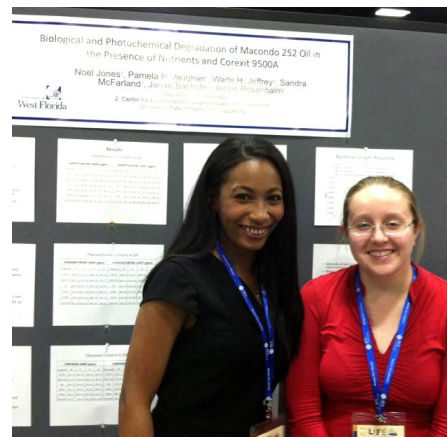
UWF faculty and undergraduate students have also been very active in presenting the results of their research. Altogether, 36 posters and oral presentations have been made at 10 different regional, national, and international meetings by 32 students and five chemistry faculty members.

Undergraduate students presented posters at:

- the American Chemical Society meetings in San Diego in March 2012 (eight presentations by 11 students); Philadelphia in August, 2012 (one presentation by one student); New Orleans in March, 2013 (14 presentations by 20 students)
- the 2013 Annual Biomedical Research Conference for Minority Students (ABRC MS) (3 research posters presented by 3 students)
- the 2013 Southeastern Medical Scientist Symposium (4 research posters by seven students)
- American Physical Society (physics collaboration) in February, 2012 (4 students) and February, 2013 (3 students)

Student work was also presented by chemistry faculty at:

- Gordon Conference on Liquid Crystals in June, 2013
- International Symposium on Supramolecular and Macrocyclic Chemistry (ISMSC) in July, 2013
- Gulf of Mexico Oil Spill and Ecosystem Science Conference in January, 2013
- Catalysis and Sensing for Our Environment Conference (CASE Conference) at University of Texas, Austin in March, 2013
- Department of Chemistry at Tulane University
- Department of Chemistry and Biochemistry at University of North Carolina, Greensboro



Alumni/Student News

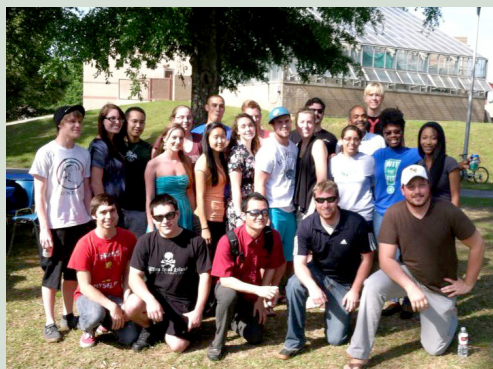
Dr. Michael Summers ('84 BS Chemistry) was named an Honorary Doctor of Science during the UWF Spring 2013 commencement ceremony. Summers currently serves as a Professor of Chemistry at the University of Maryland, Baltimore County, and a Howard Hughes Medical Investigator. Summers' scientific research focuses on understanding how retroviruses, specifically HIV, assemble, in hopes of finding a cure. He is also a tireless advocate for the Meyerhoff Scholars Program whose primary focus is to increase diversity among future leaders in science, technology, engineering and math (STEM) related fields. Using the Meyerhoff program as a model, he helped start the Chemistry Scholars Program at UWF. Summers continues to accept UWF chemistry students to participate in the University of Maryland, Baltimore County summer research program and is currently mentoring Janae Baptiste ('13 BS Biochemistry) and Joshua Brown ('13 BA) who is pursuing his MD/PhD joint through UMBC and University of Maryland.

Chemistry Club Awards

The Chemistry Club won two Honorable Mention awards from the American Chemical Society, for its activities in academic years 2011-2012 and 2012-2013.

Several recent graduates have received graduate school awards including:

- Jenna Bilbrey ('09 BS Chemistry) Beverly Hirsh Frank Graduate Fellowship for Women in Science at the University of Georgia
- Tim Pope ('10 BS Biochemistry) at UGA and Lyndsay Munro ('07 BS Biochemistry) Teaching assistant awards, University of Nevada, Reno
- Jennifer Glancy Logan ('11 BS Chemistry), Competitive Edge Fellowship and teaching assistant award, University of California, Irvine
- Joseph Brice ('13 BS Chemistry), Excellence in Graduate Recruiting Fund Award, University of Georgia
- Luther McDonald ('10 BS Chemistry) is a new Assistant Professor of Nuclear Engineering at the University of Utah.



Jerome E. Gurst Excellence in Chemistry Endowment

The Department of Chemistry at the University of West Florida is excited and pleased to announce the establishment of a new scholarship endowment in honor of Dr. Gurst – the Jerome E. Gurst Excellence in Chemistry Endowment. As you know, Dr. Gurst was one of the founding faculty members in chemistry and retired in 2007 after 40+ years of service at UWF. This endowment is meant to honor his legacy and service to UWF, the chemistry students, and his time as pre-medical adviser for all students pursuing medical school from UWF. Proceeds from the endowment will be used to award scholarships to UWF chemistry majors based on academic merit and the student's interest in attending graduate school in a STEM discipline (Science, Technology, Engineering and Mathematics) as well as interests

in issues of STEM diversity. These scholarships will help alleviate the financial barriers preventing students from engaging in opportunities for research and/or presenting at scientific meetings.

The department of Chemistry thanks the following donors to the Jerome E. Gurst Excellence in Chemistry Endowment:

Dr. Gabriela Bambrick-Santoyo, MD
Mrs. Miriam P. Birdwhistell
Drs. Wayne and Christie Brouillette
Mr. Dustin James Dixon
Lieutenant Lucille A. Combs-Walker
Mr. and Mrs. Gary Hoffman

Dr. Michael T. and Amy Huggins
Dr. and Mrs. Waylon L. Jenkins
Dr. Paul F. Junker, DO
Drs. Chris and Karen Molek
Mr. and Mrs. McEarnest Moorer
Dr. Stevens W. Pearce

Dr. Arun T. and Anne Royappa
Dr. Egbert J. Serrao, M.D.
Dr. Alan K. and Nancy Schrock
Dr. Michael F. and Holly Summers
Dr. Pamela P. Vaughan
Dr. Richard W. Wegman

"Thanks to the creators and donors of this new endowed scholarship, the Jerome E. Gurst Excellence in Chemistry Endowment. I know that the primary benefactors of this fund are my very good friends, Mike and Holly Summers, and to them goes my deeply felt gratitude. I also know that there are many other donors whose names have not been provided to me. So, to everyone, please accept my appreciation and thanks for thinking of me in this very meaningful way. I'm always delighted to see a new path opened for future students to find their way to a successful life and a productive career, based on an education in chemistry."
- Jerry Gurst, PhD

Dr. Larry Manziek Memorial Scholarship Endowment

Dr. Larry Manziek, BS '70, was a University of West Florida distinguished Chemistry alumnus, a good friend, a longtime advocate and UWF supporter. He served in the Army National Guard 1966-1970, and the Army Reserves 1970-1972. He received his B.S. in Chemistry from the University of West Florida in 1970, his M.S. in Environmental Engineering from the University of Florida in 1974, and his Ph.D. in Inorganic and Organic Chemistry from the University of Florida in 1976. He was proud to be part of the Gator Nation. After completing his graduate studies, Dr. Manziek joined the Rohm & Haas Company as a Senior Research Scientist at their Corporate Research Centre in Spring House, PA. His research covered many areas: ion exchange technology, functional polymer synthesis, precious metal extractive metallurgy, selective precious metal recovery from complex aqueous solutions, catalyst design and microengineered inorganic materials. Dr. Manziek received the distinguished Otto Haas Award for Scientific Achievement in 1982, and retired from the Rohm & Haas Company as a Senior Research Fellow in 1998. Following his retirement, he assumed the position of Executive Director for the International Precious Metals Institute (IPMI.org) and remained in that position until his untimely death.

During the University's 40th Anniversary Celebration, Larry was recognized as one of forty distinguished alumni. To read more about Larry, his goals, his aspirations and his accomplishments go to http://uwf.edu/40years/honorees/manziek_larry.cfm. The endowment will support scholarships for full time chemistry majors at UWF.

Giving to the Department 2012-2013 Chemistry Supporters

The department gratefully acknowledges the following alumni and friends, whose financial support in 2012 and 2013 has helped to fund undergraduate student scholarships and awards and enhance our research and instructional activities

Dr. Mark E. Ates
Dr. Gabriela Bambrick-Santoyo, MD
Dr. Karen and Mr. Robert Barnes
Dr. Linda Benner
Dr. Kurt R. Birdwhistell
Mrs. Miriam P. Birdwhistell
Mr. and Mrs. David A. Blodgett
Ms. Ilona Julia Borish
Drs. Wayne and Christie Brouillette
Mrs. Elizabeth S. Calhoun, REM, CESM
Mr. and Mrs. Arthur W. Carnrick
Mr. Richard M. Clawson
Mr. and Mrs. John F. Cline
Ms. Debbie L. Dahlin
Mr. Dustin James Dixon
Lieutenant Lucille A. Combs-Walker
Ms. Carrie A. Delcomyn
Mr. Joseph M. Galant, Jr.

Mr. Sandor F. Genet
Mr. J. W. Godwin
Mr. Harvery N. Gottlieb
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Mr. and Mrs. Gary Hoffman
Dr. Michael T. and Amy Huggins
Mrs. Therese Anne Hunter
Dr. and Mrs. Robert M. Ianniello
Dr. and Mrs. Waylon L. Jenkins
Dr. Paul F. Junker, DO
Dr. Eric J. Langenmayr, Ph.D.
Ms. Sheila Lohbeck
Mrs. Larry Manziek
Mr. Karl Mock and Mrs. Ann Mock
Mr. and Mrs. McEarnest Moorer
Mrs. Dana K. Nagel
Mr. Patrick A. O'Neal

Dr. Stevens W. Pearce
Mr. Isaiah D. Reeves
Dr. Arun T. and Anne Royappa
Mr. Swadesh R. Samanta
Mr. Alexander R. Saunders II
Dr. Egbert J. Serrao, M.D.
Dr. Alan K. and Nancy Schrock
Mrs. Susan M. Smith
Dr. Pamela and Mr. David Tanner
Dr. Michael F. and Holly Summers
Ms. Anita L. Suttmiller
Dr. and Mrs. Stephen P. Tanner
Dr. Scott K. Spear
Mr. Don Thompson
Dr. Pamela P. Vaughan
Mr. Anh Duy Vu
Mr. David C. Waterman
Dr. Richard W. Wegman

Supporting the Department

The Mike Huggins Alumni Challenge (aka Argo Roll call) is an effort to increase UWF alumni participation with UWF that can materially benefit the Department of Chemistry: the UWF department that receives the greatest increase in percentage of alumni giving to UWF will receive \$15,000 in travel funds to support department activities. Please help Chemistry win the challenge by making a gift of any amount to the Chemistry Department or to any of the 300+ funds at UWF. No amount is too small to make a difference: the challenge will be won based on the rate of alumni participation in giving, not the total dollars raised. Your gift will benefit students and it will also count towards our rankings in publications like US News & World Report. You can learn more and make your gift at www.uwf.edu/ArgoRollCall.





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UWF Chemistry Department

