

USF Chemistry NEWS

News of Interest to Friends of the Department of Chemistry University of South Florida

Volume 2, No 4. December 2004

In Memoriam

We learned only recently that Mrs. Ada Castle passed away in March. She and her husband, Dr. Raymond Castle, were strong supporters of the Department through the Castle Lectures, other generous donations, and by their example. Survivors include Dr. Lyle Castle (Ph.D. '92) and Dr. Joanne Castle (Ph.D. '93).

Recognition...

Dr. Mohammid Eddaoudi (Assistant Professor) received an Outstanding Faculty Research Achievement Award in September, one of only five faculty members in the College of Arts and Sciences to have received such an award.

Dr. Leon Mandell (Professor Emeritus) was informed by the Development Director at Emory University that a cardiologist from Ft. Lauderdale had donated \$50,000 to establish the "Leon Mandell Undergraduate Research Scholars" program to encourage Undergraduate Research involvement.

Dr. Mike Zaworotko (Professor and Chairman) gave an invited presentation entitled "Supramolecular Synthesis" at the Green Chemistry Gordon Conference, July 2004. The full program can be found at the following link:

http://www.grc.uri.edu/programs/2004/green.htm.

He is also organizing a symposium on noncovalent derivatives at next year's GCE05, the 2nd International Conference on Green



Dr. and Mrs Castle.

and Sustainable Chemistry and 9th Annual Green Chemistry and Engineering Conference. The conference will be held from June 20-24 2005 at the Marriott Wardman Park Hotel in Washington DC.

Out and about...

When faculty members retire, some stay around (if we're lucky), and we get to see them from time to time.

Dr. Jesse Binford, until recently, could still be seen riding his bicycle. He also tried to reactivate the USF Bicycle Club. He and **Mrs. Lolita Binford** moved to Austin. They bought a home (5600 Bull Creek Road, Austin, Texas 78756) near where one of their sons lives. **Dr. Robert C. Braman** is keeping busy on campus and off. Off-campus activities include providing leadership with a church investment club. He and his wife celebrated their 50th Wedding anniversary in Italy in October.

Dr. Jeff C. Davis, Jr. has promised to stop by when he visits Tampa. Meanwhile he and **Mrs. Sylvia Davis** are enjoying life in northern California (414 Crestridge, Santa Rosa, CA95409).

Dr. Leon Mandell was able to visit with family including his grandchildren in South Carolina last summer.

Dr. Terence C. Owen, spent a month in England, and returned to researching in his laboratory.

Dr. Joseph A. Stanko and **Mrs. Joan Stanko** started a hobby of wine making among other chemistry related projects. He told me that you don't need to grow the grapes (nor trod on them), but he picks up the project from that point with the assistance of a local firm. One of us was lucky enough to receive a delightful bottle of their merlot.

Dr. Jay H. Worrell and **Mrs. Louise Worrell** just built a new home in Tallahassee and have moved there in June (2836 Frogs Leap Way, Tallahassee, FL 32309).

Staff members you should know...

Venice Osteen has been morning secretary and receptionist in the Department since 1981. She was born in Varnville, SC where her father was a carpenter and her mother was a homemaker and the mother of six daughters. She came to Florida in 1948 at the suggestion of an uncle, and the day after arriving obtained a position with the County Judge's



Venice Osteen.

Office at the Pinellas County Court House in Clearwater. Subsequently, she met her future husband, Dewitt, who had just mustered out of the Coast Guard after two different enlistments. They were married in 1951 and built a house in Tampa where Mr. Osteen was employed as an insulator and where his Local Union was located. The Osteens had one daughter, Deborah Osteen Mathias (who married Tom Mathias, the son of Millie Mathias, a former member of the Dean's office staff when they were located on the top floor of the Science Center). Mrs. Osteen has one granddaughter, Morgan Mathias, a junior in high school, whom she describes as "the light of my life." Mrs. Osteen joined the Chemistry Department in 1981 at the suggestion of Mrs. Mathias, and has been with us ever since. Mr. Osteen retired in December 1987 after 35 years as an insulator and they moved to a home that they built in Wesley Chapel. Mrs. Osteen handles telephone and walk-in reception duties, does copying requests, maintains office supplies, and BSF back-up supply, does the mail distribution, and raises our spirits.

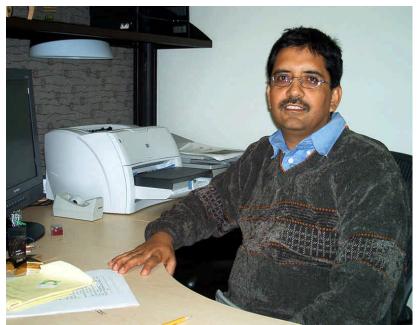
Spotlight on

[Continuing our series on departmental faculty members]

Dr. Kirpal Bisht is an organic chemist, who joined the department faculty in 1998. He was granted tenure and promoted to Associate Professor this year.

In 2003, Dr. Bisht was recognized as the recipient of the Environmental Protection Agency (EPA) Presidential Green Chemistry Challenge Award for his postdoctoral work on enzyme-catalyzed polymerizations. The method he developed allows for polymerization reactions using non-toxic and environmentally friendly Dr. Bisht stated methods. that previous conditions for these types of reactions polymerization involved the use of organometallics as catalysts.

Additionally, Dr. Bisht has been on the cutting edge of calixarene chemistry the enabling research his research group to synthesize substrates that will have a broad impact on calixarene chemistry as whole, a ranging from host-guest chemistry to novel materials. In the process he discovered a phenomenon, described as 'self inclusion', that was heretofore unknown in these types of systems (a class of cavitands).



Dr. Bisht, in his new office in the NES building.

Dr. Bisht has also successfully completed an improved total synthesis of platelet Imperanene, a aggregation inhibitor. The improved synthesis is unique in that it uses enzymatic methods in the total synthesis.

Another facet of Dr. Bisht's research revolves around the chemo-enzymatic synthesis glycolipid of analogues; compounds these have potential use as biosurfactants in several areas of chemical industry. These molecules are being synthesized in his laboratories in accordance with the principles of "green chemistry" and should have an impact on the chemical community in the near future.

Dr. Bisht's latest endeavor is targeting potentially anti-HIV compounds through chemical and enzymatic synthesis. These compounds contain a carbocyclic moiety and a nucleic acid base. Moreover, the presence of amino acid functionality this enables class of compounds to act as peptidomimetics. Dr. Bisht noted that these compounds and the novel enzymatic methods, by which they are synthesized, should have a direct influence on research potentially for anti-HIV compounds.

The joy of our present, the hope of our future

[Continuing our series on chemistry graduate students...]

Joanna Bis was born in 1977 in Nisko, a little town in southern Poland. "After completing my diploma in a chemistry profiled high school in Nowa Sarzyna in 1997, I moved to Cracow, where I studied chemistry at Jagiellonian University (JU), one of the oldest European universities. While there, I was awarded the Socrates/Erasmus

Scholarship which gave me the opportunity to study chemistry at the Forensic Science Unit at University of Strathclyde in Glasgow, Scotland. I graduated from JU in the spring of 2002 with a Master of Science Degree in analytical chemistry and specialization in industrial and environmental chemistry. The same year I moved to Florida, where I was admitted to the Ph.D. program in the Department of Chemistry at USF. Ι joined Dr. Zaworotko's research group and started working in the area of crystal engineering on a project concerning the design of novel organic co-crystals. Since Fall 2003 I have been working as а research assistant funded bv TransForm Pharmaceuticals Inc. I plan to continue my



Joanna Bis.

Ph.D. studies and to graduate in Fall 2006."

Seen about...

Those we saw at the Philadelphia ACS meeting in August included: Heba Abourahma (Ph.D. '04: post-doctoral associate Univ. of Iowa), Robert Kalbach (Ph.D. '96; Finger Lakes CC; Canandaigua, NY), Dr. Doug Raber (former faculty member), Ralph Salvatore (Ph.D.'01, Assist. Prof. Univ. of Western Kentucky), and Eric Elmquist (B.S. '00: Graduate student at Vanderbilt).

Mr. Chetan Shende (MS.'02) and his wife stopped by to say hello to his mentor, Dr. Malik and others in October. He is employed at Real Time Analyzer, Inc. in East Hartford, CT.

Alumni News

Frank S. Adamo (B.A., '66; M.S., 68) is a Business Efficiency Specialist at Business Efficiency Solutions and & Technologies (in Cypress, We appreciated his CA). words about kind the departmental News.

William P. Alford, M.D. (charter class member, '63) has been practicing medicine (internal medicine) in Denver for the past 25 years.

Major Charles Asowata, U.S.A. has been accepted into a Ph.D. program at the University of Medicine and Dentistry of New Jersey. His academic advisor is at the Medical College of George (Augusta), which is near to the Army base where he is stationed.

Mark-Allen Barnard (M.S. '99) wrote that he and his partner adopted their second son in January 2003 and he became a stay-at-home dad in March 2003 taking care of this son and his older brother Bryon, now $4\frac{1}{2}$.

Paul Bauer (Ph.D. '95) is a staff Chemist in the Quality Assurance Department at Nalco Company in Sugar Land, Texas. Most of the chemicals produced at this plant are for the petroleum industry, and he works with production, research, marketing, pilot plant units, as well as customers not only to solve problems, but also to devise the best way to bring new products into the plant. His wife teaches second grade at a nearby elementary school, and his son, Jonathon, is 12 and started seventh grade this fall.

He added, " I look back on my years at USF with fondness and marvel at how fast the time flies."

Carl J. Biver (Ph.D.,'93) is an Instructor in Chemical Engineering at USF.

Joanne C. Castle (Ph.D.'93) is on the chemistry faculty of BYU-Idaho, Rexburg, ID.

Lyle R. Castle (Ph.D. '92) is Professor of Chemistry at Idaho State University.

George P. Cobb (Ph.D. '87) is Professor of Environmental Toxicology, and Division Environmental Leader. Health and Toxicology, Texas Tech. A masters advisee of his recently received a STAR (Science to Achieve Results) Fellowship from the Environmental Protection Agency. The fellowships are highly competitive and this was the only one awarded in the State of Texas.

David L. Daughdrill (B.A'66; M.S. '68) wrote: "I went directly into the Army as a Chemical Corp officer and remained on active duty until 1976. (I stayed in the Army Reserves until I retired as a Lieutenant Colonel in 1991.) After leaving active duty, I took a position with the Army as a civilian employee. For the next five years I worked in the Army's program to destroy chemical agents stored at various locations and then transferred in 1981 to an organization now known as the US Army Center for Health Promotion and Preventive Medicine (USACHPPM). I homesteaded there until I retired last year. At USACHPPM, I was a program manager for air pollution management and, later, program manager for environmental health risk assessment. Our work supported environmental programs at Army installations worldwide. We also did a great deal of work in trying to protect deployed soldiers from the potential negative health impacts associated with environmental threats such as those which resulted in the Agent Orange and Gulf War Syndrome controversies."

"I spend my time gardening, woodworking, and reading. On a more personal note, I have two children, a son and a daughter, who are doing well. My wife, Marilyn, must work two more years before she can retire at which point we intend to move back to the West Coast of Florida. We own six acres in the Port Charlotte area."

Dr. Frank W. Fowler (B.A.'64) is Professor of Chemistry at SUNY-Stony Brook. He accepted an invitation to serve as a Martin Lecturer in December and his topic was "The Development of Strategies for the Preparation of Designed Materials".

Thomas H. Hebert (M.S.'68) is listed as the inventor or co-inventor on nine patents since 1976. His masters research with **Dr. Binford**

was concerned with microcalorimetry. He lives in Lutz, and attended the retirement reception for Dr. Binford in April 2003.

Barrett Johnson, J.D. (M.S. '66) is an attorney practicing in Tallahassee. He has maintained ties with USF through service on the USF Council of 100, an informal group of USF Alumni, who regularly with meet President Judy Genshaft. His wife is User Services Director for the National High Magnetic Field Laboratory in Tallahassee. Their son, Jett, attended Georgia Tech and FSU and is a civil engineer in the U.S. Marine Corps. Their daughter, Jennifer, is in marketing with the Florida Department of Agriculture and lives in Tallahassee. The Johnsons have five grandchildren, five and under. His masters adviser was Dr. Terence Owen.

Duke D. Pooré, (Ph.D. ' 96) Capt. U.S.Army, was elected Secretary of the Junior Officers Council of Walter Reed Army Hospital, Washington, D.C.

Remember when?

Open houses were an annual event in the fall that gave us a chance to listen to a Nobel Laureate or outstanding lecturer (please see the



Joanne C. Castle (Ph.D. '93) and Dr. Rebecca O'Malley.

Department History on our web page for more details), to provide guided tours of the Department, and to display the departmental research.

Joanne C. Castle (Ph.D. '93) and Dr. Rebecca O'Malley are pictured looking at a research poster in the October 1989 Open House.

What are they up to?

Please look at our web page ("Graduate Alumni") and see if you (and or your friends and fellow alumni) are accurately listed. It is hard to keep up with the growing list of alumni (would you believe over 275 graduate alumni). We would be grateful if you could bring us up-to-date on what you or some of your friends are doing...

News and feedback

For additional information on faculty, staff, students, and programs, please see our Department Home Page: <u>http://chemistry.usf.edu</u>.

For past issues you may have missed, please see the Home Page.

And if you have news for us, please contact us at: <u>dmartin@mail.cas.usf.edu</u>

It's that time of the year!

All best wishes for a happy holiday season from the faculty, staff, and students of the Department of Chemistry.