# **USF Chemistry NEWS**

UNIVERSITY OF SOUTH FLORIDA

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

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# Have you seen?

The progress on the new NES Building is impressive as you may be able to see from a recent picture. The building is now topped out, exterior insulation is being applied, and bricklayers have been busy with an attractive three-color pattern.

Further progress is evident in the start of the renovation of the Chemistry Building, which was originally built in 1959 at a cost of \$1 million and was a multi-purpose building ever since, having housed at one time the teaching faculty of a variety of departments, as well as research for chemistry and geology, and serving as teaching facility in recent years for chemistry, mathematics. and engineering, among others. A major step was to clear out the accumulation of 40 years or so of storage. The teaching laboratories were refurbished when Dr. Terence Owen was Chair (1974-78), and various modifications have been made subsequently to the classrooms and lecture rooms.



NES Building, September, 2004.

# Recognition...

**Dr. Kyung Jung** (Associate Professor and Coordinator of Organic Chemistry) received a \$1.45 million grant from the National Institute of General Medical Sciences for a project entitled "Oxygen Promoted Pd(II) Catalysis for Medicinal Chemistry." This grant is in addition to his current grant from the same agency.

In addition, readers were able to see a feature article on Dr. Jung by Jean Andrews [<u>http://www.research.usf.edu</u>] entitled "We Make It Better." His current work has been funded by a fiveyear \$1.05 million NIH grant involving pyrrolidines, fivemembered ring heterocyclic compounds and specific efficient synthetic route to a promising anti-cancer drug.

The new grant (scheduled for July 1, 2004) will be focused on "developing a process that uses a palladium catalyst in an oxygen promoted reaction to produce the most basics carbon-carbon bonds", according to the feature article.

Please see the Web page for additional details and pictures.

#### **Dr. Mark McLaughlin**

(Professor of Chemistry and Interdisciplinary Oncology) served as a speaker at the College of Arts and Sciences "Lunch with a Scholar". His topic was "New Developments in Drug Discoveries at USF" and included a discussion of a new drug that is being used to help those afflicted with Chrone's Disease.

#### **Barbara and Dean Martin**

completed 20 years service as editors of the Florida Scientist (published by the Florida Academy of Sciences) in December, and were re-appointed to another two-year term by the FAS Council.

# A tradition continues...

The seventeenth Annual Undergraduate Awards Banquet was held April 7 at the Embassy Suites Hotel. Dr. Richard Pierce (.B.A' 67, M.S. '69) was given the 2004 Outstanding Alumni Award. Dr. Pierce is Senior Scientist and Director of the Center for Ecotoxicology at Mote Marine Laboratory in Sarasota. Pictures of undergraduate awardees are available on the Department web page, thanks to Mr. Jason Hair, our Webmaster.

Among the guests were retired faculty members Drs.



Roberto Avergonzado.

Braman (and Mrs. Braman), Owen, and Stanko. Dr. Owen personally presented the T. C. Owen Undergraduate Research Award to Mr. Casey Cosner.

# Staff members you should know...

#### Mr. Roberto Avergonzado

(SCA 411) is a key staff member in the Department. He handles course scheduling and management, space scheduling liaison, key card requests, telecommunication liaison, student evaluation forms for all courses, change of grade forms, Drop/Add the first two weeks of class, and preparation of combined section examinations. And he does it with unfailing cheerfulness and good humor.

He was born in Inchon City (where General Douglas MacArthur landed during Korean Conflict), Republic of Korea. His father was a chief engineer in the US Army stationed in Korea where he met his mother. He has two brothers: his elder brother is in the Navy stationed in Virginia Beach, Virginia, and will be retiring in two years with 20 years in service (if he retires). His younger brother works for Disneyland as a network and web specialist. Both were also born in Korea.

#### He added:

"My wife (Filipina) works in the College of Education, secondary education department as office assistant (full-time OPS). She graduated in Philippines with a degree in Business Management and also graduated with a degree in Business Administration (Manage ment Information Systems-MIS) in USF last year.

"I have two children, Brian (18) and Katrina (12). Brian is a senior in Gaither High School. He enjoys playing basketball. Katrina is in sixth grade in Ben Hill Middle School. She likes to read, and she plays the viola.

"I have an associate degree in Aviation Electronics (Avionics) and General Radio Communications from Philippine Aeronautics Technical/Training Institute in Manila. While pursuing my studies I worked full time as a reservation/interpreter staff with Korean Airlines. Even though, I was born in Korea I spent most of teenage and my adult life in Philippines.

"My mother migrated to Guam in 1980. We three brothers followed her in 1984. I worked as front office staff in Guam Dia-ichi Hotel for two years. I join the United States Air Force in 1986. I was stationed in Dayton, Ohio, Wright-Patterson Air Force Base. I worked with the Air Force Institute of Technology (Air University), Registrar's Office as information manager. I was sent to Osan Air Base in 1994 for one year (remote tour of duty). I worked in the 56th Transportation Unit, Air Logistic Group, Pacific Command. I retired from the service in 1996 due to uncontrollable circumstances.

"In 1998 I worked as a mail sorter in the post office, main branch, Tampa Airport. In 2000 I joined the University of South Florida, Chemistry Department as senior word processor and in 2002 I got promoted to office assistant. "I enjoy playing all sorts of sports. In high school, I was in the swim and the tennis team. I played basketball with friends. I love to fish, while stationed in Dayton, Ohio my wife and I went fishing for bass, trout, and catfish up north to Sandusky River. I also enjoy reading computer magazines."

When you visit, stop in SCA 411 and say hello.



Eric Dueno.

# Spotlight on...

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

**Eric E. Dueno** was born in Omaha, Nebraska. His father, Colonel Hector Dueno, U.S Army, moved the family through out the world including posts in Japan, Germany, Italy and several in the United States, finally moving to Florida to retire from active service. In 1993, Eric graduated from the Florida State University with a B.S. degree in Chemistry. He then enrolled in the master's program at the University of Central Florida where he worked with Dr. J. T. Gupton, who moved to another institution in 1998. While a graduate student at USF, Eric received several departmental awards: the Tharpe Outstanding Publication Award, the Tharpe **Outstanding Teaching** Assistant Award, the Tharpe Travel Award, and the George Bursa Award for **Outstanding Graduate** Achievement in Chemistry. His work at USF has resulted in five national ACS meeting poster presentations, and over 12 publications including Journal of Chemical Education, Journal of Organic Chemistry, and Chemical Communications under the supervision of Dr. Bisht. Eric defended his dissertation last summer and accepted a position as a tenure track assistant professor of organic chemistry at Eastern Kentucky University in Lexington Kentucky, where he will teach and conduct research

# The joy of our present, the hope of our future...

[Recipients of various awards were announced at the last seminar meeting of the year. The background of the awards is available on the Department Web page. This year there was a tie for the George Bursa Award.]

#### The Alexiou Award

Young Chul Park is a graduate student from Korea. He obtained his M.S. with honors in chemistry from Dankook University, Seoul, Korea in the year 1990. He



Awardees. From left to right, Young Chul Park, Christina Ridley, Jarrod F. Eubank, Greg McManus.

then worked on natural products chemistry and also on total synthesis of natural products in Esung pharmaceutical company, Korea for 8 years. He joined the Department of Chemistry at Florida Institute of Technology in 1999 for his PhD under the supervision of Dr. Bill J. Baker. His doctoral research was based on the isolation of secondary metabolites from Antarctic marine organisms and total synthesis of natural products. He relocated along with his supervisor Dr. Bill J. Baker to Department of chemistry, University of South Florida in 2001 to continue his Ph.D. program. He was graduated in May 2004.

#### Theodore and Venette Askounes Ashford Graduate Fellowship

Christina Ridley was born in Oberlin, OH and raised in Temple Terrace, FL. She was graduated summa cum laude with a BA in Chemistry and Economics from the University of South Florida in May 2000. In Fall 2001. she returned to USF as a Presidential Doctoral Fellow. Christina is working on her Ph.D. under the supervision of Professor Brian Space. Her research interests include developing time correlation function theories for various types of spectroscopy and performing molecular dynamics simulation of organic molecules and small peptides. She hopes to finish her Ph.D. in 2005 and pursue postdoctoral studies.

#### The George Bursa Award

Jarrod F. Eubank was born in Union County, Kentucky and attended Western Kentucky University in Bowling Green. His studies included scientific research in multiple areas, including organic chemistry under the supervision of USF alumnus **Dr. Ralph** Salvatore (Ph.D. '01). He was graduated Magna Cum Laude in May 2002 with a B.S. in both Chemistry and Recombinant Gene Technology. The following fall he joined the department of chemistry at USF to pursue his Ph.D. in chemistry, and he joined the group of Dr. Mohamed Eddaoudi to work in the specific area of metal-organic chemistry. Currently, his research involves the design and synthesis of stabile, porous metal-organic frameworks for various applications, as well as the design and synthesis of new organic ligands to be utilized in such frameworks.

#### The George Bursa Award

Greg McManus was born in Charlottetown, Prince Edward Island in 1980. He attended the University of Prince Edward Island where in 2002 he obtained his B.Sc. with honors in chemistry under the supervision of Dr. Brian Wagner. Greg attended the Departmental Open House in March of 2002 and subsequently decided leave the ice and snow of Canada behind and in August of 2002 he joined Dr. Mike Zaworotko's research group here at USF. Greg is currently finishing up the second year of his Ph.D work involving crystal engineering, nanoscience, and x-ray crystallography. He presented a paper describing his research at the Spring National ACS in Anaheim. CA in April.

# We hear from alumni...

**Heba Abourahma** (Ph.D.'04), having served as a visiting faculty member at Eckerd

College, accepted a postdoctoral position at the University of Iowa.

**Craig Bowe** (Ph.D., '03) accepted an offer of an assistant professorship at Texas A &I University, Kingsville starting with the fall 2004 term.

**Kathleen Carvalho-Knighton** (Ph.D. '00) presented a paper on fuel cells based on biomass at the 68th annual meeting of the Florida Academy of Sciences (Orlando, March) and at the National ACS meeting in Anaheim

Mick Perez-Cruet, M.D. (M.S.'86) is now practicing medicine in Detroit, Michigan.

**Patricia M. Dooris** (Ph.D. '78) is now Principal, Dooris & Associates, LLC, an environmental consulting firm, St. Leo Florida.

Maria T. Gallardo-Williams (Ph.D.'99) was featured in an issue of the North Carolina State University's news page. She was pictured setting up equipment in the new state-of-the art teaching laboratory (organic chemistry).

**Cherie D. Geiger** (Ph.D. '94), Associate Professor of Chemistry, University of Central Florida, served as Co-chair of the Local Arrangements Committee for the 68th Annual meeting of the Florida Academy of Sciences held at UCF in March. She is currently serving as President of FAS.

**Elsie D. Gross** (Ph.D. '94) is still very busy with Delta Kappa Gamma. In April, for example, she was scheduled for district meetings on three of the four Saturdays. At these meetings, she holds two-hour workshops to train members who will be chapter presidents in 2004-2006. In addition to other related activities and May, June, and July, she was scheduled to attend the international convention of the organization in July in Minneapolis. She wrote, "It is an interesting job, and I get to see many friends that I have met over the years".

#### **James Donald Hayes**

(Ph.D.'00) is Manager of Research, Development, and Engineering at Bausch & Lomb in Tampa.

#### Suzette M. Marteny (B.A.

'00) worked as an analytical chemist for about 18 months before going to law school. She now practices patent law in Tampa at Carlton Fields, P.A. **Matthew McKenzie** (B.S. '03) is a graduate student in chemistry at Louisiana State University where one of his research projects deals with modeling peptide sequences for drug design in collaboration with his research advisor and a biochemist.

#### Dr. W. Karl Olander

(B.A.'66; M.S.'68) was corecipient of highest honor of Semiconductor Equipment and Material International. He and his co-inventor were recognized for Safe Delivery Source ® technology used in modern wafer fabrication processes. Dr. Olander was one of the five founders of ATMI in 1986. He held senior management positions at Lord Corporation's Chemical Products Division, American Cyanamid Co, PPG Industries, and General Electric. He has also been a key developer of new business ventures, according to ATMI (Danbury, CT). He received the Department's first Outstanding Alumni Award on April 18, 1988.

Jay P. Parrish (Ph.D. '01) is a Senior Scientist with Gilead Sciences in Forster City, CA. He wrote that they specialize in anti-infectives, specifically HIV and hepatitis B/C. He lives in San Francisco.

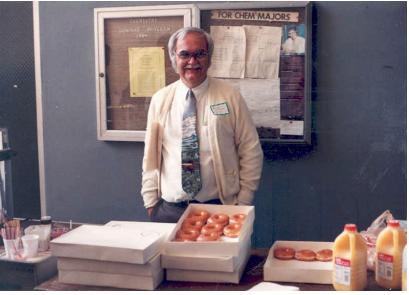
#### **Eileen Pérez** (Ph.D.'99) described the "Use of Cooperative Learning Groups in a General Chemistry Laboratory Courses at HCC Brandon Campus" a program that she devised and implemented

(68<sup>th</sup> Annual Meeting Florida Academy of Sciences, Orlando March 12).

**Duke D. Poore**, Capt. U.S. Army, (Ph.D. '96) is stationed at Walter Reed Army Medical Center, where he serves as editor of Inquiring Minds (News and notes from the Department of Clinical Investigations) among other duties.

# Seen in passing...

At the recent FAME 2004 (80th annual), we got to visit with **Craig Bowe** (Ph.D.'03), **Kenneth Heffner** (Ph.D.,'03), **Brian Moulton** (Ph.D.,'03), **Shelly Tatro** (Ph.D.,'02), and **Jerome Williams** (Ph.D.,'97). All were giving papers, and it was a pleasure to have a chance to visit with them.



Chemathon'94. Off to a good start. Dr. Joseph Stanko welcomed participants to donuts and juice or coffee.

# Remember when?

For a number of years an Associate Chair, Dr. Terry Oestreich or Dr. Andv Zektzer (Ph.D. '85) would coordinate a Chemathon with the cooperation of various faculty members. High school chemistry teachers would be invited to come for presentations, guided tours, and chemistry quiz contests. Prizes were given at the end of the day. Pictured here are candid shots from Chemathon'94. (not all from the Department of Chemistry).

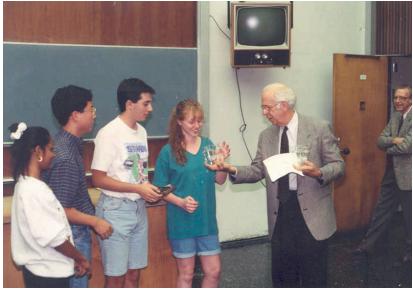
## What are they up to?

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 growing list of alumni (would you believe over 275 graduate alumni?).

We have started on the list of undergraduate alumni, a major project, (please see our Web page under "Undergraduate Studies), and we would be grateful if you could bring us up-todate on what you or some of your friends are doing.



Chemathon'94. Dr. Julie Harmon explained research in her polymer chemistry laboratory in BSF.



Chemathon'94. Dr. Jack E. Fernandez, Charter Faculty member, presents prizes to unidentified high school students. Special coffee mugs had been prepared by Glassblower Curt Sexton. Dr. Jeff Davis watches (right).

### News and feedback

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