



On April 6, most of the faculty had their picture taken.

Recognition...

Two graduate students were recognized for exemplary teaching in an award ceremony on April 18th in the Campus View East Ballroom. At a reception for the Provost Awards for Outstanding Teaching by a Graduate Teaching Assistant, Mr. **Jarrold Eubank** received a "Provost Certificate of Recognition for Outstanding Teaching by a Graduate Teaching Assistant". Mr. **Greg McManus** received a "Provost Commendation for Outstanding Teaching by a Graduate Teaching Assistant."

We congratulate both on this significant recognition of their efforts and talents.

Mr. Eubank's mentor is **Dr. Mohamed Eddaoudi** and **Mr. McManus's** is **Dr. Zaworotko**.

It's a first!

Eleven Ph.D. recipients in Chemistry were granted their degree at a single commencement (May 6th). USF has the tradition of "hooding" by the faculty advisor, a ceremony in which the doctoral hood is placed over the head of the advisee

while standing on the platform in front of those attending.

Dr. Mike Zaworotko said, “The number of Ph.D. graduates in 2006 reflects the intake of students and investments in faculty/-infrastructure made 4-5 years ago. Given that intake of students, number of research active faculty and funding levels have subsequently grown there is every reason to expect that future numbers of Ph.D. graduates will increase above even the levels of 2006”.

The first persons to receive a Ph.D. in chemistry were Craig Foreback and Anthony J. Girgenti in 1972.

Out and about...

Undergraduate Awards Banquet: The Sixteenth annual undergraduate Awards Banquet was held April 19th. **Dr. Denise Manker**, received the Outstanding Alumni Award for 2006. Dr. Manker is Director of Research and New Business Development at AgraQuest, Davis, CA. Pictures may be found on the Department Web page. Names of some other award recipients are listed on the Department Web page under “Department Awards”.

Tampa Bay Section ACS’s Second Annual Meeting -in-Miniature, April 21st

Award recipients included: *Inorganic Chemistry:* **Greg McManus** (First Prize), **John J. Perry IV** (Second Prize); *Environmental Chemistry:* Derek Guenther (First Prize); *Organic Chemistry:* **Thushara Diyalanage** (First Prize); **J. Alan Maschek** (Second Prize).

Excellent arrangements were organized by **Eric Steimle** (PhD. ‘99), who arranged for

support, refreshments, and souvenirs, and prize money (\$200 first prize, \$100 second prize).

Fifth Annual Raymond N. Castle Student Research Conference was held April 29th

The Chemistry Society at USF

Members under the leadership of **Ms. Erika von Arx** organized an “End of the Semester Barbeque and Soccer Match”, held Friday April 21st at Riverfront Park. A good time was had by all, and the Faculty defeated the Undergraduates by 7:1 in a soccer match. Dr. Noel Dickson is faculty advisor to the Club.

Graduate Student Awards

Theodore and Venette Askounes Ashford Doctoral Fellowship in Chemistry: **Giordano da Silva.**

The Alexiou Award in Environmental Chemistry: **Jarrold Eubank.**

The George Bursa Award: **Giordano da Silva** and **John J. Perry IV.**

The background of the awards and lists of past recipients may be found on the Department Web page (“Department Awards”). Our congratulations to all recipients.

REU News...

News from the Assistant Chair, **Dr. Patricia Muisener:** REU is a research experience for undergraduates and was initiated as an NSF-supported summer program with a three-year grant, as noted in previous issues of *News*. The program was adapted to the

fall and spring semesters starting with the fall of 2005, and this semester some 60 students participated.

A program was scheduled for Thursdays with a presentation from a librarian, lectures from faculty members, visits to local laboratories and facilities, and presentations on poster preparations and other pertinent issues.

Ms. Tanise Shattock, a graduate student, assisted in the program.

Several chemistry papers were among those who received awards at the annual Undergraduate Research Symposium.

Campus changes - past and future...

A number of changes have occurred since you left. Just how many depends on when you left. Just to pick a few...

Construction continues as Parking Garage III is taking shape near Moffitt Cancer Center and Research Institute. The facility is scheduled to open in October, 2006, and will have 1500 parking places.

A 10-year plan calls for 20 new construction projects, either modifying existing buildings (for example Physics) or creation of new ones, including one that will house some chemists.

The enrollment on the Tampa campus is expected to increase from about 41,000 to over 56,000 by 2010.

We're "covered"

Faculty members have found their work featured on covers of journals and dust jackets. **Dr. Abdul Malik** had his work

featured on the article of the November 15, 1997 issue of *Analytical Chemistry*. A sol-gel SEM micrograph was featured on the dust cover of *Quantitative Chemical Analysis* (6th ed.) by Daniel C. Harris, published by Freeman.

More recently, **Dr. Mohamed Eddaoudi** saw a structure from a paper that he co-authored on the cover of *RSC Chemical Communications* (14 April, 2006).

There may be more that we have missed.

Changes in rank...

Drs. Julie Harmon, Randy Larsen, and Brian Space have been officially prompted to the rank of Full Professor of Chemistry. **Dean Martin** has been appointed Professor Emeritus. All appointments are effective this summer.

Around the campus...

Dr. Julie Harmon and **Dr. Patricia Muisener** appear on the USF 2006 telephone directory.

Dr. Bill Baker, shown working in his laboratory, appeared in the TV program "Green and Gold" which also featured the current all but one of the past presidents of USF. It was shown Wednesday April 5 over WUSF and the previous week in the studios to a group of WUSF Supporters.

Invited lectures...

Dr. Mike Zaworotko gave an invited lecture at the Polymorphism and Crystallization 2006 Conference held in London, March 21-23.

Dr. L. Preston Mercer, Professor of Chemistry, and Campus Executive Officer USF-Lakeland, gave an invited lecture “International Iodine Deficiency” in April at Lincoln College, Oxford.



Dr. Preston Mercer speaking at Lincoln College, Oxford, April 7.

FAME 2006 plenary lectures were given by **Dr. Abdul Malik** (Analytical) and **Dr. Mike Zaworotko** (organic and inorganic) May 11 and 12.

Dr. Zaworotko also presented an invited lecture at the Polymorphism and Crystallization 2006 Conference in Los Angeles (May 23).

Faculty you should know...

Dr. Jon Antilla, Assistant Professor of Chemistry, joined the faculty in January. We asked him to tell us about himself.

“I grew up in a small iron-ore mining town named Republic, which is located in the upper peninsula of Michigan and very close to Canada. My father is a retired lumberjack

(woods worker) and my mother a retired secretary. The pastor’s family was located across the street from our house and I always played with the boys from their family. At a younger age I would build several tree houses and small camps in the woods with my childhood best friend, Jeff Boleman. We were kind of like Huckleberry Finn and his friends. One tree house we built was named “Java’s Jungle Hut”. It was torn down by rival kids...



Dr. Antilla in his BSF office.

The rest of the time we used to dig very deep holes in the ground for no apparent reason. This caused my parents to say “you are going to dig half-way to China!” on several occasions. I was also into a lot of “typical” outdoor activities like skating, skiing, swimming, fishing, hunting, hiking, etc. My high school was very small and typical class sizes were from 25-35 students, with all grade levels in the one school building. I am the youngest of four, and therefore followed my older brother around a lot. Since my brother, Dean, was into science and math it also piqued my interest. However, while he was a famously fantastic student who set all kinds of achievement records at our school, I was not. My elder sister Carrie was extremely good in school as well, often battling my brother in the number of 100% marking period scores they would receive. We are not just talking A’s

here, they were getting perfect scores for a whole quarter – nothing wrong at all! Teachers would always ask me why I do not perform as well as Dean or Carrie in my classes. I just shrugged my shoulders, and said, ‘I don’t know’. I did well in classes I liked. My high school did not have chemistry or any advanced math or physics but I liked, and did well in history and drafting. Dean ended up being a lawyer and lives in Lower Michigan. Carrie is a writer and artist, and has published many romance novels. They have been marvelously successful. My other sister Christy, who used to join me in picking on Carrie a lot, graduated from the Northern Michigan University and worked as an assistant to Congressman Bob Davis in Washington D.C. She is now a stay-at-home mom in Chicago, IL. She was always the most socially active and charismatic of my brother and sisters.”

“I attended Northern Michigan University in 1987 but stopped my studies after only one year. I found things pretty boring and I was really uninterested in my major – Earth Science. I took HS level chemistry to bring myself up to speed in the subject since it was required for my major. I loved that course a lot but ultimately decided to dropout and go to a small town called Pauling located just an hour north of New York City. Some friends of mine got factory jobs in that town so I joined in. I worked in the manufacturing of inflatable rubber seals like the kind that went into the space shuttle. These types of O-rings failed in the Challenger launch and explosion. Our company, PRESRAY, did NOT make the NASA O-Rings. I did make seals for nuclear submarines and missiles. At some point I just decided this was not for me and I was ready to attend college again. I went through the only catalog for NMU again and

sort of haphazardly chose biochemistry as my new major in my triumphant return.”

“I decided the first thing I had to do was to redeem myself and take every class that I did not perform well in back in 1987. So, I took the calculus class I failed previously and received an A. I took the physical geography that I had previously had a D grade, and, with the same professor, got an A. I don’t think he even remembered or cared. I also took the same American history professor and went from a C to an A. NMU allowed only three re-takes, so I had that out of the way. I took general chemistry and absolutely loved the course and really did well. During that first semester, I noticed that, while I sat at a desk in the chemistry hallway (I was ALWAYS there!), I would see students going in and out of Professor Roth’s office. Some would be crying, some would be mad, and very few would be happy. I found out Roth was the dreaded organic teacher. I talked to him a few times and eventually told him that I would ace his class. In a class of 100, he would usually have very few students in the 80’s to 90’s. I later thought, “what have you gotten yourself into!” I took the summer before the semester to go through seven chapters of organic so I could get off to a good start. I took some of those “no-doz” before the first exam and got sick right before it was to begin. I can still remember throwing-up in the bathroom and hearing the “roth-inator” coming into the room and saying, “Jon, are you OK? You can take the exam later today”. I had to take it later but did really well – 95%. I would normally meet with three or four other guys and girls to go over organic EVERY night. For some reason they would call me the “master blaster”. I helped teach them all organic chemistry in a way where you don’t just memorize everything. You actually used logic to push electrons and to predict

products. Roth showed this in class, but you really needed to go over it many times to get how it all worked. I was also very good at finding laboratory unknowns. I would often help out the others in their unknown determination based on the data they found. I would act like a chemistry Jinni and say ‘I will grant you three unknowns’. I was a bit of a chemistry bully now and then, but it was all for fun. I was not that great in physical chemistry – I held my own, but thought it all a lot of memorizing... In my last year at NMU I met my future wife Jun. We got married a short time after graduate school started, and she has been the one to keep my head up above water and to keep me in line. Without her I certainly would be in deep trouble and not nearly as successful.”

“I attended The University of Chicago for graduate school in 1995 and received my degree in 2000. I chose to work for Milan Mrksich at Chicago. I started out in material science but did not enjoy this area of research and desired to get more into synthetic organic chemistry. So, after passing my candidacy, I switched to the laboratory of William D. Wulff, and, man, did I make the right choice. Bill Wulff is a great guy to work for. He gave complete freedom in the lab with the following rules: (1) Have fun, (2) No Rush Limbaugh on the radio, and (3) You don’t have to do what I tell ya’, but you have to do something. These rules were simple enough. I soon began a thesis project on the development of a new catalytic asymmetric methodology to form aziridines. This project took about two years to really start to work. We ended up with the best catalytic asymmetric method to form chiral aziridines, but it was definitely a battle. I had to use all of my “sisu” to hammer that chemistry out. *Sisu* is a unique Finnish concept. It stands for the philosophy that *what must be done will be done*,

regardless of what it takes. *Sisu* is a special strength and persistent determination and resolve to continue and overcome in the moment of adversity... an almost magical quality, a combination of stamina, perseverance, courage, and determination held in reserve for hard times. I am 100% from Finnish decent, and I have some *sisu*. Bill was a great mentor and I still miss him and the old group even to this day. A few months before I defended, we had our first daughter, Lily. Lily was a real eye-opener for us. We had to become responsible parents – this made me much more responsible throughout every day life.”

“After my degree, I continued my studies as a postdoctoral associate for Stephen L. Buchwald at MIT. Steve told me, and others, to turn his successful palladium-catalyzed reactions into copper-catalyzed reactions. I helped in the discovery of this new research direction, and the papers I published with Steve have been cited numerous times and the reactions are being used in industry and academia. I learned so very much while working in Steve’s group.”

“I started my independent research career at The University of Mississippi. Oxford, MS is a very nice small town to live. I agreed with a statement that a nephew of one of my graduate students made ‘Oxford is nice, it has a lot of shade trees’. The chemistry department was quite small – with only 3 chemists in each area. A great reward I got out of Ole Miss Chemistry was Gerald and Emily Rowland, two fine graduate students. They got married while students in my lab. The Antilla lab is where the true “chemistry” happens... The best thing that happened to me in Oxford was the birth of my youngest daughter, Isabel. I soon realized that as I got more and more into my research that Ole Miss was not the place to advance my chemistry to the point I desire.

I looked into new opportunities and applied to USF. The short version of this story is that after multiple visits and one year of waiting, I did get a faculty position at USF. Whether it be high school, college, or my faculty career I always seem to have adversity in the beginning and then find my niche. It looks as though I have found that niche at USF. My family loves Tampa, and we think that our life here will be great. My lab is up-and-running with three graduate students and is well equipped with shiny new rotovaps and instrumentation. We are already having a great time and new chemistry is certainly on its way!”

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

[a continuing series on current graduate students]

Giordano F. Z. da Silva is the recipient of the 2006 Theodore and Venette Askounes-Ashford Graduate Fellowship in Chemistry and the co-recipient of the 2006 George Bursa Award:



Mr. da Silva in his BSF laboratory.

“I was born in 1977 in the city of Rio de Janeiro, in the state of Rio de Janeiro, in South America’s only Portuguese-speaking country, Brazil. After over two months of

not having a name (parents could not decide!!) I was named after the philosopher Giordano Bruno. I am second generation Brazilian, being the grandson of Italian/German immigrants. After World War I, half of my family immigrated to Brazil and the other half to the United States. I attended military school for most of my primary education in my home country while developing a love for music and studying classical guitar at the Conservatory of Music in Rio de Janeiro. At that time I also began training in the martial arts; both music and martial arts are still part of my day to day life. Most of my family, including my parents, still live in Brazil and I visit periodically.”

“At age 14, the opportunity to study in the U.S. came about and I moved here to stay with my grandmother and then my older sister. I am an alumnus of St. Petersburg High School (SPHS), home of the Green Devils. While at SPHS I became very interested in the natural sciences, primarily physics, and maintained a busy social schedule in service clubs, student government, the varsity soccer team, and a 4.0 GPA. At this time the Kelley family, mostly Cuban immigrants, “adopted” me as a surrogate son and from them I learned to love Cuban culture and to speak Spanish. Because I was not a citizen, it was difficult to arrange financial means to attend a university, but St. Petersburg College offered me a scholarship. While At SPC I continued my classical guitar training and literally fell in love with organic chemistry, thanks to Dr. William Nixon for his charismatic approach to teaching the subject and his ability to describe the inherent beauty of reaction mechanisms.”

“After graduating from SPC in 1998 I needed a break since I had been working full time and attending school full time. I played in a rock band for over a year; we recorded



Dean Stewart Schneller (Auburn), Dr. William Swartz, The Martins, Dr. P. Calvin Maybury, Dr. Robert Braman, Dr. Joseph Stanko, Dr. Marilyn Lupton were among those present at the reception on April 28th.

two CD's and had a lot of fun. In 1999 however I had the urge to return to college and enrolled at USF. Being an organic chemist was still my goal until learning inorganic chemistry with Dr. Joseph Stanko; soon after I enrolled in undergraduate research with Dr. Jay Palmer and Dr. Stanko, working on the synthesis of *cisplatin* compounds down in the first floor of SCA. I should now formerly apologize to Dr. Brian Space for falling asleep in his thermodynamics class, but I was working an overnight job at Bausch & Lomb Pharmaceuticals and his class was at 9:00 am! Dr. Space actually was one of the inspirations that led me to seriously consider graduate school and because of that I started working with Dr. Li-June Ming (who I still

work for), in metalloenzyme purification and characterization. These days my research interests are varied and range from enzymology to molecular biology, from chemical kinetics to spectroscopy."

"When not working in the lab, reading scientific journals, working with undergraduates in research, and writing manuscripts, I still find time to read the latest in general relativity, game theory, philosophy, practice martial arts, yoga, and play lots of music. I hope to find a postdoc after graduating, and eventually become a professor at a university since discovery and teaching are my primary passion."

Martin retiring...

Dean F. Martin, Distinguished University Professor, is nearing the end of the DROP program and will formally retire on August 31. He joined the chemistry faculty in August 1964. He has enjoyed a good balance between teaching, research, and service.

As a member of the President's Committee on Oceanography, he helped start the program in Marine Science at St. Petersburg until his place was taken by Dr. Peter Betzer. He served as Chair of the IRB-01, a committee dealing with oversight of human subject research, for 25 years. He served in the faculty senate and was elected to a term as speaker. He has been a tour speaker for the American Chemical Society since 1968.

His interest in applied coordination chemistry and the environment was materially assisted by a Five-year Career Development Award from the U.S. Public Health Service (1969-74).

He was advisor or co-advisor to over 20 doctoral candidates and 15 masters students. He was allowed to teach courses ranging from general chemistry for those

who had no high school chemistry to various graduate level classes. For over ten years, he was involved in teaching courses by distance learning that allowed him to reach students on four campuses and as far north as Atlanta.

He and his wife, Barbara, will have edited the *Florida Scientist* for 25 years in 2007. He hopes to continue joint research activities, and they plan to be able to visit their six children more often (“Spending the Children’s inheritance”).

The Martins were honored at a reception on April 28th, the last day of classes. They treasured the experience, and were most grateful to Drs. **Rebecca O’Malley and Joseph Stanko, Mike Zaworotko, Ms. Lorene Hall-Jennings, and Mr. Roberto Avergonzado** for their special involvement.

We get letters and visitors...

Kathleen Carvalho-Knighton (Ph.D. ‘00) Assistant Professor of Environmental Science & Policy, USF St. Petersburg, was Chair of a search committee for a chemist.

Melissa Derby (Ph.D. ‘02), Harvard University, visited campus in March

Brian Moulton (Ph.D. ‘03) was visiting from Brown University where he is an assistant professor of chemistry. He is married; he and his wife have a young daughter.

Robert Kalbach (Ph.D. ‘96), Associate Professor, Finger Lakes Community College sent greetings and good wishes. He also visited the Department on May 19th.

Ralph Salvatore (Ph.D.’01) Chaired a section for the Division of Organic

Chemistry at the Atlanta ACS Meeting in March.

He recently accepted a position as Full Professor (with tenure) and Chairman of the Department of Chemistry at the City University of New York-Lehman College.

Bill Sawyers (Ph.D. ‘99) has been Laboratory Director, Bioanalytical Systems, Inc., in Baltimore, MD, where he was responsible for 17 chemists and managed the operations of a 25,000 sq. ft mass spectrometry and HPLC laboratory. Equipment included six triple-quad mass spectrometers and 20 HPLC systems.

Those seen in NES on April 28 included **Dr. and Mrs. Robert Braman, Dr. P. Calvin Maybury and Mrs. Maybury, Dr. Jay Palmer, Dr. Stewart Schneller, Dr. Bill Swartz, Craig Bowe** (Ph.D.’03), **Kathleen Carvalho-Knighton**(Ph.D. ‘00), **Patricia M. Dooris** (Ph.D. ‘78), **Elsie Gross** (Ph.D. ‘94), **Cherie D. Geiger** (Ph.D. ‘94) **D. L. Eng-Wilmot** (Ph.D.’78), **Dr. Marilyn Lupton, Eileen Perez** (Ph.D.’99), **Dr. and Mrs Joseph Stanko, Dr. W. Karl Olander** (M.S. ‘68)and **Mrs. Zuli Olander, Dr. Rhea Law** (Chair, USF Board of Trustees), **Dr. Renu Khator** (University Provost), **Dr. Arthur Guilford** (CAS Associate Dean).

From the past...

Among the activities during the Chemathons were competitive exams for visiting high school students and laboratory tours. While students were taking exams, their teachers shared their demonstration skills.



Students receiving instructions from Dr. Wizard (a.k.a. Dr. Jay Worrell) at Chemathon-93. (photo from the files of Mr. Ron Federspiel).

News and feedback

For additional information on faculty, staff, students, and programs, please look at our Department Home Page:

<http://chemistry.usf.edu>

News for us or comments? Please write to

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