

# **USF Chemistry NEWS**

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

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## Recognition...

**Dr. Mohamed Eddaoudi,** Assistant Professor of Chemistry, is ranked number 68 among the 100 most highly cited chemists in the world, according to annual ranking of ISI Web of Knowledge published in November 2007. (The ranking covers the last 10- year period). Last November, the total citations (from November 1997 to October 2007) was 7,166.

The latest listing of total citations was 9,076 (including 2008), according to information provided in an announcement by Dr. Cheryl Kirstein, CAS Associate Dean for Research and Scholarship.

**Dr. Eddaoudi** joined the faculty in August 2002, and was awarded the NSF-Career award in 2006, the most prestigious NSF award for Young Investigators. He is also the principal investigator in a BES-DOE grant awarded in 2007 to tackle the use of functional porous solids as sorbents for hydrogen and their use for vehicular application.

**Dr. Edward Turos,** Professor of Chemistry, and his research team's work is featured in the most recent issue of *USF Magazine*.

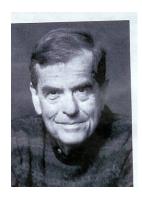
**Dr. Turos** is Director of the Center for Molecular Diversity in Drug Design, Discovery and Delivery (CMD5). He is also

a founding member of the Florida Center of Excellence in Biomolecular Identification and Targeted Therapeutics.

The research on nanoparticles that contain drug molecules could be "a key to fighting Methicillin-resistant *Staphyloccus areus*, also called MRSA" according to the article. MRSA, once a problem in "hospitals and nursing homes, is spreading rapidly to the general population."

## Nobel Laureate in Science Lecture Series...

**Dr. Aaron Ciechanover**, this year's lecturer was a 2004 Recipient of the Nobel Prize in Chemistry, and is Distinguished Research Professor at Technion, Israel Institute of Technology. The title of his lecture (May 1) was "the Ubiquitin Proteolytic System..."



Dr. Aaron Ciechanover

His studies showed how "ubiquitin, a small protein molecule, was directly linked to proteins through a series of enzymes... once a protein was linked with ubiquitin, it would be degraded through a second set of enzymes."

Many arrangements were the result of Faculty of the Department of Biology.

## New Orleans ACS Meeting

those faculty attending Among Mohamed represented were Drs. Eddaoudi, Randy Larsen, Jennifer Lewis, David Merkler, Li-June Ming, Edward Turos, Mike Zaworotko. Dr. Ming gave invited lecture ("Metal Ions in an Neurodegerative Diseases"). Dr. Lewis, in addition to presenting a paper on using **POGIL** activities in undergraduate biochemistry courses, also attended a presession meeting as a member of the Division of Chemical Education Executive Committee.

Faculty and students went to New Orleans in different ways. Some flew. Dr. Turos's students car-pooled. Dr. Larsen's students went with him in a van that he rented.

### **FAME 2008**

The Department was well represented at the Annual meeting of Florida Chemists held at the Orlando Sun Resort and Conference Center, May 8-10.

Among the faculty present or represented were Drs. Mildred Acevedo-Duncan, Bill J. Baker, Kirpal S. Bisht, Alfredo Cardenas, Julie Harmon, Randy W. Larsen, Roman Manetsch, Dean F. Martin, Mark L. McLaughlin, David J. Merkler, Li-June Ming, Edward Turos,

and Mike Zaworotko. Dr. Cardenas was the organizer for two physical chemistry sessions.

### ASMS Meeting

At the annual conference held in Denver, June 2-5 **Dr. Julie Harmon**, visited with Dr. Fred McMcLafferty about induction-based fluidics and polymers.



Drs. McLafferty and Harmon

Dr. McLafferty is the Peter J. W. Debye Professor Emeritus at Cornell University. He is an internationally recognized spectroscopist. He was a President's Council Seminar Series Lecturer at USF in 1982. This was a series instituted by **Dr. Stewart Schneller** (faculty, 1971-94; Now Dean of the College of Sciences and Mathematics, Auburn University).

**Dr. Harmon,** Professor of Chemistry and College of Arts and Sciences Faculty Coordinator of Special Projects, was accompanied by graduate student Mr. Brent Hilker. They contributed two posters.

## Department Webmaster

For the past two years, a graduate student, Mr. Tony Green, has served as the

Department Webmaster. We asked him for a short autobiography.

"I grew up in the small central Illinois town of Taylorville. After graduating from high school, I attended Coastal Carolina Univ. in Conway, SC, where I received an NSF Scholarship and the Coastal Scholar's Award. While there, I met my future wife, Lindsay, between my second and third years. During my final two years at CCU, I studied wave mechanics with Dr. Louis Keiner, and did my undergraduate research project with Dr. John Goodwin on the spectroscopy of various Co(III) tetraphenylporphyrin derivatives, some of which was published in *Inorganic Chemistry*. In May 2001, I graduated Magna Cum Laude with a B.S. in Chemistry."

"After graduation, I worked in an analytical lab in Springfield, IL, where I realized that computation and theory was my main interest."



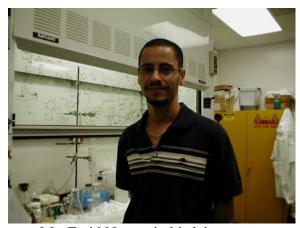
Mr. Tony Green

"In 2002, I enrolled in the Ph.D. program at USF, and joined Dr. Brian Space's group, where I am studying molecular modeling and sum frequency generation spectroscopy. For the past two years, I have been appointed as the webmaster for the department."

## Spotlight on...

Mr. Farid Nouar is a graduate student in Dr. Mohamed Eddaoudi's research group. Mr. Nouar was born in Roussillon, France, in 1975. He earned his high school diploma (BACCALAUREAT) in mathematics and natural science in 1994. He then went to medical school for 2 years, but switched to biochemistry and earned his bachelor's degree in 2001 at Universite Claude Bernard, Lyon, France. He then earned a Masters Material Science in and Formulation Engineering (2003) at the same university.

He joined the USF Department of Chemistry in August 2005 to work toward a Ph.D. His research area is concerned with porous metal-organic materials and their application on hydrogen storage.



Mr. Farid Nouar in his laboratory

Mr. Nouar noted that he had prior associations with USF: "During my first year of my Masters program (2002), I worked for 6 months (on an internship required by the university) in Dr. Coleman's lab (Dr. Eddaoudi's Ph.D. advisor) at CNRS (French National Research Center), Lyon, France" where his project was: Crystal Engineering: The use of Electrostatic

Interactions for Calixarenes/bio-molecules Crystallization."

He added, "During my second year (2003), I worked for 5 months (on an internship required by the university) in Dr. Eddaoudi's lab, on Design and Synthesis of Zeolite-like Porous Solid."

**Mr. Nouar** has been an active researcher with seven papers in major refereed journals, along with several presentations at scientific meetings.

## End of the term gathering...

It has been a custom of several years to have an end-of the semester gathering, usually after the last Faculty meeting of the term. This one was held May 9<sup>th</sup> at 5 pm. Our thanks to Ms. Lorene Hall-Jennings and Dr. Zaworotko for the arrangements.



Drs. Manetsch, Rivera, McLaughlin, Ms. Hall-Jennings, Drs. O'Malley, Weldegirma, Muisener, (uncertain), Ms. Read



Back: Drs. Turos, Bisht, Weinzierl, Antilla,

Zaworotko, Tate, Larsen.

Front: Drs. Acevedo and Lykourinou. (Pictures courtesy Mr. John Connaughton,

M.B.A.

### USF then and now...

The university opened in 1960 with *five* buildings; it now has 390.

The campus had no sidewalks when it opened; the first was laid between Administration and the University Center in the fall, 1960.

The budget in 1960 was \$2.4 million; in 2008, it is about \$1.8 billion.

The percent of the budget provided by the State appropriation and by tuition has decreased noticeably over the years, During President Castor's administration it was 39%. In 2007-2008, it was 23%. In 2008-2009, It may become less than 18%, owing to economic problems the state is facing.

In 1960, USF started with about 2,000 students; now there are over 45,000, and USF is the *ninth* largest university in the US.

## "Plus ça change, plus c'est la même chose"

Chemistry started (1960) as a program in the Division of Natural Science of the College of Liberal Arts. It be came a department in 1964.

The Division became the College of Natural Science in 1971 as the College of Liberal Arts was abolished.

Natural Sciences was merged into a newly formed College of Arts and Sciences in 1990.

Now "the science department chairs are proceeding with a plan to form a School of Sciences and Mathematics within the College of Arts and Sciences. The overall idea is for the school to be a semi-autonomous unit with respect to budget, tenure and promotion, etc."

## Around the campus...

"The new Marshall Student Center is scheduled to open Aug. 20. The new facility will include a student life tower, a 1,100-seat ballroom, a 700-seat theater, a 75-seat multi-tiered chamber, and more than 20 additional meeting rooms. The facility will also include a variety of food venues, such as Moe's Southwest Grill, Chick-fil-A, Sbarros, Einstein's Bros., Ben & Jerry's Ice Cream, the Top of the Palms Restaurant, Beef O' Brady's Sports Grille and more."

## What are you doing?

We are justly proud of our chemistry alumni, and we say so as part of our "tracking project." Please look at the

Webpage (<a href="http://chemistry.usf.edu">http://chemistry.usf.edu</a>), right-hand side under "Graduate Alumni".

Alumni change positions, and we would like to update the list. Please take the time to find your name and see if we are up-to-date. We are the only USF department to have a tracking project, and we'd appreciate your help. (Please see the last entry under "News and Feedback" below.)

## Alumni we've heard about or seen...

**Frank Adamo** (M.S. '68) is a facilitator for developing presentation skills and offers workshops in California.

**Dr. Jose Barreto** (M.S. '82) is a full professor in the Department of Chemistry and Mathematics, Florida Gulf Coast University.

**Patrick H. Benz** (B.A. '68 and Ph.D. '76) is the 2008 Distinguished alumnus winner, according to an announcement by the USF Alumni Association (May 27). Dr. Benz is founder of Benz Research and Development, Sarasota.

He will be honored during USF's Homecoming weekend, October 17 and 18 at an awards luncheon, as a guest on the Alumni Homecoming parade float, and will be recognized on the field at half time at the USF vs. Syracuse football game.

His firm has been in business for over 20 years. The Web page notes: "Since our entry into the IOL [intraocular lens] materials market in 1998, Benz Research and Development has become the preeminent supplier of quality materials and state of art technology to the IOL industry. The reason for our strong growth is our

dedication to excellence in Quality and our proven experience in producing high quality polymer blanks for the soft contact lens industry."

Dr. Julia R. Burdge (M.S. '90) is the author or co-author of several chemistry books, including Chemistry: the Central Science (9th ed.) by T. L. Brown, H.E. LeMay, B. E. Bursten, and J. R. Burdge (May 2002); Chemistry by J. R. Burdge and R. Chang (Feb, 2008), and Chemistry by J. R. Burdge (McGraw-Hill Higher Education January, 2009).



Dr. Julia Burdge

After receiving her Ph.D. from the University of Idaho, she was a faculty member at the University of Akron, where she became a tenured associate professor.

In 2001, she relocated to the Honors College of Florida Atlantic University.

She is currently living and writing in Pasco County

**George Cobb** (Ph.D. '89) is Professor of Environmental Toxicology at Texas Tech U. In addition to an active research program involving, among other areas, toxicant

distributions left in the wake of Hurricane Katrina, he is active in the Environmental Chemistry Division of the American Chemical Society. He has served as Member-at-large, Merits Awards Chair and is currently a candidate for Alternate Councilor (2009-2011).

**Dr. Jeff C. Davis, Jr.** (Faculty, 1965-98; Chair, 1978-82, 1995-98) is helping with a new departmental history project – the history of NMR, as suggested by Dr. Edwin Rivera, Research Assistant Professor.

He wrote, "We seem to be busy despite retirement. Sylvia is active in the local Art Association and doing some watercolor work as well and is involved with an active philanthropic women's' group. I've become quite active in a local Kiwanis Club which puts its emphasis on helping children in various ways. We have managed a few short trips lately such as a nice several days in Yosemite Valley with Sylvia's brother and sister-in-law."

Scott Lewis (Ph.D. '06), Assistant Professor, Department of Chemistry and Biochemistry, Kennesaw State University visited us May 27. It was good to see him again.

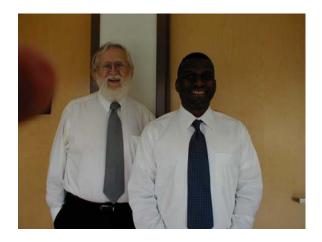
**Dr. P. Calvin Maybury** (Faculty, 1961-87; Chair, 1963-74) also agreed to help with the NMR history project.

Mark McClure (Ph.D. '99) is a tenured Associate Professor in the Department of Chemistry and Physics at University of North Carolina-Pembroke.

**Charles D. Norris** (Ph.D. '95) is the Coordinator, Laboratory and research Services, Department of Civil,

Environmental, and Construction Engineering, University of Central Florida.

**Capt. Duke D. Pooré, U.S. Army** (Ph.D. '96) visited in June on leave from assignment at Walter Reed Hospital. His



Former Pooré advisor and Capt. Pooré

next assignment will be as a bench chemist at Walter Reed Research Institute. His older son, Joseph, will be a senior in high school, and his younger son, Stephen, will be a junior.

Eric Steimle (PhD. '99) was responsible for the excellent arrangements for the fourth annual Meeting-in-Miniature of the Tampa Bay Section, ACS. He arranged for support, refreshments, and souvenirs, and prizes. He is a faculty member at USF-St. Petersburg.

## Departmental Funds...

This is the list provided by Dr. Zaworotko last December.

Chemistry Operating Fund for general use (acct. # 42-0550)
Chemistry Scholarship Undergraduate

Awards (42-0700)

Barbara and Dean Martin Seminar Series Fund (42-6014)

George Bursa Award in Chemistry for outstanding graduate students (42-6013) Barbara B. Martin Endowed Fellowship (42-6046)

Owen Chemistry Undergraduate Research Fund (42-3030)

**Worrell Memorial Scholarship** (42-1900001)

Wenzinger Memorial Scholarship (42-0043005).

#### News and feedback

Chair's Address:

Dr. M. J. Zaworotko Department of Chemistry-CHE 205 University of South Florida 4202 East Fowler Avenue Tampa, FL 33620-5205

#### Acknowledgments:

**Mr. Tony Green**, a doctoral candidate working with **Dr. Brian Space**, serves as Department Webmaster.

Some campus photographs courtesy of Mrs. Barbara B. Martin.

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: dmartin@cas.usf.edu