

COLLEGE OF

Natural Sciences & Mathematics



SPOTLIGHT

Atmospheric Conference Is a Big Hit!

The 21st Informal Symposium on Kinetics and Photochemical Processes in the Atmosphere was held on campus on Tuesday, February 24, 2004. It was a great success! The symposium featured four invited talks and nearly fifty short talk/poster presentations. Ten of the presentation were made by CSUF. There were 130 people in attendance, including 28 CSUF students. The level of science proved academically and intellectually stimulating, as evidenced by the superb interaction among the attendees. Titan Student Union facilities and food were also excellent. The conference was organized by Drs. Scott Hewitt, Fu-Ming Tao, and Zhuangjie Li from the Department of Chemistry & Biochemistry, with help from the Chemistry & Biochemistry Student Club. The conference was funded by the California Air Resources Board, the Chemistry & Biochemistry Department, and the CSUF Foundation.



INSIDE

Science Education Program awarded grant	Department News.....2
Graduate students win awards for research	Department News.....2
Research programs now accepting applications	Research Center.....3
Student Assistant position available	Scholarship & Employment Info ...4
Forum for Diversity in Graduate Education takes place April 3	Good to Know.....5
Change in tutoring schedule in Opportunity Center	Good to Know.....6

Dean's Office
 McCarthy Hall 166
 (714) 278-2638

Dean:
 Dr. Kolf O. Jayaweera
 kjayaweera@fullerton.edu

Associate Dean:
 Dr. David Fromson
 dfromson@fullerton.edu

Assistant Dean:
 Rochelle Woods
 McCarthy Hall 488
 (714) 278-7082
 rwoods@fullerton.edu

Department of Biological Science
 McCarthy Hall 282
 (714) 278-3614

Dr. C. Eugene Jones, Chair
 cejones@fullerton.edu

Department of Chemistry & Biochemistry
 McCarthy Hall 580
 (714) 278-3621

Dr. Robert Belloli, Chair
 rbelloli@fullerton.edu

Department of Geological Sciences
 McCarthy Hall 254
 (714) 278-3883

Dr. John Foster, Chair
 jfoster@fullerton.edu

Department of Mathematics
 McCarthy Hall 154
 (714) 278-3631

Dr. James Friel, Chair
 jfriel@fullerton.edu

Department of Physics
 McCarthy Hall 611
 (714) 278-3366

Dr. Roger Nanes, Chair
 rnanes@fullerton.edu

Program in Science Education
 McCarthy Hall 527
 (714) 278-2307

Richard Lodyga, Director
 rlodyga@fullerton.edu

Department News



Chemistry

- Katherine Kantardjieff will be the keynote speaker at the Roundtable on Biomedical Engineering Materials and Applications (BEMA) April 8, 2004 at the National Academy of Sciences in Washington, DC. BEMA is a group of high-ranking members of industry, academia, and government involved in the field of biomedical materials and applications. The purpose of the roundtable is to enable open and neutral discussion between these different stakeholder groups regarding regulatory, environmental, and political issues that may impede the development and introduction to market of useful biomedical devices. The meeting will focus on two specific topics, "Biomaterials Issues in Genomics and Proteomics Technology" and "New Tools for Proteomics, Genomics, and Understanding Disease States."

Math

- The Department of Mathematics will be hosting several Colloquium talks throughout the spring semester. This month's talk will be:
March 18, Thursday, 2:00 pm: Dr. Alberto Candel (Cal State Northridge) – *title to be announced*
- Michael Vodhanel, a second year applied-math graduate student under the supervision of Dr. Charles H. Lee, won the second-place award in the student research poster competition at the Mathematical Association of American Meeting organized by the Southern California-Nevada Section March 6 at the University of San Diego. The title of his talk was:

Fast and Tractable Algorithms for the Principal Orthogonal Decomposition and its Applications

Physics

- The Department of Physics announces two papers recently published in *Physics Review A*. The papers discuss research conducted by Greg Childers and student Ken James under the supervision of Dr. Murtadha Khakoo. Ken James is presently pursuing a Ph.D. at UC Riverside and Greg Childers was appointed a full-time (tenure track) faculty beginning fall 2003. The research, which involved international collaboration, focused on electron scattering of atomic hydrogen. The titles of the papers are:

Low-energy electron scattering from atomic hydrogen. I. Ionization
 J. G. Childers and K. E. James, Jr.

Low-energy electron scattering from atomic hydrogen. II. Elastic and inelastic scattering
 K. E. James, Jr., J. G. Childers, and M. A. Khakoo

Science Education

- The Science Education Program will be responsible for administrating a three-year grant awarded to CSUF by the California Postsecondary Education Commission. The grant, totaling \$1,220,775 in federal monies, has been earmarked for improving the quality of teaching. This project, named *Consortium for the Advancement of Science Teachers (CoAST)*, aims to address the shortage of highly qualified science teachers in Orange County. Cal State Fullerton will engage in a joint venture with Anaheim Unified School District. Additional partners in the CoAST project include Santa Ana Community College, Project Tomorrow, Orange County Department of Education, and the Tiger Woods Foundation.

The grant will be used to increase the number of students entering science teaching, accelerate their training, and increase their content knowledge. One proposal will allow students to receive bachelor's degree and teaching credential in just 4½ years through an accelerated program expected to be implemented in fall 2005. Veteran teachers will be provided opportunities to advance their skills, knowledge, certification, and careers.

To find out more about the CoAST project, contact Richard Lodyga at rlodyga@fullerton.edu or (714) 278-4680.



Research Center

Research Opportunities

Minority Science Development Program

Year-round program: open to full-time CSUF students who have completed 30 units.

Summer program: open to any full-time student with 30 units; program runs June 3-August 13.

Preference is given to minorities who are underrepresented (African American, Hispanic American, Native American, Pacific Islander) in the biomedical profession.

Compensation: Students in year-round program will receive a salary (\$8,085 undergraduate, \$10,300 graduate, per year), year-round students will be reimbursed for tuition and travel funds to one meeting. Summer students will receive a stipend of \$3,000.

Faculty Include: Dr. Oscar Aurelio, Dr. Amybeth Cohen, Dr. Peter de Lijser, Dr. Kathryn Dickson, Dr. Christina Goode, Dr. Michael Horn, Dr. Katherine Kantardjieff, Dr. Robert Koch, Dr. Maria Linder, Dr. Rodrigo Lois, Dr. Christopher Meyer, Dr. Chandra Srinivasan, Dr. Fu-Ming Tao, Dr. Marcelo Tolmasky, Dr. Frederick Wipple

Applications can be obtained from Chemistry/Biochemistry Department

Office: MH-580

Phone: (714) 278-4258

Email: esimki@fullerton.edu

Website: <http://stromboli.fullerton.edu>.

CSU Fullerton Southern California Ecosystems Research Program

Program will be accepting applications for new scholars through March 25, 2004.

The program is for undergraduate students interested in environmental biology and ecology. Students must have freshman, sophomore or junior standing as a biology major. Students from groups underrepresented in ecology and environmental biology are especially encouraged to apply. All applicants must be registered as full-time CSU Fullerton students.

Compensation: A stipend of up to \$4,500 can be received each year. Students may be eligible for funds to travel to conferences, as well as obtain funds for field and lab supplies.

Faculty Include: Dr. Sandra Banack, Dr. Kathryn Dickson, Dr. William Hoese, Dr. Michael Horn, Dr. C. Eugene Jones, Dr. William Presch, Dr. Steven Murray, Dr. Darren Sandquist.

Applications can be obtained in MH 282, or from Dr. Bill Hoese

Email: bhoese@fullerton.edu

Website: <http://biology.fullerton.edu/scerp/index.htm>

MONEY
SCHOLARSHIP AND EMPLOYMENT INFO

Now Hiring

Science Education Program

Student Assistant: OFFICE / Lab Assistant Backup

*** Federal Work Study Position ***

(You must have been awarded Financial Aid)

\$7.11/hr., 10 hrs./week * Flexible schedule.

Primary duties include: light office tasks & back-up
receptionist

Lab Assistant backup for lab supply & equipment maintenance

High School Chemistry or Physics preferred*

Please bring resume/cover letter to Sylvia in MH 527
at ext. 2307.

Email: stricoche@fullerton.edu

Be a Freshman Mentor

Freshman Programs is looking for some great junior and senior level students to serve as Peer Mentors for Freshman Programs next year. Peer Mentors are upper division students that are teamed up with faculty and/or student affairs staff members to teach a section of Fullerton First Year or Compass Program classes. The Peer Mentor plays an active role in class discussions, collaborates with instructional team members, and meets with individual students to serve as a role model and peer mentor. The Peer Mentor also works closely with Peer Mentors from other sections and receives ongoing training and supervision from the Assistant Coordinator and Director of Freshman Programs.

Students receive credit and a small stipend.

Deadline is March 12th at 2:00 p.m.

Contact: Brie Roumeliotis in Freshman Programs, MH 142, broumeliotis@fullerton.edu, 714-278-3584



2004 California Forum for Diversity in Graduate Education

Saturday April 3, 2004

California State University, Channel Islands

What is the Forum?

California Forum for Diversity in Graduate Education is an all-day program designed to acquaint students from underrepresented groups with the career opportunities and academic challenges associated with advance study in a wide range of disciplines, including science, mathematics, engineering, education, and liberal arts.

What is Presented?

The Forum will include workshops on:

- Selecting the right graduate program
- The graduate application cycle
- Financial aid opportunities
- Preparation for the GRE
- The role of the master's degree
- The culture of graduate schools
- Employment prospects
- Discipline-specific presentations

In addition, students will have the opportunity to meet with representatives from over 100 of the nation's leading graduate schools.

Who Participates?

Underrepresented juniors, seniors, and master's students from California colleges and universities. Attendance is by invitation only, so interested students must contact Gerald Bryant, Director of the McNair Scholars Program at 714-278-7364.

For more information, register online at: <http://www.gdnet.ucla.edu/deans/forum>

7th Annual University Leadership Conference

Saturday March 20, 2004

The University Leadership Conference is an all-day event focused on strengthening student leadership abilities. This year's conference workshops will provide participants an opportunity to discover leadership potential, examine personal leadership type, explore ways to enable others to grow as leaders, and discover ways to effect change and make a difference in on the college campus and in the community.

Conference Fee:

\$10.00 for students, \$15.00 for others before March 12. After March 12, registration is \$15.00 for CSUF students and \$20.00 for others. The registration fee includes materials and lunch.

Volunteer positions are also available.

Registration forms can be obtained from the Dean of Students Office
TSU 235
(714) 278-3211



GOOD TO KNOW ...

March is Women's History Month

Several free events are scheduled throughout the month, including lectures and a look at gender research at CSUF. For a complete schedule check out the women's history month website:

<http://hss.fullerton.edu/womens/whm2004.pdf>



The spring semester tutoring schedule has changed!

Andrew will no longer be tutoring physics and chemistry on Monday and Wednesday. He will continue to be available on Tuesday and Thursday.

Evolution/Creation Presentation

Thursday March 11, 2004 7:00 p.m.
Titan Student Union, Portola Pavilions B&C
Free, Open to the Public

University Honors and Scholars Speaker Series
Presents:

An Evolving Creation: No Oxyoron

Exploring the scientific and theological case for biological evolution.

Presented by **Dr. Keith Miller**, a professor in the Department of Geology at Kansas State University. Dr. Miller received his Ph.D. in Geology from the University of Rochester. His theological interests have led him to explore the relationship between God and science, specifically to study the implications of the developing scientific picture of the universe and its long creative history in the context of God as creator.

For more information, see the announcement:
<http://www.fullerton.edu/honors/events/miller.pdf>

Or call University Honors & Scholars Center,
(714) 278-7440

Run for ASI Office

Candidate packets are now available for Associated Students, Inc. positions. To be eligible, candidates must submit a petition of candidacy, a certification of academic progress and disclosure, and an authorization for educational record disclosure.

Deadline is March 23, 200 at 5:00 p.m.

Student interested in running for an ASI position may pick up a candidate packet in TSU 207.



Angels Help Support the Math Club



The Math Club is sponsoring a fundraiser trip to the Angels v. Oakland game April 16, 2004.

Tickets are \$15.00 for lower level (3rd baseline) seats.

Contact the Math club at mathclub@fullerton.edu or 714-278-4551