

The Beaker

Bonding Students to Chemistry



Volume I Issue V

April 5th, 2011

Upcoming Events

College and Career Center

(All Events are in Brotman Hall room 250)

- April 5 noon, **Resume Clinic**
- April 6 2pm, Prepare for the **Job Fair**
- April 7 noon, 2011 Engineering, Science and Technology Fair
- April 7 5pm, Employer Presentation
- April 11 2pm, Advanced Job Search Strategies for International Students
- April 11 3pm, Negotiating Your Job Offer
- April 12 1230pm, Business Etiquette 101
- April 13 noon, Managing Your Personal Finance
- April 14 1pm, **GRE/GMAT Strategy Session**
- April 18 noon, Make Your Job Green
- April 19 1230pm, Panel: Green Careers in Math and Science
- April 20 1pm, Green **Internships**
- April 21 3pm, Panel: Careers in Engineering
- April 25 2pm, Job Search Essentials: **Resume Writing**
- April 27 noon, Job Search Success
- April 28 2pm, Job Search Essentials: **Interviewing Techniques**
- May 2 2pm, Online Tools for Networking

Chemistry Department Updates

April 11- Registration deadline for **Chem 111A placement test** on April 22

Summer and Fall schedules are posted

SAACS (For all events please contact SAACS at csulbsaacs@gmail.com)

- Next meeting is April 11th @ 5pm in Ph1-127.
- Free Coffee and donuts every Friday at 930-1030am at MLSC patio 1st floor
Come mingle with the professors and other chem. Students.

Seminars in April

(All Seminars will be held in PH2-110 at 4pm)

Nanochemistry for Noobs, Nanodoodads built by Speaker Phil Lukeman from California State University, Pomona on April 6th
Host: Dr. Brian McClain

Tackling the Fundamental Chemistry, Problems of Alternate Energy Solutions by speaker Alan Heyduk from University of California, Irvine on April 20th
Hosted by: Dr. Lijuan Li

Controlling Chemistry of Metal Nanoparticles and Nanostructured Metal Films by Speaker Young Shon California State University Long Beach on April 27th
Hosted by: Dr. Young Shon

Faculty Spotlight: Dr. Shahab Derakhshan

Written by Cindy Pham, Edited by: Karen Yu and Monica Royer

Dr. Shahab Derakhshan was born in Iran where he acquired his undergraduate degree in applied chemistry, and master's degree in inorganic chemistry. Following the completion of his master's degree, he founded his chemical company where he produced raw materials for hygienic industries. After three years of hard work in the industry, he decided to leave his country in search of better opportunities in terms of research. His intellectual trek led him to Canada where he received his PhD at the University of Waterloo, focusing on energy related materials for acquiring clean energy. He then spent three and half years at McMaster University as a postdoctoral fellow. At McMaster, he worked on exotic magnetic properties of some transition metal oxides.

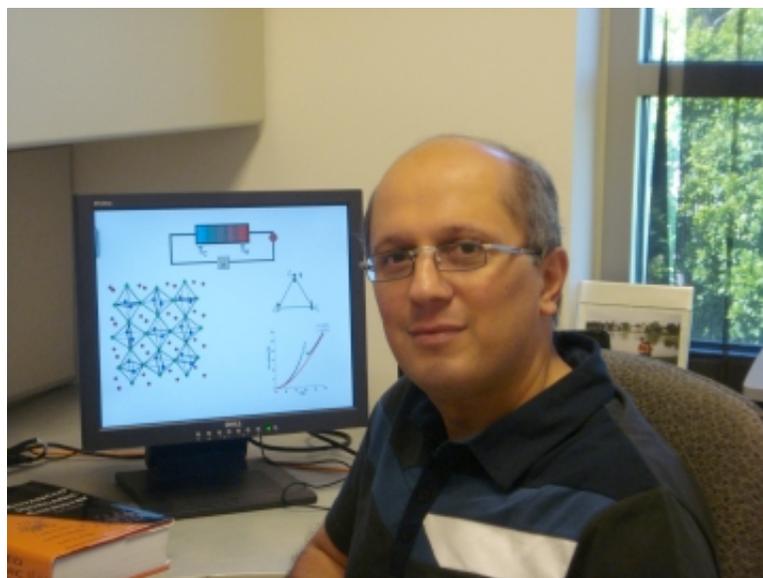
After his Post Doc, Dr. Derakhshan moved to California. He jokingly said that the freezing -30° F Canadian weather in January 2009, when he received the job offer from CSULB, was an important factor for him to choose California State University Long Beach. He shared that it was, indeed, the very friendly environment and the seldom-observed close student-faculty interactions that truly won him over.

Aside from teaching, Dr. Derakhshan does research on magnetic materials and energy related materials such as thermoelectrics. He is also trying to design and synthesize materials that can capture the solar energy, which can be converted into oxygen and hydrogen fuel. Hydrogen-powered energy can reduce fossil fuel consumption and lower the environmental issues associated

with the high CO_2 levels. The most recent acquisition in his lab is a Powder X-ray machine; this machine is used to analyze the structure of crystals. He strongly encourages students to seek research opportunities in order to see the various applications of chemistry outside of class. If you are interested in his lab, please contact him about positions available during the summer and fall semester. His door is always open to any students who have questions about chemistry or his research. For students who want to join a research lab, he recommends reading articles about a particular professor's research so as to determine if those types of projects attract their interest. In addition, he mentioned that students could increase their chances of publication by sticking with one research lab.

Dr. Derakhshan has published more than twenty articles in peer-reviewed journals during his work as a graduate student and a postdoctoral fellow, the most recent being from 2010 concerning hydrogen storage materials.

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His latest laboratorial achievement was in magnetic materials, which earned him the Research Corporation for Science Advancement Award.

Dr. Derakhshan truly enjoys teaching and interacting with his students. What he loves the most is seeing students pull knowledge from past chemistry courses, thereby seeing how it is all related in the "big picture" of chemistry and the sciences. At Cal State Long Beach, he has taught Chemistry

111A and is currently teaching inorganic chemistry, Chemistry 331. Subjects in general chemistry that overlap with inorganic chemistry are atomic and molecular orbitals, atomic properties, and bonding. His only advice for students entering CHEM 331 is to review and learn their general chemistry to the best of their ability. If you are looking for a professor who wants to give back to his students and looks forward to their success, then Dr. Derakhshan is definitely a professor worth getting to know.

Derakhshan Fun Facts!

- * Listens to classical and traditional Persian and Azeri music.
- * Plays Setar (A type of Persian instrument).
- * If he could be any element he would be Hydrogen.
- * Favorite elements to work with are Ti and Cu.
- * His wife is also a chemist and teaches on campus.
- * He has one sister who studied biology.
- * His 12-year-old son makes fun of his drawings.
- * He plays FIFA on PlayStaion with his son at a very competitive level.
- * Dr. Derakhshan loves soccer and plays weekly with Dr. Weers, Dr. Shon, students, and other biology, physics and chemistry professors. Students currently enrolled in CHEM 331 should know that the point group of soccer ball is I_h .
 - All students are welcome to join on Frdays @ 5pm on the CSULB soccer field!

Beaker Box

Questions, Comments, or Ideas? Call or email us about them!

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562-985-1866

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In the last issue, we asked you, our readers, what your favorite piece of laboratory equipment was. Here are some of our favorites. Thank you everyone for your submissions!

"My favorite lab equipments are my safety goggles and lab coat. I don't know about other people but I feel like a real scientist when I have my lab coat on and it's one of the best feelings in the world in my opinion. I LOVE wearing my lab coat! :D"

-Sarah Z.

"My favorite lab equipment is the separatory funnel because its the easiest way to separate two liquids. And, after separating them, you can even use it to purify it. To top things off, it even lets you add your separated, and purified liquid at different rates by adjusting the stopcock. It's the Swiss army knife of Chemistry!"

-David J.

We're on the Web!

View every issue on:

<http://chemistry.csulb.edu/thebeaker.html>

Beaker CONTEST!!

Hey there faithful readers! We are currently searching for a new illustrated logo that is a representation of this newsletter and the Chem/Biochem Department.

Send us your name and design. The winning illustration will be posted in the next issue, so give it your all.

All Submissions are **Due April 24th, 2011.**

Want to join our staff?

Send us your name, school year, major, small bio, and why you would like to join our staff.

We are currently looking for...

- 1. A comic strip artist*
- 2. A writer/Interviewer*
- 3. Newsletter formatter*

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