

CHEMISTRY & BIOCHEMISTRY

CALIFORNIA STATE UNIVERSITY LONG BEACH • FALL 2014

MEZYK
RECEIVES
TOP FACULTY
AWARD

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Also, department faculty continued their successful acquisition of external research grants. Dr. Xianhui Bu received a \$380,000 NSF-DMR research grant seeking to introduce new synthetic concepts and methods that can be employed to create homochiral porous materials as catalysts and adsorbents for

Dr. Stephen Mezyk was named CSULB's 2014 Outstanding Professor in recognition of his excellence in teaching, research and professional activity.

A native of Australia, Mezyk received his B.S. and Ph.D. degrees from the University of Melbourne. After postdoctoral work at the Universities of Calgary, Notre Dame and Saskatchewan, and research positions at Atomic Energy of Canada and the University of North Carolina at Wilmington, he joined the CSULB faculty in 2001.

Mezyk, who teaches both physical chemistry and general chemistry, is one of the most popular and effective professors on campus.

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THE FACULTY MEMBER AN ARIEL EL ES INTO CELLS

Cells are a marvel of nature as the building blocks of living organisms.

Eukaryotic cells have a variety of membrane-enclosed internal structures that play important roles in cell function and are of great interest to Dr. Deepali Bhandari, the Department of Chemistry and Biochemistry's newest faculty member, who joined CSULB this fall.

The cell biology course she took as a first-year graduate student at Loyola University Chicago ignited her fascination about the basic building block of life. She learned how simple biochemical assays could answer scientific questions piece by piece and, when put together, how these pieces could unravel the molecular intricacies of complex biological processes.

During her Ph.D. and postdoctoral training

Dr. Roger Acey

It was a very interesting year for the group. We have two major projects. One involves a novel metal binding protein (MT) we hope to develop into a "heavy metal sponge" for environmental cleanup applications. The other involves butyrylcholinesterase. Using umbilical cord stem cells, we have shown that the activity of the enzyme is expressed during a very narrow period of neuron development.

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Dr. Ken Nakayama

Our ongoing work with Dr. Roger Acey's group on the cholinesterases has developed into additional collaborative efforts with Dr. Jason Schw

A CSU LEADER IN RESEARCH PROJECTS

Peer-reviewed journal articles from CSU chemistry and biochemistry departments (based on Web of Science™, June 2014).

Dr. Xianhui Bu

Zhao, X., C. Mao, X. Bu, and P. Feng. 2014.

Direct observation of two types of proton
conduction tunnels co-existing in a new

porous indium-[Zr_2O_7]-based MOF-5 derivative

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Otto, S.C., S.P. Mezyk, and K.D. Zimmerman. Complete beta-lactam antibiotic removal from wastewaters: hydroxyl radical mediated oxidation efficiencies. (Accepted for publication). Destroying pharmaceuticals in wastewater with a minimum use of energy.

S. Ahuja,

Ed., Elsevier Press, 2014.

McKay, G., and S.P. Mezyk. 2014. Using polyethylene glycols to understand the temperature dependence of the dissolved organic matter-HO• reaction. Accepted to the American Chemical Society Symposium Series.

Glover, C.M., S.P. Mezyk, K.G. Linden, and F.L. Rosario-Ortiz. 2014. Photochemical degradation of Corexit components in ocean water. Accepted to

Dr. Vasanthi Narayanaswami

Kim, S. H., S. Kothari, A.B. Patel, J.K. Bielicki, and

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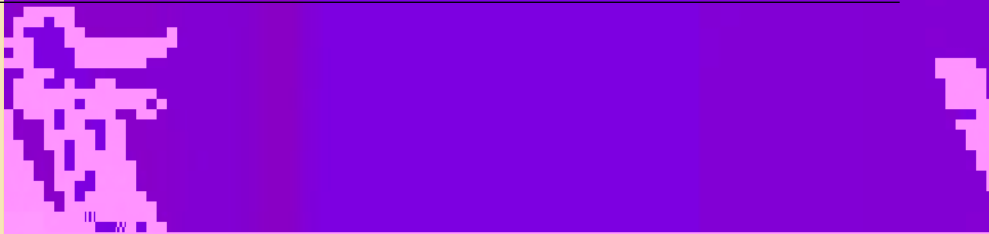


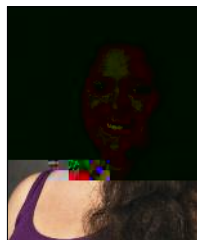
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Roy Hernandez, a graduate student of bio-chemistry conducting research in Dr. eari

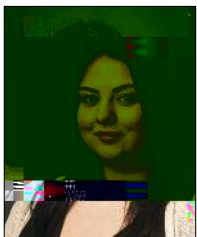
Robert B. Henderson Award
Dr. Robert





Louis M. Perlgut Scholarship

Dr. Louis M. Perlgut, professor of biochemistry in the department from 1965-82, taught the biochemistry courses for both science majors and nursing students, and supervised both undergraduate and graduate research. He was instrumental in launching the M.S. biochemistry program. This scholarship defrays the tuition expenses of a graduate student in biochemistry. This year, a \$1,000 scholarship was presented to Alexandra Donovan.



Maria Erlinda Co Sarno Scholarship in Chemistry

After a highly successful career as a chemist at Baxter Healthcare, Maria Erlinda Co Sarno (M.S., chemistry, 1975) became a U.S. patent attorney serving small businesses and independent inventors. The award, which was presented this year to Sahar Roshandel, is meant to recognize and inspire an international graduate student with research interests in compounds leading to therapeutics or prevention of disease.



John H. Stern Award in Physical Chemistry

Dr. John H. Stern, a distinguished teacher of physical and general chemistry in our department from 1957-87, was internationally known for his work in solution thermodynamics and author of many publications in that field. Kaylee Smith received this year's award.



Leslie K. Wynston Scholarship

Dr. Leslie K. Wynston was a biochemistry professor in the department (1965-98), who served as chair of the Pre-Professions Health Advisory Committee and was active in the Association of Advisors for the Health Professions. The \$1,500 award recognizes an outstanding junior who is pursuing a B.S. in biochemistry and planning to enter a health-related professional school the following year. The 2014 recipient is Tania Chandiluhur.

Contributions to Student Award Funds Are Welcome

The department welcomes contributions to support these awards. When you make your donation to the department, you may specify that it go to the Student Award Funds, SVU2% n*. SC% k 4#ZwD1

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