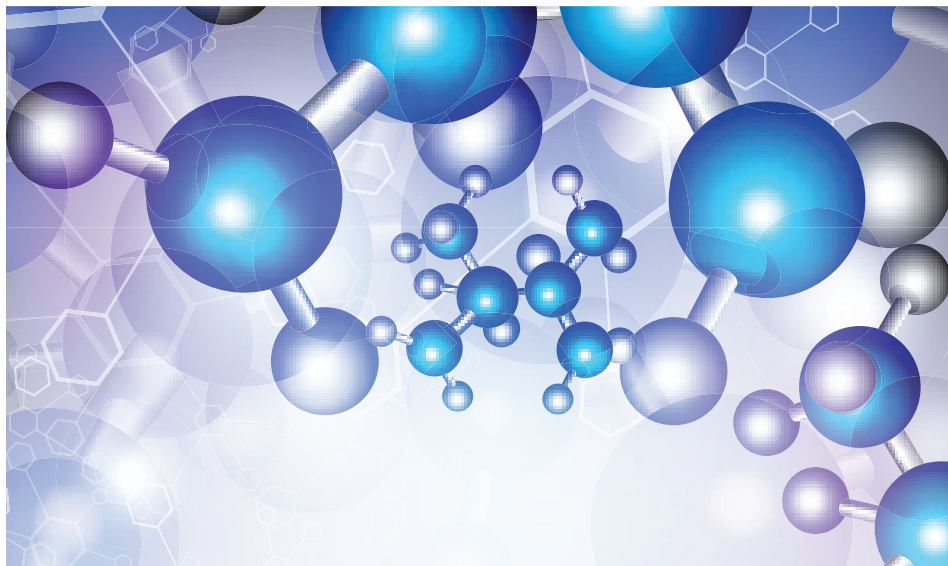


TRANSCENDING SPACE AND TIME: USING VISUALIZATIONS TO EXPLAIN CHEMICAL PROCESSES FROM THE MOLECULAR TO THE MACROSCOPIC

A NATURAL SCIENCES SEMINAR BY DR. BARBARA GONZALEZ, PROFESSOR, DEPT OF CHEMISTRY & BIOCHEMISTRY, CAL STATE FULLERTON.



NATURAL SCIENCES SEMINAR SERIES UPCOMING SEMINARS

2016

MARCH 8

DR. JOEL ABRAHAM, BIOLOGY, CSUF

APRIL 5 (REVISED DATE)

DR. ADRIAN BORSA, GEOPHYSICS, SCRIPPS
INSTITUTION OF OCEANOGRAPHY

MAY 10

DR. DAWN PERSON, SCIENCE EDUCATION,
CSUF

ENGAGE IN **stem**

ABOUT ENGAGE IN STEM

Engage in STEM is a 5-year grant to increase the awareness, retention, and success of students in STEM fields and majors. See <http://engageinstemfc.com> for more information on how to participate in this project.

ABOUT THE NATURAL SCIENCES DIVISION

The Division of Natural Sciences encourages academic growth through a variety of academic and experiential opportunities, including boot camps, workshops, undergraduate research, and field studies. Our mission is to be the science program of choice for high school and college students in Southern California. We prepare successful science learners!



DESCRIPTION OF EVENT

Chemistry education research provides answers to fundamental questions about teaching and learning chemistry that can lead to improved pedagogy, curriculum, and instructions that promotes the scientific chemical literacy of our nation. Dr. Gonzalez will present results from her investigations of the impact of visualization on conceptual understanding in chemistry, especially as it may apply to scientists and educators communicating research and scientific information. Students who attend the seminar may also attend the **Meet-the-Speaker Pizza Mixer** from 5:30-7:00pm sponsored by the ENGAGE in STEM Program. For more information, contact Sean Chamberlin.

EVENT DETAILS

WHEN: 4:30-5:30 pm, Tuesday, February 9, 2016.

WHERE: Room 410, Natural Sciences Building, Fullerton College.



ABOUT DR. GONZALEZ

Dr. Barbara Gonzalez earned B.S. Chemistry and M.S.Ed. degrees from USC. She earned

a PhD in Chemical Education at UCLA. Her research focuses on how conceptual change, problem solving, visualization and transformation of particulate to macroscopic representations affect learning chemistry, and includes the impact of technology on the development of mental models. Dr. Gonzalez is an NSF CAREER Awardee.