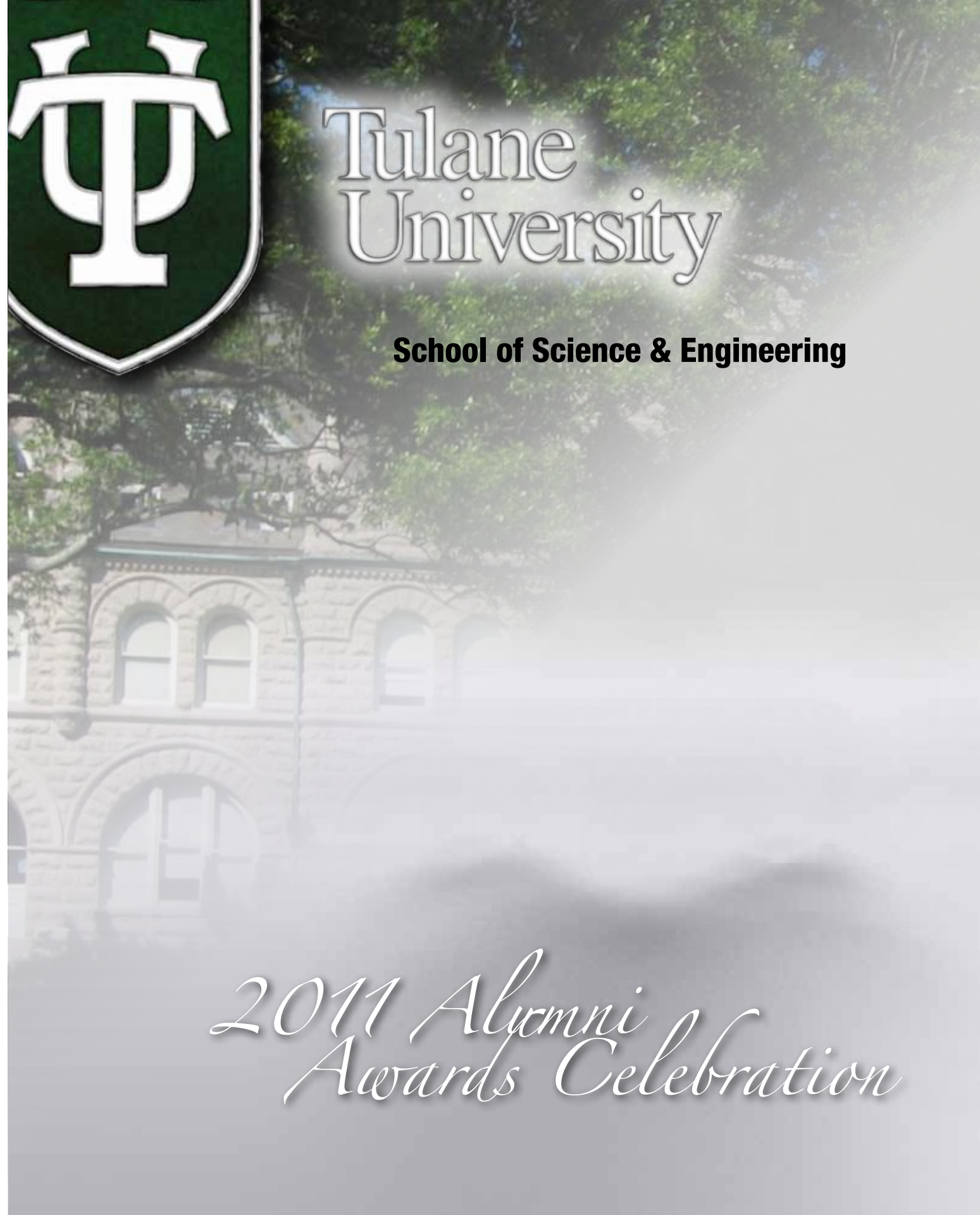




Tulane  
University

**School of Science & Engineering**



*2011 Alumni  
Awards Celebration*



Tulane University School of Science and Engineering  
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## Hadley Sikes

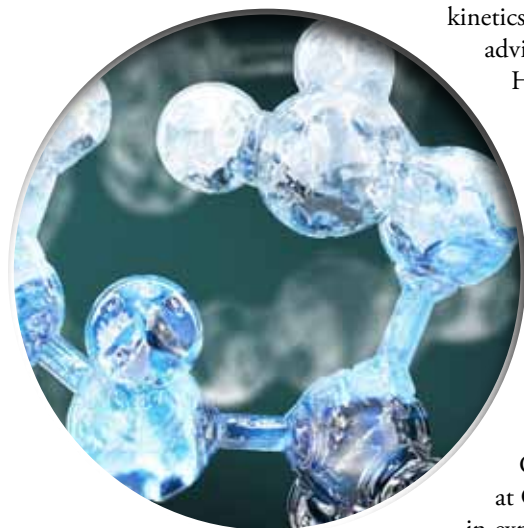
School of Science and Engineering  
Outstanding Young Alumna



Hadley D. Sikes is an assistant professor of chemical engineering at the Massachusetts Institute of Technology and is honored to hold the Joseph R. Mares endowed chair. She leads a team of postdoctoral, graduate and undergraduate researchers in the application of physical principles to design, synthesize, characterize and test biological molecules with the goal of identifying and understanding those that serve pressing societal needs. She teaches a senior design subject that is part of the undergraduate core curriculum as well as a graduate core subject, chemical kinetics and reactor engineering, and particularly enjoys her role as academic advisor to chemical engineering sophomores.

Hadley graduated from the H. Sophie Newcomb Memorial College of Tulane University in 1997 with a B.S. in chemistry, summa cum laude. The classroom instruction in physical and analytical chemistry provided by Professors Mel Levy, Brent Koplitz, Mark Sulkes and Russell Schmehl and the invaluable experience of serving as a research assistant in Professor Daniel Schwartz's laboratory for several years were the highlights of her undergraduate education and served as excellent preparation for graduate studies at Stanford University (Ph.D, Physical Chemistry, 2003, supervised by Professor Christopher Chidsey). Following this formal degree work, a desire to explore engineering and applied research led to two postdoctoral positions: one in Professor Christopher Bowman's research group at the University of Colorado, Boulder, and one in Professor Frances Arnold's research group at Caltech. None of the above mentioned research groups share any overlap in expertise; as a result of time spent in each laboratory, Hadley is an expert in nanoscale surface structures, electron transfer kinetics, polymer reaction engineering, and the directed evolution of redox enzymes.

Hadley is the author of peer-reviewed articles that have been published in Science, Nature Materials, and several ACS journals. She has been granted US and international patents, one of which has been licensed and translated into a commercial product. She is a former Goldwater Scholar, NSF Graduate Fellow, NIH Postdoctoral Fellow and was awarded a Burroughs Wellcome Fund Career Award at the Scientific Interface.



## Tulane University School of Science and Engineering 2011 Alumni Awards Celebration

Lavin-Bernick Center for University Life  
1834 Club  
April 7, 2011

### Welcome

Nicholas J. Altiero  
*Dean, School of Science and Engineering*

### Remarks

Yvette Jones  
*Executive Vice-President for University Relations & Development*

### Remarks

Nicholas J. Altiero  
*Dean, School of Science and Engineering*

### Presentation of Alumni Awards

Shepard Perrin, III  
*Chemical Engineering '83*

### Outstanding Alumnus Award

*Miriam John, Chemical Engineering '72*

### Outstanding Service Alumnus Award

*James Orth, Mechanical Engineering '73*

### Outstanding Young Alumnus Award

*Hadley Sikes, Chemistry '97*



## Miriam John

School of Science and Engineering  
Outstanding Alumna



Mim is serving in various consulting and board roles since her retirement as Vice President of Sandia's California Laboratory in Livermore. During her Sandia career, she worked on a wide variety of programs, including nuclear weapons, chemical and biological defense, missile defense, and solar energy, and provided leadership for a number of the laboratory's energy and national security programs. She is a member of the DoD's Defense Science Board and Threat Reduction Advisory Committee. She is also Chair of the National Research Council's Naval Studies Board and serves on the Academies Beckman Center Advisory Board. She is a member of the Board of Directors of the National Institute for Hometown Security. She is a past member of the Air Force Scientific Advisory Board, the Board on Army Science and Technology, and DOE's National Commission on Science and Security. She was appointed a National Associate of the National Academies of Science and Engineering.

She is a chair of the California Council on Science and Technology. She is a member of the Dean's advisory board for the School of Science and Engineering and chairs the Advisory Board for the Department of Chemical and Biomolecular Engineering at Tulane University. She is a member of the Advisory Board for MIT Lincoln Laboratory and the Board of Directors for Draper Laboratory. She is a member of the Board of Directors of SAIC and the Strategic Advisory Board for RedX Defense Systems. She has been recruited to consult for Sandia, Los Alamos, and Lawrence Livermore National Laboratories, and efforts evaluating the Domestic Nuclear Detection Office of DHS.



## James Orth

School of Science and Engineering  
Outstanding Service Alumnus



Mr. Orth has a long history with Tulane University, since his mother, himself, and his daughter graduated from the University. In 1973, he graduated from Tulane University with a Bachelor of Science degree in Mechanical Engineering. After graduating Mr. Orth accepted a position with Texaco as Operations Engineer. In 1977, he joined Brock Exploration Corporation to become the Canadian Operations Manager. He held this position until 1981 when he began what would be a long-time career with the Louisiana Land and Exploration Company (LL&E). Headquartered in New Orleans, LL&E operated a crude oil refinery near Mobile, Alabama, and conducted exploration and production operations in the United States and select foreign countries. Mr. Orth was instrumental in developing production in the North Sea and world-wide.

He began his tenure at LL&E in various engineering and finance positions before becoming Engineering Manager of the company's Europe, Africa, and Middle East Division in London, England. Mr. Orth was then promoted to Vice-President of the Rocky Mountain Division in Denver, Colorado, where he was instrumental in the development of Wyoming's Madden Field, one of the largest natural gas fields in the continental U.S. In 1996, he became Vice-President of World Wide Operations and Production.

Following the 1998 merger of LL&E and Burlington Resources, Mr. Orth co-founded Energy Partners Ltd., a privately-held, New Orleans-based oil and gas company. In 2001, the company was taken public via an initial public offering (IPO) on the New York Stock Exchange. A year after the IPO of Energy Partners, Jim and Tulane Alum Luis Banos co-founded ORX Resources, Inc. ORX is a leading technology driven sub-salt exploration company headquartered in and committed to New Orleans. Jim serves as Director, President, and Chief Operating Officer of this privately held company.

Mr. Orth has always been active in the Tulane and New Orleans community. Jim is the President Elect of the School of Science and Engineering Board of Advisors and a member of the Board of the Tulane Engineering Forum. His daughter graduated Cum Laude from the first "official" graduating class of the School of Science and Engineering with a degree in Ecology and Evolutionary Biology. Jim is a multi-generational New Orleanian with ancestry dating to the eighteenth century Spanish colonial period. He and his company are active supporters of local civic endeavors including Audubon Institute and the Parks and Parkways Commission. ORX is also a major sponsor of the annual Tulane Engineering Forum.

