



Mechanical and Aeronautical Engineering Department  
University of California Davis  
Davis, California 95616-5294  
mae.ucdavis.edu/SpaceED

## 2002-2003 Monthly Seminar Series on Space Research

3<sup>rd</sup> Thursday 4:10-5:00 p.m., refreshments will be provided at 4:00 p.m.

### ***ADVANCED ROCKET PROPULSION AT ORBITEC***

***Dr. Eric E. Rice***

President and CEO, ORBITAL TECHNOLOGIES CORPORATION (ORBITEC™)  
Madison, WI 53717

Date: **Thursday November 21, 2002**

Time: **4:00-5:00 pm**

Location: **1065 Engineering II**

#### ABSTRACT

This seminar is about the innovative advanced rocket propulsion developments at Orbital Technologies Corporation (ORBITEC). Dr. Rice's talk will involve a general corporate overview of the wide range of ORBITEC activities, and then focus on advanced rocket propulsion developments underway at the Madison, WI Corporation. Several unique and revolutionary chemical rocket propulsion technologies will be reviewed, including vortex-injected hybrids, cryogenic solid hybrids, gas premix engines, and the revolutionary vortex cold-wall engines. Applications of these technologies in vehicles that would provide low-cost access to space are highlighted. Possible future propulsion technologies will be identified.

#### ABOUT THE SPEAKER

Dr. Eric Rice is President, CEO and Chairman of Orbital Technologies Corporation (ORBITEC), Madison, Wisconsin. ORBITEC is a growing aerospace company and was recently awarded the largest Phase III SBIR contract in NASA history. Through his leadership and initiative, ORBITEC has become one of NASA's leading Small Business Innovation Research Contractors. Dr. Rice has been a leader and innovator in advanced propulsion and propellants, as well as in microgravity processing and in-situ space resource utilization. Dr. Rice is an AIAA and NIAC Fellow. He has initiated the formation of the new AIAA Space Colonization Technical Committee (TC). He had chaired the AIAA Space Transportation and Space Processing TC's and been a member of the AIAA Space Systems and Nuclear and Future Flight TC's. He has a PhD degree in Aeronautical and Astronautical Engineering from The Ohio State University, Columbus, OH.

***For more information about SpaceED program or the seminars please contact  
Professor Nesrin Sarigul-Klijn at (530)-752-0682 or [nsarigulklijn@ucdavis.edu](mailto:nsarigulklijn@ucdavis.edu)***

Members of the campus community and visitors from the region are welcome to attend the seminar series. Sign-in is required at the event. SpaceED seminar will replace MAE297 seminar on 3<sup>rd</sup> Thursdays.

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