



Mechanical and Aeronautical Engineering Department  
University of California Davis  
Davis, California 95616-5294  
[http://mae.ucdavis.edu/general/news/n\\_news07.htm](http://mae.ucdavis.edu/general/news/n_news07.htm)

## 2004-2005 Monthly Seminar Series on Space Research

21 October, 18 November, 20 January, 17 February, 21 April, 19 May  
3<sup>rd</sup> Thursday 4:00-5:00 pm

### ***Assuring Mission Success in Space Propulsion***

***Bill Kearney and Sam Wiley***

*Aerojet*

Date: 18 November 2004 Thursday Time: 4:10-5:00 pm

Location: 1062 Bainer

Refreshments will be provided at 4:00 p.m.

#### **ABSTRACT**

Aerojet is a world-class provider of rocket propulsion systems for space and defense applications. In the space market, Aerojet propulsion systems are utilized on the Titan, Delta, and Atlas launch vehicles and provide in-space-maneuvering capability for many of NASA's exploration spacecraft. Two engineers working on propulsion systems from both the launch vehicle and spacecraft perspectives review recent endeavors in the design, development, and flight of these systems. Wide arrays of engineering skills contribute to the achievements realized on these programs with mission success being the paramount objective behind our efforts.

#### **ABOUT THE SPEAKERS**

**Bill Kearney** is currently the director of Atlas V engineering at Aerojet. Bill began his engineering career in propulsion materials, structures and component technology. He worked with Aerojet as the nozzle design manager on the NASA Space Shuttle Advanced Solid Rocket Motor and was recently the director of the mechanical engineering organization. Bill also worked with Pratt & Whitney for 14 years where he was the chief engineer for the two solid rocket motors of the IUS orbit transfer vehicle used for NASA's Magellan, Galileo and Chandra x-ray telescope missions. He also contributed to many missile and missile defense technology, development and production programs. He is an Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA) and the recent chairman of the AIAA Solid Rocket Technical Committee.

**Sam Wiley** is the chief engineer for spacecraft propulsion systems at Aerojet. For the past ten years, Sam has been responsible for Aerojet's spacecraft propulsion systems that have been used to explore the universe. These include the NEAR spacecraft sent to observe the near earth asteroid Eros and the MESSENGER spacecraft just launched and on its way to orbit the planet Mercury. He has also contributed to numerous studies for spacecraft missions to the Moon and the planets Mars, Jupiter and Pluto. He is currently working on the propulsion system for the spacecraft that will rendezvous, dock, repair and de-orbit the Hubble space telescope.

#### ***For more information about***

***SpaceED (Space Engineering Research and Graduate 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.

SpaceED seminars are supported in part by



*Space Systems Company*