Mechanical and Aeronautical Engineering Department
University of California Davis
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http://mae.ucdavis.edu/research/spaceEd/

2008-2009 Monthly Seminar Series on Space Research

16 October, 20 November, 15 January, 19 February, 16 April, 21 May
3rd Thursday 4:00-5:00 pm

LAUNCH VEHICLE PROPULSION ENGINEERING FOR MISSION SUCCESS

Bill Kearney
Aerojet, Sacramento

Date: **16 Oct. 2008 Thursday** Time: **4:10-5:00 pm** (*Refreshments will be provided at 4:00 pm)* Location: **1062 Bainer**

ABSTRACT

Hosted by: Professor Nesrin Sarigul-Klijn

Aerojet is a world class provider of rocket propulsion systems for space and defense markets. In the area of space launch, Aerojet propulsion systems fly on Delta, Atlas and the Space Shuttle and provide in-space-maneuvering for most of NASA's exploration spacecraft. New products are continuously being developed for the next generation of NASA launch and space exploration vehicles. Strong teams with an array of engineering skills and disciplines contribute to the achievements of these programs with mission success being the paramount objective behind all our efforts.

Aerojet's engineering process focuses on identifying and addressing problems and risks early and throughout the product life-cycle. From requirements and concept definition through the design, development and production phases, potential failures are identified, analyzed and mitigated for component designs, propulsion system performance, component fabrication and assembly operations and vehicle integration and launch readiness processes. When critical problems, failures, anomalies, and/or out-of-family conditions are discovered they are analyzed for understanding and determination of direct and root cause to effectively implement corrective and pre-emptive actions for future opportunities.

ABOUT THE SPEAKER

Bill is Aerojet's director of chief and project engineers for strategic and space booster programs. Bill began his career with Pratt & Whitney developing advanced materials and component technologies for solid rocket nozzle and thrust vector control systems. Subsequently serving at Pratt & Whitney as chief engineer for the production of IUS orbit transfer rocket motors used on NASA and DoD missions and was also the director of new business development. He has served in various capacities with Aerojet including the nozzle design lead for NASA's space shuttle advanced solid rocket motor, engineering director for Atlas V solid rocket motors and director of mechanical engineering. He is an associate fellow of the American Institute of Aeronautics and Astronautics (AIAA), a recent chair of the AIAA solid rocket technical committee and the 2006 AIAA Joint Propulsion Conference technical chair.

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

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 3rd Thursdays.

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