STANFORD – September, 2008 - Sun Microsystems, Inc., has selected the Stanford Center for Computational Earth and Environmental Science - CEES, at Stanford University, as a Sun Microsystems OpenSPARC Centre of Excellence. Stanford will join an elite group of universities in the U.S., which are now official OpenSPARC Technology Centers of Excellence.

CEES, a Sun COE, aims to investigate the multi-core, chip multi-threading nature of the UltraSPARC T2 and UltraSPARC T2+ architectures for petroleum related applications. The research will address two different classes of computationally demanding applications: Seismic imaging and flow in porous media. The overall period for this investigation will be three years.

“Multicore and thread rich architectures are clearly the leading direction for computer hardware evolution. This collaborative partnership with Sun will bring CEES resources and opportunities for collaboration to pursue novel solutions requiring massive parallel implementations,” says Jerry M. Harris, director of CEES and Professor in the Geophysics Department.

Sun is leading the technology trends through chip multi-threaded architectures, which are highly energy efficient and high-performance. According to Sridhar Vajapey, Vice President of Sun Microsystems Technology, Validation and Test Department, “the task at hand is to research how highly compute intensive seismic applications can take advantage of highly multi-threaded architectures to do computing much more efficiently. Predictions are that the data size and compute requirements for the seismic applications are expected to grow much faster than the improvements provided by traditional architectures. So our efforts are to see how we can provide more efficient "green" compute solutions as against just adding more and more compute horsepower”.

About CEES

The Stanford Center for Computational Earth and Environmental Science - CEES (http://cees.Stanford.edu) is a research partnership created by the School of Earth Sciences and private industry. CEES’ goal is to expand capacity for new interdisciplinary Earth science research, while enabling more discipline specific research. A complementary goal is to engage computer architects to design hardware and software systems that are better suited to Earth and environmental science problems.

About-Sun Microsystems’ OpenSPARC Program

In December 2005, Sun announced OpenSPARC T1 program and made it the first major processor design to be offered to the open source community. And since the launch of the OpenSPARC T1 processor in March 2006 and OpenSPARC T2 program in August 2007, the program has received much traction in universities and research communities worldwide. More details of the program can be found at www.opensparc.net.