



Lab announces Venture Acceleration Fund recipients

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Alamos, New Mexico, August 11, 2009 - Los Alamos National Laboratory has selected Adaptive Radio Technologies, Los Alamos Visualization Associates, Mesa Tech International Inc., and ThermaSun Inc. as recipients of awards from the Los Alamos National Security, LLC Venture Acceleration Fund. The Laboratory's Venture Acceleration Fund provides investments of up to \$100,000 to regional entrepreneurs, companies, investors, or strategic partners that use LANL technology or expertise to create or grow regional businesses. Evaluation criteria for the funding include regional impact, team composition, technical feasibility, market opportunity, and the availability of matching funds or in-kind contributions."The fund propels regional businesses by helping accelerate the commercialization process - moving Lab-based technology to market," said Steve Girrens, Technology Transfer Division leader. "The impact is already resonating throughout the Northern New Mexico business community in the form of attracting additional investment and creating jobs." Girrens added that since the fund was launched in fall 2006, Los Alamos National Security has made

awards totaling some \$1.25 million to 14 regional companies - most of which have licensed technology from LANL. One recipient, Adaptive Radio Technologies (ART), will use the funding to construct and test a radio communications system prototype, known as "Firehose," for use on miniature satellites or CubeSats. Firehose will apply an algorithm developed at LANL to enable advanced functions, such as imaging and video streaming, offering ten times more bandwidth than current CubeSat communication systems. ART President Michael Caffrey explained that the Venture Acceleration Fund is about more than just the funding. "The process of participating in the solicitation really sharpened our vision and planning and helped us fully appreciate that the business element is as important to success as the creative idea." A second recipient, Los Alamos Visualization Associates (LAVA), will use funding to develop a proof of concept for a Virtual Museum of New Mexico, in collaboration with the New Mexico Department of Cultural Affairs. The virtual museum will be based on a database framework and provide an online repository of collections from several state museums, including sample collections from the Maxwell Museum of Anthropology and the Institute of American Indian Arts. LAVA hopes to grow into a 3D virtualization company, enabling the use of 3D virtualization in art and cultural preservation markets. LAVA Chief Operations Officer Steve Smith said the "acceleration" emphasis of the VAF is very important. "By concentrating our efforts and helping us get an early lead in the technology, we expect to move ahead of the curve as museums and other holders of cultural and historical artifacts begin to adopt 'virtualization' as a viable strategy for their collections, exhibitions, and analysis requirements," he said. A third recipient, Mesa Tech International Inc. of Santa Fe, is developing a "DNA dipstick" to detect food pathogens. In contrast to today's laboratory culture methods, the dipstick will allow fast and accurate detection in a hand-held and battery-operated device. Developed at LANL, the technology is expected to detect multiple pathogens at once. Mesa Tech's research on food pathogen detection will compliment research already funded by the National Institutes of Health - for diagnosis of infections and genetic disease in humans - and the Citrus Research Board - for bacterial and viral infections of agricultural crops. According to Mesa Tech Chief Executive Officer John Elling, "The funding will allow Mesa Tech to explore new testing applications beyond the goals of the current grant and contract funding." The final recipient, ThermaSun Inc. of Taos, will continue development of a solar thermal heating prototype that uses heat transfer fluids presently unknown in the industry. The company's goal is to overcome current barriers in the solar thermal industry that create jobs in solar thermal installation and manufacturing while reducing greenhouse gas emissions associated with current solar thermal energy heating and cooling methods. According to ThermaSun President Larry Mapes, about 50 prototype units are already being used by Valverde Energy, ThermaSun's sister company, with results exceeding expectations. "The VAF kicks off commercialization of ThermaSun products and adds valuation to ThermaSun, making it much more attractive to the investment world, said Mapes." The LANS Venture Acceleration Fund is managed by Northern New Mexico Connect, which is administered by the Regional Development Corporation. The Laboratory's Technology Transfer Division and Community Programs Office jointly manage Northern New Mexico Connect activities through the Regional Development Corporation.