

Bi-National Sustainability Laboratory



Sandia National Laboratory and the BNSL Sign Memorandum of Understanding

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On December 15, 2006 Sandia National Laboratory and the Bi-National Sustainability Laboratory signed a Memorandum of Understanding (MOU) to formalize the partnership between the BNSL and Sandia. Dr. Paul Maxwell, CEO of the BNSL and Dr. Lenny Martinez, Vice President of Enterprise Transformation at Sandia signed

the MOU for their respective organizations.

Sandia Corporation, a Lockheed Martin company which manages Sandia for the U.S. Department of Energy's National Nuclear Security Administration and was a key stakeholder and champion for the creation of the BNSL. The BNSL is part of Sandia's efforts to create collaborative partnerships on emerging tech-

nologies that support their mission. As such BNSL is teaming with Sandia to commercialize technology developed by Sandia and affiliated researchers.

The two organizations are working together to establish projects that include Micro-Electro-Mechanical Systems (MEMS) packaging and manufacturing, advanced materials for petroleum processing, and environmental/water technologies, among others. The MOU provides the foundation on which the BNSL and Sandia can further their respective missions and focus on activities that will be of benefit to our border region.

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This teaming will help launch the commercialization of Sandia technology on the US-Mexico Border.

Advisory Board Formed

The Bi-National Sustainability Laboratory has formed a new bi-national Advisory Board. The Advisory Board consists of eighteen individuals who represent a wide spectrum of expertise in the business, government and public sectors, and bring a wealth of experience to the

border region.

The Advisory Board was formed to counsel the BNSL Executive Director and staff on matters of science and technology, as well as social and economic issues related to BNSL activities and programs. The Board is asked to be creative and to address

these issues with a broad-based approach and a firm understanding of the economic, social, and political realities of the border region.

The Advisory Board consists of **Mike Acosta** Director of the Border Office of the U.S.-Mexico Foundation for Science (FUMEC), **Ricardo Benavides**

Director of the Research and Development Center of Servicios Industriales Peñoles, S. A. de C. V., **Jose Canales** Professor El Paso Community College, **Russell R. Chianelli** Professor Department of Chemistry at the University of Texas

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“Building

Border

Businesses”

BNSL Awarded \$600,000 Federal Grant for Economic Development

The U.S. Department of Commerce's Economic Development Administration (EDA) awarded a \$600,000 federal grant to BNSL on March 20, 2007.

This two year grant will support the

continued development and expansion of technology-based businesses on the U.S.-Mexico Border.

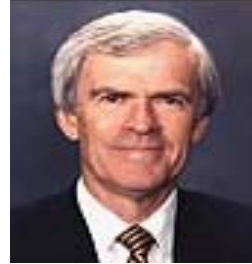
EDA has continually been a strong supporter of BNSL efforts. "We greatly appreciate the support of EDA in helping the

BNSL achieve its mission to act as an engine for sustained economic development in the U.S.-Mexico border region," said Paul Maxwell, Executive Director of the BNSL.



"Through this federal investment, the BNSL will be in an even better position to contribute to the future of the border region," said Reyes. "I applaud the Economic Development Administration for recognizing the lab's potential."

Congressman Silvestre Reyes (TX)



"The funding awarded today will help BNSL continue its efforts to promote economic development opportunities, bringing good jobs to southern New Mexico" Bingaman said.

Senator Jeff Bingaman (NM)

Advisory Board (cont.)



Standing Left to Right: Larry Peterson, Guillermo Fernández de la Garza, Gary J. Jones, Leopoldo Rodriguez, Paul Maxwell, Frank Hoy, Gil Cisneros. *Seated Left to Right:* Ernesto Vazquez Martinez, Mike Orshan, Jose Canales, Mike Acosta, Ron Munden

at EL Paso, **Gil Cisneros** President and CEO of the Chamber of the Americas, **Guillermo Fernández de la Garza** Executive Director of the U.S.-Mexico Foundation for Science, **Rogelio G. Garza** Director of the Facultad de Ingeniería Mecánica y Eléctrica at the Universidad Autónoma de Nuevo León, **Jesus Gonzalez** Director General of CIMAV, **Frank Hoy** Professor College of Business at the University of Texas El Paso, **Gary J. Jones** Manager of International Partnership Development at Sandia National Laboratories, **José**

President Mexico of CEMEX, **Leopoldo Rodríguez** Chairman of the Board of Governors of the U.S.-Mexico Foundation for Science, and **Jessica Turnley** President of Galisteo Consulting Group, Inc.

The Board is made up of individuals with a firm understanding of the economic, social, and political realities of the border region from which to address U.S. - Mexico border economic development issues.

Manuel Mascareñas Haas Executive Director of the Fundación Margarita Miranda de Mascareñas, A.C., **Ron Munden** Partner of EPV Group, **Miguel Angel Olín** Corporate Technology Director for Vitro Corporativo, **Mike Orshan** President of T2B, **Larry Peterson** Partner and Vice-President of Technology Tree, **Homero Ramírez** Quality Assurance Director and Technical Vice

News & Events

Partnering agreements signed:

- **Ibarra, Espino y Cia, S.C.**, a Mexican consulting company - March 15, 2007
- **Sandia National Labs** - December 15, 2006
- **MEMS Packaging Cluster** - November 30, 2006
- **International Business Accelerator** November 16, 2006

Upcoming Events:

- **Regional Business Roundtable: Capitalizing on the northern region's competitive advantages**, May 15-16 2007. Hermosillo, Sonora. Sponsored by the Economist Magazine. 212-554-0605 or americas_customerservice@economist.com
- **NAFTA Institute: Supplier Meet the Buyer Conference**, June 14 - 15, 2007. Santa Teresa New Mexico. Space is limited in this year's conference, so please contact 505-589-2200 or info@nmiba.com as quickly as possible if you are interested in attending.
- **COMS 2007**, September 2 - 6, 2007. Melbourne Australia. www.mancef-coms2007.org
- **National SBIR/STTR Fall Conference**, October 29 - November 1, 2007. Richardson TX. www.sbir texas.com
- **EDA Regional Symposia**, Various Dates between April 12th and September, 2007. <http://www.eda.gov/NewsEvents/>

BNSL holds first “Empower your Business” Seminar

The BNSL’s *Empower your Business* seminars provide an opportunity for the business, government and academic communities to come together to learn, network, partner, and develop innovative strategies for promoting a technology-based economy in the regions in which the BNSL operates. This is a series of bi-monthly luncheon forums hosted by BNSL where experts discuss innovative approaches, ideas and lessons for technology based economic development.

The first of these series, co-sponsored with UTEP’s Center for Hispanic Entrepreneurship (CEDARS), was held in March at the El Paso Club with keynote speaker, John Gale from Taligo LLC which is a consulting firm that supports Global 5,000 business development initiatives by connecting them with the Silicon Valley. Mr. John

Gales’ topic was “A Consultant’s View of Silicon Valley” and a copy of a white paper on *Equity Planning* was handed out to all attendees. Also, discussed were strategies for emerging technologies as well as Mr. Gales’ experiences in identification and screening of investment and business partner candidates.

This was a great opportunity for regional businesses to take advantage of Mr. Gales’ 25 years of experience in the development and advancement of high tech businesses, as well as investigating the potential of



working with Silicon Valley. There were approximately

26 attendees from different entities from El Paso and vicinity.

“The presence of a technology business venture expert such as John Gale in our region is an invaluable resource for both, the investors and business people who participated in his formal presentation and the students who were exposed to the strategies, problems, and issues in the information industry. Cooperation between BNSL and CEDARS and the support received from all BNSL personnel to make these events a success proves once more the need for close cooperation between both entities to press forward business growth in particular and economic development in general within our region.” *Dr. Santiago Ibarreche CEDARS Director*

Laser Text Display Incubates at BNSL



Laser Text Display (LTD), LLC is a New Mexico start-up company that has developed a unique projecting apparatus utilizing Sandia National Lab’s Vertical Cavity Surface Emitting (VCSEL) laser technology to display information in textual form. LTD’s mission is to offer visual information dissemination solutions based on laser technology at low cost, high reliability, and optimal utilization of available space.

The BNSL has been assisting LTD since February 2006, when the inventor and now President of LTD, Russ Burgess, approached the BNSL at an Invention 2 Venture Seminar. Since then, BNSL has provided intellectual property consulting, assisted with the drafting and filing of the patent application, the application

process to become a New Mexico Limited Liability Company, the development, design, and content of LTD’s marketing collateral, and provided space within the BNSL business incubator.

“I am very pleased with my experience with the Bi-National Sustainability Laboratory! I have found the staff to be very knowledgeable in the various directions that I could have taken my intellectual property. The route for success was mapped out by the staff of BNSL, their assistance and vision for my company was critical to bringing an idea to fruition,” said Russ. LTD began incubating at the BNSL in September 2006.

Currently, the BNSL, in conjunction with the Small Business Development Center (SBDC) and students from UTEP’s “Entrepreneurship for Scientists and Engineers” class are helping LTD develop its business plan. Preliminary efforts are focused on performing a Market Study for

specific applications of the technology. In addition, the BNSL is researching funding opportunities for LTD via the SBIR/STTR Program and through Sandia National Lab’s Small Business Assistance Program.

Laser Text Display still has a long road ahead for technology development and obtaining funding, but the BNSL is committed to assisting LTD achieve its business goals, so that LTD can become a thriving company on the U.S.-Mexico border. “The BNSL has my endorsement and unflinching belief that Laser Text Display’s success is assured with the continuing guidance that is necessary for a high technology start-up,” affirms Russ Burgess.

More information on Laser Text Display can be found at www.lasertextdisplay.com.

Board of Directors

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Dinformatica21

Al Zapanta - Vice President

President & CEO
U.S.-Mexico Chamber of Commerce

Lucinda Vargas - Treasurer/Secretary

CEO
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Advanced Project Group
Sandia National Laboratories

Antonio R. Zárate Negron

Director General Ejecutivo
Programa Monterrey Ciudad Internacional del Conocimiento de Nuevo León

A Message from the Executive Director

Social Entrepreneurialism and the BNSL

Wikipedia defines social entrepreneurialism as: "The use of entrepreneurial principles to organize, create, and manage a venture to make social change... social entrepreneurs assess their success in terms of the impact they have on society and often work through nonprofits and citizen groups." Examples of social entrepreneurialism go back many decades, including such figures as Florence Nightingale, founder of modern nursing and John Muir, founder of the National Park Service and the Sierra Club. Last year's 2006 Nobel Prize for Economics went to Bangladeshi economist, Muhammad Yunus for creation of "microcredit" and "microloans" for individual businesses leading to new economic development strategies utilizing the energy and skills of individuals overlooked by standard banks and loan institutions.

The BNSL is perhaps best described by its mantra, "Creating Border Businesses," where we look to harness advanced and emerging technologies to promote economic development in the border region. While the creation of individual businesses will certainly generate concentrated wealth for individuals and specific companies created or expanded, the social impact goes well beyond the individuals or their company. Wealth generating opportunities in the border region have secondary and tertiary impacts that surpass a single company or set of individuals. "Trickle down" economics provides a positive stream of new jobs and business opportunities that extends well into any community.

As such, the BNSL promotes at least two broad social impacts through its activities. One is the impact on illegal immigration. As noted in the recent meetings between Presidents Bush and Calderon, jobs in Mexico are of prime importance to help stem the tide of Mexican workers surging northward—a surge based more on survival than a desire to relocate in the U.S. New jobs providing livable wages for Mexican workers can only be mitigated by the creation of new wealth generating opportunities in Mexico, especially in the border region. A second major impact is the creation of technology-based businesses that will employ the new, young engineers and scientists being educated and trained in our border institutions of higher education. For example, the University of Texas at El Paso graduates the largest number of Hispanic engineers and scientists in the United States, yet despite the investment of hundreds of millions of dollars by institutions, such as UTEP, these highly skilled men and women often leave the border region for jobs that can use their talents and advance their careers. The BNSL hopes to stem this regional "brain drain" as new businesses and economic developments are created through its activities.

"Social ends through innovation and entrepreneurialism - a new mantra for the BNSL?"

-Paul Maxwell



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