

 **TECH BRIEFS**
ENGINEERING SOLUTIONS FOR DESIGN & MANUFACTURING

NEWS BRIEFS

*Notes from Industry and
the Federal Laboratories*

Late last year, Semiconductor Laser International (SLI) of Binghamton, NY, acquired an exclusive license from Northwestern University Center for Quantum Devices to develop, manufacture, and market aluminum-free high-power semiconductor lasers worldwide. The patented technology, which is said to increase power levels dramatically, was developed by Prof. Manijeh Razeghi of Northwestern, who agreed to act as advisor to SLI in commercial implementation. With the new year, Dr. Geoffrey T. Burnham, SLI's president and CEO, announced that demand was so great that work would begin on a second phase of its manufacturing facility, substantially ahead of schedule, that would double its size. By February, the manufacturing facility's first phase, comprising 15,000 sq. ft. and a 4,000-sq.-ft. clean room, was in full production and order backlog had reached \$1.3 million.

The facility is equipped with the world's first molecular beam epitaxy crystal growth reactor incorporating the patented U.S. Air Force technology known as desorption mass spectrometry, a yield-increasing method for which SLI also has an exclusive license.

Most recently, the company acquired a second Northwestern license for technology developed by Prof. Razeghi: the buried-ridge laser device. Burnham noted the technology allowed for good electrical confinement, "which can be utilized in the digital storage industry, specifically the digital video disc or DVD, which holds eight times more data than a conventional CD."

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