



*OSA Press Release, November 4, 2002*

## **New Research Brings Scientists Closer to More Powerful Computers and Faster Internet with First-Ever Observation of Raman Light Emission from Silicon Light Wires**

*“Raman Emission Identified in Silicon Optical Wires; Results Could Revolutionize Chip and Internet Technologies.”*

*“Research published today in Optics Express a journal of the Optical Society of America (OSA), puts scientists one step closer to generating and*

*amplifying light in silicon, a process that was at one time considered impossible because of its atomic structure. “*

*“By utilizing an approach that differs from other current investigations, scientists at the University of California, Los Angeles (UCLA) were able to exploit the naturally occurring vibrations in silicon to produce light. “*

*“The UCLA research group, led by Professor Bahram Jalali, devised a new technique for evaluating the light-emitting properties of silicon. While similar research explores the introduction of impurities in silicon for optical purposes, Jalali took his team in another direction.”*