Los Alamos National Laboratory technologies capture prestigious R&D 100 awards

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LOS ALAMOS, New Mexico, July 3, 2008—Cutting-edge innovations garnered Los Alamos National Laboratory researchers two of *R&D Magazine's* prestigious R&D 100 Awards. The awards, which will be presented October 16 in Chicago, recognize the top 100 industrial innovations worldwide in 2008. Winning Laboratory projects are the 3-D Tracking Microscope and Laser-Weave technology.

"Congratulations to our R&D 100 award-winners for this acknowledgement of scientific excellence," said Laboratory Director Michael Anastasio. "The awards demonstrate that the Laboratory continues at the forefront of developing innovative concepts and translating them into practical applications."

This year's awards bring Los Alamos's total to 107 since the Laboratory began entering the competition in 1978.3-D Tracking Microscope Los Alamos researchers have

developed the 3-D tracking microscope, the only confocal microscope capable of following the motion of nanometer sized objects, such as quantum dots, organic fluorophores, single green fluorescent proteins, as they move through 3-dimensional space at rates faster than many intracellular transport processes. The 3-D tracking microscope was developed by Jim Werner of the Laboratory's Center for Integrated Nanotechnologies.Laser-WeaveThe Laser-Weave process uses innovative technology to synthesize inorganic fibers. Laser-Weave is able to grow high-strength inorganic fibers into useful shapes and complex patterns, braid or weave strong cables, cloth, or composites with lasers, produce new high-value, cost-effective refractory ropes and textiles, and prototype novel high-aspect ratio microelectrical mechanical systems. Laser-Weave was developed by Jim Maxwell of the Lab's Applied Electromagnetics group.

The R&D 100 Awards program honors significant commercial potential in products, materials, or processes developed by the research and development community worldwide. *R&D Magazine* uses technical experts to judge the submissions.

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