

The Nanotechnology Report 2004 Features New Investment Strategies, Patent Licensing Opportunities and Trends

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[Nanotechnology](#), the manipulation and control of matter at the molecular level, has widely been recognized as critical for the future of economic and regional competitiveness, job creation, and technological superiority. In The Nanotech Report 2004, Lux Research Inc demonstrate how Nanotechnology affects every existing industry, from Chemicals, Textiles/Apparel, Computing and Storage, to Transportation, Energy, Power, Healthcare and Homeland Security. The report illustrates how senior executives and investors can exploit the prevailing trends to maintain a competitive advantage.

Key findings in TNR2004 include:

Governments, corporations and venture capitalists will spend more than \$8.6 billion worldwide on nanotechnology research and development in 2004.

National and local governments across the world will invest more than \$4.6 billion in nanotechnology R&D in 2004.

The U.S. government will spend nearly twice as much on nanotechnology this year as it did on the Human Genome Project (HGP) in its peak year. In 2005, the National Nanotechnology Initiative will surpass the HGP on a cumulative basis. The U.S. has now appropriated more than \$3.16 billion to fund nanotechnology R&D since 2000 and is proposing \$982 million in new funding for FY 2005.

Established corporations will spend more than \$3.8 billion globally on nanotechnology R&D in 2004.

Key Findings

- Governments, corporations, and venture capitalists will spend more than \$8.6 billion worldwide on nanotechnology research and development (R&D) in 2004.
- National and local governments across the world will invest more than \$4.6 billion in nanotechnology R&D in 2004.

- Approximately 35% (\$1.6 billion) in North America
- 35% (\$1.6 billion) in Asia
- 28% (\$1.3 billion) in Europe
- 2% (\$133 million) in the rest of the world

Lux Research expects 2004 will be the last year that governments outspend corporations on nanotechnology, as activity shifts from basic research to applications development.

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- Established corporations will spend more than \$3.8 billion globally on nanotechnology R&D in 2004.

- Approximately 46% (\$1.7 billion) by North American companies
- 36% (\$1.4 billion) by Asian companies
- 17% (\$650 million) by European companies
- Less than 1% (\$40 million) by companies in the rest of the world

- There is no bubble in nanotech venture capital funding, despite

widespread reports to the contrary.

Venture capital (VC) firms invested just \$79 million into nanotechnology companies in the first half of 2004, down from \$325 million in 2003 and \$386 million in 2002.

This decline reflects a global deflation in VC funding, with nanotech's share of overall venture capital remaining relatively constant

throughout this period at approximately 1.6%. Based on current fundraising activity, we expect VC investment to total approximately \$200 million in 2004.

- Approximately 1,500 total companies worldwide have announced nanotechnology R&D plans.

Eighty percent of them—approximately 1,200—are startups, 670 of which are in the United States. As these startups develop over the next year, Lux Research predicts a sharp rise in both corporate mergers and acquisitions (M&A) transactions and business failures.

- Media coverage of nanotechnology—both positive and negative—is increasingly exponentially.

Mentions of the word “nanotechnology” in the popular press rose from 190 in 1995 to 7,316 in 2003;

Lux Research predicts more than 12,000 mentions in 2004.

Corporate Activity

- 63% of the 30 companies comprising the Dow Jones Industrial Average (Dow) are currently funding R&D in nanotechnology.

- 30% of the Dow components have announced nanotechnology partnerships. Of the 68 nanotech leaders analyzed in The Nanotech Report 2004, 28% have partnerships with Dow companies. This pattern of corporate partnership mirrors the biotech industry, where pharmaceutical giants increasingly outsource R&D to more focused startups.

- While only eight nanotech mergers and acquisitions occurred in 2003, this represented a 300% increase over the prior year (two). Three were in semiconductor capital equipment, and two were in chemicals. In 2004 to date, three nanotech companies have been acquired. Within the next three to five years, Lux Research expects that the annual volume of transactions will be more than five times current levels

More information : www.luxresearchinc.com

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