

Contact:

Peter Hebert
Lux Research, Inc.
646-723-0702
peter.hebert@luxresearchinc.com

NANOTECHNOLOGY TOOLS' GROWTH DRIVEN BY CORPORATE R&D AND NEW COMMERCIAL APPLICATIONS

Lux Research report projects market for nanotech tools grows from \$580 million in 2004 to \$1.1 billion in 2010

New York, NY – September 13, 2005 – Interest in nanotechnology focuses on remarkable applications ranging from computer displays to cancer treatments. But behind the scenes of nearly all such applications lie sophisticated tools that researchers use to inspect, fabricate, and model matter at the nanoscale. Sales of such tools will grow from \$580 million in 2004 to \$1.1 billion in 2010, according to a new report from Lux Research entitled “The Truth About Nanotech Tools.”

Nanotechnologists use three principal categories of tools: inspection tools to visualize nanostructures, fabrication tools used to make nanostructures, and modeling tools to predict nanostructures' properties. The Lux Research report is the first study to rigorously quantify the market for these tools as used for emerging nanotechnology applications – excluding established uses in fields like semiconductors and data storage.

The report presents market sizing and forecast figures for all three nanotech tools categories. For the report, Lux Research conducted confidential interviews with CEOs and marketing executives at 21 leading tool vendors worldwide and with R&D leaders at 49 cutting-edge corporations, start-ups, universities, and national labs active in nanotech. The team combined data from these interviews with exhaustive secondary research to calibrate top-down, bottom-up, and stocks-and-flows forecasting models for each individual tool type making up each category. Finally, the team put the results through an extensive peer review process with nanotech tool vendors and industry luminaries.

The current market for nanotechnology tools is dominated by inspection tools, which account for 95% of 2004 revenue and saw dramatic growth during the early 2000s nanotech explosion, when many university nanoscience centers were constructed. The growth outlook for the next five years, however, looks very different. “Growth for nanotech inspection tools through 2010 depends on corporate R&D, because the university and national lab market is saturated,” explained Lux Research Analyst Vahé Mamikunian, co-author of the report. “In fabrication and modeling, growth prospects look much stronger – applications for nanoimprint lithography, a prominent fabrication tool, will gain traction through 2010, and modeling will see higher adoption as vendors like Accelrys offer improved commercial tools.”

While the predicted growth of nanotech tools as a whole is steady at a compound annual growth rate of 11%, the individual categories each tell a different story. The report projects that:

- Inspection tools like scanning probe microscopes (SPMs) and electron microscopes (EMs) will experience tepid single-digit growth as the academic market stalls and the smaller corporate base requires time to take off.
- Fabrication tools, dominated by nanoimprint lithography (NIL), will grow at double-digit rates as applications gain traction and as these tools move beyond R&D labs onto manufacturing floors.
- Modeling tools will experience strong growth over the next five years, as software makers concentrate on improving accuracy and enhancing ease of use. However, entrenched user skepticism will keep penetration far lower than in the other two categories – making modeling the smallest of the three by revenue in 2010.

The report debunks a number of myths about nanotech tools. “There’s an expectation that nanotech inspection tools will see a big boost from being adopted by nanomaterials manufacturers for quality control in the factory,” said Lux Research Analyst and report co-author Dr. Michael Holman. “But the nanomaterials manufacturers we spoke to tell us that faster and cheaper alternatives are available for routine quality control, and that they only need inspection tools like scanning probe microscopes and electron microscopes for process development and spot checks. When these companies begin shipping products, they don’t see the need to buy new tools beyond what they already have for R&D.”

“The Truth About Nanotech Tools” also calls out likely merger and acquisition activity in all three tool categories as larger vendors look for new ways to grow and co-opt potential competitors. It offers nanotech tool buyers and sellers alike tips for taking advantage of changing nanotech tools market dynamics. The report is available immediately to clients of Lux Research’s Nanotechnology Strategies advisory service. For information on how to become a client, contact Rob Burns, VP of Sales at (646) 723-0708.

About Lux Research:

Lux Research is the world's leading nanotechnology research and advisory firm. We help our clients make better decisions to profit from nanoscale science and technology, tapping into our analysts' unique expertise and unrivaled network. Our clients include top decision makers at large corporations, portfolio managers and analysts at leading financial institutions, CEOs of the most innovative start-ups, and visionary public policy makers. To get connected and for more information, visit www.luxresearchinc.com.

About the Lux Executive Summit:

Focusing on the business impact of nanotechnology, the Lux Executive Summit will present exclusive ideas and data from Lux Research's renowned analysts. The conference is a meeting of business leaders who want to understand how nanotechnology will change products, commerce, and ultimately society. For event details on the Lux Executive Summit, please visit www.luxexecutivesummit.com.

###