



THIS STORY HAS BEEN FORMATTED FOR EASY PRINTING

BOSTON CAPITAL

The Boston Globe

The next small thing

By Steven Syre, 1/20/2004

Take a look at what's going on in the hottest corner of the technology stock market and it's hard to escape the feeling that you've seen it all before.

The explosion of nanotechnology stocks is a tiny story in more ways than one. It involves companies trying to create and manipulate materials no larger than a billionth of a meter (about 100,000 of those equal the diameter of a human hair). Even after a wildly successful year in the stock market, most public companies working in this field would still be considered microcap investments.

The nanotech stock boom resembles past biotech surges because many shares have soared without much in the way of company revenues. It looks a little like the telecom stock boom a few years ago because the technology might improve on old products by dizzying degrees but it faces practical, real-world obstacles.

The nanotech stock boom might even remind you of the old Internet bubble. Some companies have changed their names to feed off the investment buzz, like the businesses that added ".com" to their names a few years ago. National Diagnostics Inc. became Nanobac Pharmaceuticals Inc., US Global Aerospace Inc. became US Global Nanospace Inc., and a handful of others did likewise.

But the nanotech story might also remind you of all those old booms because there is so much real promise behind the hype. Just like the Internet, biotech, and telecom, nanotechnology almost certainly will produce valuable new things, eventually. Making money off them may be another matter.

Nanotechnology already enhances common products today, from pants that don't wrinkle to lighter carbon graphite tennis rackets. But home-run potential lies in dramatically smaller integrated circuits and improved medical diagnostics and therapeutics.

A lot of the nanotechnology action is still taking place in basic science labs and Greater Boston is a hotbed of activity. Chemist Charles Lieber at Harvard, engineer Subra Suresh at MIT, and geneticist Susan Lindquist at MIT's Whitehead Institute are just three high-profile examples of the local scientists pursuing nanotechnology.

Lieber became a founder of Nanosys Inc. of Palo Alto, Calif., a closely followed start-up that agreed to collaborate on nanotech research with Intel Corp. last week. One of the best-known nanotech start-ups in Massachusetts, Nantero Inc. of Woburn, traces its roots back to Lieber's lab at Harvard.

"It's not a big field, but it's gotten off to a good and interesting start," says Joe McNay of Essex Investment Management in Boston. "It's very early, but it's showing up on the horizon now."

Several leading nanotechnology stocks had doubled or tripled through the first 11 months of last year. Then President Bush signed a bill in December to invest nearly \$3.7 billion in nanotechnologies and stocks spiked even higher.

Nanogen Inc. is up 594 percent in the past 12 months. Nanometrics Inc. has climbed 322 percent over the same period. Harris & Harris Group Inc., a public venture capital firm that trades in "tiny technology" companies, has soared 466 percent over the past year.

Harris & Harris made its first investment in a nanotechnology company in 1994 and now counts at least 10 in its portfolio. Chief executive Charles Harris says the valuation of private nanotech companies has remained reasonable, but he demurs on the question of surging public stock prices.

"There, you're getting beyond my pay grade," he says.

Peter Herbert, a managing partner of the venture firm Lux Capital, has no problem warning that many nanotech stocks have become dangerously overvalued.

Herbert recommends a "picks and shovels" approach, the kind of strategy that led investors to computer hardware companies like Cisco Systems Inc. during the Internet boom. In the nano context, that means companies like Veeco Instruments Inc., a maker of powerful atomic microscopes, and Accelrys, a maker of design software useful to nanotech scientists, which is expected to be spun out of corporate parent Pharmacia Inc. in this quarter.

Nanotechnology will give us some great things in the future. But it doesn't give you a good reason to invest in most of the nano stocks at today's prices.

Steven Syre is a Globe columnist. He can be reached at syre@globe.com.

© Copyright 2004 Globe Newspaper Company.

© [Copyright](#) 2004 The New York Times Company