

TAKING THE NANOPULSE

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Welcome to the Nano-Nexus

It's the finish line that's a starting gate.

BY SCOTT E. RICKERT

You look up at a sky full of stars. Do you see a scattering of lights or connect the dots to see a constellation? You step into a factory. Do you see bins of components or a camera in the making? Open a financial statement. Do you see columns of numbers or a business plan in action?

You already know the answer. The people who succeed make the connections and see the patterns they create. I was recently reminded of that truth with a punch. Let's see if you detected what I observed.

As a 25+ year veteran in nanotechnology, I get scores of nano-communications crossing my desk every day. Nanotechnology innovations in health science, clean water, solar energy. Nanotech business reports, funding requests, policy papers. Plus reports on Congressional committees, EPA hearings, economic development zones and more.

From where I sit, the pattern of all these data points is clear. We're arrived at the nano-Nexus. Nanotechnology is the nexus, the linking place that joins them all together. Energy policy. Economic policy. Environmental policy. Security policy. It's all Nanotechnology policy.

Let me explain. As I read the proceedings of a recent Nano Energy conference, I found the sessions on innovations in clean water and solar energy side by side with sessions on investment exit strategies and updates on Federal environmental policy. The same day, I began planning my own keynote for another nanobusiness audience and found my fellow speakers were covering topics from biomedical and aerospace products to "weathering the economic storm" and "who's going to finance innovation".

The pattern? All roads to all futures lead through the nano-nexus. Let's follow the logic paths one by one. Becoming energy-independent is at the heart of economic growth, not to mention bolstering our security. We're not going to get there without nanotechnology. It's in the storage capacity of batteries, the conductive coatings for solar cells, durable construction for wind turbines, oil recovery from previously cost-prohibitive fields.

How about nanotechnology and environmental policy? Start by re-reading the previous paragraph. Clean, alternative energy is nano-powered, and so are many energy-saving innovations. Add to that nanotech's potential in helping assure a clean water supply and reduce waste by enabling more durable products.

That brings us to economic policy. As I've said before, innovation is the ultimate economic stimulus. Nanotechnology can be an invaluable driver for so many federal government initiatives: energy, health care, manufacturing, transportation, the environment. Nanotechnology is the key

to all things smaller, faster, lighter, more powerful, less invasive, more durable, less costly.

What does the nanotechnology world need to make that happen? Fortunately, some of it is already on the table. The National Nanotechnology Initiative Bill has passed the House of Representatives and is expected to be introduced in the Senate in a matter of weeks. It supports research and education, technology transfer, development of public nanotechnology research centers, and development in areas of national importance. In addition, stimulus funding will benefit companies putting nanotechnology to work in their businesses.

Still, there remain very real challenges. Powerful technology is languishing in this rough economy -- from medical breakthroughs to energy-saving architectural advances to smarter, faster, smaller electronics.

What's this all mean to you? Keep looking at the big picture. You're at the nano-nexus and innovation possibilities are all around you. Pinpoint the stars in this constellation that can benefit your business. See if nanotechnology can expedite or enhance a new or improved product. Find ways to partner with nanotechnology specialists to make innovation into commercialization. And let your government officials know that you have, want and need more nanotechnology in business.

We're standing at the nexus of nanotechnology and possibility. All we need to do is move ahead.

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