## **Safety Comes First for Nanotechnology**

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Online guide provides innovative path to product stewardship.

Earlier this year, the International Council on Nanotechnology (ICON), Houston, launched the GoodNanoGuide, which is available at <a href="http://www.goodnanoguide.org/">http://www.goodnanoguide.org/</a>. To cater to all audiences, the guide provides basic, intermediate and advanced options to choose from to contribute to or search within the online forum. This innovative approach sets a new standard for creative, interactive, Internet-based product stewardship tools. This column explains why you may want to take a look at the GoodNanoGuide and consider the implications of this wonderful new stewardship tool.

## What's Nanotechnology?

Nanotechnology is the control and manipulation of objects of 1-100 nanometers. The emergence of nanotechnology offers extraordinary opportunities for advancements in cleaner production, energy generation, environmental remediation, and reducing pollution, to name a few promising applications. Product manufacturers, regulators, non-governmental organizations (NGO), public health professionals, and other nanotechnology stakeholders have been challenged, however, to address the many legal, policy, science, and related issues that have arisen in managing the applications and implications of nanotechnology.

#### **Good Nano Practices**

Recognizing that workplace safety is a key priority when handling novel nanoscale materials, many stakeholders have accelerated their efforts to identify workplace clothing, equipment, and handling practices to assure a safe and healthful workplace. The newest contribution to the field is ICON's GoodNanoGuide. It's an Internet-based collaboration platform specially designed to enhance the ability of experts to exchange ideas on how best to handle nanomaterials in an occupational setting. It's meant to be an interactive forum that fills the significant need for up-to-date information about current good practices, including highlighting new practices as they develop and on a real-time basis.

The GoodNanoGuide has three goals: develop and launch a protected Internet site on occupational practices for the safe handling of nanomaterials using a Wiki-software platform; create a process wherein multiple stakeholders within the international community contribute, share and discuss information related to occupational safety; and establish a modern, interactive forum that fills the need for up-to-date information and remains current as new practices develop.

While the GoodNanoGuide reflects the global dialogue underway regarding the effect nanotechnologies may have on human health, the environment, and society in general, the

GoodNanoGuide isn't meant to address or resolve such issues. Instead, according to ICON "it assumes that someone, somewhere in the world is likely to be working on nanomaterials as this debate continues, and thus endeavors to provide information to that person about current good practices to make sure appropriate safeguards are in place as that person works on nanomaterials in an occupational setting."

Finally, the GoodNanoGuide is open for everyone to review. To ensure the dependability of the good practices reported, the GoodNanoGuide is a protected site in which contributions are limited to those individuals that have become GoodNanoGuide members.

#### A Forum for the Future

The GoodNanoGuide is intended to be used by occupational safety professionals in large and small companies, researchers, government officials and regulators, labor organizations, NGOs, public health professionals, and other nano stakeholders.

Initially, the GoodNanoGuide will be restricted to material published by a reliable source. As it develops, ICON expects to provide a forum for new and original good practice protocols. Individuals interested in adding their contributions to the GoodNanoGuide must submit a request for "provider" rights. The GoodNanoGuide Implementation Committee (IC) will evaluate such requests and, given the GoodNanoGuide's novelty, the IC reportedly will proceed slowly at first in granting provider rights. All information posted on the GoodNanoGuide will be published under the GNU Free Documentation License, or comparable licensing system.

The "How to Help" section offers the opportunity to interact with the community by commenting on topics, asking questions to other members and suggesting topics or articles. For the more knowledgeable "expert providers", it provides a way to help increase the knowledge base, answer questions, spread the word about working safely with nanomaterials.

The GoodNanoGuide is a creative and interactive way to keep nanotechnology stakeholders posted on and engaged in the latest developments in nanomaterials safe occupational practices. Assuming the model is successful we may well see many other such "GoodGuides" in the months and years ahead.

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