

Cosmetics Design-Europe

Nov 26/2007 - **As more and more personal care products are made using nanotechnology, a nationwide survey indicates that scientists are more concerned than the public about its potential health and environmental risks.**

[Nanotechnology](#) is expected to make a big impact on the cosmetics industry, particularly in sun care and anti-aging, but concerns about the safety of the emerging technology have been raised.

Researchers at the University of Wisconsin-Madison interviewed 363 leading nanotechnology scientists and surveyed American households concluding that scientists are more fearful than ordinary people

The authors of the report, which was published in Nature Nanotechnology yesterday, suggested that lack of knowledge among the general public explained the difference and called for greater education of consumers about the potential risks of nanotechnology.

Only 15 percent of public respondents indicated a concern that new forms of nanotechnology pollution may emerge, while 20 percent of scientists thought that might be a problem.

Over 30 percent of scientists expressed concern that nanotechnology may pose risks to human health while only 20 percent of ordinary people shared their fears.

Health concerns are particularly relevant to the [personal care](#) industry because lotions and shampoos produced using nanotechnology come into direct contact with the body and even penetrate the skin.

While anxiety surrounding the safety of cosmetics using nanotechnology remains the number of products developed using the technology is on the rise.

An inventory of nano-based consumer goods, compiled by the Project on Emerging Nanotechnologies at the Woodrow Wilson International Center recently recorded an increase to 85 personal care products from 58 when it was launched in March 2006.

In the latest research scientists expressed concern about potential health risks but were generally optimistic about the potential benefits of nanotechnology.

"Scientists aren't saying there are problems," said the study's lead author Dietram Scheufele, professor of life sciences communication and journalism at the University of Wisconsin-Madison. *"They're saying, 'we don't know. The research hasn't been done.'"*

The tendency is for the public to worry more than scientists about new technologies but the latest survey indicates the opposite is true for nanotechnology.

The researchers behind the latest report suggested the public was less fearful of nanotechnology than of other developments like nuclear power and genetically modified foods because they know little about it.

"Nanotechnology is starting to emerge on the policy agenda, but with the public, it's not on their radar," said Scheufele. *"That's where we have the largest communication gap."*

A similar conclusion was reached by the Woodrow Wilson International Center, which recently conducted a consumer survey on nanotechnology and reported that 70 percent of respondents said they knew little or nothing about it.

In terms of filling the information gap, Scheufele said that of all sources of nanotechnology information, scientists are the most trusted by the public.

Nanotechnology is the science of manipulating the properties of tiny particles, measuring one billionth of a metre and has a broad range of applications from computer chips to personal care.

A human hair is 80,000 nanometres (nm) wide, a red blood cell 7,000 nm wide, and a water molecule 0.3 nm wide.