

Data and knowledge on nanomaterials -Processing of socially relevant scientific facts www.nanoobjects.info



Knowledge Base Nanomaterials

Latest research results on the effects of nanomaterials on humans and the environment

Scientifically profound and easy to understand

FUNDED BY THE

Federal Ministry of Education and Research

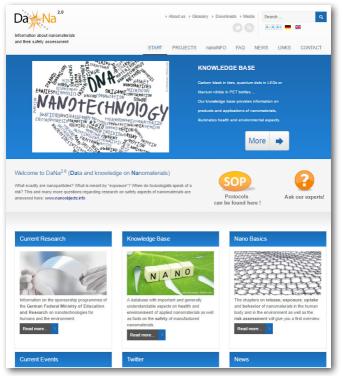
within the Framework Programme "From Material to Innovation"

THE PROJECT

What exactly are nanoparticles? What is meant by "exposure"? When do toxicologists speak of a risk? This and many more questions are answered by the new internet knowledge base www.nanoobjects.info.

Many consumers miss reliable and understandable information on nanomaterials and nanotechnology. In an interdisciplinary approach of human- and environmental toxicology, biology, physics, chemistry and pharmacy the DaNa^{2.0} project team provides more transparency and processes results of research on nanomaterials and their influence on humans and the environment in an understandable way.

For this purpose, DaNa^{2.0} processes results of completed and current projects, funded by the German Federal Ministry of Education and Research, analyses scientific publications, reports, and latest news on human and environmental toxicology, and wraps up the state of knowledge in the knowledge base.



Screenshot from www.nanoobjects.info

THE KNOWLEDGE BASE

Here you find:

- Relevant nanomaterials that are already being used
- Detailed explanations of important health and environmental aspects of nanomaterials
- Summaries and evaluation of safety studies of the respective materials (release, uptake, and behaviour of the materials)
- Facts relating to risk management



www.nanoobjects.info

SIMPLE NAVIGATION, UNDERSTANDABLE TEXTS

- Thanks to the linking of material and application, you will find your information quickly
- The texts are presented in such a way that they are understandable for interested citizens
- Journalists, NGOs, politicians or scientists will find links to further literature
- The page shows applications and products, which may contain nanomaterials and guide you directly to the relevant materials
- The glossary and the FAQs contain valuable further information about nanotechnology
- Webpages available in German and English



Open questions? dialog@nanopartikel.info

LATEST INFORMATION ABOUT NANOSAFETY RESEARCH

Find information on running and completed projects, funded by the German Federal Ministry of Education and Research, on **nanosafety** for **humans and the environment:**

- Project description and project goals
- Duration
- Project partners
- Results achieved and publications



CONTINOUS UPDATES

- Regular extension of the knowledge base with latest data
- News and Events on nanomaterials
- Additional data from scientific publications



WHAT IS NANOTECHNOLOGY?

Nanotechnology is considered one of the key technologies of the 21st century. It uses methods and effects that allow for the analysis, controlled modification, or the manufacture of objects and structures in the range of a few nanometres.

A nanometre is one billionth of a metre or one millionth of a millimetre and, hence, corresponds roughly to one fifty thousandth of the thickness of a human hair.

The success of this fascinating technology is particularly based on its versatility. It will bring about fundamental changes of basic research as well as many sectors of industry and of life from electronics to the health care system. On the nano level, physical or chemical properties like electrical conductivity, colour, melting point, and reactivity of materials may change dramatically.

These modified properties open up new technological opportunities, ranging from the conversion and storage of energy, to the lifespan of tyres, to surface protection and cosmetics, to the diagnosis and the fighting of diseases. Consequently, nanotechnology as a multi-disciplinary technology influences numerous new developments.

DaNa^{2.0} on Twitter



Follow DaNa^{2.0} on Twitter @nano_info

CONTACT

Ask an expert: dialog@nanopartikel.info

Dr. Christoph Steinbach DECHEMA e.V. Theodor-Heuss-Allee 25 60486 Frankfurt/M. - Germany Phone: +49 (0) 69 7564 -263 steinbach@dechema.de

Dr. Katja Nau Karlsruhe Institute of Technology (KIT) Institute for Applied Computer Science Hermann-von-Helmholtz-Platz 1 76344 Eggenstein-Leopoldshafen - Germany Phone: +49 (0) 721 608 -24823 nau@kit.edu

THE PARTNERS



Picture credits: boninturia, nano eccolo / fotolia.com