



Good Practices Wiki

Kristen M. Kulinowski, PhD

8 July 2008

Argonne, IL



Addressing Applications & Implications



<http://cben.rice.edu>

The Center for Biological & Environmental Nanotechnology

An NSF center of excellence in nanotechnology research & education



<http://icon.rice.edu>

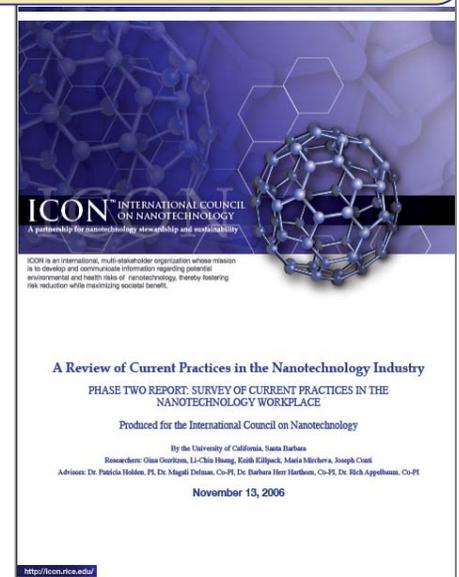
The International Council on Nanotechnology

A unique multi-stakeholder forum for addressing the potential risks of nanotechnology

Survey of Current Handling Practices

First comprehensive, international survey of handling practices in the nanotech workplace (Nov 2006)

- **64 respondents from four continents**
- **Self-reported data**
- **Key findings**
 - Nano-specific EHS programs and training are widely reported
 - Actual practices do not significantly depart from conventional safety practices for handling chemicals
 - Many organizations display active interest in additional information on how best to handle nanomaterials
 - Lack of information and guidance are the main reported impediments to further development of EHS practices
 - Most pressing need is for research on toxicology, hazards and safe handling methods for nanomaterials
- **Funded by ICON, performed by team at CNS UCSB**



“This work will give researchers ... valuable insight into current information gaps that might exist in understanding and managing the occupational health implications of this revolutionary technology.”
John Howard, NIOSH Director



Sources for Information on Handling



Designation: E 2535 – 07

Standard Guide for Handling Unbound Engineered Nanoscale Particles in Occupational Settings¹

This standard is issued under the fixed designation E 2535; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last approval. A superscript symbol (s) indicates an editorial change since the last revision or approval.

PD 6699-2:2007

PUBLISHED DOCUMENT

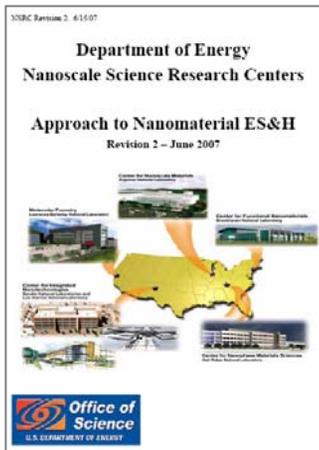
Nanotechnologies – Part 2: Guide to safe handling and disposal of manufactured nanomaterials

100 13 100, 71,100,99



NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

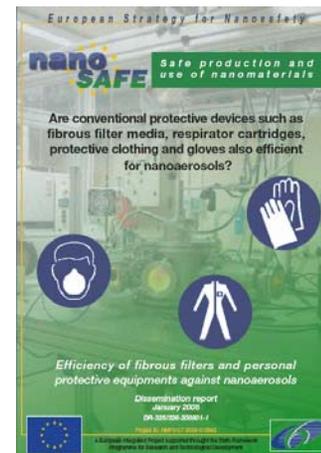
US



Canada



Europe



Where Are We Today?

- Affected stakeholders from many areas
 - EHS professionals
 - Students and other researchers
 - Worker representatives
- Intense need for specific information
- Knowledge and practices rapidly evolving
- Information needs worldwide

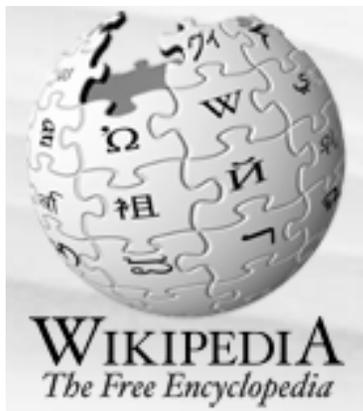


What is a Wiki?

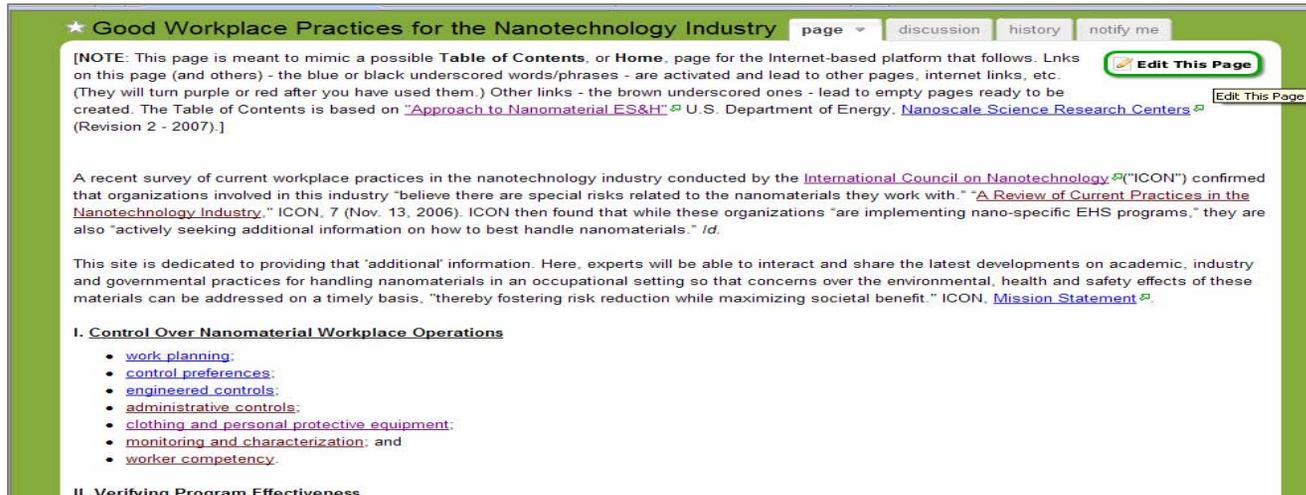
A Wiki is central, shared repository of online information

Wikis for Dummies

- Anyone can edit the pages
- Editing should be easy and require no special tools
- Formatting should be simple
- Changes are easily tracked



Nano Good Practices Wiki



Features

- Protected Internet site on occupational practices for the safe handling of nanomaterials
- Multiple stakeholders contribute, share and discuss information
- Modern, interactive, up-to-date

http://icon.rice.edu/projects.cfm?doc_id=12207 ...

Administrator

ICON

Chairs

**Bruce Stockmeier
(ANL)**

**Michael Riediker
(Institute for
Work and Health,
Switzerland)**

Planning Team

**Crowell & Moring,
LLP**

NIOSH

U Wisc NSEC

**U Mass Amherst
NSEC**

ILO

IOM (UK)

RTI

Evonik DeGussa

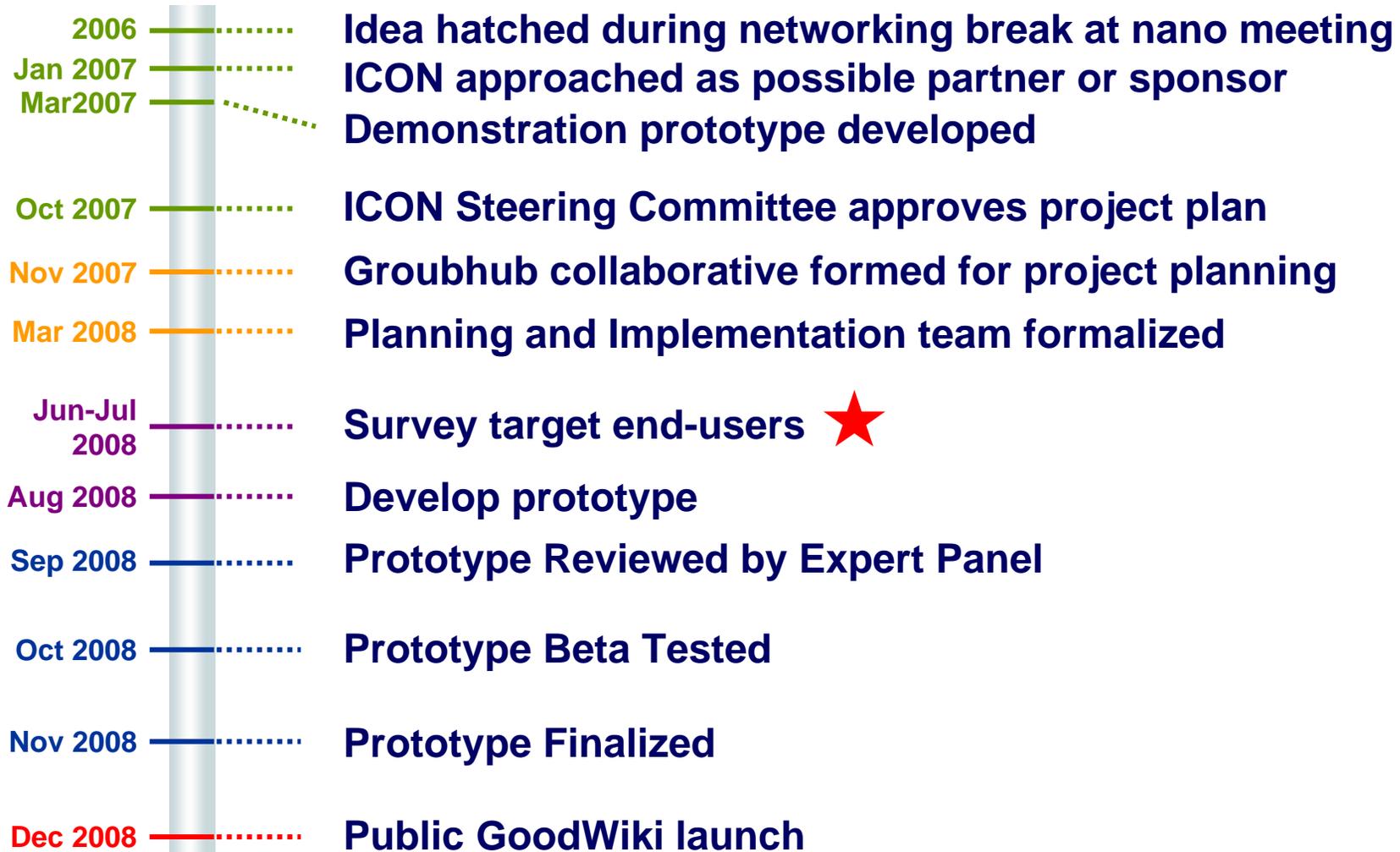
**Nanotech
Industries Assoc
(UK)**

Boeing



RICE

Timeline

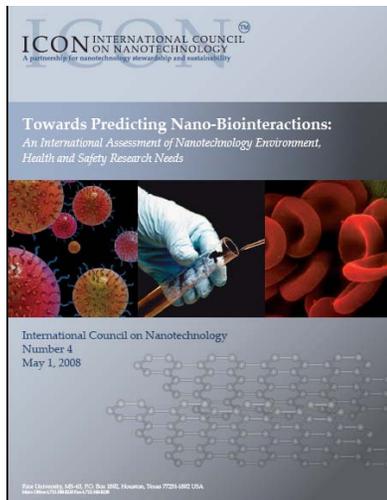


Quality Information about Risks & Benefits

Knowledge Base

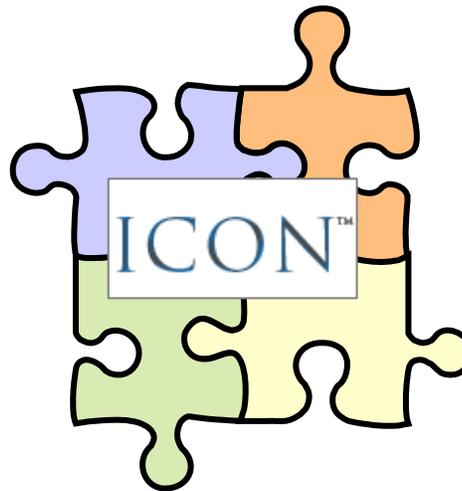


Database/VJ on nanoEHS research



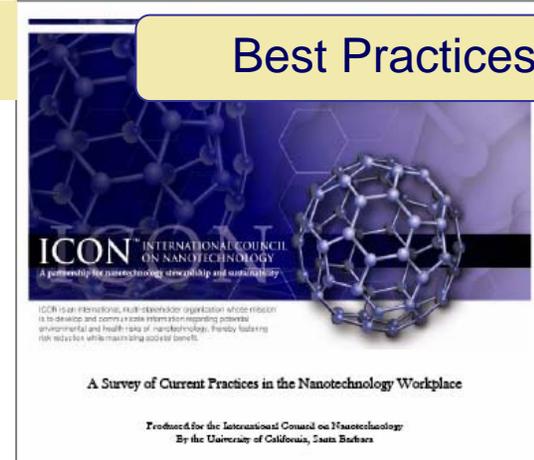
International nanoEHS research needs assessment

New ES&T paper:
DOI: [10.1021/es702158q](https://doi.org/10.1021/es702158q)



ICON Working Groups

Best Practices



Survey of current workplace practices

Communications



ICONsultations with diverse stakeholders

More information

For more information see our website:

<http://icon.rice.edu>

<http://cben.icon.edu>



Or contact me at:

Kristen Kulinowski

kk@rice.edu

+1.713.348.8211