

Shaping the dialogue with the public on nanotechnology

How will the nanotechnology industry move forward around the world? Can we overcome the hurdles imposed by technophobia and what strategies will need to be in place for public acceptance, regulation and policy development.

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Challenges and Opportunities for new technologies.

Many mistakes have been made in the previous technology debates. We have lots of reasons to rethink and reshape the debate on green biotechnology. People start to realize that this is a considerable technology push affecting everybody's life. And this time the new technology will come forward with food products which will enter the human food chain. This will be exactly the same for nanotechnology. Basically, we should understand concerns and respect other peoples knowledge, which does not necessarily focus on scientific knowledge alone. More: if scientists insist to explain the whole world with scientific data and facts, they will create resistance. Questions on the benefits and risks of nanotech products will have to be solved in a more discursive manner in future, where everybody tries also to listen to their opponents. We will have to obey to certain rules, which comprise (among others)

- The symmetry of ignorance
- Reduce hidden agendas
- Solutions have to be found stepwise
- Only allow participants in a discursive process which are part of the problem
- Respect for various kinds of knowledge

Discursive decision making processes have best chances to solve "wicked problems" – problems which also comprise social and cultural elements. Wicked problems cannot be tackled with linear planning, they need to be taken care of with more complex planning methods which need weeks if not months, and where scenarios have to be determined first. A detailed account on these discursive methods in relation to biotech debates has been just published last week:

Ammann, K. & Papazova Ammann, B. (2004)

Factors Influencing Public Policy Development in Agricultural Biotechnology. *In RISK ASSESSMENT OF TRANSGENIC CROPS*. (ed S. Shantaram), Vol. 9, pp. 1552. Wiley and Sons, Hoboken, NJ, USA.P. Christou & H. Klee Handbook of Plant Biotechnology, link: the manuscript in press:

<http://www.botanischergarten.ch/Wiley/Factors-Discourse-Wiley.pdf>

The report on the impact of agricultural biotechnology on biodiversity:

<http://www.botanischergarten.ch/Biotech-Biodiv/Report-Biodiv-Biotech12.pdf>

This link above is given as an example that scientific scrutiny often reveals that concerns risen are much less harmful than the way the protest industry wants to sell them. It would be helpful to create a similar report for nanotechnology

http://www.botanischergarten.ch/Curriculum/click_Coordinates_Klaus_Ammann.htm