

# **Science and Technology in Society : An International, Interdisciplinary, Graduate Student Conference**

---

**Is it useful to compare biotechnology and nanotechnology? If so, what may be the consequences on public participation?**

**THOREAU Francois, University of Liege, BELGIUM  
Scientific and Public Involvement in Risk Allocations Laboratory – SPIRAL**

Like modern biotechnologies, nanotechnologies are a generic area of research linked with several interconnected disciplinary fields. They may be converted into a large panel of applications. It also brings, with its development, promises of a quite huge potential including important economic opportunities. Both of those emergent technologies also raise important social, ethical or environmental issues.

Nevertheless, many substantive differences remain between biotechnologies and nanotechnologies. The former was introduced in society by a time public actors were less sensitive to public participation, as shows the history of parliamentary Technology Assessment. A lack of public participation is often told to have grounded some public opposition to some particular biotechnologies, with the usually quoted case of GMOs.

The latter are currently under development in quite other circumstances, as social shaping of technology begins to be widely acknowledged and role played by STS community grows faster. Nanotechnologies deal with more uncertainties and more complexity. So it is commonly accepted that, within their development process, they should include more public participation to avoid some pitfalls of biotechnologies.

Still, other differences that context exist between biotechnologies and nanotechnologies. It may be stressed that biotechnologies have left laboratories for a private financial designing of marketable products and that nanotechnologies are just starting to leave laboratories under great public impulsions, with wide public support and funding, as in the case of the National Nanotechnology Initiative in the US.

So in the presentation we consider whether, given those differences, biotechnologies and nanotechnologies are likely to be compared. Then we pick a look to potential consequences related to public participation. Should there be more public participation? What for? Should it be driven in a different way?

THOREAU François – [ftoreau@ulg.ac.be](mailto:ftoreau@ulg.ac.be) – SPIRAL