

NanoFate

Environmental effects of spreading manufactured nanoparticles.
Fate, exposure and risks.

Erik J Jøner
Bioforsk Soil & Environment
Ås, Norway



Target

- ✓ The 2007 call, Theme 4; *Nanosciences, nanotechnologies, materials and new production technologies (NMP)*
- ✓ Specific target: The topic *NMP-2007-1.3-2: Risk assessment of engineered nanoparticles on health and the environment*
- ✓ Which
 - Is a “Small-medium focused research project” (under Collaboration)
 - Has a maximum duration of 3 years
 - Has an upper limit for EU funding of 4 M€ (cover 75% of eligible costs, thus maximum 5.3 M€ total budget)
 - Requires a balanced EU-US collaboration
- ✓ SM focused projects under NMP receive a total of almost 106 M€, which will be divided on 13 topics (avg. 8.1 M€ per topic; thus an average of 2-3 projects funded for each topic)

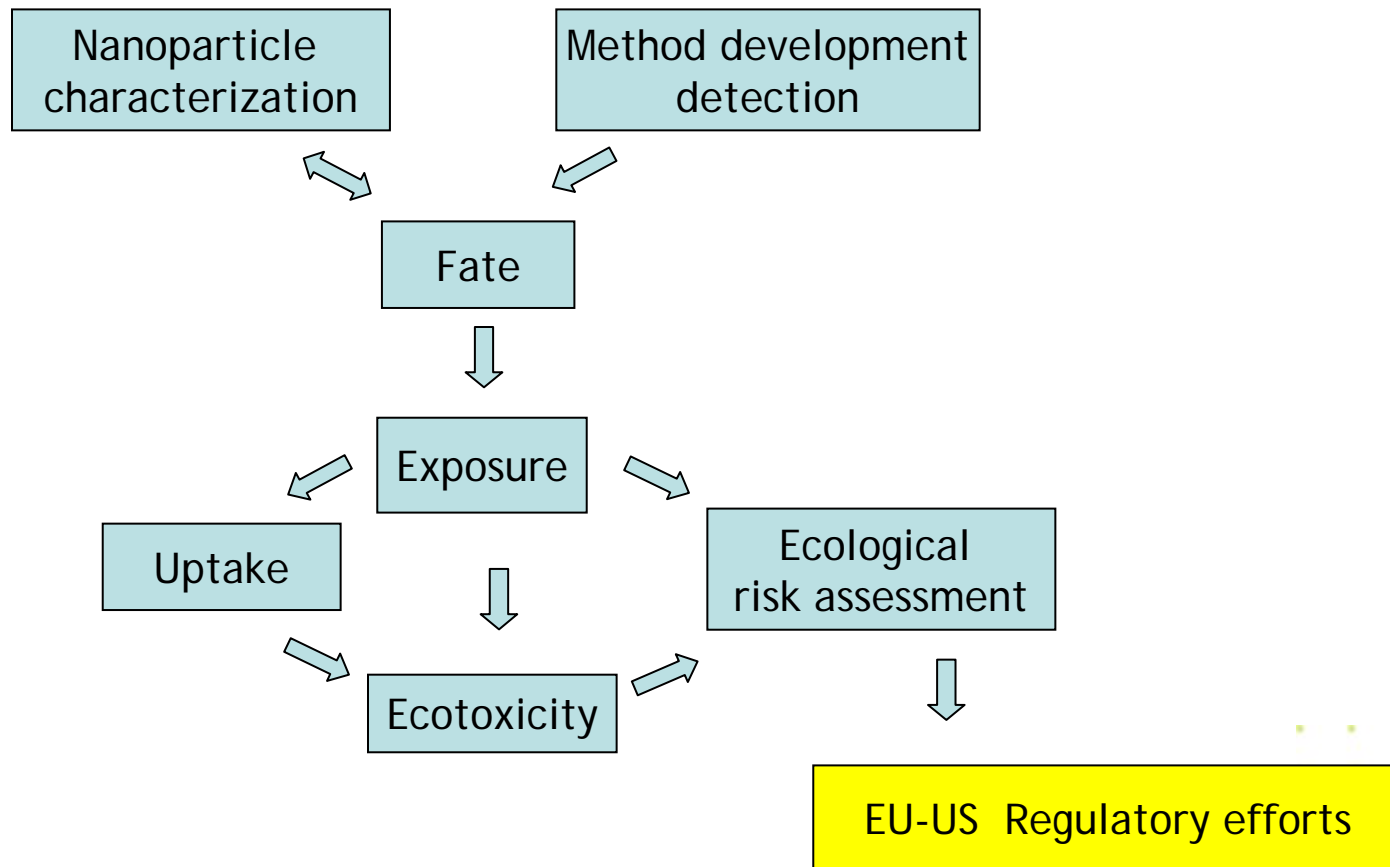


Scientific aim

- ✓ Describe the environmental fate of NP released to the environment (soil, water, sediments, waste) and the risk for the environment and organisms therein
- ✓ The topic contains a dichotomy separating “health” and “the environment”
- ✓ Since these are quite different, NanoFate will be limited to environmental aspects
- ✓ This area is poorly suited for risk assessment at the present time
- ✓ Our focus is thus “fate”



NanoFate, flow chart



Partners, overview



1. Catalàn Institute of Nanotechnology, Barcelona, Spain.
2. Institute for Physics, University of Augsburg, Germany.
3. Dept of Inorganic, Analytical and Applied Chemistry, Univ of Geneva, CH.

4. CEREGE, Aix-Marseilles, France.
5. School of Earth, Atmospheric and Environmental Sciences, Univ of Manchester, UK.
6. Maija Balode, Latvian Institute of Aquatic Ecology, Riga, Latvia
7. National Environmental Research Institute/Univ of Aarhus/iNano, Denmark
8. Institute of Environmental Biotechnology, Tulln, Austria.
9. Laboratoire Pierre Sue - CEA, Saclay, France.
10. Department of Plant and Environmental Sciences, Univ of Life Sciences, Ås, Norway.

11. National Institute for Public Health and the Environment, Bilthoven, The Netherlands.
12. Bioforsk Soil and Environment, Ås, Norway.

US teams:

PI: Mark Wiesner, Dept. of Civil and Environmental Engineering, Duke University, NC.

PI: Ron Turco, Dept. of Agronomy, Purdue University, IN.

