

The Ethical Governance of Nanotechnology and Public Engagement

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Abstract

The ethical governance of nanotechnology is devoted to explore the possibility and feasibility while regulating the upstream in the process of nanotechnology development. Based on the Socio-technical Systems Theory, we found that decision-making, R&D and application of modern technology are associated with the aspects of economy and politics increasingly; therefore, the regulation and evaluation of technology need institution and policy. The article contrasts the role of the government between the EU, the United States and China in the decision-making stage of the development of nanotechnology. It indicates techno-science is closely associated with politics. It reflects the possibility of the upstream regulation to the related ethical issues of nanotechnology. And then analysis the pros and cons of the top-down strategic, points out that the upstream regulation is different from the traditional government management. We also need the approach from the bottom to the top. Nanotechnology as a system, the scope, the implementation and the consequence is interaction with the society. It showed that the role of the public is as important as politician and scientists in the ethical governance of nanotechnology. By analyzing the possibility and the limitation of public engagement in the governance of nanotechnology, we concluded that only through wide public engagement, could the ethical governance of nanotechnology come true.

Key words: nanotechnology; ethical governance; public engagement