

C'Nano 2020

The Nanoscience Meeting

TOULOUSE

Centre des congrès Pierre Baudis

December, 8, 9 and 10



Fernand Doridot

Teacher & Researcher, ICAM of Lille, Center for Ethics, Technics and Society – CETS, 6 rue Auber, 59000 Lille

<https://www.icam.fr>

fernand.doridot@icam.fr

Fernand Doridot is researcher in Ethics of Technology. He has been working on the topic of nanotechnology for more than ten years. He has been the coordinator of the “Researchers-Citizen” NANOSCOOPE project (2013-2017) funded by the Hauts-de-France regional council on sustainable development of nanotechnology. He is associated to the works of ANSES (French National Health Agency) on the safety of nanomaterials. He is currently leader of the “Sustainability” WP in the H2020 NanoFabNet Project.

THE NANOFABNET HUB FOR SUSTAINABLE NANOFABRICATION

NanoFabNet (<https://nanofabnet.eu/>) has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 886171. The NanoFabNet project aims at creating a strong international Hub for sustainable nanofabrication (in terms of human health, ethics, environment, life cycle analysis, ...) that stands for (a) a well-implemented, guided approach to high levels of safety and sustainability, (b) trusted technical reliability and quality, and (c) compliance with and drive of harmonisation, standardisation, and regulation requirements, amongst all of its members and along the nanofabrication value chains. The open structure of the Hub is currently developed, agreed and validated in a step-wise approach specifically supported by the consultation of a wide-range of stakeholder knowledge, view and opinions, laying the foundations for an increased identification of the stakeholders with the *NanoFabNet* brand they are creating.

Some key points of the NanoFabNet Hub will be the setting up of one of the following services according to the needs expressed by stakeholders: - The Creation of a NanoFabNet brand to improve confidence in products and technologies resulting from nanofabrication, both for a top-down approach (lithography, etc.) and a bottom-up approach (chemical synthesis of nanoparticles/nanoobjects, functionalization, integration into systems, etc.); - The Identification of key players/infrastructures, initiatives & networks at national, European and international level (processes, platforms, methodologies, sustainability, risk assessment tools, metrology, standardization, tools for dialogue with civil society, etc.) for sharing with NanoFabNet members in order to support sustainable nanofabrication (creation of databases); - Technology validation (validation/labeling guides and services, organization of proficiency testing, etc.); - The facilitation of access to infrastructures; - Communication and information sharing (regulations, technologies, standardization, good practices, etc.) - International cooperation (USA, China, Japan, Australia ...) and promotion of European projects; - Identification of the needs in the field and establishment of roadmaps to feed European strategy.

Keywords: Sustainable NanoFabrication ; International Hub ; Stakeholders ; Validation and Harmonization ; Single Entry Point ; Community ; Trust.