

## CV for Steffen Foss Hansen (\*1979)

\*Orcid: 0000-0003-4342-7779

### \*Degrees:

2022	Master in Environmental Law, Aarhus University
2018	Dr. techn., Technical University of Denmark (DTU)
2009	Ph.D., Department of Environmental Engineering, DTU
2004	M. Tech. Soc., Department of Environmental Planning, Roskilde University



### \*Positions:

2013-	Associate Professor, Department of Environmental Engineering, DTU
2012-2013	Senior Researcher, Department of Environmental Engineering, DTU
2011-2012	Guest researcher at the European Environment Agency, Copenhagen, Denmark
2011-2012	Expert consultant, Millieu Ltd, Brussels, Belgium
2010-2011	Part-time consultant for the Institute of Occupational Medicine, Edinburgh, Scotland
2008-2011	Post Doc, Department of Environmental Engineering, DTU

### \*Research Area:

Regulatory engineering i.e. 1) how science and engineering can best be used in regulatory settings in situations pervaded by scientific uncertainty and complexity; 2) risk assessment, regulation and governance of emerging technologies and pollutants; and 3) the applicability of decision-making tools under uncertainty e.g. Alternatives Assessment, DPSIR, Stakeholder analysis, Technology Assessment.

### Distinctions and awards:

2009	The Director Gorm-Petersen memorial grant to young scientist in promising development
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### Memberships of scientific committees, review:

2018-	Advisory panel of Nature Nanotechnology in Nanotechnology and Society
2017-	Member of the European Chemical Agency's Nanomaterial Expert Group
2016-	Associate editor of 1) NanoImpact and 2) Chemical Processes and Materials
2016-	Member of the independent expert panel on deposit of radioactive waste in Denmark
2013-	Assessor of Grant Applications related to NANO2021 Innovasjonsprosjekter i næringslivet innen nanoteknologi og avanserte materialer, Norway research council
2012-13	Expert advisory group on nanotechnology of the World Health Organization
2012-2017	Member of the Nanomaterial Working Group of the European Chemical Agency

\*Web of Science publications: 91; Citations: 2449; h-index: 28;

Other publications: 17; Patents: 0.

### \*Supervision of PhDs, 2017 – present (ongoing or finished in 2017 or later):

- Due, I. Risk evaluation and regulation of plastics, on-going (main supervisor)
- Nielsen, M.B. Regulation of nanomaterials, on-going (main supervisor)
- Heggelund, L.R. Characterization and Management of Nanowaste, 2017 (co-supervisor)
- Hjorth, R. Environmental risk assessment and management of engineered nanomaterials - The role of ecotoxicity testing, 2017 (co-supervisor)

**\*Selected grants, 2017 – present (ongoing or finished in 2017 or later):**

Horizon 2020 “PLASTICHEAL” - Innovative & standard tools to study the impact of incidental micro & nanoplastics on human health: towards a knowledge base for risk assessment on the short and the long term. Amount granted to Dept: 3,1 mill DKK, Project period: 2021-2025

VeluxFonden “MarinePlastic” - The Danish center for research into marine plastic pollution. Amount granted to Dept: 2,4 mill DKK, Project period: 2019-2023

MISTRA Stiftelsen för miljöstrategisk forskning ”MISTRA” - Environmental Nanosafety Fas II. Amount granted to Dept: 3,2, Project period: 2019-2023

**\*Selected publications (2017 or later):**

**Hansen, S. F.**, Arvidsson, R., Nielsen, M. B., Hansen, O. F. H., Clausen, L. P. W., Baun, A. & Boldrin, A., 2022. Nanotechnology meets circular economy. *Nature Nanotechnology* 7(7):682-685

Paulsen, F.L., Nielsen, M.B., Shashoua, Y., Syberg, K., **Hansen, S.F.** 2022. Early warning signs applied to plastic. *Nature Review Material*. <https://doi.org/10.1038/s41578-021-00317-9>

Rasmussen, A. S. B., Hammou, A., Poulsen, T.F., Laursen, M.C., **Hansen, S.F.** 2021. Definition, categorization, and environmental risk assessment of biopharmaceuticals. *Science of The Total Environment* 789, 147884

Saldivar, L., **Hansen, S.F.** 2021. Should the precautionary principle be implemented in Europe with regard to nanomaterials? Expert interviews. *Journal of Nanoparticle Research* 23:70.

Nielsen, M.B., Baun, A., Mackevica, A., Thit, A., Odnevall Wallinder, I., Gallego, J.A. Clausen, L.P.W, Rissler, J., Skjolding, L., Nilsson, A.C., Cedervall, T., **Hansen, S.F.** 2021. Nanomaterials in the European chemicals legislation – methodological challenges for registration and environmental safety assessment. *Environmental Science: Nano* 8(3): 731-747.

Syberg, K., Nielsen, M.B., Clausen, L.P.W., van Calster, G., van Wezel, A., Rochman, C., Koelmans, A.A., Cronin, R., Pahl, S., **Hansen, S.F.** 2021. Regulation of plastic from a circular economy perspective. *Current Opinion in Green and Sustainable Chemistry* 29, 100462.

Bendtsen, E.B., Clausen, L.P.W., **Hansen, S.F.** 2021. A review of the state-of-the-art for stakeholder analysis with regard to environmental management and regulation. *Journal of Environmental Management* 279 (2021) 111773.

Farkas, J., Polesel, F., Kjos, M., Carvalho, P.A., Ciesielski, T., Flores-Alsina, X., **Hansen, S.F.**, Andy M. Booth 2020. Monitoring and modelling of influent patterns, phase distribution and removal of 20 elements in two primary wastewater treatment plants in Norway. *Science of The Total Environment* 725, 138420.

Syberg, K., Palmqvist, A., Khan, F.R., Strand, J., Vollertsen, J., Clausen, L.P.W., Hartmann, N., Oturai, N., Møller, S., Nielsen, T.G., Shashoua, Y., **Hansen, S.F.** 2020. A nationwide assessment of plastic pollution in the Danish realm using citizen science. *Scientific Reports* 10, 17773.

**Hansen, S.F.**, Hansen, O. F. H. Nielsen, M. B. 2020. Advances and challenges towards consumerization of nanomaterials. *Nature Nanotechnology* 15: 964–965

Arvidsson, R., **Hansen, S.F.** 2020. Environmental and health risks of nanorobots: an early review. *Environmental Science: Nano* 7,2875-2886.

Arvidsson, R., **Hansen, S.F.**, Baun, A. 2020. Influence of natural organic matter on the aquatic ecotoxicity of engineered nanoparticles. *NanoImpact* 20, 100263

**Hansen, S.F.**, Lennquist, A. 2020. SIN List criticism based on misunderstandings. *Nature Nanotechnology*. <https://doi.org/10.1038/s41565-020-0692-7>

**Hansen, S.F.**, Lennquist, A. 2020. Carbon nanotubes added to the SIN List as a nanomaterial of Very High Concern. *Nature Nanotechnology* 15: 3–4.