

Nanotechnology Revolutionizing Occupational and Environmental Health

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« Forecasting Nano Law: Risk Management Protecting Public Health
Under International Law »

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I. Nanotechnology's revolution for the global economy can also revolutionize public health, and operationalize the human right to occupational health

Sound occupational health programs that implement best strategies are the grease for the machinery of powerful economic engines. Information provided through occupational health programs helps employers survive because accidents and disease are not simply expensive but wasteful. No one can afford waste in this economy. The fat to be trimmed, however is not the same as the grease for the wheels and machinery that makes smooth commerce. Using well-honed tools for in-house occupational health and safety compliance systems therefore can save the life of marginal employers despite a difficult economy. *But what do we do in that fragile moment in time, when everyone agrees there is a big risk, but the details of that risk remain unknown?*

Since 2008, an increasing body of international expertise has agreed that nanotechnology holds both great promise and unquantified, unknown major risks to workplace health. In 2012, several international organizations began the first steps towards international nanotechnology regulation. Stakeholders comments to the World Health Organization (WHO) Geneva Switzerland (March 2012) critiques the agency's Background Paper by outlining clear steps for risk mitigation that are the cornerstone of sound programs to protect people who are exposed to manufactured nanoparticles, noting that procedural problems in the draft must be corrected if it is to be approved by the World Health Assembly in the political arena¹. Scientists and governments agree that the application of nanotechnology to commerce poses important unanswered

¹ This paper is based on comments that this author prepared for The Work, Health and Survival Project, ("WHS") including: International Safety Resources Association (ISRA), Fullerton California, Earth Focus Foundation, Geneva Switzerland, Digital 2000 Productions, Stafford Texas USA, Donald H. Ewert, IH, VP-Field Services nanoTox, Inc. and Director, Field Services AssuredNano Dr Gustav Grob, and International Sustainable Energy Organization (ISEO) Geneva, Switzerland Comments presented by: Ilise L Feitshans RE: WHO Guidelines on "Protecting Workers from Potential Risks of Manufactured Nanomaterials" (WHO/NANO), (Background paper) 2011 Draft, comments presented March 2012.

questions: Examples of high level respected reports that express this concern include: the Swiss Federation (Precautionary Matrix 2008), the Royal Commission on Environmental Pollution (UK 2008), German Governmental science commission, Public testimony sought by USA, National Institute for Occupational Safety and Health (NIOSH, Feb 2011), the Organisation for Economic Co-operation and Development (OECD) working group (since 2007), the World Health Organization (WHO), working group (in process of formation), and several non-governmental industrial organizations groups.

Yet, qualitative data to protect exposed people and the greater ecological system that surrounds the human environment lags behind industrial use: Nanotechnology is expected to represent about three trillion dollars of Gross Domestic Product (GDP) by 2015. The sheer economic importance of nanotechnology will change several antiquated systems regarding industrial processes, scientific understanding and categorization of chemical informatics and ultimately the health care delivery systems that must use or correct the end products of these changes anyway. Therefore, nanotechnology's arrival in commerce provides an unprecedented excellent opportunity to change society for the better.

Ilise L Feitshans JD and ScM is a bi-lingual lawyer with a Masters of Science in Public Health from the Johns Hopkins University. She has written the chapter "Occupational Health as a Human right" for the ILO Encyclopaedia, and is the author of the treatise DEIGNING AN EFFECTIVE OSHA COMPLIANCE PROGRAM, which addresses law and occupational medicine. Her articles and press releases have been published in many nations. I have given university level presentations in both English and French, especially at the UN in my former capacity as Coordinatrice of the Encyclopaedia for Safety and Health, ILO, Geneva Switzerland. I have taught legislative drafting at the Columbia University School of Law in the City of New York, and in turn, I have had the honor of drafting laws from the local level (NYC Board of Health regulations concerning confidential testing of minors for HIV) to the international level, (ILO Memoranda of Understanding with non-profit organizations and with the US government) and in 2012, a report to the Council of Europe that will be debated by the full Parliamentary Assembly in April 2013. Switzerland is a Member of the Council of Europe, so this is a source of particular pride for my family, my colleagues at the research institute at UNIL, and my school in Geneva, Provisional version Committee on Social Affairs, Health and Sustainable Development Nanotechnology: balancing benefits and risks to public health and the environment

http://www.assembly.coe.int/Communication/Asocdoc27rev_2012.pdf

If you wish to know more about her work, please read the WISE (Women in Safety Engineering) « 100 Women Making a Difference in Safety Health and Environmental Profession » at the American Society of Safety Engineers (ASSE)" ASSE 100th Conference , USA 2011. I am profiled in their book. My ability to break complex concepts into simple words without jargon is the hallmark of my work. This talent has enabled me to sustain a writing career, and to represent people from all walks of life around the world, and to bring their ideas to other people far away, ranging from Europe, Asia and the Gulf States.