

Mixed Exposure Issues for Nanotechnology Safety

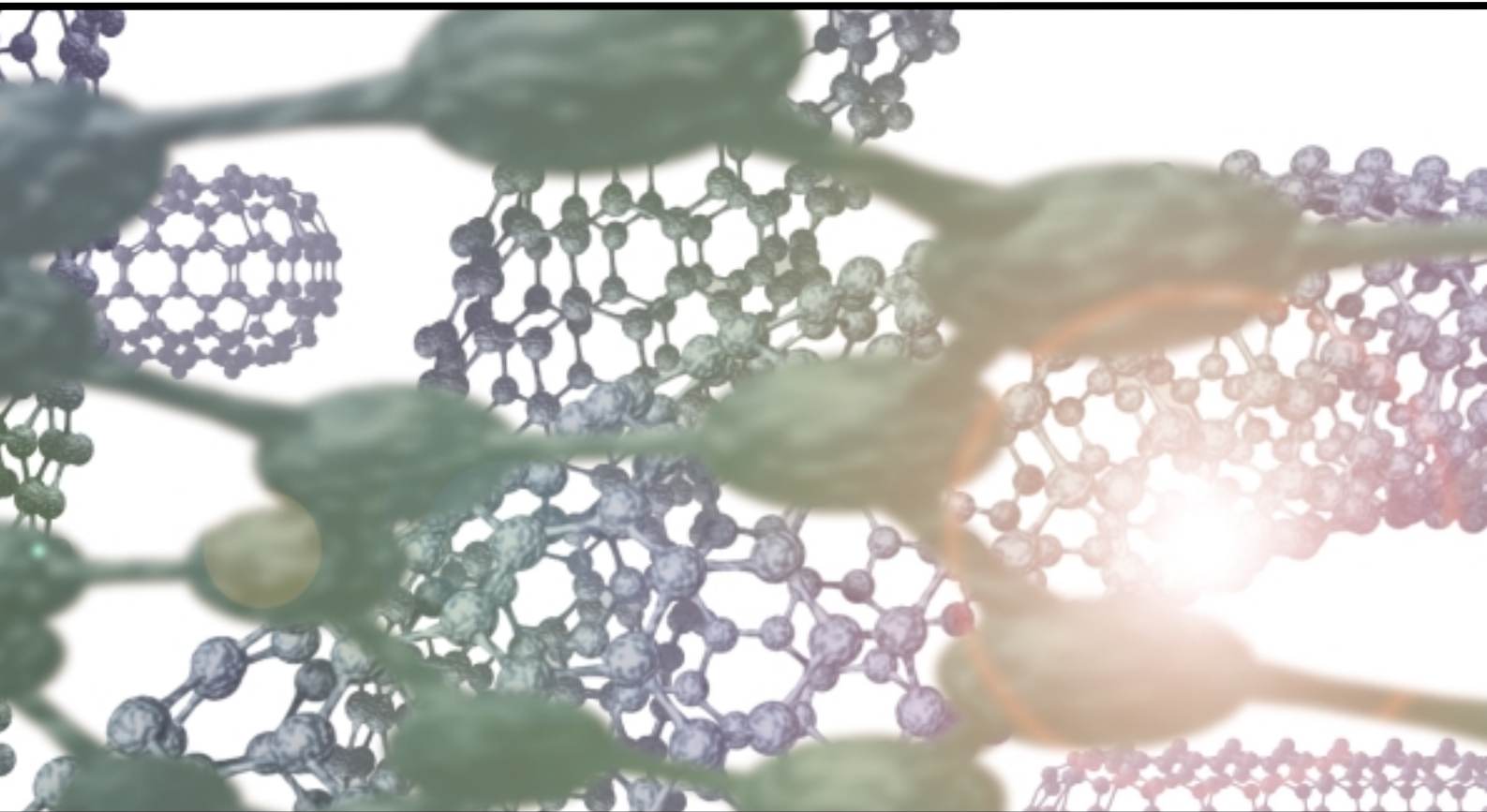
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The National Occupational Research Agenda (NORA) was initiated in April 1996 by the National Institute for Occupational Safety and Health (NIOSH) and its business, labor, academic, and government partners. NORA is directing and focusing occupational safety and health research in 21 areas to produce improvements in worker safety and health. Information about NORA is available at www.cdc.gov/niosh/. The NORA Mixed Exposures Team is considering mixed exposure scenarios relevant to nanotechnology safety and health, including health concerns for nanoparticles and nanomaterials in a range of particle sizes; mixed dermal and inhalation exposure pathways; multiple simultaneous exposures to individual agents; exposures to different agents at different times in workers' lives; generic classes of nanoparticles or nanomaterials with multiple components; and the combined effect of other stressors such as heat on nanoparticle exposures and behavior. Insights into health and safety issues for nanotechnology may come from lessons learned in studies of complex mixtures such as asphalt fumes, welding fumes, fossil fuels, and combustion products. The NORA program is also interested in the possibility that advances in nanotechnology may create tools to better enable research on mixed exposures; e.g. development of nanosensors that can be used to study health effects from exposure to mixtures (not necessarily involving nanoparticles). The NORA Mixed Exposures Team invites collaboration to improve the anticipation, measuring, modeling, and mitigation of potential health effects from nanotechnology activities.

Nanomaterials

a risk to health at work?



First International Symposium on Occupational
Health Implications of Nanomaterials

12-14 October 2004
Palace Hotel, Buxton, Derbyshire, UK

Report of Presentations at Plenary and Workshop Sessions and
Summary of Conclusions

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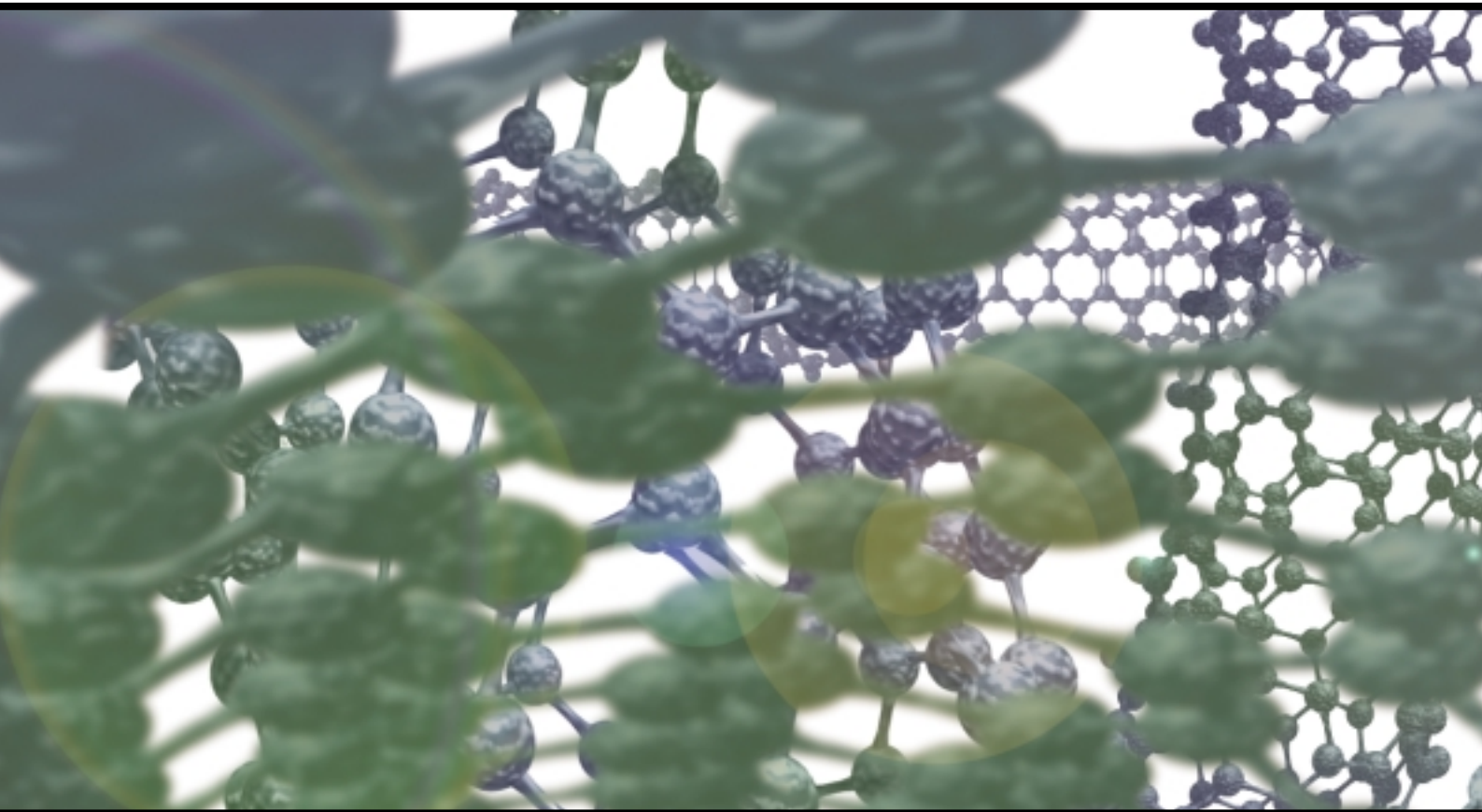
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