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Protective Equipment (PPE) ""; ""4.3.7. Fire and Explosion Safety ""; ""4.3.8. Recommendations and Guidance ""; ""4.3.9. Communication and Information""; ""4.3.10. Applications for Occupational Safety and Health ""; ""4.4. INTERNATIONAL ACTIVITIES ""; ""OUTPUTS""; ""5.1. NIOSH PUBLICATIONS ON NANOTECHNOLOGY""
""5.2. NIOSH PEER-REVIEWED PUBLICATIONS""""5.3. SPONSORED CONFERENCES ""; ""5.4. PRESENTATIONS ""; ""RESEARCH TO PRACTICE (R2P) ""; ""6.1. CAPACITY BUILDING THROUGH TECHNICAL ASSISTANCE ""; ""INTERMEDIATE CUSTOMERS AND INTERMEDIATE OUTCOMES""; ""7.1. FEDERAL GOVERNMENT AGENCIES ""; ""7.2. STANDARDS DEVELOPMENT ORGANIZATIONS""; ""7.3. INDUSTRY, LABOR, AND ACADEMIA ""; ""7.4. PROFESSIONAL ORGANIZATIONS ""; ""7.5. RESEARCH COLLABORATIONS""; ""OUTCOMES ""; ""APPENDIX A ""
""APPENDIX B NIOSH POSITION STATEMENT ON NANOTECHNOLOGY a€? ADVANCING RESEARCH ON OCCUPATIONAL HEALTH IMPLICATIONS AND APPLICATIONS """"APPENDIX C INTRAMURAL NANOTECHNOLOGY RESEARCH PROJECTS ""; ""GENERATION AND CHARACTERIZATION OF OCCUPATIONALLY RELEVANT AIRBORNE NANOPARTICLES ""; ""PULMONARY TOXICITY OF CARBON NANOTUBE PARTICLES ""; ""ROLE OF CARBON NANOTUBES IN CARDIOPULMONARY INFLAMMATION AND COPD-RELATED DISEASES ""; ""PARTICLE SURFACE AREA AS A DOSE METRIC ""; ""ULTRAFINE AEROSOLS FROM DIESEL-POWERED EQUIPMENT ""; ""NANOTECHNOLOGY SAFETY AND HEALTH RESEARCH COORDINATION ""
""NANOPARTICLES: DOSIMETRY AND RISK ASSESSMENT ""

Sommario/riassunto

Nanotechnology is the manipulation of matter on a near-atomic scale to produce new structures, materials, and devices. This technology has the ability to transform many industries and will have numerous applications to areas ranging from medicine to manufacturing. Research in nanoscale technologies is growing rapidly world-wide. By 2015, the National Science Foundation estimates that nanotechnology will have a $1 trillion impact on the global economy and employ 2 million workers, 1 million of which may be in the United States. Nanomaterials may present new challenges to understanding, predicting, and managing potential health risks to workers.