

# Nanoparticles

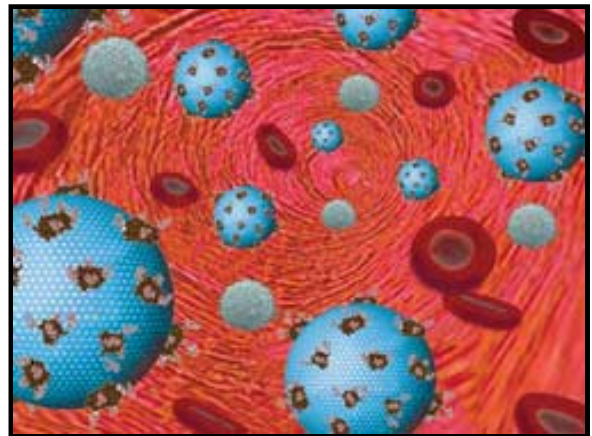
## Risk Assessment, Pervasiveness and Legacy to Future Generations

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We have always been exposed to nanoparticles, mainly consisting of minute crystals of soluble salts windblown from the sea. Throughout our prehistory there were relatively few other particles of less than 100 nm in the air until man harnessed fire. Our defence mechanisms therefore evolved principally to cope with the biological threat of viruses. There is evidence that nanoparticles can enter the body by inhalation, ingestion and across the skin, and can then travel around the body into various organs including across the blood-brain barrier. These properties are being harnessed by the pharmaceutical industry to improve the efficiency of drug delivery, but the same properties apply to pollution. There is considerable evidence that insoluble nanoparticles can be toxic, primarily because of their small size rather than substance. As a precaution, human exposure should be minimised by curbing the generation of unnecessary nano-particles. However, the nanotechnology industry has commenced the bulk production of nanoparticles before the long term environmental fate of such products has been determined.



Light refreshments will be available from 5.30 pm

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