Journal of Nanomaterials

Special Issue on
Nanomaterials and the Environment 2016

CALL FOR PAPERS

Developments in nanoscience have brought about industrial benefits as well as environmental concerns. Nanomaterials have been considered a potential environmental emerging contaminant, and their origin can be natural or incidental or from manufacturing processes. Incidental nanomaterials are those generated by the side product of anthropogenic processes, whereas manufactured nanomaterials are deliberately produced with specific properties. Exposure to both types is currently being investigated, and these may enter air, water, and soil from a range of routes. Physicochemical and biological transformations make nanomaterials potentially highly reactive in both environmental and biological systems, which may alter their fate, dispersion, and toxicity compared with their bulk counterparts.

We invite researchers to contribute original research articles as well as review articles that will stimulate the continuing efforts to understand the advances in nanomaterial characterisation, emissions, transformation, dispersion, fate, and effects in different environmental compartments (air, water, and soil). We are particularly interested in articles that deal with their environmental and health impacts and the implications for policy and regulations for both indoor and outdoor environments.

Potential topics include, but are not limited to:

- Emissions of nanomaterials/ultrafine particles from vehicle and nonvehicle sources
- Transformation of nanomaterials in air, water, and soil media
- Fate and behaviour of nanomaterials in anthropogenic and natural systems
- Dispersion and exposure modelling of nanomaterials/aerosols/particulate matter
- Environmental effects assessment of nanomaterials/ultrafine particles/aerosols
- Nanomaterials concentration in the indoor and outdoor environments: measurements, modelling, and predictions
- Physicochemical characteristics of incidental and manufactured nanomaterials
- Health effects assessment of environmental exposures of nanomaterials
- Nanomaterials in the environment: control technologies and policies
- Fate and effects of nanomaterials throughout the life cycle of products
- Applications of nanomaterials in water treatment (drinking water and wastewater)
- Management of nanotechnology-integrated products in the environment
- Environmental risk characterisation, assessment, and management of nanomaterials

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/jnm/nenv16/.

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