Special Issue

Mineralogic and Health Risk of Respirable Dust Exposures: Current Progress and Future Challenges

Message from the Guest Editors

Respirable dust can be defined as mineral grains capable of entering the human lung, and once inside the lung they are capable of causing adverse health effects. These effects can be temporary or permanent damage, leading to a large range of different diseases. Typically, these diseases are either cancer such as mesothelioma from asbestos exposure or non-cancerous such as the fibrotic disease silicosis from respirable crystalline quartz. There is a growing knowledge base about the biotoxicity of different minerals, the sizes and shapes of those mineral grains, and possible health outcomes. Current research is targeting specific minerals, both naturally occurring minerals as well as manufactured mineral materials typically used in the construction industry amongst others. The technology used collect airborne minerals is constantly improving, along with improvements in monitoring networks. Advances are constantly being achieved in assessment of mineral biotoxicity. A clear trend in this research is a movement away from conventional toxicity involving animal models to state-of-the-art techniques using in-vivo models and genomics.

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Toxics (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

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