JOURNAL OF HAZARDOUS MATERIALS

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DESCRIPTION

The Journal of Hazardous Materials is an international forum that advances world class research by publishing articles in the areas of Environmental Science and Engineering. We publish full-length research papers, review articles, and perspectives that improve our understanding of the hazards and risks that certain materials pose to public health and the environment. Papers that deal with ways of assessing environmental impact (Environmental Science) and risk mitigation (Environmental Engineering) of hazardous materials (HM) are within the scope of the journal. The Journal publishes high-impact contributions on:

- Characterization of the harmful effects of chemicals and materials (including contaminants of emerging concern). Studies of harmful effects are restricted to their impact on model organisms or cell-based assays typically used in environmental science and engineering studies. Some examples of model organisms include, but are not limited to, plants, microbes (viruses, bacteria, fungi, algae), zooplankton, phytoplankton, zebrafish, and C. elegans Field studies monitoring HM concentrations and bioaccumulation in organisms or microorganisms to determine fate and impact of contaminants in the environment Advances in measurement and monitoring of HM with relevant numbers of replicates
- Transport, fate and removal or transformation of environmentally relevant concentrations of HM in the environment Physico-chemical and separation processes for HM removal Advanced Oxidation Process for HM Removal Thermal Processes for HM Removal Biological processes for HM removal including biodegradation and elucidation of biodegradation pathways. Demonstrated safer and cleaner technologies and biotechnologies with minimization of the environmental impact of HM Resource recovery (Energy and Materials) from HM with reduction of their environmental impact Modeling related to HM fate and transport

However, the following areas are excluded:
- Non-hazardous materials
- Work place health and safety
- Municipal wastewater treatment research focusing on the removal of regular organic and nutrient compounds
- Greenhouse gas mitigation
- The manufacturing of explosives
- Epidemiological studies (e.g. studies involving patients or cohort studies) Fire/flame and/or flame retardants that do not focus on hazardous effects of the materials.
- Characterization of harmful effects on arthropods, reptiles, fish, birds or mammals (including humans), as well as tissues/organs/organelles (e.g. mitochondria) of such organisms, which would more effectively be conveyed in specialized journals
- Studies with a materials engineering focus that primarily deal with material synthesis, characterization, and utilization for contaminant sequestration under conditions that are not environmentally relevant or conducted with non-hazardous contaminants

AUDIENCE

Chemists, Chemical Engineers, Manufacturers of Chemicals, Designers of Chemical Plants, Local Authorities, Emergency Services, Transportation Services, Safety Engineers and Inspectors.

IMPACT FACTOR

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