ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY

DESCRIPTION

Ecotoxicology and Environmental Safety focuses on integrated mechanistic research related to short- and long-term pathways and interactions of substances and chemical mixtures in environmental systems and subsystems on their bioavailability, and assimilation in organisms, as well as biological responses of these organisms, and damage mechanisms (endocrine disruption, genotoxicity); and on their subsequent fate in the environment, food chain, including humans. Novel technologies, techniques, and methods such as biomarkers, biosensors and bioanalytical systems, bioremediation methods, QSARs and QSPRs, advanced high performance computational methods, models, and their applications in obtaining and processing interdisciplinary ecotoxicological information are also addressed in the journal. We welcome the applied outcome of complex ecotoxicological research such as developing the science-based Environmental Quality Criteria (EQC), standard toxicity tests, techniques, and methods for ecotoxicological evaluation of the environment, as well as developing ecotoxicologically proven methods and technologies for prevention, interception, and remediation of human-induced damage to ecosystems. Emphasis is placed on ecological animal models rather than laboratory based rodent studies; The above scope of the journal is aimed at providing science-based tools for sustainably managing the environment through risk assessment, risk characterization, risk prediction, and risk management. The journal publishes regular research articles, and review articles.

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Ecotoxicology and Environmental Safety focuses on integrated mechanistic research related to short- and long-term pathways and interactions of toxic substances and chemical mixtures in environmental systems with emphasis on their bioavailability, assimilation and metabolism in target organisms as well as biological responses of these organisms, and damage mechanisms (endocrine disruption, genotoxicity); fates of toxicants in the food chain, including exposures in humans are considered.. The journal prefers interdisciplinary studies of environmental chemistry and toxicology describing environmental fate and biological fate of pollutants, novel analytical technologies, techniques, and methods such as biomedical photonic technologies, biomarkers, biosensors, bioanalytical systems, QSARs, QSPRs, advanced high-performance computational methods, models, and their applications in obtaining and processing ecotoxicological information. We welcome the applied outcome of complex ecotoxicological research such as developing the science-based Environmental Quality Criteria (EQC), standard toxicity tests, techniques, and methods for ecotoxicological evaluation of the environment, as well as developing ecotoxicologically proven methods and technologies for prevention, interception, and remediation of human-induced damage to ecosystems. The above scope of the journal is aimed at providing science-based tools for sustainably managing the environment through risk assessment, risk characterization, risk prediction, and risk management. Emphasis will be placed on ecotoxicological animal model studies (rather than rodent models) as well as field studies (rather than controlled laboratory investigations) dealing with fate and effects of pollutants.

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