SCIENCE OF THE TOTAL ENVIRONMENT
An International Journal for Scientific Research into the Environment and its Relationship with Humankind

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

- Description p.1
- Audience p.2
- Impact Factor p.2
- Abstracting and Indexing p.2
- Editorial Board p.2
- Guide for Authors p.9

DESCRIPTION

*Science of the Total Environment* is an international journal for publication of original research on the **total environment**, which includes the **atmosphere**, **hydrosphere**, **biosphere**, **lithosphere**, and **anthroposphere**.

totalenvironment.gif

The total environment is characterized where these five spheres overlap. Studies that focus on at least two or three of these will be given primary consideration. Papers reporting results from only one sphere will not be considered. Field studies are given priority over laboratory studies. The total environment is studied when data are collected and described from these five spheres. By definition total environment studies must be multidisciplinary.

Examples of data from the five spheres are given below:

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Subject areas may include, but are not limited to:

- Agriculture, forestry, land use and management
- Air pollution quality and human health
- Contaminant (bio)monitoring and assessment
- Ecosystem services and life cycle assessments
- Ecotoxicology and risk assessment
- Emerging fields including global change and contaminants
- Environmental management and policy
- Environmental remediation
- Environmental sources, processes and global cycling
- Groundwater hydrogeochemistry and modeling
- Human health risk assessment and management
- Nanomaterials in the environment
- Noise in the environment
- Persistent organic pollutants
- Plant science and toxicology
- Remote sensing
- Stress ecology in marine, freshwater and terrestrial ecosystems
• Trace metals and organics in biogeochemical cycles
• Waste and water treatment

The editors discourage submission of papers which describe results from routine surveys or monitoring programs, studies which are local in scope, laboratory experiments, hydroponic or pot studies measuring biochemical/physiological endpoints, food science studies, screening of new plant species for phytoremediation, testing known chemicals in another setting, and experimental studies lacking a testable hypothesis.

The abstract, highlights and conclusions of papers in this journal must contain clear and concise statements as to why the study was done and how readers will benefit from the results. Articles submitted for publication in Science of the Total Environment should establish connections among research findings with implications for environmental quality, ecological health, and/or human health.

AUDIENCE

Environmental Scientists, Environmental Toxicologists, Ecologists, Chemical/Environmental Engineers, Environmental Health Scientists and Epidemiologists, Risk Scientists, Environmental Science Managers and Administrators.

IMPACT FACTOR

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ABSTRACTING AND INDEXING

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Selected Water Resources Abstracts
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Scopus
CSA Technology Research Database

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Organic Contaminants; Pesticides; Emerging Contaminants; Adsorption; Transformation; Mitigation; Water Quality; Aquatic Toxicology; Remediation; Biochar.

Associate Editors
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Ralf Ludwig, Ludwig-Maximilians-Universität München (LMU), München, Germany

Lidia Morawska, Queensland University of Technology, Brisbane, Queensland, Australia

air pollution, air quality, indoor air pollution, exposure assessment, contaminated particulates, VOC, anthropogenic, characterization, automotive, apportionment, pollution transport, monitoring, analytical

Wei Ouyang, Beijing Normal University, Beijing, China

Water environment and climate risk, diffuse pollution assessment

Elena Paoletti, National Research Council of Italy (CNR), Firenze, Italy

Plant ecophysiology Effects of pollutants (ozone, UV-B, metals, acidic deposition, and surfactants) and climate change (drought, frost) on forests and trees (gas exchange, water relations, cuticles, roots, ectomycorrhizas, growth and pollen)

Yolanda Picó, Universitat de València, Valencia, Spain

Media / Habitats: drinking water, water quality, water pollution, rivers, lakes, sediments, watersheds, soils, exposure assessment, human health effects, biomarkers, bioindicators, dietary exposure, food contamination, food safety Human Health Effects: pesticides, endocrine disruptors, pharmaceutical residues, organics, analytical, surveys

Simon Pollard, Cranfield University, Cranfield, Bedfordshire, England, UK

Risk analysis, risk management, remediation, environmental policy, environmental decision sciences, environmental technology, regulation

Charlotte Poschenrieder, Universitat Autònoma de Barcelona (UAB), Bellaterra, Spain

Ajit Sarmah, University of Auckland, Auckland, New Zealand

Scott Sheridan, Kent State University, Kent, Ohio, USA

Human biometeorology, climate change, synoptic climatology, extreme temperature events

Helena Solo-Gabriele, University of Miami, Coral Gables, Florida, USA


Filip Tack, Universiteit Gent, Gent, Belgium

Heavy metals, trace element biogeochemistry, dredged materials, soil and sediment remediation, phytoremediation

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Atmospheric chemistry, Numerical models of atmospheric dynamic and chemistry, Atmospheric gas/aerosol pollutants

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biomonitoring, moss biomonitoring, raptor biomonitoring, heavy metal contamination, cellular localization of metals, hydrological fluxes of forest canopies.

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Aerosols, air pollution

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Analytical chemistry, aquatic toxicology, environmental risk assessment, and toxicogenomics

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environmental biogeochemistry, active and passive biomonitoring of persistent contaminants in terrestrial and aquatic ecosystems

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Expertise in Waste management, Environmental monitoring and Risk assessment, Life cycle analysis, Soil decontamination, Geochemical and Thermodynamic modelling and Groundwater pollution

Ivan Bergier, EMBRAPA Brazil, Corumbá, Brazil

expertise in sustainable development, particularly in the following areas: environmental services, ecology and biogeochemistry of ecosystems and agroecosystems, bioenergy, biofuels, biochar, remote sensing, and electron microscopy applied to nanotechnology, electronics and automation, climate change adaptation and mitigation of greenhouse gases emissions.

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Geoecology, sediment cores, mercury, trace metals

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air quality, water quality, forests, ecological effects, bioavailability, bioindicators, PAHs, Dioxin, nutrients, copper, natural, anthropogenic, diffuse, apportionment, bioremediation, restoration, climate change, eutrophication, desertification, deforestation, monitoring, sequential extraction, remote sensing, moss biomonitoring, lichens, tree rings (dendrochronology), historical monitoring, Africa, Western Europe, Mediterranean region, South America

Satinder Brar Kaur, Institut National de la Recherche Scientifique (INRS), Québec, Quebec, Canada
Development of finished products (formulations) of wastewater and wastewater sludge based value-added bioproducts, such as enzymes, organic acids, platform chemicals, biocontrol agents, biopesticides, butanol and biohydrogen

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Arctic, marine ecosystems, birds, metals, organo-compounds, biomonitoring, biological effects

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Development of finished products (formulations) of wastewater and wastewater sludge based value-added bioproducts, such as enzymes, organic acids, platform chemicals, biocontrol agents, biopesticides, butanol and biohydrogen

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Water Quality, Environmental and Aquatic Eco- Toxicology, Risk and Hazard Assessment, Comparative Pharmacology and Toxicology, Environmental Public Health, Harmful Algal Blooms, Green and Sustainable Chemistry, Urban and Aquatic Ecology, Water Reuse.

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10.020: air pollution, 10.030: air quality, 10.040: indoor air pollution, 70.040: clean technologies, 80.050: incineration

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Biochemical engineering and environmental engineering this last focused on biodegradation of pollutants by microorganisms or enzymes. Bioreactors, immobilization, kinetics, etc.

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Applications of spectroscopy techniques in environmental chemistry; phytoremediation, novel methods for the bioproduction of nanoparticles, development of analytical methods to detect nanomaterials, study of the fate of nanoparticles in the environment, and applications of nanotechnology to clean water among others

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and health, health risk assessments.

**Ying Guo**, New York State Department of Health (NYSDOH), Albany, New York, USA
My research interests: (1) biomonitoring organic chemicals in human body, such as phthalates,
PAHs, organophosphate pesticide and environmental phenols; (2) monitoring organic pollutants in
environment, e.g., persistent organic pollutants; (3) Analytical method development for novel organic
contaminants in various environmental matrix. Recently, I am working on Exposome to women with
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Organics, monitoring, human health, ecotoxicology

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Janine McCartney, HHC Services Inc., Lester, Pennsylvania, USA
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Howard S. Neufeld, Appalachian State University, Boone, North Carolina, USA
1. Over 25 years of research on the effects of ozone on plants 2. Research on the role of anthocyanins in vegetative tissues in plants 3. Climate change impacts on plants in the southern Appalachian mountains 4. My technical expertise resides in measuring plant gas exchange and plant water relations, using the Li-Cor 6400 gas exchange system, a Sperry hydraulic conductivity apparatus and Scholander pressure chamber, as well as a variety of other instrumentation (including leaf fluorescence meter) to monitor plant responses to environmental stresses.

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Tiina Reponen, University of Cincinnati, Cincinnati, Ohio, USA
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Robert Risebrough

Chelsea M. Rochman, University of California, Davis, Davis, California, USA
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Mª Jesús Sánchez-Martín, IRNASA, CSIC, Salamanca, Spain
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Piotr Szefer, Medical University of Gdańsk, Gdańsk, Poland
- Biomagnification of major and minor elements along the sequential trophic levels of the marine biosphere. - Bioavailability of metallic pollutants to benthic organisms as potential biomonitors in relation to the adjacent sediments and sea water. - Chemometric evaluation of the distribution of essential, toxic elements and other pollutants in the marine ecosystems. - Evaluation of chemical elements relationships in their horizontal and vertical distribution in the marine sediments. - Chemometric evaluation of marine organisms as potential biomonitors of chemical pollution of the aquatic ecosystems worldwide.

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Maria Concetta Tomei, National Research Council of Italy (CNR), Roma, Italy
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PAHs, organic matter, marine environments
INTRODUCTION

Aims and Scope

Science of the Total Environment is an international journal for publication of original research on the total environment, which includes the atmosphere, hydrosphere, biosphere, lithosphere, and anthroposphere.

totalevironment.gif-Total Environment

The total environment is characterized where these five spheres overlap. Studies that focus on at least two or three of these will be given primary consideration. Papers reporting results from only one sphere will not be considered. Field studies are given priority over laboratory studies. The total environment is studied when data are collected and described from these five spheres. By definition total environment studies must be multidisciplinary.

Examples of data from the five spheres are given below:

stoten-banners.jpg-The five spheres of the total environment

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Types of paper

Full papers: reporting original and previously unpublished work.

Short Communications: A brief communication of urgent matter or the reporting of preliminary findings to be given expedited publication.

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