



SCIENCE OF THE TOTAL ENVIRONMENT

An International Journal for Scientific Research into the Environment and its Relationship with Humankind

AUTHOR INFORMATION PACK

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ISSN: 0048-9697

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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Scopus

EDITORIAL BOARD

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Jay Gan, University of California at Riverside, Riverside, California, USA

Special Issues Editor

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

Associate Editors

Baoliang Chen, Zhejiang University, Hangzhou, China
Soil pollution control and remediation; Traditional and novel functional materials and environmental applications (biochar, graphene, biosorbent, and organoclay); Sorption and reactions of organic and inorganic contaminants with natural and synthesised media; Novel membrane and pollutant abatement

Jianmin Chen, Fudan University, Shanghai, China

Gaseous and particulate air monitoring and chemistry (particularly urban), secondary aerosol, haze formation and fog chemistry, human toxicity of atmospheric particulates, aerosols and climate impacts

Frederic Coulon, Cranfield University, Cranfield, Bedfordshire, England, UK
Remediation, separations, hazardous waste, water and wastewater treatment ; Risk assessment and remediation of polluted soil; Bioaerosols, Hydrocarbons; microbial communities; Antarctic science

Adrian Covaci, University of Antwerp, Wilrijk, Belgium

Xinbin Feng, Chinese Academy of Sciences (CAS), Guiyang, China
Mercury biogeochemical cycling in the environment and its health impact; Mercury stable isotope geochemistry and remediation of mercury contaminated lands; Cd, Pb, As and Sb biogeochemical cycling in the environment

José Virgílio Matos Figueira Cruz

Ashantha Goonetilleke, Queensland University of Technology, Brisbane, Queensland, Australia

Mae Gustin, University of Nevada at Reno, Reno, Nevada, USA

Zhen (Jason) He, Virginia Tech, Blacksburg, Virginia, USA
water pollution and treatment, environmental biotechnology, resource recovery from wastes, bioelectrochemical systems, bioenergy, membrane technology, bioremediation, and desalination.

Patricia A. Holden, University of California, Santa Barbara, California, USA

Henner Hollert, RWTH Aachen University, Aachen, Germany

Wei Huang, Peking University, Beijing, China
Exposure assessment; Air pollution attributed effects and risks on chronic diseases; Underlying pathophysiological mechanisms; Health intervention strategies; Environmental epidemiology; Exposure assessment methodology

Pavlos Kassomenos, University of Ioannina, Ioannina, Greece

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

Scott Sheridan, Kent State University, Kent, Ohio, USA
Human biometeorology, climate change, synoptic climatology, extreme temperature events

Filip Tack, Universiteit Gent, Gent, Belgium
Heavy metals, trace element biogeochemistry, dredged materials, soil and sediment remediation, phytoremediation.

Kevin Thomas, University of Queensland, Queensland, Australia

Paola Verlicchi, Università di Ferrara, Ferrara, Italy
Water treatment

Daniel A. Wunderlin, Universidad Nacional de Córdoba, Córdoba, Argentina

Editorial Board

Jésus Ramon Aboal Viñas, Universidade de Santiago de Compostela, Santiago de Compostela, Spain
biomonitoring, moss biomonitoring, raptor biomonitoring, heavy metal contamination, cellular localization of metals, hydrological fluxes of forest canopies.

Takashi Azuma, Osaka University of Pharmaceutical Sciences, Osaka, Japan

Roya Bahreini, University of California at Riverside, Riverside, California, USA
Aerosols, air pollution

Carlos Barata, IDAEA-CSIC, Barcelona, Spain
Analytical chemistry, aquatic toxicology, environmental risk assessment, and toxicogenomics

Roberto Bargagli, Università degli Studi di Siena, Siena, Italy
environmental biogeochemistry, active and passive biomonitoring of persistent contaminants in terrestrial and aquatic ecosystems

Georgios Bartzas, National Technical University of Athens (NTUA), Athens, Greece
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.

Harald Biester, Technische Universität Braunschweig, Braunschweig, Germany
Geocology, sediment cores, mercury, trace metals

Julian Blasco, Instituto de Ciencias Marinas de Andalucía (CSIC), Puerto Real (Cádiz), Spain

Paul Bradley, U.S. Geological Survey (USGS), Columbia, South Carolina, USA

Cristina M. Branquinho, Universidade de Lisboa, Lisbon, Portugal
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

Birgit Braune, Carleton University, Ottawa, Ontario, Canada
Arctic, marine ecosystems, birds, metals, organo-compounds, biomonitoring, biological effects.

Bryan W. Brooks, Baylor University, Waco, Texas, USA
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.

Giorgio Buonanno, University of Cassino, Cassino (FR), Italy
10.020: air pollution, 10.030: air quality, 10.040: indoor air pollution, 70.040: clean technologies, 80.050: incineration

Joanna Burger, Rutgers University, Piscataway, New Jersey, USA
Eco-toxicology, behaviour, monitoring and assessment, birds and reptiles

Glòria Caminal, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain
Biochemical engineering and environmental engineering this last focused on biodegradation of pollutants by microorganisms or enzymes. Bioreactors, immobilization, kinetics, etc.

Art Chappelka, Auburn University, Auburn, Alabama, USA
Air pollution and global climate effects to terrestrial ecosystems, native plant community responses (shifts in diversity) to air pollutants and global climate change, plant-stress-air pollution/global climate change interactions, urban ecology and ecosystem services.

Da Chen, Jinan University, Guangzhou, China
Environmental chemistry; analytical chemistry; ecotoxicology; persistent organic pollutants; flame retardants; pesticides; mass spectrometry; gas/liquid chromatography.

Wei Chen, Nankai University, Jinnan District, Tianjin, China
Nanoparticles, toxicity

Joaquín Cochero, Universidad Nacional de La Plata, La Plata, Buenos Aires, Argentina

Rui Coutinho, Universidade Dos Açores, Ponta Delgada, Portugal
Hydrogeology, Volcanology, Natural Hazards, Water Resources Management, Environmental Geology.

Xinyi (Lizzy) Cui, Nanjing University, Nanjing, China
Organics, bioavailability

Guido Del Moro, National Research Council of Italy (CNR), Bari, Italy
novel processes for wastewater treatment, aerobic granular biomass technologies, integration of chemical oxidation and biological processes for industrial wastewater, advanced oxidation processes, electro-degradation processes, wastewater treatment modelling

José L. Domingo, Universitat Rovira i Virgili, Reus, Catalonia, Spain

Margaret Eng, University of Saskatchewan, Saskatoon, Saskatchewan, Canada
Avian toxicology; wildlife toxicology; utilizing molecular and physiological tools in ecotoxicology; long-term effects of early developmental exposure; neurological and behavioral effects of contaminants; flame retardants, pesticides, dioxin-like compounds, methylmercury.

Jose Angel Fernández, Universidade de Santiago de Compostela, Santiago de Compostela, Spain

air pollution, air quality, water pollution, rivers, ecological effects, bioavailability, bioindicators, aquatic toxicology, heavy metals, biomagnification, bioaccumulation, surveys, moss, biomonitoring, Western Europe

Jean-Francois Focant, Université de Liège, Liège (Sart-Tilman), Belgium

exposure assessment, dietary exposure, food contamination, Human Health Effects, POPs, VOC, PCBs, Dioxin, analytical, measurement methods

Jorge Gardea-Torresdey, University of Texas at El Paso, El Paso, Texas, USA

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

Leobardo Manuel Gomez Oliván, New Mexico State University, Toluca, Mexico

Daren Gooddy, British Geological Survey, Oxfordshire, England, UK

Andrew Gray, University of California at Riverside, Riverside, California, USA

Sediment transport, hydrology

John Gulliver, Imperial College London, London, UK

noise and air pollution exposure assessment, air pollution monitoring, dispersion modelling, land use regression modelling, geographical information systems, geo-statistical techniques (Kriging etc.), spatial analysis of environmental and health data. More broadly: geographical studies of environment 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 fertility problems.

Neil S. Harris, University of Alberta, Edmonton, Alberta, Canada

Expertise: cadmium, micronutrients, membrane transporters, trace metal uptake and translocation in plants

Roy M. Harrison, University of Birmingham, Birmingham, UK

Air Pollution; Atmospheric Science; Environmental Health; Environmental Chemistry; Aerosol Science

Gerard Hoek, Utrecht University, Utrecht, Netherlands

exposure assessment, air pollution modeling, environmental epidemiology

Peter Hooda, Kingston University, Kingston upon Thames, England, UK

Biogeochemical Cycling of Nutrients and Environmental Contaminants; Catchment Water Quality; Land Degradation; Climate Change Impacts on Soil Processes; Emerging Contaminants

Kiril Hristovski, Arizona State University, Tempe, Arizona, USA

Environmental Applications and Implications of Nanomaterials; Water/Wastewater Quality and Treatment; Solid and Hazardous Waste; Management of Environmental Systems in Developing Countries.

Rong Ji, Nanjing University, Nanjing, China

Organics, terrestrial

Sunny Jiang, University of California, Irvine, California, USA

Pathogens, water treatment

Weiying Jiang, California Environmental Protection Agency, Sacramento, California, USA

Organics, pesticides, dust, analytics

Begoña Jiménez, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain

Sarah Jovan, Pacific Northwest Forest Inventory and Analysis (PNW-FIA), Portland, Oregon, USA

My greatest expertise is in using lichen community composition for monitoring and quantifying nitrogen pollutants. But I also work with lichen/moss tissue assays (for N, S, metals, PAHs), landscape-scale community-based gradient modeling more generally, and biomass modeling for ground-dwelling non-vascular communities in boreal and tundra systems.

Athanasios Katsoyiannis, European Commission Joint Research Centre (JRC), Ispra (VA), Italy

expertise on the occurrence, fate and source identification of organic contaminants (especially PCBs, PBDEs, PAHs and VOCs) in all environmental compartments.

Mary Beth Kirkham, Kansas State University, Manhattan, Kansas, USA

soil-plant-water relations; drought stress; elevated carbon dioxide; uptake of heavy metals by plants

Charles Knapp, University of Strathclyde, Glasgow, Scotland, UK

ecological effects, bacteria, microorganisms, wastewater, nutrients, eutrophication

D. Kolpin, Iowa City, Iowa, USA

Ewa Korzeniewska, University of Warmia and Mazury, Olsztyn, Poland

Air pollution quality and human health; Contaminant (bio)monitoring and assessment; Ecotoxicology and risk assessment; Environmental management and policy; Human health risk assessment and management; Waste and water treatment

Prashant Kumar, University of Surrey, Guildford, Surrey, UK

Air quality and health; Airborne ultrafine and nanoparticles; Exposure assessment; Low-cost pollution sensing; Exhaust and non-exhaust emissions; Air pollution control; Grey-grey infrastructure interactions; Indoor air quality; Dispersion modelling; Urban nexus; Future cities/megacities

Keisuke Kuroda, National Institute for Environmental Studies, Fukushima, Japan

Subsurface geochemistry and mitigation technologies of contaminants of emerging concern (CECs)

James Lam, The Education University of Hong Kong, Tai Po, New Territories, Hong Kong

POPs, emerging contaminants

Dimitra Lambropoulou, Aristotle University of Thessaloniki, Thessaloniki, Greece

Emerging Contaminants, Organic Pollutants, Transformation Products, Environmental fate, Sample preparation and analysis, Advanced mass spectrometry techniques, Environmental monitoring and risk assessment, water quality, Treatment processes for water and wastewaters

Joakim Larsson, Göteborgs Universitet, Göteborg, Sweden

aquatic toxicology, pharmaceutical residues

Juying Li, Shenzhen University, Shenzhen, Guangdong, China

Organics, bioavailability, isotopes, analysis

Shibin Li, U.S. Environmental Protection Agency (EPA), Duluth, Minnesota, USA

Environmental toxicology, Environmental chemistry, Environmental remediation, nanomaterials, and Chemical risk assessment

Daohui Lin, Zhejiang University, Hangzhou, China

Environmental behavior of pollutants; Environmental evaluation; Ecotoxicity.

Kunde Lin, Xiamen University, Xiamen City, Fujian 361102, China

Organics, biosynthesis, catalysis

Weiping Liu, Zhejiang University, Hangzhou, China

Organics, monitoring, human health, ecotoxicology

Xiaobo Liu, The University of Hong Kong, Hong Kong SAR, China

Applied food microbiology, Biofuels and biomass, Environmental microbiology, Food fermentation engineering, Microbial biotechnology, Wastewater treatment

Sheila Macfie, Western University, London, Ontario, Canada

Metal toxicity and tolerance in plants; Synchrotron radiation techniques; Rhizosphere chemistry

Sonia Manzo, ENEA, Naples, Italy

A. Markus, Deltares, Delft and University of Amsterdam, The Netherlands

Jonathan Martin, University of Alberta, Edmonton, Alberta, Canada

Analytical environmental chemistry, perfluorinated compounds, bioaccumulation, toxicology and environmental chemistry

Ioannis Matiatos, International Atomic Energy Agency (IAEA), Vienna, Austria

isotope hydrology, water resources management, hydrogeochemistry, groundwater modeling, applied statistical modeling, climate change impact and environmental monitoring

Janine McCartney, HHC Services Inc., Lester, Pennsylvania, USA

Thomas Meinelt, Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany

Alternative treatments in aquaculture, impact (and interaction) of humic substances on environment and animals.

Derek Muir, National Water Research Institute (NWRI), Burlington, Ontario, Canada

Environmental chemistry, biogeochemistry, bioaccumulation, persistent organic pollutants, chemicals of emerging concern, chemical inventories, mercury, polycyclic aromatic compounds, Arctic, marine mammals, fish

Jacek Namieśnik, Technical University of Gdansk, Gdansk, Poland

environmental analytics and monitoring, food analysis, QA/QC systems, green analytical chemistry, envirometrics

Kazakis Nerantzis, Aristotle University of Thessaloniki, Thessaloniki, Greece

Groundwater modelling; Groundwater vulnerability; Hydrogeochemistry; Hydrogeophysics; Isotope hydrology; Water resources management; Floods; Climate change impacts on water resources

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.

Huu Hao Ngo, University of Technology Sydney, Ultimo, New South Wales, Australia

water and wastewater treatment and reuse technologies, alternative water resources, water management and impact assessment, solid waste management, specific green technologies: water – waste – energy nexus and greenhouse gas emission control and minimisation.

Hong-Gang Ni, Peking University, Shenzhen, China

His research interests focus on the environmental behavior and fate, human exposure and health risk of organic pollutants. My research interests focus on the environmental behavior and fate, human exposure and health risk of organic pollutants. My personal keywords: organic pollutants (persistent organic pollutants and environmental molecular markers); environmental model (process and impact); human exposure and health risk.

Fernando Pacheco Torgal, University of Minho, Guimarães, Portugal

Anastasia K. Paschalidou, Democritus University of Thrace, Orestiada, Greece

Momir Paunovic, University of Belgrade, Beograd, Serbia

hydrobiology, aquatic macroinvertebrates, freshwater mollusks, invasive aquatic species, feeding of benthivorous fish, functional analyses of aquatic ecosystems, relation of aquatic biota and environmental variables, bio-monitoring in freshwater, genotoxicological investigations on aquatic organisms and microbiology of freshwaters.

Alexandra Pavlidou, Hellenic Centre for Marine Research, Mavro Lithari, Anavyssos, Greece

Eutrophication and eutrophication indexes according to WFD and MSFD, biogeochemical cycles and nutrient dynamics in marine environments (coastal and open sea)

Alexandre R. Péry, AgroParisTech, Paris, France

Toxicokinetic modelling; Toxicodynamic modelling; Ecotoxicology; Mixtures; Integrated risk assessment

Maria Pignata, Universidad Nacional de Cordoba (Argentina), Cordoba, Argentina

Human Health Effects: pesticides, endocrine disruptors, pharmaceutical residues, organics, analytical, surveys

Xavier Querol, Consejo Superior de Investigaciones Científicas (CSIC), Barcelona, Spain

Environmental geochemistry; Air quality; Atmospheric aerosols; Tropospheric ozone; Black carbon; Ultrafine particles; Metals; Organic pollutants; Inorganic gaseous pollutants, NO₂, NO, NO_x, SO₂, SO₃, CO, NH₃; Source apportionment; Urban and regional pollution; Atmosphere and climate change; Air quality policy; Mobile, industrial, domestic and agricultural emissions of air pollutants; Leaching of industrial wastes; Impact of mining on environment; Recycling of industrial wastes; Coal use related pollution

Clemens Reimann, Norges geologiske undersøkelse - NGU, Trondheim, Norway

Geochemistry, Environmental Geochemistry, Biogeochemistry, Hydrogeochemistry, Regional Geochemistry, Geochemical mapping, Critical Zone Research, Soil chemistry

Eric Reiner, Ontario Ministry of the Environment, Toronto, Ontario, Canada

Gas Chromatography, Liquid Chromatography, mass spectrometry, Quality Control / Quality Assurance, Environmental Analysis.

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

Indoor air pollution, exposure assessment, bacteria, microorganisms, biohazards, monitoring

Robert Risebrough

Anacleto Rizzo, IRIDRA, Florence, Italy

Constructed Wetland; Nature-Based Solution for Wastewater Treatment; Sustainable Water Management; Sustainable Sanitation Modelling; Sustainable Urban Drainage Systems; Water Sensitive Urban Design; Low Impact Development; Green Infrastructure; Ecosystem Service

Teresa Rocha-Santos, Universidade de Aveiro, Aveiro, Portugal

Micro(nano)plastic; Plastic; Microfibres; Organic contaminants; Marine monitoring; Environmental monitoring; Wastewater treatment; Biodegradation of microplastics; Sensors; Biosensors

Chelsea M. Rochman, University of California, Davis, Davis, California, USA

Marine debris, plastic debris, persistent organic pollutants, aquatic toxicology, marine ecotoxicology

David Roser, UNSW Australia, Sydney, New South Wales, Australia

S. Sabater, University of Girona (UdG) and ICRA, Girona, Spain

M^a Jesús Sánchez-Martín, IRNASA, CSIC, Salamanca, Spain

Pesticides, soil, water, organic amendments; Adsorption, desorption, degradation, mobility; Soil and water contamination by pesticides and emerging pollutants; Behaviour of pesticides in soils; Influence of organic amendments

Nan Sang, Shanxi University, Taiyuan, Shanxi, China

Environmental exposure and health risk of chemicals; Biological effect and toxic mechanism of environmental chemicals

Ralf Bernhard Schäfer, Universität Koblenz-Landau, Landau, Germany

water quality, water pollution, rivers, ecological effects, sensitive populations, susceptibility to pollutants, cumulative effects, aquatic toxicology, PAHs, pesticides, microorganisms, anthropogenic,

diffuse, non-point, climate change, geographic information system (GIS), modeling, monitoring, Western Europe, Australasia

Gabriele Schaumann, Universität Koblenz-Landau, Landau, Germany

Soil quality in agricultural practices; Engineered nanoparticles in the Environment Soil Chemistry, soil organic matter Fate and transformation of organic and inorganic pollutants

Jianwen She, California Department of Public Health, Richmond, California, USA

Bioanalytics, POPS, human health

Wei Shi, Nanjing University, Nanjing, China

Environmental fate of emerging organic pollutants; Effect directed analysis based on instrumental analysis and bioassays

Luis Felipe Silva Oliveira, Canoas, RS - Brazil

Andreas Skouloudis

Athanasios S. Stasinakis, University of the Aegean, Mytilene, Greece

Marianne Stuart, British Geological Survey, Keyworth, Nottingham, UK

Groundwater pollution, Agrochemicals, Emerging contaminants in groundwater, Industrial contaminants in groundwater, Shale gas exploitation.

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.

Phong Thai, Queensland University of Technology, Brisbane, Queensland, Australia

Maria Concetta Tomei, National Research Council of Italy (CNR), Roma, Italy

Processes and Technologies for Urban and Industrial Wastewater Treatment; Modelling and Control of Biological Processes, Treatment of Xenobiotic Compounds, Two-Phase Partitioning Bioreactors (TPPBs); Sludge Treatment; Soil Bioremediation

Ashley Townsend, University of Tasmania, Hobart, Tasmania, Australia

Environmental analysis, geochemistry, oceanography, marine and Antarctic science, materials science, and human health areas

Richard Van Curen, University of California, Davis, Davis, California, USA

Aerosol Science, atmospheric pollution, climate science, atmospheric modeling

Wei (Vivienne) Wang, Zhejiang University, Hangzhou, China

Pesticides, bioavailability, biodegradation, analysis

Shaun Watmough, Trent University, Peterborough, Ontario, Canada

Ecosystem biogeochemistry; ecological impact of trace metals; ecosystem acidification; air pollution impacts on ecosystems

Ishwar Chandra Yadav, Tokyo University of Agriculture and Technology, Tokyo, Japan

Kun Yang, Zhejiang University, Hangzhou, China

Organics, adsorption, organic matter

Samantha Ying, University of California at Riverside, Riverside, California, USA

Trace elements, arsenic, biogeochemistry

Jing You, Jinan University, China

Organics, ecotoxicology, bioavailability

Teng Zeng, Stanford University, Stanford, California, USA

Contaminants of emerging concern, Drinking water disinfection, Wastewater reuse

Chaosheng Zhang, National University of Ireland, Galway, Ireland

Spatial analysis of environmental variables and health; Heavy metals, phosphorus, organic carbon in soils/sediments; Precision Agriculture; Diffusive gradients in thin films (DGT)

Shuzhen Zhang, Chinese Academy of Sciences (CAS), Beijing, China

Organics, ecotoxicity, bioavailability, analysis

Xiaowei Zhang, Nanjing University, Nanjing, China

Toxicogenomics of chemicals, Ecogenomics of pollution, Ecotoxicology

Yong Zhang, Xiamen University, Xiamen City, Fujian 361102, China

PAHs, organic matter, marine environments

GUIDE FOR AUTHORS

Your Paper Your Way

We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.

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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**.

totalenvironment.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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- 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.

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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.

Letters to the Editor. A written discussion of papers published in the journal. Letters are accepted on the basis of new insights on the particular topic, relevance to the published paper and timeliness.

Reviews. Critical evaluation of existing data, defined topics or emerging fields of investigation, critical issues of public concern.

Discussion. Opinionated exposition on an important scientific issue or event designed to stimulate further discussion in a broader scientific forum.

Special Issues. Proceedings of symposia, workshops and/or conferences will be considered for publication as a special issue. An Editor or Associate Editor should be contacted early in the conference planning process to get approval and for guidelines on special issues of the journal.

Book Reviews will be included in the Journal on a range of relevant books which are not more than two years old. Book reviews are handled by the Journal Editors. Unsolicited reviews will not usually be accepted, but suggestions for appropriate books for review may be sent to one of the Editors.

Submission checklist

You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

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