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 multi-disciplinary natural science journal for publication of novel, hypothesis-driven and high-impact research on the **total environment**, which interfaces the **atmosphere**, **lithosphere**, **hydrosphere**, **biosphere**, and **anthroposphere**.

totalenvironment.gif-Total Environment

STOTEN's Aims & Scope has been updated - we invite contributions of original and high quality interdisciplinary environmental research papers of broad impact. Studies significantly advancing fundamental understanding and that focus on the interconnection of multiple spheres will be given primary consideration. Field studies have preference, while papers describing laboratory experiments must demonstrate significant advances in methodology or mechanistic understanding with a clear connection to the environment. Descriptive, repetitive, incremental or regional-scale studies with limited novelty will not be considered.

1) Subject areas may include, but are not limited to:

• Air quality, atmospheric conditions, and new understanding of their role in adverse health or environmental outcomes
• Atmospheric biogeochemistry
• Ecosystem services and life cycle assessment
• Ecotoxicology and risk assessment
• Eco-hydrology
• Wildlife and contaminants
• Environmental impacts of climate change, agriculture, forestry, and land uses
• Environmental impacts of waste or wastewater treatment
• Drinking water contaminants and health implications
• Environmental remediation of soil and groundwater
• Global change-induced extreme events and environmental impacts
• Groundwater hydrogeochemistry and modeling
• Nanomaterials, microplastics, and other emerging contaminants
• Novel contaminant (bio)monitoring and risk assessment approaches
• Remote sensing and big data applications in multiple spheres
• Stress ecology in marine, freshwater, and terrestrial ecosystems
• Trace metals and organics in biogeochemical cycles
• Water quality and security
• Critical reviews or Discussion on current or emerging topics

• Fast-track submissions (less than 2 weeks): Ground-breaking discoveries with immediate impact

2) Types of submissions not to be considered:
• Papers not contributing significant new knowledge to the field of study
• Disciplinary studies with limited environmental relevance
• Local or regional scale case studies lacking international relevance
• Soil or plant science studies without environmental implications
• Laboratory batch experiments without an application component, e.g., batch sorption experiments, preparation, and evaluation of sorbents or catalysts for contaminant removal
• Manuscripts that are primarily data reports without a substantial hypothesis, e.g., monitoring of common contaminants
• Modelling studies without calibration and data validation
• Papers of social science in nature on economics, sociology, psychology, political science, policy, planning and/or management
• Toxicology and ecotoxicology studies testing single chemicals in bench-scale assays
• Human health studies that do not provide significant additional understanding of air pollution induced health outcomes
• Method development papers on common contaminants
• Bibliometric analysis-based papers

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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Elsevier BIOBASE
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Scopus

EDITORIAL BOARD

Co-Editors-in-Chief

Damià Barceló, Institute of Environmental Assessment and Water Research, Barcelona, Spain
Environmental analysis, Water and soil quality, Organic mass spectrometry, Emerging organic contaminants, Nanomaterials

Jay Gan, University of California Riverside, Riverside, California, United States of America
Environmental chemistry and toxicology of classic and emerging contaminants, Transformation, transport, plant uptake and risk mitigation of organic chemicals in the environment, Bioavailability

of hydrophobic organic contaminants, Novel sampling and measurement methods and applications in risk assessment, Method development for trace contaminant analysis

Philip Hopke, University of Rochester, Rochester, New York, United States of America

Characterization of source/receptor relationships for ambient air pollutants, Multivariate statistical methods for data analysis, Chemical characterization of ambient aerosol samples, Emissions and properties of solid biomass combustion systems, Experimental studies of homogeneous, heterogeneous, and ion-induced nucleation, Indoor air quality, Exposure and risk assessment

Elena Paoletti, Research Institute on Terrestrial Ecosystems National Research Council Florence Branch, Florence, Italy

Air Pollution, Climate Change, Plant Ecosystems, Ecophysiology, Ecosystem Exchanges

Special Issues Editor

Paola Verlicchi, University of Ferrara Department of Engineering, Ferrara, Italy

Wastewater treatment and options for reuse, Occurrence and removal of pharmaceuticals from water and wastewater, Treatment and management of hospital effluent, Industrial wastewater treatments, Constructed wetlands, Environmental risk assessment

Associate Editors

Warish Ahmed, CSIRO Geelong Waurn Ponds, Belmont, Australia

Microbial source tracking, ARGs, Health risk assessment, Wastewater microbiology, Water microbiology, Enteric pathogens

Daniel S. Alessi, University of Alberta, Edmonton, Alberta, Canada

Environmental geochemistry, Geomicrobiology, Sustainability, Lithium extraction, Hydraulic fracturing, Surface chemistry, Biochar

Lotfi Aleya, Franche-Comte University, Besançon, France

Harmful algae, Microbiology, Protistology, Medicine, Toxicology

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Life cycle assessment,Agricultural Systems,Agricultural Engineering,Renewable Energy

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Marine ecotoxicology, trace metal biogeochemistry, marine pollution, nanotoxicity, pharmaceuticals, emerging pollutants

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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 Department of Environmental Science and Engineering, 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, United Kingdom

Environmental Pollution and Remediation, Water-Soil-Waste System Engineering and Modelling, Risk Management, Environmental Biotechnology, Analytical chemistry, Environmental Sciences &, Ecology, Polar environments, Bioaerosols, Hazardous waste management

Adrian Covaci, University of Antwerp Toxicological Centre, Wilrijk, Belgium

Analytical chemistry of emerging contaminants, Identification and development of biomarkers of exposure and effect to emerging contaminants, Elucidation of exposure pathways to emerging contaminants, Human biomonitoring of emerging contaminants, Development of metabolomics tools for toxicology

Martin Drews, Technical University of Denmark Department of Technology Management and Economics, Kgs Lyngby, Denmark

Climate modelling, regional climate, hydrological and hydrodynamic modelling, climate and weather extremes, statistical methods, machine learning, remote sensing, water-energy-food nexus, decision-making frameworks, risk assessment, climate change adaptation, emergency preparedness, climate services for insurance, agriculture, energy, water and health sectors, marine, coastal, and urban environments, developing countries

Kuishuang Feng, University of Maryland at College Park, College Park, Maryland, United States of America

Sustainable production and consumption, Input-output-analysis, Life-cycle analysis, Low carbon transition, Environmental inequality

Xinbin Feng, Institute of Geochemistry Chinese Academy of Sciences, Guiyang, China

Mercury biogeochemical cycling in the environment, mercury stable isotopes, Antimony stable isotopes, Remediation of mercury contaminated land, Health impact of mercury pollution

Zhaozhong Feng, Nanjing University of Information Science and Technology School of Applied Meteorology, Nanjing, China

BVOCs, Ozone pollution, Photosynthesis and C cycle, Water use efficiency, Urban environment and forestry,Interaction of crop and soil,Crop and atmosphere interaction,Greenhouse emission,Environmental stress

José Virgílio Matos Figueira Cruz, University of the Azores, Ponta Delgada, Portugal

Groundwater geology; Groundwater geochemistry; Surface water chemistry; Water quality; Water pollution; Water management; Water planning

Pingqing Fu, Tianjin University, Tianjin, China

Organic aerosols; Atmospheric chemistry; Isotopes of atmospheric aerosols; Fog water; Ice-core organics; Dissolved organic matter; Biomarkers

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

Water quality, Water pollution, Water reuse, Water treatment, Stormwater pollutant processes, Integrated Water Resources Management, Water infrastructure resilience, climate change adaptation

Hai Guo, The Hong Kong Polytechnic University Department of Civil and Environmental Engineering, Hong Kong, Hong Kong

Atmospheric chemistry, VOC Photochemistry, New particle formation, Acidic ultrafine particles, Indoor air pollution, Organic aerosol

Mae Sexauer Gustin, University of Nevada Reno, Reno, Nevada, United States of America

Biogeochemical cycling of mercury, metals, and isotopes, Air pollution

Henner Hollert, RWTH Aachen University, Aachen, Germany

Bioanalytical environmental toxicology, Aquatic toxicology, Triad (Weight of evidence) approaches, Effect directed analysis, Sediments, In-situ investigations and monitoring, In-vitro bioassays, Waste- and ground water investigations (advanced wastewater treatment), Ecology

Deyi Hou, Tsinghua University, Beijing, China

Sustainability assessment, Life cycle assessment, Environmental footprint analysis, Risk management, Contaminated soil and groundwater remediation, Heavy metal contamination, Biochar production and application, Green synthesis of environmental functional materials, Fate and transport of volatile organic compounds in porous media

Abasiofiok Ibekwe, USDA-ARS Salinity Laboratory, Riverside, California, United States of America

Antibiotic,Antibiotic resistance genes,Antibiotic resistant bacteria,Antibiotic resistant determinants,Horizontal gene transfer,Whole genome sequencing,metagenomics,food safety,pathogenic bacteria,wastewater,constructed wetland,microbe-soil-plant interaction,Microbial community,Microbial Ecology

Pavlos Kassomenos, University of Ioannina, Department of Physics, Laboratory of Meteorology, Ioannina, Greece

Air pollution, Meteorology, Environmental health, Climate change, Particulates, Ozone, Bioaerosols, Dust transportation, Vehicle emissions, Noise

Katarzyna Kordas, University at Buffalo Department of Epidemiology and Environmental Health, Buffalo, New York, United States of America

Human exposure to toxic elements, Health effects elements and their mixtures, Nutrient-toxicant and diet-toxicant interactions, Intersection of chemical and social environments

Ewa Korzeniewska, University of Warmia and Mazury in Olsztyn Department of Water Protection Engineering and Environmental Microbiology, Olsztyn, Poland

Environmental microbiology, environmental pollution, antibiotic resistance bacteria, resistance genes, biogas production

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

Christian Herrera Lameli, Bernardo O'Higgins University, Santiago, Chile

Hydrogeology; Groundwater geochemistry; Isotope hydrogeology; Surface water – groundwater interactions; Remote sensing in groundwater; Climate change

Manuel Esteban Lucas-Borja, University of Castilla-La Mancha, Ciudad Real, Spain

Ecological forest restoration. Postfire management strategies effects on forest plant biodiversity, soil properties and multiple ecosystem functions, including nutrient cycling, climate regulation, waste decomposition, symbiosis, wood production and water regulation, Soil erosion. Assessing hydrological behaviour and sediment connectivity in contrasting landscapes, Forest ecosystem management under the sustainability and multifunctionality forestry principles within the context of climate change

Jürgen Mahlknecht, Monterrey Institute of Technology and Higher Education, Monterrey, Mexico

Water quality, Hydrogeochemistry, Groundwater pollution, Environmental tracers, Environmental isotopes, Microcontaminants

Rafael Mateo, Research Institute of Wildlife Resources, Ciudad Real, Spain
Wildlife toxicology, Lead poisoning in wild birds, Metal pollution by mining activities, Spatiotemporal trends of persistent organic pollutants, Agrochemicals (insecticides, herbicides, fungicides, rodenticides and fertilizers) and Effects on farmland wildlife, Wildlife-human conflicts, Deliberate and accidental wildlife poisoning, Toxins in freshwater wetlands and effects on waterbirds, and Invasive and non-invasive biomarkers in wildlife
Lidia Mínguez-Alarcón, Harvard Medical School, Boston, Massachusetts, United States of America
Endocrine disrupting chemicals,Chemical mixtures,Diet-chemical interactions,Reproductive epidemiology,Human infertility
Huu Hao Ngo, University of Technology Sydney, Broadway, Australia
Advanced biological waste treatment processes, Membrane technologies, Alternative water resources, Resource recovery, Environmental impacts assessment, Circular economy based clean technologies, Renewable bioenergy and Minimization of wastes and emissions
Jose Julio Ortega-Calvo, Institute of Natural Resources and Agrobiology of Sevilla Agrochemistry Environmental Microbiology and Soil Conservation, Sevilla, Spain
Biodegradation and biotransformation of organic pollutants in soils and sediments; Bioremediation; Environmental microbiology; Bioavailability and persistence; Risk assessment
Wei Ouyang, Beijing Normal University, Beijing, China
Water environment and climate risk, Watershed environment management, Non-point source modeling and control, Diffuse pollution assessment
Fernando Pacheco, University of Tras-os-Montes and Alto Douro, Vila Real, Portugal
Hydrologic models coupled with weathering algorithms, especially in areas with significant anthropogenic pressure; multivariate statistical and environmental analyses of surface and groundwater databases, with focus on the prevention of surface and groundwater contamination; land degradation and management, as well as the negative impacts of inadequate land uses on soil erosion, surface and groundwater quality; water security issues, such as conjunctive use of surface and groundwater sources in public water supply systems, or the attenuation of hydrologic extremes (floods, droughts) through implementation of detention basins and decentralized rainwater harvesting systems in catchments.
Anastasia Paschalidou, Democritus University of Thrace Department of Forestry and Management of the Environment and Natural Resources, Orestiada, Greece
Air pollution meteorology, Urban meteorology, Dust transportation, Climate change, Environmental health / Environmental epidemiology, Biometeorology, Synoptic climatology, Dispersion Modeling, Air Quality Indices
Paulo Pereira, Mykolas Romeris University, Vilnius, Lithuania
Land Degradation, Ecosystem Services, Nature Based Solutions, Spatial Analysis, Fire Impacts on Ecosystems
Yolanda Picó, University of Valencia, 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
Charlotte Poschenrieder, Autonomous University of Barcelona Faculty of Biosciences, Bellaterra, Spain
Plant-Environment Interactions, Plant-Soil Relationships, Salinity, Plant- Microbe Interactions, Plant Toxicology, Crop Production, Plant Natural Adaptation
Sergi Sabater, University of Girona, Girona, Spain
River and stream ecology; Biofilm ecology and ecotoxicology; Mediterranean; Water scarcity; Ecosystem functioning; Bioidiversity; Conservation of rivers
Scott C. Sheridan, Kent State University, Kent, Ohio, United States of America
Human biometeorology, climate change, synoptic climatology, extreme temperature events
Wei Shi, NC State University, Raleigh, North Carolina, United States of America
Soil Ecology, Microbial Ecology, Soil Carbon Sequestration, Nitrogen Cycling, Greenhouse Gas Emissions, Soil Microbiome, Nitrification, Denitrification, Organic Matter Decomposition
Filip M.G. Tack, Ghent University, Gent, Belgium
Heavy metals; Trace element biogeochemistry; Dredged materials; Soil and sediment remediation; Phytoremediation
Kevin Thomas, The University of Queensland Queensland Alliance for Environmental Health Sciences, Woolloongabba, Queensland, Australia
Contaminants of emerging concern; Non-target analysis; High resolution Mass Spectrometry; Microplastics; Biomonitoring
Daniel C.W. Tsang, The Hong Kong Polytechnic University Department of Civil and Environmental Engineering, Hong Kong, Hong Kong

Green chemistry/engineering, Soil/sediment remediation, Engineered biochar, Waste valorization, Resource recovery, Wastewater/stormwater treatment, Catalytic conversion/ degradation, Pollutant transport, Environmental pollution | Sustainable urban development,Urban wastes,Contaminated land and water,Waste management (food,wood,Green remediation,Wastewater treatment,CO2 adsorption,Pre-combustion CO2 capture

Paola Verlicchi, University of Ferrara Department of Engineering, Ferrara, Italy

Wastewater treatment and options for reuse, Occurrence and removal of pharmaceuticals from water and wastewater, Treatment and management of hospital effluent, Industrial wastewater treatments, Constructed wetlands, Environmental risk assessment

Jan Vymazal, Czech University of Life Sciences Prague, Praha, Czechia

Fang Wang, Institute of Soil Science Chinese Academy of Sciences, Nanjing, China

Soil pollution and remediation, Persistent organic pollutants, Emerging Contaminants, Antibiotics and resistant gene, Phthalate ester and microplastics, Biochar, Biodegradation, Biofilms, Analytical method

Qilin Wang, University of Technology Sydney Faculty of Engineering and Information Technology, Broadway, Australia

Anaerobic digestion technologies,Wastewater treatment technologies,Sludge and waste treatment technologies,Biological nutrient removal,Aerobic digestion,Microplastics,Antimicrobial resistance,Greenhouse gas,Algae,Biochar,Fermentation,Bioenergy

Daniel A. Wunderlin, National University of Cordoba, Cordoba, Argentina

Tracing pollutants from their source to foods, Food Integrity, including the evaluation of bioactive compounds in foods, Studying links between food production and environmental pollution

Daqiang YIN, Tongji University School of Environmental Science and Engineering, Shanghai, China

Persistent Toxic Substances, Emerging Pollutants, Environmental Toxicology, Ecotoxicology, Mechanisms of Action of Pollutants or Toxic Chemical, Bioassay and Biomarker, Antibiotic resistance, Risk assessment and Water Quality

Shuzhen Zhang, Chinese Academy of Sciences, Beijing, China

soil contamination, Sorption/desorption of organic contaminants, Bioaccumulation and transformation of organic contaminants in the terrestrial environment, Applications of synchrotron-based spectroscopy techniques in environmental chemistry, NOM analysis and effects on contaminant behaviors

Yifeng Zhang, Technical University of Denmark Department of Environmental Engineering, Kgs Lyngby, Denmark

Microbial electrochemistry, Advanced oxidation process, Anaerobic digestion, Water resource recovery, CO2 capture and utilization

Editorial Board

Jésus R. Aboal Viñas, University of Santiago de Compostela, Santiago de Compostela, Spain

Biomonitoring; Moss biomonitoring; Raptor biomonitoring; Algae biomonitoring; PAHs contamination; Heavy metal contamination; Cellular localization of metals; Hydrological fluxes of forest canopies

Evgenios Agathokleous, Nanjing University of Information Science and Technology School of Applied Meteorology, Nanjing, China

Abiotic stress, Antibiotic resistance, Biostimulation, Dose-response relationship, Ecological effects of pollution, Ecotoxicology, Emerging contaminants, Ecological health, Environmental health, Environmental pollution impacts, Ecophysiology, Environmental toxicology, Hormesis, Microplastics, Organismic interactions, Oxidative stress, Ozone effects, plant protection, Priming

Souhail R. Al-Abed, US Environmental Protection Agency Center for Environmental Solutions and Emergency Response, Cincinnati, Ohio, United States of America

Environmental implication and applications of nanomaterials; Sediment and water remediation; Contaminant (metals and organics) transformations in the environment; Reuse of materials in environmental applications

Zakaria Q. Al-Qodah, Al-Balqa' Applied University, Al Salt, Jordan

Wastewater treatment, Combined treatment processes Adsorption, Electrocoagulation, Biological Treatment, Reactor design, Hydrodynamics, Sustainable treatment, Management of bio-waste's

Abed Alaswad, Aston University School of Engineering and Technology, Birmingham, United Kingdom

Energy modelling, Bioenergy

Dong An, Fudan University Department of Environmental Science and Engineering, Shanghai, China

Water treatment, Wastewater treatment, Adsorption, Advanced oxidation, Reuse water

Alexandros G. Asimakopoulos, Norwegian University of Science and Technology, Trondheim, Norway

Environmental Chemistry, Risk Assessment, Human exposure, Exposure assessment, Human health effects, Biomarkers, Food safety, Human biomonitoring, Indoor and outdoor pollution, Emerging contaminants, Legacy contaminants, Wastewater epidemiology, Aquaculture chemistry, Raptors Biomonitoring, Mammals Biomonitoring, Maternal and children's health

Mukesh Kumar Awasthi, Northwest Agriculture and Forestry University, Yangling, Shaanxi, China
Soil Fertility,Composting,Trichoderma,Drug Resistance,Microbial,Microbial Diversity,Microbial Biotechnology,Bioenergy
Takashi Azuma, Osaka Medical and Pharmaceutical University Faculty of Pharmaceutical Sciences Graduate School of Pharmaceutical Sciences, Takatsuki, Japan
Pharmaceuticals and personal care products (PPCPs), Antimicrobial-resistant bacteria (AMRB), Water environment, Sewage treatment plant, Hospital effluent, Occurrence and environmental fate, Water treatment system, Water management, Environmental science, Environmental hygiene
Roya Bahreini, University of California Riverside, Riverside, California, United States of America
Aerosol sources; Formation processes; Composition and microphysical properties; Direct and indirect effects on climate
Xiaoyong Bai, Institute of Geochemistry Chinese Academy of Sciences, Guiyang, China
Karst, Ecosystem services, Soil Erosion, Environmental Remote Sensing, Ecological Restoration, Climate Change, Carbon sink, Ecotoxicology and risk assessment, Geochemistry, Soil Organic Carbon
Michael Bank, Institute of Marine Research, Bergen, Norway
Mercury, microplastics, ocean health, seafood safety, ecotoxicology, isotopic niches, Bayesian modeling, contaminants
Kunshan Bao, South China Normal University, Guangzhou, Guangdong, China
Anthropocene, Atmospheric dust, Carbon burial, Climate change, Decipher human-climate interactions, Ecological risk assessment, Human impact, Historical trend, Holocene, Lake and wetland environmental change, Land cover change, Nutrient accumulation, Paleolimnology, Peatland, Potential harmful trace element, Polycyclic aromatic hydrocarbon, Pesticides, Radioisotopes, Rare earth elements
Carlos Barata, Institute of Environmental Assessment and Water Research, Barcelona, Spain
Analytical chemistry; Aquatic toxicology; Environmental risk assessment; Toxicogenomics
Roberto Bargagli, University of Siena, Siena, Italy
environmental biogeochemistry, active and passive biomonitoring of persistent contaminants in terrestrial and aquatic ecosystems
Georgios Bartzas, National Technical University of Athens - Zografou Campus, Zografos, Greece
Waste management,Environmental monitoring and Risk assessment,Life cycle analysis,Soil and Groundwater decontamination,Geochemical/ Thermodynamic modelling,Heavy metals and metalloids,Climate change
Ivan Bergier, Brazilian Agricultural Research Corporation Pantanal, CORUMBA, Brazil
Expertise in sustainable development, particularly in the following areas: environmental services, ecology and biogeochemistry of ecosystems and agroecosystems; Bioenergy; Biofuels; Biochar; Remote sensing; Electron microscopy; Applied to nanotechnology, electronics and automation; Climate change adaptation; Mitigation of greenhouse gases emissions
Rafael Bergillos, University of Cordoba, Cordoba, Spain
Coastal Engineering, Beach Morphodynamics, Coastal Flooding, Ocean Energy, River Deltas, Fluvial Processes, Fluvial Hydraulics, Management Strategies, Climate Change, Sustainable Development
Harald Biester, TU Braunschweig University, Braunschweig, Germany
Biogeochemical cycling of mercury and trace elements; Biogeochemistry of peatlands
Lubertus Bijlsma, University Jaume I, Research Institute for Pesticides and Water, Castillon, Spain
Liquid Chromatography Mass Spectrometry; Ion mobility; Water quality; Contaminants of emerging concern; Wastewater-based epidemiology.
Jayanta Kumar Biswas, University of Kalyani, Kalyani, India
Water and soil contamination, Remediation of contaminants, Ecotoxicology of metal(loid)s and emerging contaminants, Bioremediation, Environmental microbiology, Ecological engineering, Ecotechnology, Nanobiotechnology, Wastewater treatment and resource recovery
Paul Bradley, US Geological Survey South Atlantic Water Science Center, Columbia, South Carolina, United States of America
Drinking Water Exposure; Water Quality; Environmental and Public Health; Contaminants of emerging concern; Pharmaceuticals; Water Reuse; Remediation; Environmental microbiology; Urban and Aquatic Ecology
Satinder Brar Kaur, INRS – Research Centre on Water Earth and the Environment, Quebec, Quebec, Canada
Wastewater; Wastewater sludge; Treatment; Emerging contaminants; Antibiotics; Fermentation; Value-added bioproducts, such as enzymes, organic acids, platform chemicals, biocontrol agents, biopesticides, butanol and biohydrogen
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Water quality, Environmental, aquatic and comparative toxicology, Environmental and green chemistry, Environmental public health
Giorgio Buonanno, University of Cassino and Southern Lazio, Cassino, 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 Division of Life Sciences, Piscataway, New Jersey, United States of America
Eco-toxicology; Behaviour; Monitoring and assessment; Birds and reptiles

Paromita Chakraborty, SRM Institute of Science and Technology, Department of Civil Engineering, Chengalpattu, Tamil Nadu, India
Multi-media movement of microorganic pollutants viz., Pesticides, Industrial chemicals, and plasticizers in the hotspots and riverine/marine environment, Atmospheric Transport of persistent organic pollutants, Cost-effective remediation techniques for emerging organic contaminants in soil, sediment, water, and wastewater

Wei Chen, Nankai University College of Environmental Science and Engineering, Jinnan District, Tianjin, China
Nanoparticles; Nanomaterials; Adsorption; Reactivity; Transport; Remediation; Groundwater; Soil; Organic contaminants

Xueming Chen, Fuzhou University, Fuzhou, China
Biological wastewater treatment,Mathematical modelling of bioconversion processes,Advanced technologies for nitrogen removal,Greenhouse gases emissions and mitigation from wastewater management,Membrane-based biofilm technology

Chin Kui Cheng, Khalifa University, Abu Dhabi, United Arab Emirates
Wastewater treatment, sustainable development, clean energy, carbon footprint, water footprint, biofuel, waste-to-wealth, bio-hydrogen, green chemistry

Joaquín Cochero, National Scientific and Technical Research Council, Buenos Aires, Argentina
Biofilm; Stream ecology; Biomonitoring; Urban streams; Citizen science

Xinyi (Lizzy) Cui, Nanjing University, Nanjing, China
Fate, transport, and ecotoxicology of legacy and emerging organic contaminants in soil, sediment, and indoor environment, especially the bioavailability study

Andrea Di Guardo, Environmental informatics, Milano, Italy
environmental fate of pesticides, landscape impact assessment, risk assessment of veterinary pharmaceuticals; environmental decision support systems, air pollution, environmental modelling, software engineering for the environment

Judith Z. Drexler, US Geological Survey California Water Science Center, Sacramento, California, United States of America
Carbon accumulation in wetlands, Impacts of climate change on coastal ecosystems, Invasive plants as ecosystem engineers, Peat soils as archives of environmental change, Wetland restoration

Ali Ercan, University of California Davis, Davis, California, United States of America
Physically-based hydrologic and hydraulic modeling, river basin management, environmental hydrology and hydraulics, modeling impacts of changing climate, stochastic flow and transport processes, scaling, time series modeling, flood forecasting.

Ronald C. Estoque, Forestry and Forest Products Research Institute Center for Biodiversity and Climate Change, Tsukuba, Japan
Sustainability science, Land change science, Social-ecological system, Ecosystem services, Forest transition, Forest cover monitoring, Landscape/urban ecology, Climate change mitigation, Vulnerability, Risk and adaptation, GIScience and Remote sensing

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Soil microbiology, Fecal pollution of surface water, Biodegradation and bioavailability of organic pollutants, Pesticides, Plant-soil-microbial interaction

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Air pollution;Air quality; Water pollution; Rivers; Ecological effects; Bioavailability; Bioindicators; Aquatic toxicology; Heavy metals; Biomagnification; Bioaccumulation; Surveys; Moss; Biomonitoring; Western Europe

Bo Gao, China Institute of Water Resources and Hydropower Research, Beijing, China
Geochemistry of trace metals in environment; Water and sediment transport; Large-scale watershed management

Alejandro García-Gil, Geological and Mining Institute of Spain Geological Risks Processes and and Global Change, Madrid, Spain
Urban hydrogeology; Groundwater quality; Shallow geothermal exploitation impacts on water resources; Groundwater management; hydrogeochemistry; River-groundwater interaction; Groundwater flow and reactive transport numerical modelling; Groundwater microbiology; Enmerging organic contaminants

Ruben Aldaco Garcia, University of Cantabria, Santander, Spain
Life Cycle Assessment; Circular Economy; Water-Energy-Food Nexus; Bioecomy; Industrial Ecology.

Jorge Gardea-Torresdey, The University of Texas at El Paso, El Paso, Texas, United States of America

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; Applications of nanotechnology to clean water

Ramesh Goel, University of Utah, Department of Civil and Environmental Engineering, Salt Lake City, Utah, United States of America

Microbiology, Cyanotoxins, Nutrients, Metagenomics, Emerging Contaminants, Microbiology, Biological treatment, Virology

Leobardo Manuel Gómez Oliván, Autonomous University of Mexico State, Toluca, Mexico

Aquatic toxicology, Fish toxicity, Emerging contaminants, Metals, Genotoxicity, Citotoxicity, Embryotoxicity, Teratogenesis, Oxidative stress, Biomarkers

Daren Gooddy, British Geological Survey - Wallingford Office, Wallingford, United Kingdom

Groundwater, Biogeochemical cycles, Residence time indicators

Andrew Gray, University of California Riverside, Riverside, California, United States of America

Sediment transport, Hydrology, Water quality, Plastic pollution, Watershed sediment dynamics, Sedimentology, Paleoenvironmental analysis

Mingming Guo, Zhejiang University, Hangzhou, China

Antimicrobial mechanism, Bacterial cell membrane science, Microbiological safety, Utilization of biological resources

Wenshan Guo, University of Technology Sydney, Broadway, Australia

Biological wastewater treatment technologies, Nutrient recovery Energy recovery, Membrane bioreactor, Waste-to-energy

Xuetao Guo, Northwest Agriculture and Forestry University, Yangling, Shaanxi, China

Microplastics, Pharmaceuticals and personal care products (PPCPs), Antibiotics, Antibiotic resistance, Adsorption, Occurrence and environmental fate, Environmental monitoring

Ying Guo, New York State Department of Health, Albany, New York, United States of America

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.

Vijai Kumar Gupta, Scotland's Rural College, Edinburgh, United Kingdom

Biobased biorefineries,Serectomics and bioprocessing technologies,Glycobiotechnology, Bioactive natural products,Microbial engineering biotechnologies,and Environmental sustainability,Functional Microbiome Interactions,Bioactive Natural Products

Gary Hardiman, Queen's University Belfast, Belfast, United Kingdom

Computational biology, Epigenetics, Endocrine disruption, Systems biology, Biomarkers of exposure and human health risk assessment, Diagnostic tool development

Tham Hoang, Auburn University School of Fisheries Aquaculture and Aquatic Sciences, Auburn, Alabama, United States of America

Metal bioavailability and toxicity, Mixture toxicity, Pesticide toxicity, Microcosm studies, Water quality and pollution, Aquatic toxicology, Bioaccumulation of pollutants, Ecological risk assessment, Microplastics and environmental effects

Gerard Hoek, Utrecht University, Utrecht, Netherlands

Exposure assessment, Air pollution modelling, Environmental epidemiology

Patricia A. Holden, University of California Santa Barbara, Santa Barbara, California, United States of America

Water quality; Environmental microbiology; Fecal pollution, Biodegradation and bioremediation; Soil pollution and soil processes; Nanomaterials; Wastewater treatment; Biogeochemistry; Emerging contaminants; Hydrocarbons; Metals

Peter Hooda, Kingston University, London, United Kingdom

Soil Science, Soil use and management, soil fertility, soil organic carbon management, soil contamination & remediation, degraded land restoration

Kiril D. Hristovski, Arizona State University Ira A Fulton Schools of Engineering, Tempe, Arizona, United States of America

Environmental nanomaterial applications and implications, Water quality, Water and wastewater treatment, Solid and hazardous waste

Wei Huang, Peking University, Beijing, China

Exposure assessment, Environmental epidemiology, Health intervention

Xiang Huang, University of Waterloo, Waterloo, Ontario, Canada

Hydrogeology and groundwater, Water-vapour flow in variably saturated deformable porous media, Thermal-hydraulic-mechanical-chemical modeling in a cold and arid region, Occurrences and reactive

transport of contaminants in porous media, Surface water and groundwater interaction, Contaminated soil and groundwater remediation, Permafrost and frozen soils

Hafiz M. N. Iqbal, Technological and Higher Education Institute of Monterrey, School of Engineering and Sciences, Monterrey, Mexico

Environmental Engineering, Bioengineering, Biomedical Engineering, Bioremediation, Emerging contaminants, Wastewater treatment, Biomaterials, Bio-catalysis, Enzymes, Enzyme-based pollutant degradation, Immobilization, Toxic heavy elements, Liquid and solid waste management, Valorization of agro-industrial wastes and by-products

Darrel Jenerette, University of California Riverside, Riverside, California, United States of America

Land use/ land cover, Carbon and nitrogen cycling, Ecohydrology, Drylands, Urbanization, Spatial analysis, Remote sensing

Rong Ji, Nanjing University, Nanjing, China

Organics; Terrestrial; Biodegradation; Environmental process; Radiotracer

Sunny Jiang, University of California Irvine, Irvine, California, United States of America

Environmental Microbiology, Environmental Engineering, Water Treatment, Environmental Technology, Microbial Risk Assessment

Wei Jiang, Shandong University Environment Research Institute, Qingdao, China

Environmental risk of nanomaterials; Nano-bio interaction; Cell membrane damage; Cytotoxicity; Nanoparticle transport

Begoña Jiménez, Spanish Scientific Research Council, Madrid, Spain

Persistent Organic Pollutants (POPs), Dioxins, PCBs, Fate of POPs, Contaminants of emerging concern, Organic pollutants in aquatic and terrestrial ecosystems, Bioindicators, Marine mammals, Air Pollution, Environmental chemistry, Monitoring

Anna Jurado, TU Dresden, Dresden, Germany

Aquifer recharge quantification, Emerging organic contaminants, Greenhouse gases, Groundwater quality, Groundwater management, Urban groundwater, River-groundwater interaction, Managed aquifer recharge, Numerical modelling, Quantitative hydrogeology

Athanasios Katsogiannis, European Commission Joint Research Centre Ispra, Ispra, Italy

Environmental Chemistry and pollution characterisation in all environmental compartments, including oceans and polar regions. Wastewater treatment processes and impact on the surrounding environment, Environmental occurrence and fate of new and emerging pollutants, with particular attention on remote and polar areas, Emission and source identification of volatile and semi-volatile organic compounds from various sources

Nerantzis Kazakis, Aristotle University of Thessaloniki, Thessaloniki, Greece

Groundwater modelling, Groundwater vulnerability, Hydrogeochemistry, Hydrogeophysics, Isotope hydrology, Water resources management, Floods, Climate change impacts on water resources, Managed Aquifer Recharge

M.B. Kirkham, Kansas State University Department of Agronomy, Manhattan, Kansas, United States of America

Soil-plant-water relations, Drought stress, Elevated carbon dioxide, Uptake of heavy metals by plants

Charles Knapp, University of Strathclyde, Glasgow, Scotland, United Kingdom

Microbial ecology; Bacteria; Microorganisms; Wastewater; Surface water; Nutrients; Eutrophication; Antibiotic resistance; Antimicrobial resistance; Molecular ecology

Manish Kumar, University of Petroleum and Energy Studies, Dehradun, India

Hydrogeochemistry,Wastewater Surveillance,Diffuse Pollution and Control,Contaminant Transport and Remediation,Urban Water Management,Antimicrobial Resistance;

Prashant Kumar, University of Surrey, Guildford, United Kingdom

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, Toyama Prefectural University, Imizu, Japan

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

James Lam, The Education University of Hong Kong Department of Science and Environmental Studies, Hong Kong, Hong Kong

POPs, Emerging contaminants, Risk assessment

Jae-Seong Lee, Hanyang University College of Natural Science, Seoul, South Korea

Molecular ecotoxicology, comparative genomics, rotifers, copepods, killifish, oxidative stress, mechanistic toxicity, lipid metabolism, microplastics, emerging chemicals, ocean acidification

Guoyong Leng, University of Oxford Environmental Change Institute, Oxford, United Kingdom

Crop Modeling, Global Food Security, Water-Food Nexus, Climate Change, Hydrometeorology, Droughts, Land Surface Modeling

Kelvin Sze-Yin Leung, Hong Kong Baptist University Department of Chemistry, Hong Kong, Hong Kong

Environmental analytical chemistry, Emerging contaminants, their transformation and fate, High-resolution mass spectrometry for target and non-target analyses, Human exposure, Exposure assessment

Juying Li, Shenzhen University, Shenzhen, China

Organics; Bioavailability; Isotopes; Analysis; Degradation; Soil-plant system; Transformation; Toxicity

Shibin Li, Syngenta Crop Protection LLC, Greensboro, North Carolina, United States of America

Environmental toxicology, Regulatory toxicology, Ecotoxicology, Exposure science, Risk assessment, Product safety

Xiangkai Li, Lanzhou University School Of Life Sciences, Lanzhou, China

Microbial heavy metal remediation, Heavy metal remediation genes, Synthetic biology for environment, Waste water treatment, Bio-energy.

Zhao-Jun Li, Chinese Academy of Agricultural Sciences Institute of Agricultural Resources and Regional Planning, Beijing, China

Antibiotics and related resistance genes in manure or environments, emerging contaminants, Heavy metal contamination, reuse of agricultural wastes.

Daohui Lin, Zhejiang University Library, Hangzhou, China

Nanomaterials; Ecotoxicity; Nanotoxicity; Bioavailability; Colloidal behavior; Sorption

Kunde Lin, Xiamen University, Xiamen, China

Organic contaminants; Active sampler

Xiaobo Liu, Nanjing University of Science and Technology, School of Environmental and Biological Engineering, Nanjing, China

Evironmental microbiology and biotechnology,Biofilm-mediated bioprocesses,Biodeterioration of stone monuments,Cultural heritage microbiology,Biofouling,Biogeochemical cycles of archaea,Biocatalysis & enzyme engineering,Fermentation Engineering,Extracellular electron transfer

Yangxian Liu, Jiangsu University, School of Energy and Power Engineering, Jiangsu, China

Air pollutant control, Gaseous pollutants removal (e.g., SO2, NOx, Hg0, CO2, H2S, etc.) by oxidation, adsorption and/or catalysis, Advanced oxidation technology for removal of gaseous pollutants

Ralf Ludwig, Ludwig Maximilians University Munich, Munich, Germany

Hydrology, Water resources management, Climate change, Land use change, Extreme events, Modeling, Remote sensing

Tran Le Luu, Vietnamese German University, Ho Chi Minh City, Viet Nam

Water and wastewater treatment technology, Advanced oxidation processes, Electrochemical water treatment, Biological treatment, Membrane technology, Capacitive deionization, Environmental monitoring and Sensor technology

Rasha Maal-Bared, EPCOR, Edmonton, Alberta, Canada

Expertise - Drinking water, wastewater, treatment processes, biosolids, biofilms, risk assessment, environmental persistence and control, engineered and plumbing systems, disinfection, public and occupational health

Sheila Macfie, Western University, London, Ontario, Canada

Metal toxicity in plants; Metal localization in plants; Rhizosphere chemistry

Konstantinos C. Makris, Cyprus University of Technology Cyprus International Institute for Environmental and Public Health, Lemesos, Cyprus

Human exposome, environmental health, non-pharmacological trials, metabolomics

Guilherme Malafaia, Federal Institute of Education Science and Technology of Goias - Urutai Campus, URUTAI, Brazil

Ecotoxicology, Water pollution, Behavioral and Biochemistry Toxicology, Environmental impacts, Nanomaterials and Micro (nano) plastics

Sonia Manzo, ENEA Centro Ricerche Portici, Portici, Italy

Ecotoxicology, Nanomaterials, Aquatic environment, Seawater, Microalgae, Seaurchin, Risk assessment

Adriaan Albert Markus, Deltares, Delft, Netherlands

Water quality modelling; Numerical modelling and programming in various languages (notably Fortran, in relation to numerical modelling); Transport and fate of nanoparticles and microplastics in the aquatic environment

Antonio Martínez Cortizas, University of Santiago de Compostela, Faculty of Biology, Department of Edaphology and Agricultural Chemistry, Santiago de Compostela, Spain

Continental sediments and soils (lake sediments, peat, colluvium, soil) and marine sediments, mainly focused in the field of environmental geochemistry, dedicated to the understanding of the cycles of the elements, ecosystem process and Quaternary environmental changes.

Janine McCartney, HHC Services Inc, Lester, Pennsylvania, United States of America

Chemical Exposures, Toxic tort, Biomarkers, Industrial Hygiene, Employee chemical exposures and community chemical exposures, Safety Engineering, Arc Flash Analyses and Accidents, Electrical

Safety, Falls, Equipment &, Machinery, Human Factors, Accident Investigation/ Reconstruction, OSHA, Guarding, Construction, Industrial &, Premises Accidents, Oil &, Gas Extraction, Pipeline Safety and Refinery Safety, Lead and Electrocution

Natalie Mladenov, San Diego State University, San Diego, California, United States of America

Natural organic matter, chemicals of emerging concern, water reuse, decentralized wastewater treatment, onsite sanitation, microplastics and marine debris, fluorescence spectroscopy, stormwater quality, organic aerosol deposition

Lidia Morawska, Queensland University of Technology International Laboratory for Air Quality and Health, Brisbane, Queensland, Australia

Air pollution, Air quality, Indoor air pollution, Exposure assessment, Contaminated particulates, VOC, anthropogenic, Characterization, Automotive, Apportionment, Pollution transport, Monitoring, Analytical

Amitava Mukherjee, VIT University Centre for NanoBiotechnology, Vellore, India

Photo catalytic Nanomaterials, Nano-remediation of Emerging Pollutants, Nano-biosensors for Environmental Contaminants, Protein-Nanomaterials Interactions, Green synthesis of Nanomaterials

Govarthanan M Muthusamy, Kyungpook National University, Daegu, South Korea

Treatment and Remediation of pollutants, Toxicity assessment of pollutants, Bioremediation, Emerging contaminants, Microbial community analysis, Microplastics, nanoplastics

Vincenzo Naddeo, University of Salerno Department of Civil Engineering Sanitary Environmental Engineering Division (SEED), Fisciano, Italy

Water-energy-food-nexus, Water quality, Biotechnology, Advanced oxidation processes (AOPs), Climate change, Algae-based technology, co2 sequestration/capture, Hydrogen, Biogas, Biomethane

Howard S. Neufeld, Appalachian State University, Boone, North Carolina, United States of America

The effects of ozone on plants; The role of anthocyanins in vegetative tissues in plants; Climate change impacts on plants in the southern Appalachian mountains; Measuring plant gas exchange and plant water relations, using the Li-Cor 6400 and 6800 gas exchange systems, 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

Hai Tran Nguyen, DuyTan University Institute of Fundamental Science and Application, Da Nang, Viet Nam

Adsorption, nanomaterial, water treatment, water pollution, waste management

Hong-Gang Ni, Peking University Shenzhen Graduate School, Nanshan, China

Organic pollutants (persistent organic pollutants and environmental molecular markers); Environmental model (process and impact); Human exposure and health risk.

Roohollah Noori, University of Tehran, Tehran, Iran

Water quality,Pollutant mixing in lakes and rivers,Groundwater,Contaminant hydrology,Eutrophication,Artificial intelligence techniques,Multivariate statistical analysis,Lakes

Avelino Núñez-Delgado, University of Santiago de Compostela, Santiago de Compostela, Spain

Environment, Soil pollution, Water pollution, Soil and water treatment

David O'Connor, Tsinghua University, Beijing, China

Soil and groundwater pollution; Biochar; Microplastics (MPs); Green and sustainable solutions; Contaminated land remediation

Krishna Pagilla, University of Nevada Reno, Department of Civil and Environmental Engineering, Reno, United States of America

Xiangliang Pan, Zhejiang University of Technology, College of Environment, Zhejiang, China

Microplastics; Antibiotic resistance genes; Remediation; Ecotoxicology

Zsolt Pap, University of Szeged Applied & Environmental Chemistry Department, Szeged, Hungary

Photocatalytic degradation of chemicals of emerging concern (CECs, such as pharmaceuticals, Pesticides, herbicides, etc.), Energy sources from organic pollutants (photocatalytic hydrogen production), CO2 reduction, development of composite photocatalysts for water treatment (pollutant affinity tuning by structural modifications, Oriented composite building and planning), Natural photocatalysts in the environment (photoactive nanominerals), Nanoecotoxicology of semiconductors based on behavioral ecology

Dimitrios Paraskevis, National and Kapodistrian University of Athens School of Medicine, Athens, Greece

Edward Park, Nanyang Technological University (NTU), Singapore, Singapore

Fluvial geomorphology,Watershed hydrology,Sediment dynamics,Human-environment interactions,Remote sensing,Southeast Asia

Momir Paunovic, University of Belgrade, Belgrade, 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; Microbiology of freshwaters

Alexandra Pavlidou, Institute of Oceanography, Anavyssos, Greece

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

Jian Peng, Peking University College of Urban and Environmental Sciences, Beijing, China

Trade-offs, supply-demand budget, scenario modelling, spatial planning

Alexandre R. Péry, Institute of Life and Environmental Sciences and Industries, Paris, France

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

Antonella Petrillo, University of Naples Parthenope, Napoli, Italy

Environmental analysis,Risk Management,Sustainable production and consumption,Life Cycle Costing,Life Cycle Assessment,Social Life Cycle Assessment,Ecological risk assessment,Circular economy,Multi criteria analysis,Renewable Energy,Environmental behavior,Corporate social responsibility

Wenhui Qiu, Southern University of Science and Technology, Shenzhen, Guangdong, China

The effects and mechanisms of action of bisphenols on the immune system and reproductive neuroendocrine system in fisharental exposure to antibiotics affects developmental immune system in zebrafish offspring and its mechanisms of actionMetagenomics/metagenetics as a key to improving sustainable crop fertility and productivity and contributing to overall 'soil health'.

José Benito Quintana, University of Santiago de Compostela, Santiago de Compostela, Spain

Contaminants of emerging concern (CECs),legacy pollutants, chromatography-mass spectrometry, environmental monitoring, transformation products (TPs), wastewater-based epidemiology (WBE), human exposure to contaminants, water and marine environment contaminants

Clemens Reimann, Geological Survey of Norway, Trondheim, Norway

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

Anacleto Rizzo, IRIDRA Srl, 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 A. P. Rocha-Santos, University of Aveiro, Aveiro, Portugal

Study of organic contaminants and microplastics fate and behaviour in the environment and during wastewater treatment, Biodegradation of microplastics, Development of novel methods for environmental, food and heath care applications (fit for purpose)

Ismael Rodea-Palomares, Bayer CropScience LP, Research Triangle Park, North Carolina, United States of America

Ecotoxicology, Environmental Toxicology, Environmental Risk Assessment, Pesticides, Environmental Modeling

David Roser, University of New South Wales, Sydney, Australia

Neil Rowan, Technological University of the Shannon Midlands Midwest - Athlone Campus, Athlone, Ireland

Microbiology, Parasitiology, Transnational Modelling, Risk Evaluation, Emerging Pollutants, Ecotoxicology, Biosecurity, Resource Utilization, Disruptive Innovation, Sustainability, Disinfection, Sterilization, Virology, COVID-19, PPE, Health, Food Systems

Mª Jesús Sánchez-Martín, Institute for Natural Resources and Agrobiology of Salamanca, 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, College of Environment and Resource, Research Center of Environment and Health, Taiyuan, China

Toxicology, Environmental exposure, Atmospheric pollutant, Neurotoxicity

Ralf Bernhard Schäfer, University of Koblenz-Landau Institute of Environmental Sciences, Landau, Germany

Water quality; Rivers; Ecological effects; Chemicals; Aquatic toxicology; Invertebrates; Microorganisms; Modelling; Statistics

Jianwen She, California Department of Public Health Immunization Branch, Richmond, California, United States of America

Environmental analysis; Persistent organic chemical analysis; Biomonitoring; Source apportionment; Non target analysis; Endocrine disruptors; Mass spectrometry

Samendra Sherchan, The University of Arizona, Tucson, Arizona, United States of America

Water quality,environmental microbiology,fecal pollution,harmful algal blooms,emerging contaminants,environmental monitoring,wastewater treatment,water pollution,water reuse,environmental health,climate change,antibiotic resistance,microbial risk assessment,microbiome,next-gen sequencing.,water quality, environmental microbiology, environmental engineering, water pollution

Wei Shi, Nanjing University, Nanjing, China

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

Rui da Silva Coutinho, University of the Azores, Ponta Delgada, Portugal

Hydrogeology, Volcanology, Natural Hazards, Water Resources Management, Environmental Geology.

Andreas Skouloudis

Zhaoliang Song, Tianjin University, School of Earth System Science, Institute of Surface-Earth System Science, Tianjin, China

Biogeochemistry, Carbon cycle, Nitrogen cycle, Silicon cycle, Stable isotopes

Athanasios S. Stasinakis, University of the Aegean Department of Environment, Mytilini, Greece

Wastewater treatment and valorization, Sludge management, Emerging contaminants, Aquatic pollution, Biodegradation

Marianne Stuart, British Geological Survey - Wallingford Office, Wallingford, United Kingdom

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

Qian Sui, East China University of Science and Technology, Shanghai, China

Pharmaceuticals and personal care products, Micro-plastics, Emerging contaminants, Analytical methods, Environmental behaviors, Source apportionment, Advanced oxidation processes, Treatment processes

Yifei Sun, Beihang University, Beijing, China

Gasification, Pyrolysis, Biomass, Solid waste disposal, Persistent organic pollutants

Zhibin Sun, Colorado State University, Fort Collins, Colorado, United States of America

Data assimilation, Mathematical modeling, Machine learning, Remote sensing, Surface ultraviolet monitoring, Ocean/Climate/Geomagnetism model

Phong Thai, The University of Queensland Queensland Alliance for Environmental Health Sciences, Woolloongabba, Queensland, Australia

Wastewater analysis, Sewer-based epidemiology, Air quality monitoring, Air pollution epidemiology, Environmental monitoring

Maria Concetta Tomei, Water Research Institute National Research Council, Roma, Italy

Processes and Technologies for Urban and Industrial Wastewater Treatment, Modelling and Control of Biological Processes, Removal of Xenobiotic Compounds, Membrane bioreactors, Sludge Treatment, Soil Bioremediation

Ashley Townsend, University of Tasmania, Hobart, Australia

Environmental analysis; Geochemistry; Oceanography; Marine and Antarctic science; Materials science; Human health areas

Ngoc Han Tran, National University of Singapore, Singapore, Singapore

Environmental analytical chemistry, Emerging contaminants, Transformation of emerging contaminants, High-resolution mass spectrometry for targeted and non-target analyses, Occurrence and fate of emerging contaminants

Sunita J. Varjani, Gujarat Pollution Control Board, Gandhinagar, India

Bioremediation, Biodegradation of hydrocarbons, Biosorption of heavy metals, Treatment of industrial effluents, Solid waste management

Yongshan Wan, United States Environmental Protection Agency Center for Environmental Measurement and Modeling Gulf Ecosystem Measurement and Modeling Division, Gulf Breeze, Florida, United States of America

Jie Wang, China Agricultural University, Beijing, China

Study of microplastics and organic contaminants fate and behavior in the environments, Bioavailability and bioaccessibility of hydrophobic organic contaminants, Environmental microbiology, Microbial ecology, Biodegradable Mitigation strategies and risk-reduction practices

Lunche Wang, China University of Geosciences, Wuhan, China

Solar radiation, Atmospheric radiative transfer, Atmospheric environment, Air pollution, Urban meteorology, geography and ecology, Regional climate change, droughts, heat waves, Agricultural remote sensing, Land surface process, Land-atmosphere interactions, Aerosol effects on the terrestrial ecosystem and crop production.

Peng Wang, Chinese Academy of Sciences, Beijing, China

Anthropogenic Material Cycle, Material Flow Analysis, Industrial Ecology, Integrated Assessment Models, Urban Sustainability, International Trade, Energy and Climate Economics

Quan Wang, Northwest Agriculture and Forestry University, Yangling, Shaanxi, China

Waste management, Microplastics, Composting, Resource recovery, Greenhouse gas, Soil heavy metal pollution and remediation, Biotransformation, Thermal-conversion, Biochar

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

Radio-isotopic tracing and photographing; Pesticides; Organic pollutants; Bioavailability; Degradation; Metabolism: chemical analysis

Xiaoping Wang, Chinese Academy of Sciences, Beijing, China

Global cycling of POPs; Mechanism of long range atmospheric transport; POPs accumulation in polar region; Risk assessment of POPs, Brown carbon; Emerging contaminants;Tibet Plateau

Yixiang Wang, Zhejiang A and F University College of Environment and Resources, Hangzhou, China

Greenhouse gases, forests, forest management, Spatial Analysis, climate change

Shaun Watmough, Trent University, Peterborough, Ontario, Canada

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

Jianming Xue, Scion, Rotorua, New Zealand

Biowaste and wastewater reuse, Emerging contaminants in biowaste and soil, Fate and transport of contaminants in terrestrial ecosystems, Antibiotic pollution and remediation, Biochar for environmental management, Plant uptake and translocation of contaminants, Plant-soil-microbe interactions, Phytoremediation of contaminated soils and water, Biowaste management and climate change

Ishwar Chandra Yadav, Tokyo University of Agriculture and Technology Graduate School of Agriculture Research Division of International Environmental and Agricultural Scienc, Tokyo, Japan

Persistent organic pollutants; Brominated and phosphate flame retardants; Heavy metal pollution; Aerosols; South Asia; PM2.5; Solid waste; E-waste; Himalayas

Yi Yang, East China Normal University, School of Geographical Sciences; State Key Laboratory of Estuarine and Coastal Research, Shanghai, China

Nanoparticles, Behavior, Incidental, POPs, ARGs , ,

Jing You, Jinan University, Guangzhou, China

Organics; Ecotoxicology; Bioavailability; Sediment; Pesticides

Yang Yu, Beijing Forestry University School of Soil and Water Conservation, Beijing, China

Land degradation,Integrated watershed management,Vegetation restoration,Soil and water conservation,Ecosystem services,Dryland ecology.,Watershed management,Soil erosion,Hydrological connectivity,Landscape ecology,Soil ecosystem services,Soil and plant interaction,Geomorpholgy

Massimo Zacchini, Research Institute on Terrestrial Ecosystems National Research Council Montelibretti Branch, Montelibretti, Italy

Plants and environmental contamination, Plant-based decontamination technologies, Plants and emerging contaminants, Plant ecotoxicology, Plant tissue culture

Chaosheng Zhang, National University of Ireland Galway, Galway, Ireland

GIS and Environmental Geochemistry

Huichun Zhang, Case Western Reserve University Department of Civil Engineering, Cleveland, Ohio, United States of America

Oxidation, Reduction, Adsorption, Predictive Modeling, Emerging Contaminants

Xiaowei Zhang, Nanjing University, Nanjing, China

Ecotoxicology, Toxicogenomics, Ecogenomics, Endocrine disrupting chemicals, Effect based analysis, Adverse Outcome Pathways Biomonitoring, Biodiversity, Ecosystem Functions.

Yong Zhang, Xiamen University, Xiamen, China

PAHs; Organic matter; Marine environments

Jian J. Zhao, Ocean University of China, Qingdao, China

Microplastics, Engineered nanoparticles, Nanoplastics, Toxicity, Environmental Behaviors

Bing Song Zheng, Zhejiang Agriculture and Forestry University, Human Resource Department, Hangzhou, Zhejiang, China

Plant-Environment Interactions; Forests; Heavy metals; Bioenergy; Environment stress; Plant ecophysiology

Lingyan Zhu, Nankai University, Tianjin, China

Occurrence, bioavailability, Fate, human exposure and potential effects of emerging persistent organic pollutants in the environment

Hussein Znad, Curtin University, Perth, Western Australia, Australia

Microalgae & algal environmental applications; Wastewater/Air polluted treatment; Ad/Bio-sorbent development for heavy and rear earth metals; Optical functionalized nano-materials for detecting and removing metals from aqueous solution; Photo/catalyst development; Advanced Oxidation Processes (Photo-Fenton, Ozone, UV/Solar, ZnO/TiO

GUIDE FOR AUTHORS

INTRODUCTION

Aims and Scope

Science of the Total Environment is an international multi-disciplinary natural science journal for publication of novel, hypothesis-driven and high-impact research on the **total environment**, which interfaces the **atmosphere**, **lithosphere**, **hydrosphere**, **biosphere**, and **anthroposphere**.

totalenvironment.gif-Total Environment

STOTEN invites contributions of original and high quality interdisciplinary environmental research papers of broad impact. Studies significantly advancing fundamental understanding and that focus on the interconnection of multiple spheres will be given primary consideration. Field studies have preference, while papers describing laboratory experiments must demonstrate significant advances in methodology or mechanistic understanding with a clear connection to the environment. Descriptive, repetitive, incremental or regional-scale studies with limited novelty will not be considered.

1) Subject areas may include, but are not limited to:

• Air quality, atmospheric conditions, and new understanding of their role in adverse health or environmental outcomes
• Atmospheric biogeochemistry
• Ecosystem services and life cycle assessment
• Ecotoxicology and risk assessment
• Eco-hydrology
• Wildlife and contaminants
• Environmental impacts of climate change, agriculture, forestry, and land uses
• Environmental impacts of waste or wastewater treatment
• Drinking water contaminants and health implication
• Environmental remediation of soil and groundwater
• Global change-induced extreme events and environmental impacts
• Groundwater hydrogeochemistry and modeling
• Nanomaterials, microplastics, and other emerging contaminants
• Novel contaminant (bio)monitoring and risk assessment approaches
• Remote sensing and big data applications in multiple spheres
• Stress ecology in marine, freshwater, and terrestrial ecosystems
• Trace metals and organics in biogeochemical cycles
• Water quality and security
• Critical reviews or Discussion on current or emerging topics
• Fast-track submissions (less than 2 weeks): Ground-breaking discoveries with immediate impact

2) TYPES OF SUBMISSIONS NOT TO BE CONSIDERED:

• Papers not contributing significant new knowledge to the field of study
• Disciplinary studies with limited environmental relevance
• Local or regional scale case studies lacking international relevance
• Soil or plant science studies without environmental implications
• Laboratory batch experiments without an application component, e.g., batch sorption experiments, preparation, and evaluation of sorbents or catalysts for contaminant removal
• Manuscripts that are primarily data reports without a substantial hypothesis, e.g., monitoring of common contaminants
• Modelling studies without calibration and data validation
• Papers of social science in nature on economics, sociology, psychology, political science, policy, planning and/or management
•Toxicology and ecotoxicology studies testing single chemicals in bench-scale assays
• Human health studies that do not provide significant additional understanding of air pollution induced health outcomes
• Method development papers on common contaminants
• Bibliometric analysis-based papers

Types of article

Research 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 scientific insights on the particular topic, critical additional information, relevance to the published paper and timeliness. Authors will be invited to submit a ***Reply*** to respond to points raised. The Editor will decide on the publication of Letters and Replies based on scientific merit, importance to the raised issues, and interest to the general audience. Letters and Replies of an unprofessional or unscientific nature, or containing personal invective, will not be considered.
Review Articles. 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. Full information can be found here. ***Editorials*** for Special issues are submitted by invitation only through the Editorial Manager portal.

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