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

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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 environmental or resource economics, policy and 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.

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ABSTRACTING AND INDEXING

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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, Biosensors for, Analysis, Fate and Risk of Emerging Pollutants such as Pharmaceuticals and Nanomaterials in the Environment Water Pollution Control and Protection Bridging analytical chemistry with ecotoxicology- toxicity identification, Evaluation techniques used, GC and LC tandem MS, biosensors, sample preparation, automated on-line techniques for water analysis environmental samples (water, including marine waters, sediments soils, biota samples)
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

**Special Issues Editor**

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

Plant health, Plant ecophysiology, Forests, Climate stressors, Air pollution impacts on terrestrial ecosystems, BVOC, Ground-level ozone

**Paola Verlicchi**, University of Ferrara, Ferrara, Italy

Water treatment, Wastewater treatments, Reuse of reclaimed water, Occurrence and removal of pharmaceuticals from (waste)water, Hospital effluent management and treatment, Petrochemical wastewater treatment, Environmental risk assessment

**Associate Editors**

**Lotfi Aleya**, Chrono-environment, Besancon, France

Harmful algae, microbiology, protistology, Medicine, Toxicology

**Julian Blasco**, Institute of Marine Science of Andalucia, Puerto Real, Spain

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

**Baoliang Chen**, Zhejiang University, Hangzhou, China

Soil pollution control and remediation; Traditional and novel functional materials and environmental applications (biochar, graphene, biosorbent, and organo-clay); 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

Human exposure; Exposure assessment; Human health effects; Biomarkers; Food safety; Biomonitoring; Indoor pollution; Emerging contaminants; Legacy contaminants; Wastewater epidemiology

**Martin Drews**, Technical University of Denmark Department of Technology Management and Economics, Kongens 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, Department of Geographical Sciences, College Park, Maryland, United States of America

Carbon Accounting, Climate Mitigation, Sustainable Consumption and Production, Environmental Input-output Analysis, Virtual Water Flow Analysis

**Xinbin Feng**, Institute of Geochemistry Chinese Academy of Sciences, 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

**Yucheng Feng**, Auburn University Department of Crop Soil and Environmental Sciences, Auburn, Alabama, United States of America

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

**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


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

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

Henner Hollert, Goethe University Frankfurt Faculty 15 Bio Sciences, Frankfurt, 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

Wei Huang, Peking University, Beijing, China

Exposure assessment; Environmental epidemiology; Health intervention

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

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

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

Groundwater chemistry, Isotope hydrology, Groundwater flow, Groundwater management, Groundwater pollution, Groundwater planning, Urban groundwater, Surface water chemistry, Groundwater policy

Rafael Mateo, Research Institute of Wildlife Resources, Ciudad Real, Spain

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

Huu Hao Ngo, University of Technology Sydney, Sydney, Australia

Water and wastewater treatment and reuse, Renewable resource recovery, Clean technologies, Bioenergy and biomaterials, Sustainable development

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

Hydorlogic 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.

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

Plant health, Plant ecophysiology, Forests, Climate stressors, Air pollution impacts on terrestrial ecosystems, BVOC, Ground-level ozone

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

Soil degradation, Soil erosion, Soil processes, Forest Fires, Spatial Analysis, Mapping, Geostatistics, Ecosystem Services

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; Biodiversity; Conservation of rivers

Scott C. Sheridan, Kent State University, Kent, Ohio, United States of America

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

Wei Shi, North Carolina State University, Raleigh, North Carolina, United States of America


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


Paola Verlicchi, University of Ferrara, Ferrara, Italy

Water treatment, Wastewater treatments, Reuse of reclaimed water, Occurrence and removal of pharmaceuticals from (waste)water, Hospital effluent management and treatment, Petrochemical wastewater treatment, 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, Sydney, New South Wales, Australia

Anaerobic and aerobic digestion, Wastewater treatment technologies, Sludge treatment, Waste management, Antibiotic resistance genes, Process modelling of biological wastewater treatment, Microplastics, Greenhouse gas production, Algae, Biochar, 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, Kongens Lyngby, Denmark

Microbial electrochemistry; Biosynthesis; Gas and dark fermentation; Anaerobic digestion; Advanced oxidation process; Wastewater management and resources recovery; Bioremediation; (Bio)electrochemical sensors; Water desalination

**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

Adaptive response, air pollution biomonitoring, carbon dioxide (CO2) ecological effects and health, dose-response relationship, ecophysiology, ecotoxicology, environmental change biology, environmental health, hormesis, hormetric dose-response, linear-non-threshold (LNT) dose-response, no-observed-adverse-effect-level (NOAEL), organismic susceptibility, organism response to contaminants and pollutants, ozone (O3) impacts, photosynthesis, plant-insect interaction, plant-microbe interaction, preconditioning, priming, species tolerance, stress response

**Warish Ahmed**, Commonwealth Scientific and Industrial Research Organisation, Canberra, Australia

Microbial source tracking, ARGs, Health risk, Wastewater microbiology, Water microbiology, Enteric viruses

**Souhail R. Al-Abed**, National Risk Management Research Laboratory, 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

**Abed Alaswad**, Aston University School of Engineering and Applied Science, 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

Resource recovery, composting, microbial-technology, bioengineering, waste valorization and bio-refinery, sludge treatment, waste management, antibiotic resistance genes, microplastics, greenhouse gas production, biochar, anaerobic digestion, bioenergy, techno-economics and life-cycle assessment, application of black soldier fly larvae for organic waste recycling, nano-biotechnology, and design of novel enzyme biocatalysts for industrial bioprocess

**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, 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, 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

Bryan W. Brooks, Baylor University Department of Environmental Science, Waco, Texas, United States of America
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 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

Glòria Caminal Saperas, Institute of Advanced Chemistry of Catalonia, Barcelona, Spain
Biochemical engineering; Environmental engineering (focused on biodegradation of pollutants by microorganisms or enzymes); Bioreactors; Immobilization; Kinetics

Art Chappelka, Auburn University, Auburn, Alabama, United States of America
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 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, Biological nutrients removal and recovery from wastewater, Greenhouse gases emissions and mitigation from wastewater management, Membrane-based biofilm technology)

**Chin K. Cheng**, Khalifa University of Science and Technology, 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, Tucumán, 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

**Guido Del Moro**, Water Research Institute National Research Council Bari Branch, 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

**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

**José L. Domingo**, Rovira and Virgili University School of Medicine Laboratory of Toxicology and Environmental Health, Reus, Spain
Toxicology, environmental health, risk assessment

**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 hydrologics, modeling impacts of changing climate, stochastic flow and transport processes, scaling, time series modeling, flood forecasting.

**Ronald C. Estoque**, National Institute for Environmental Studies Center for Social and Environmental Systems Research, Ibaraki, Japan
GIScience and Remote Sensing, Land Change Science, Urban/Landscape Ecology, Sustainability Science, Climate Change Vulnerability/Risk/Adaptation

**Zhaozhong Feng**, Nanjing University of Information Science and Technology School of Applied Meteorology, Nanjing, China
Air pollutant, BVOCs, Crop growth, Forest health, N deposition, N use and allocation, Ozone pollution, Photosynthesis and C cycle, Water use efficiency, Urban environment and forestry

**Jose Angel Fernández**, University of 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

**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, Zaragoza, 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; Emerging organic contaminants

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

**Jorge Gardea-Torresd, 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**
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

John Gulliver, University of Leicester, Leicester, United Kingdom
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; Geographical studies of environment and health; Health risk assessments

Wenshan Guo, University of Technology Sydney Faculty of Engineering and Information Technology, Sydney, New South Wales, Australia
Biological wastewater treatment technologies, Environmental biotechnology, Resource and energy recovery, Attached growth and suspended growth bioprocesses, Micropollutants removal

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.

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

Neil S. Harris, University of Alberta, Edmonton, Alberta, Canada
Expertise: cadmium, micronutrients, membrane transporters, trace metal uptake and translocation in plants

Tham Hoang, Loyola University Chicago, Chicago, Illinois, 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, Kingston Upon Thames, United Kingdom
Soil Science, Soil use and management, soil fertility, soil organic carbon management, soil contamination & remediation, degraded land restoration

Kiril Hristovski, Arizona State University Ira A Fulton Schools of Engineering, Tempe, Arizona, United States of America
Environmental applications and implications of nanomaterials, Water/wastewater treatment and quality, Solid and hazardous waste management, International environmental management, Environmental sensor technologies

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
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, Hangzhou, China
Nanomaterials; Ecotoxicity; Nanotoxicity; Bioavailability; Colloidal behavior; Sorption

Kunde Lin, Xiamen University, Xiamen, China
Organic contaminants; Active sampler

Xiaobo Liu, Guangdong Technion-Israel Institute of Technology, China
Applied Environmental Microbiology, Microbial Biofilms, Biodeterioration and Biocorrosion, Geomicrobiology of Cultural Heritage, Biofouling Control, Antimicrobial Biomaterials, Archaeal Cultivation, 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

Manuel Esteban Lucas-Borja, University of Castilla-La Mancha, Ciudad Real, Spain
Forest Hydrology, Soil erosion, Forest fires, Forest Management, Mediterranean forest

Ralf Ludwig, Ludwig Maximilians University Munich, Munich, Germany
Hydrology; Water resources management; Climate change; Land use change; Extreme events; Modeling; Remote sensing

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

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 Martinez 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.

Ioannis Matiatos, International Atomic Energy Agency, Vienna, Austria
Isotope hydrology; Water resources management; Hydrogeochemistry; Groundwater modeling; Applied statistical modeling; Climate change impact; Environmental monitoring; Water quality

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

Thomas Meinelt, Leibniz-Institute of Freshwater Ecology and Inland Fisheries in the Forschungsverbund Berlin eV, Berlin, Germany
Alternative treatments in aquaculture; Impact (and interaction) of humic substances on environment and animals.

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

**Derek Muir**, Environment and Climate Change Canada, Aquatic Contaminants Research Division, Burlington, Ontario, Canada
Environmental chemistry; Biogeochemistry; Bioaccumulation; Persistent organic pollutants; Chemicals of emerging concern; Chemical inventories; Mercury; Polycyclic aromatic compounds; Arctic; Marine mammals; Fish

**Amitava Mukherjee**, VIT University Centre for NanoBiotecnology, 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, Department of Environmental Engineering, Daegu, South Korea
Bioremediation and eco-toxicology of toxic soil pollutants, environmental microbiology, plant-metal-microbe interactions, nano-biotechnology, nanoparticles synthesis and their applications, microbial community analysis, production of microbial metabolic products and its environmental application, and microplastics.

**Vincenzo Naddeo**, University of Salerno, Fisciano, Italy
Water-energy-food-nexus, water quality, biotechnology, advanced oxidation processes (AOPs), climate change, algae-based technology, co2 sequestration/capture, hydrogen, biogas, biomethane

**Jacek Namieśnik**, University of Gdansk, Gdansk, Poland
Environmental analytics and monitoring; Food analysis; QA/QC systems; Green analytical chemistry; Envirometrics

**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.

**Avelino Nunez-Delgado**, University of Santiago de Compostela Polytechnic School Superior, Lugo, Spain

**David O’Connor**, Tsinghua University, Beijing, China
Soil and groundwater pollution; Biochar; Microplastics (MPs); Green and sustainable solutions; Contaminated land remediation

**Fernando Pacheco-Torgal**, University of Minho School of Engineering, Guimaraes, Portugal
Geopolymers, Concrete, Cement, Properties, Durability, Construction and demolition wastes, Industrial waste recycling, Masonry bricks, Masonry blocks, Nano particle based concrete, Concrete nanotechnology, Alkali-activated cement, Concrete with polymer admixtures, Biopolymer based concrete, Concrete recycling, Recycled aggregates, Construction wastes, Demolition wastes

**Krishna Pagilla**, University of Nevada Reno, Department of Civil and Environmental Engineering, Reno, United States of America
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), Nanoeccotoxicology of semiconductors based on behavioral ecology

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

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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 zebrfish offspring and its mechanisms of actionMetagenomics/metagenetics as a key to improving sustainable crop fertility and productivity and contributing to overall ‘soil health’.

Clemens Reimann, Geological Survey of Norway, Trondheim, Norway
Geochemistry; Environmental Geochemistry; Biogeochemistry; Hydrogeochemistry; Regional Geochemistry; Geochemical mapping; Critical Zone Research; Soil chemistry

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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

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Toxicology, Environmental exposure, Atmospheric pollutant, Neurotoxicity

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

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

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

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

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

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

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

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Biomagnification of major and minor elements along the sequential trophic levels of the marine biosphere, Bioavailability of metallic pollutants to benthic organisms as potential biomarkers in relation to the adjacent sediments and sea water, Analytical and chemometric assessment of food quality

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

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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

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Transport of nanoparticles, bacteria, microplastics in natural and engineered systems, Heteroaggregation of colloids, Toxicity of nanomaterials, Bacterial disinfection, Organic pollutant degradation, Heavy metal removal

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

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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

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

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

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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

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

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Organics, adsorption, organic matter

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Nanoparticles, Behavior, Incidental, POPs, ARGs

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Organics; Ecotoxicology; Bioavailability; Sediment; Pesticides

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Land degradation, Integrated watershed management, Vegetation restoration, Soil and water conservation, Ecosystem services, Dryland ecology.

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Oxidation, Reduction, Adsorption, Predictive Modeling, Emerging Contaminants

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

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PAHs; Organic matter; Marine environments

Jian J. Zhao, Ocean University of China, Qingdao, China
Microplastics, Engineered nanoparticles, Nanoplastics, Toxicity, Environmental Behaviors

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

Lingyan Zhu, Nankai University, Tianjin, Tianjin, China
Persistent organic pollutant, partition, accumulation, transformation, human exposure, toxicity, metabolomics

Hussein Znad, Curtin University, Perth, Western Australia, Australia
Microalgae & algal environmental applications; Wastewater/Air polluted treatment; Ad/Bio-sorbent development for heavy and rare 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 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 environmental or resource economics, policy and 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

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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.

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.

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