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DESCRIPTION

Beginning in 2019, Environment International became an open access journal and further expanded its scope into new areas of research to become a multi-disciplinary journal publishing high quality and novel information within the broad field of 'Environmental Sciences'.

Coverage includes, but is not limited to, the following research topics:
1) Public Health and Health Impact Assessment, Environmental Epidemiology (Prof. Mark Nieuwenhuijsen)
2) Environmental Health and Risk Assessment, Environmental Chemistry (Prof. Adrian Covaci)
3) Environmental Monitoring and Processes, Environmental Microbiology and Toxicology (Prof. Yong-Guan Zhu)
4) Environmental Technology (Prof. Zhen Jason He)

The journal has published before on many of the above mentioned topics, and thus they are familiar to authors, readers, reviewers and editors. In particular, the following specific topics are welcome (non-exhaustive list), as long that they have a strong environmental aspect and applicability and if they discuss "interactions between environment and humans" in the broad sense.

1) Public Health and Health Impact Assessment, Environmental Epidemiology (Prof. Mark Nieuwenhuijsen)
The section overseen by Prof. Nieuwenhuijsen will cover novel topics related to the exposure assessment and epidemiology of indoor and outdoor air quality, noise, green space, temperature and other environmental exposures, the assessment and health effect of urban and transport planning and the built environment. We also welcome innovative research on women, children, migrants and elderly as specific and vulnerable sub-populations. Other topics of interest relate to the health implications and impacts of climate change with specific reference to sustainable development, including planetary health and urban health.

2) Environmental Health and Risk Assessment, Environmental Chemistry (Prof. Adrian Covaci)
The section overseen by Prof. Covaci covers novel topics related to the assessment, modelling and impact of chemicals of emerging concern on human exposure and human exposome in general, which are important in environmental and health risk assessment. We also welcome novel and innovative approaches for human biomonitoring and environmental "omics", for a broad range of Persistent Organic Pollutants, Endocrine Disruptors and Emerging Contaminants, including microplastics. These
tools are pivotal for the correct evaluation of source apportionment, exposure, fate, bioavailability, and biotransformation of environmental and food contaminants. We also want to attract innovative papers investigating the link between ecosystem health and human health and their input on the chemicals policy and regulation. We strongly encourage the submission of systematic reviews related to environmental and human health risk assessment.

3) Environmental Monitoring and Processes, Environmental Microbiology and Toxicology (Prof. Yong-Guan Zhu)

The section overseen by Prof. Zhu will cover environmental processes, ecotoxicology and environmental microbiology. For environmental processes, we welcome novel and innovative research submissions addressing biogeochemical processes in terrestrial and aquatic ecosystems, and their influence on the status and fate of contaminants and nutrients. Under the topic of ecotoxicology, we will cover novel areas of toxicological studies, particularly on molecular mechanisms of emerging contaminants and population dynamics under contamination. We also welcome papers on environmental microbiology, addressing fundamental interactions between environmental conditions and microorganisms, both ecology and molecular mechanisms; and the dynamics of microbial genes in the environment.

4) Environmental Technology (Prof. Zhen Jason He)

The Environmental Technology section, overseen by Prof. He, responds to increasing attention on technological solutions which will lead to an improvement of our environment and quality of life in general. We will consider innovative research on, but not limited to: technologies for minimizing and treating contaminants, and/or maximizing recovery of valuable resources from wastes such as energy, nutrients, and water; technologies for sensing and monitoring the quality of water, air, and other environmental compartments; and technologies for analyzing emerging contaminants via chemical and microbiological methods. We welcome both applied and fundamental research that develops novel and innovative technologies with a strong environmental application potential, that address key limitations of existing technologies, and/or demonstrate technologies in the real world using methods with strong scientific merit. We are particularly interested in interdisciplinary research that connects environmental technologies to public and environmental health, resource recovery, social economics, and sustainability.

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AUDIENCE

Environmental scientists, ecotoxicologists, environmental chemists, environmental health specialists, environmental regulators, ecologists, biologists, hydrologists, geologists, marine and atmospheric scientists.

IMPACT FACTOR

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Environmental Chemistry & Health, Risk Assessment
Human exposure; Exposure assessment; Human health effects; Biomarkers; Food safety; Biomonitoring; Indoor pollution; Emerging contaminants; Legacy contaminants; Wastewater epidemiology
Mark Nieuwenhuijsen, Centre for Research in Environmental Epidemiology, Barcelona, Spain
Public Health, Environmental Epidemiology & Health Impact Assessment
Environmental epidemiology; Environmental exposure assessment; Health impact assessment; Air pollution; Green space; Noise; Temperature; Built environment
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Environmental Technology
Water pollution and treatment; Environmental biotechnology; Resource recovery from wastes; Bioelectrochemical systems; Bioenergy; Membrane technology; Bioremediation; Desalination
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Special Issue Editor
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Associate Editors
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Research Interests: Human biomonitoring; environmental epidemiology; exposure; risk assessment
Olga-Ioanna Kalantzi, University of the Aegean Department of Environment, Mytilini, Greece
Environmental Chemistry, Analytical Chemistry, Persistent Organic Pollutants, Emerging Contaminants, Ecotoxicology, Environmental Health, Children’s Health, Environmental Epidemiology
Martí Nadal, Pere Virgili Health Research Institute Laboratory Toxicology and Environmental Health, Reus, Spain
Heavy metals, Persistent Organic Pollutants, Polycyclic aromatic hydrocarbons, Emerging Pollutants, Human exposure, Health risk assessment, Waste management, Food toxicology, Dietary intake, Environmental monitoring, In-silico tools, Environmental toxicology
Shoji F. Nakayama, National Institute for Environmental Studies, Japan Environment and Children’s Study Programme Office, Tsukuba, Japan
Research Interests: Public health, Environmental health, Children’s environmental health
Biomonitoring, Exposome, Contaminants of emerging concern, Perfluoroalkyl substances (PFAS)
Heather Stapleton, Duke University, Durham, North Carolina, United States
Environmental Chemistry, Human Exposure, Children’s Environmental Health, Metabolism and Biotransformation, Halogenated Persistent Pollutants, Endocrine Disruptors, Flame Retardant Use & Exposure, In Vitro Assays for Thyroid Disruption.

Environmental Processes, Quality, Toxicology & Microbiology
Hefa Cheng, Peking University, Beijing, China
Environmental geochemistry; Heavy metals; Environmental monitoring; Health risk assessment; Food safety; Soil pollution; Waste management; Environmental transport and fate of pollutants; Waste treatment and disposal
Frederic Coulon, Cranfield University, Cranfield, Bedford, United Kingdom
Remediation, hazardous waste, water and wastewater treatment; Risk assessment and remediation; Bioaerosols; Hydrocarbons; Environmental microbiology; Antarctic science

Environmental Technology

Thanh Huong (Helen) Nguyen, University of Illinois at Urbana-Champaign, Champaign, Illinois, United States
Water and food safety; Disinfection; Water distribution system; Hydroponics; Aquaponics

Guo-Ping Sheng, University of Science and Technology of China, Hefei, China
Biological wastewater treatment; Water reuse technique

Public Health, Environmental Epidemiology & Health Impact Assessment

Hanna Boogaard, Health Effects Institute, Boston, Massachusetts, United States
Air pollution epidemiology; Exposure assessment; Accountability research; Systematic reviews

Zorana Jovanovic Andersen, University of Copenhagen, Copenhagen, Denmark
Environmental epidemiology; Health effects related to air pollution exposure; Health effects related to road traffic noise exposure; Health effects related to wind turbine noise exposure; Health effects of green and blue spaces

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

Associate Editor – Systematic Reviews

Paul Whaley, Lancaster University, Lancaster, United Kingdom
Systematic review; Evidence mapping; Machine learning; Chemical risk assessment; Research standards

Editorial Board

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Air pollution; Particulate matter; Environmental epidemiology; Exposure assessment; Cardiovascular disease

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Bioenergy; Biorefineries; Biogas; Biofuels; Bioproducts; Fermentation; Microbial ecology; Algae; Biomass; Microbial electrochemistry; Industrial biotechnology

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Environmental Health; Exposure and Risk Assessment; Birth ohort; Environmental Chemicals (POPs, Phthalates, bisphenols); SNPs and epigenetics; Indoor Environment

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Air pollution epidemiology; Cohort studies; Time series studies; Systematic review; Meta-analysis; Medical statistics

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)

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Environmental Toxicology, Dioxin, Endocrine Disruptors, BPAs, Flame Retardants

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Metals; Pharmaceuticals; Nanoparticles; Pollution; Ecotoxicology; Risk assessment; Seawater; Sediment

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Environmental exposure to Toxic metals: Children, Mercury, Lead, Fish, Human milk

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Advanced wastewater treatment and reuse; Effluents desalination; Biofouling; Micropollutants removal; Microbial degradation of toxic organic compounds

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Human health risk assessment, exposure assessment, organic chemicals (POB's, dioxins, PAHS), risk communication, contaminated land

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Metabolomics; Risk Assessment; Environmental Analytical Chemistry; Gut microbiome; Biomarkers; Exposome; Mixture Effect; Non-targeted identification

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Organic contaminant; Soil-plant system; Soil contamination and remediation; Rhizosphere; Root exudates; Soil environmental chemistry; Bioremediation; Plant contamination

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Climate change and health; Air pollution and health; Extreme weather and health; Exposure assessment; Environmental Epidemiology; Biostatistics; Machine learning; Time series analysis

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Exposure assessment; Air pollution modelling; Environmental epidemiology

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Research Interests: Air pollution, noise, cardiovascular dieasease, metabolic and neurocognitive impairment

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Human exposure assessment; Biomonitoring

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Characterizing the chemically induced reproductive toxicity and developmental toxicity during embryonic and perinatal life stages, understanding of their modes of action, and applying such information to human health risk assessment

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Biogeochemistry of trace metals in soils, wastes, and plants; Soil contamination and remediation; Phytoremediation; Chemical stabilization; Metal speciation; Metal bioavailability and bioaccessibility; Metal exposure and human health; Plant metal uptake and transport; Microbial transformation of metals; Metal availability and food safety

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Environmental biotechnology; Bioprocess engineering; Wastewater treatment; Anaerobic digestion; Biotransformation; Bioremediation; Bioenergy and biofuels; Bioelectrochemical systems; Kinetics and modeling

**Nuno Ratola**, University of Porto, Porto, Portugal
Environmental presence and behaviour of legacy and emerging organic contaminants; Biomonitoring and chemical transport of chemicals; Advanced analytical techniques of extraction and quantification; Field sampling campaigns and sample handling protocols; Exposure assessment and prioritisation of relevant compounds; Climate change scenarios

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Gene expression Omics

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Biological effects, environmental chemicals, infectious diseases, climate change, veterinary science, wildlife medicine, predatory mammals, raptorial birds, sea birds, fish, internal organs, reproductive organs, histopathology, morphology, skeletal system, bone density, immune system, endocrinology, PBPK modelling, blood biochemistry, implantation of PTT satellite transmitters, immobilization.
Analytical Chemistry; Ecotoxicology; Molecular Toxicology; Environmental Monitoring; Risk Assessment; Human studies; Organic Contaminates; Flame Retardants; Urinary Biomarkers; Metabolites; Gas Chromatography-Mass Spectrometry (GC-MS); Lipid Chromatography-Mass Spectrometry (LC-MS)

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Wastewater analysis; Water quality; Air quality; Air pollution; Environmental monitoring; Environmental health

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Environmental epidemiology, climate change, planetary health, sustainable development, quantitative risk assessment, spatiotemporal modelling

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Modelling & decision support in environmental systems; Urban and regional water quality; Water pollution control of river system; Urban sewage system planning; Aquatic Ecosystem management

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Wastewater, Sewer, Resource recovery, Modelling, control

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Air quality; Built Environment; Climate Change and Health; Environmental and Occupational Epidemiology; Exposure assessment; Exposome; GIS; Urban Health; Statistics

**Yinpeng Zhang**, Tsinghua University, Beijing, China
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3. Correspondence is encouraged. Opinions, perspectives and insight on articles published in Environment International are very welcome.

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PREPARATION

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