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ISSN: 0269-7491

DESCRIPTION

Environmental Pollution is an international journal that seeks to publish papers that report results from original, novel research that addresses significant environmental pollution issues and problems and contribute new knowledge to science.

The editors welcome high quality papers where the pollutants are clearly defined and measured and can be directly related to biological, ecological, and human health effects. This includes air, water, and soil pollution and climate change. New techniques for the study and measurement of pollutants and their effects are also encouraged as well as papers on new types of environmental challenges such as pollution/antibiotic resistances of organisms. Emerging pollutions are of eminent interest, such as microplastics, electronic wastes, light or noise pollution as long as they can clearly be related to the biological effects mentioned above. Papers must be process-orientated and/or hypotheses-based to be considered for population. Papers based on field studies are given priority for publication over micro/meso cosmos studies.

Papers, such as meta analyses, that report findings from re-examination and interpretation of existing data are welcome. Modeling papers are welcome only to a certain extent, i.e., they must be related to a specific pollution issue or process that is potentially of ecological and/or human health implications. Critical review papers and commentaries are also of high interest as are letters to the editor.

The editors do not wish to publish papers that describe results from routine surveys and monitoring programs that are primarily of local or regional interest. Descriptions of well-known pollutants, such as legacy pollutants, in yet another location are not of interest. Papers about sewage, waste and wastewater treatment and management as well as standard techniques in agronomy, remediation, biomonitoring, bioremediation and phytoremediation are not acceptable. However, papers on innovative techniques to combat regional or global problems are welcome; however, technical studies must show their field applicability.

Furthermore, the editors discourage submission of papers which describe analytical methods, laboratory experiments, food science studies, screening of new plant/animal/microorganism species for effect assessments and testing known pollution and chemicals in another setting. Eutrophication studies and secondary pollution by eutrophication are not covered by *Environmental Pollution*. In the same line, papers on ocean enrichment by CO₂ will not be accepted.

The abstract (up to 300 words), highlights and conclusions of papers in this journal must contain clear and concise statements. A graphical abstract is mandatory. A cover letter must be accompanied

with each submission, containing clear and concise statements as to why the study was done and how readers will benefit from the results.

Articles submitted for publication in *Environmental Pollution* should establish connections among research findings with implications for environmental quality, ecological health, and/or human health. The cover letter must explicitly express how the submission fits the Aims and Scope of Environmental Pollution. Failure to include the paragraph will result in returning the paper to the author.

The editors welcome the following contributions:

- *Full research papers*: Results from completed investigations 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.
- *Review papers*: In-depth critical reviews of special subjects. Authors planning reviews should contact one of the editors prior to submission.
- *Commentaries*: Opinions and concerns about current scientific issues, invited or unsolicited
- *Letters to the Editor*: Short focused letters to raise issues or concerns about papers published in the journal and solicit a reply from the authors of those papers
- *Special Issues*. Special Issues will be published on emerging thematic issues and innovative conferences. 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. Furthermore, the Editors or Associate Editors will invite leading experts as Guest Editors for Special Issues.

Editors-in-Chief: D.O. Carpenter & Eddy Y. Zeng

AUDIENCE

Pollution research workers including chemists, toxicologists, environmentalists, conservationists, botanists, marine scientists, ecologists, biologists.

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ABSTRACTING AND INDEXING

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Air Pollution Control Association Journal
Biological and Agricultural Index
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SCISEARCH
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David Carpenter, State University of New York (SUNY) at Albany, Rensselaer, New York, USA

Eddy Zeng, Jinan University, Guangzhou, China

Associate Editors:

Da Chen, Southern Illinois University at Carbondale, Carbondale, Illinois, USA

Environmental chemistry; Analytical chemistry; Ecotoxicology; Persistent organic pollutants; Flame retardants; Pesticides; Mass spectrometry; Gas/liquid chromatography.

Maria Cristina Fossi, Università di Siena, Siena, Italy

Kimberly Hageman, University of Otago, Dunedin, New Zealand

Persistent organic pollutants; Pesticides; Long-range atmospheric transport; Chemical fate; Partition coefficients

Sarah Harmon, University of South Carolina Aiken, Aiken, South Carolina, USA

Aquatic toxicology; Water pollution; Heavy metals toxicity; Fecal coliform pollution; Mercury toxicity.

Klaus Kümmerer, Leuphana Universität Lüneburg, Lüneburg, Germany

Bernd Nowack, Swiss Federal Laboratories for Materials Science and Technology, St. Gall, Switzerland

Yong Sik Ok, Kangwon National University, Chuncheon, The Republic of Korea

Soil pollution; Soil remediation; Heavy metals in the environment; Waste management; Bioavailability of Emerging Contaminant; Bioenergy and value-added products; Biochar and soil organic matter; Phytoremediation

Jörg Rinklebe, University of Wuppertal, Wuppertal, Germany

Soils, sediments, waters, plants, and their pollutions (in particular trace elements and nutrients) and linked biogeochemical issues with a special focus in redox chemistry; Remediation of soils and soil microbiology

Frank von Hippel, Northern Arizona University, Flagstaff, Arizona, USA

Perchlorate, OC pesticides, PCBs, PBDEs, PFCs, toxic metals (mercury, manganese, copper, arsenic) Ecotoxicology research incorporates molecular (gene expression), organismal (endocrine disruption, developmental disruption, behavior), and ecological approaches (stable isotopes) to solve problems in conservation biology and environmental health. A critical component of several of my larger research projects is community-based participatory research (CBPR) with indigenous people.

Wen-Xiong Wang, Hong Kong University of Science and Technology, Kowloon, Hong Kong

Metal Pollution, Metal Ecotoxicology, Metal Biogeochemistry, Metal Bioavailability Metal bioaccumulation, Metal toxicity, Environmental processes of metals, Bio monitoring, Biomarkers, Bioassays.

Charles Wong, University of Winnipeg, Winnipeg, Manitoba, Canada

Baoshan Xing, University of Massachusetts, Amherst, Massachusetts, USA

Editorial Board:

Dula Amarasiriwardena, Hampshire College, Amherst, Massachusetts, USA

Metal Pollution Environmental trace metal determination (ICP-MS, LA-ICP-MS) Metal chemical speciation Toxic metals in soils Tissue level elemental bioimaging Nanoparticles in Environment Environmental remediation -metals Humic substances in the environment

Allen Barker, University of Massachusetts, Amherst, Massachusetts, USA

Nigel Bell, Imperial College London, Kensington, London, UK

Effects of air pollution on managed and natural ecosystems; radioecology; waste management

Thomas Borch, Colorado State University, Fort Collins, Colorado, USA

Hydraulic fracturing, emerging contaminants, uranium mining, and carbon sequestration

Birgit Braune, Carleton University, Ottawa, Ontario, Canada

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

Juergen Burkhardt, University of Bonn, Germany

Andrzej Bytnerowicz, U.S. Department of Agriculture (USDA), Forest Service, Riverside, California, USA

Air pollution; monitoring; ozone; atmospheric deposition of nitrogen and sulfur; critical loads; impacts of wildland fires on air quality; evaluation of forest health; interactive effects of air pollution and climate change on terrestrial ecosystem; ambient air quality standards; passive samplers.

Art Chappelka, Auburn University, Auburn, Alabama, USA

Air pollution and global climate effects to terrestrial ecosystems; native plant community responses (shifts in diversity) to air pollutants and global climate change; plant-stress-air pollution/global climate change interactions; urban ecology and ecosystem services

Thomas Custer, U.S. Geological Survey (USGS), Lacrosse, Wisconsin, USA

Alessandra De Marco, ENEA Centro Ricerche Casaccia, S. Maria di Galeria, Rome, Italy

Impacts of air pollution on vegetation, with particular interest on ozone and nitrogen deposition; climate change and air pollution interactions and their synergistic impacts on ecosystems; integrated assessment modelling for evaluating impacts of policies and measures to reduce air pollution; nitrogen cycle and nitrogen budget and their importance in agricultural field

Marisa Domingos, MutaGen Brasil, Monte Alegre, Ribeirão Preto, Brazil

Environmental pollution and climatic change effects on natural vegetation, particularly in the tropics and subtropics Air-plant-soil interactions in polluted terrestrial ecosystems Physiologic, metabolic, structural/ultrastructural markers of increased plant tolerance against air pollutants and other environmental stressors Disturbances on nutrient dynamics in polluted terrestrial ecosystems Physiognomic/landscape disturbances in polluted terrestrial ecosystems The search of innovative biomonitoring technics for evaluating risks posed by air pollutants Ozone, nitrogen and sulfur oxides, particulate matter, fluorine, trace metals, polycyclic aromatic hydrocarbons

Juerg Fuhrer, AGROSCOPE, Zurich, Switzerland

Air pollution and climate change effects on crops, plant communities and agroecosystems, greenhouse gas fluxes in agricultural systems

Jiming Hao, Tsinghua University, Beijing, China

Marcus Hauck, Georg-August Universität Göttingen, Göttingen, Germany

lichen biology epiphyte biology global change biology metals in forest ecosystems

Magali Houde, Environment Canada, Montreal, Quebec, Canada

Aquatic ecotoxicology, organic pollutants, toxicogenomics, biological effects, zooplankton and fish, bioaccumulation, impacts of waste water treatment plant effluent, emerging flame retardants, polyfluoroalkyl substances, marine mammals

Harri Kankaanpää, Finnish Institute of Marine Research, Helsinki, Finland

Takayoshi Koike, Hokkaido University, Sapporo, Japan

physiological ecology of woody plants (partly including crops) under changing environment (such as elevated ozone, high nitrogen loading, soil acidification, elevated CO₂). My interest is to study on photosynthesis, respiration, growth, allocation of woody plants and plant-insect interaction.

Rai Kookana, CSIRO (The Commonwealth Scientific and Industrial Research Organization), Glen Osmond, South Australia, Australia

Pesticides, Environment Fate, Pharmaceuticals, Soil science, Fullerene nanomaterials

Jamie Lead, University of Birmingham, Birmingham, England, UK

Chunyang Liao, Chinese Academy of Sciences, Yantai, China

Emerging organic contaminants, Endocrine disrupting chemicals, Pesticides, Environmental analytical chemistry, Environmental behavior and fate, Bioavailability, Toxicological effects, and Risk assessment

Daohui Lin, Zhejiang University, Hangzhou, China

aquatic toxicology, heavy metals pollution, constructed wetlands, fecal coliform pollution

Rainer Lohmann, University of Rhode Island, Narragansett, Rhode Island, USA

Passive samplers; POPs, sorption; bioaccumulation; atmospheric chemistry; marine pollution; long-range transport; oceans; black carbon; organic geochemistry

Stefano Loppi, Università degli Studi di Siena, Siena, Italy

Michael Lydy, Southern Illinois University, Carbondale, Illinois, USA

pesticides, toxic effects on aquatic systems, pyrethroid insecticides, bioavailability, desorption-based samplers, sediment-associated organic contaminants, honey bees declines

Shaily Mahendra, University of California at Los Angeles (UCLA), Los Angeles, California, USA

water treatment, environmental microbiology, environmental biotechnology, microbial ecology, enzymes, biodegradation, bioremediation, molecular biology, biomarkers, nano toxicology.

Andy A. Meharg, Queen's University Belfast, Northern Ireland, Belfast, Northern Ireland, UK

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

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

Willie Peijnenburg, Universiteit Leiden, Leiden, Netherlands

Risk assessment; Ecological risk assessment; Environmental fate and effect assessment; Nanoparticles; Bioavailability; Metals; Organics; Quantitative Structure-Activity Relationships (QSARs); Transformation of chemical substances; Biodegradation; Abiotic transformations

Elijah J. Petersen, National Institute of Standards and Technology (NIST), Gaithersburg, Maryland, USA

nanomaterials, carbon nanomaterials, standardization, nanoecotoxicity, carbon nanotubes

Stergios Pirintsos, University of Crete, Iraklion, Crete, Greece

"Biomonitoring of air pollution, trace elements and nitrogen using lichens Climate change issues and lichens Lichens and hydrogen production Lichen physiology and pollution Sensitivity issues of lichens Lichen diversity and vegetation in Mediterranean Ecosystems"

Pleijel, Göteborgs Universitet, Göteborg, Sweden

Ozone (effects on vegetation) Carbon dioxide (effects on vegetation) Urban ecology (especially air pollution in relation to vegetation) Temporal and spatial variation in air pollution exposure Crops (especially effects of air pollutants on growth and nutrient content) Deposition of air pollutants Weather and climate dependence of air pollution Climate change effects on crops

Markus Puschenreiter, Universität für Bodenkultur Wien (BOKU), Vienna, Austria

Heavy metals/trace elements in soils and plants, rhizosphere processes involved in metal/trace element acquisition, soil remediation technologies / phytoremediation

Brian Reid, University of East Anglia, Norwich, England, UK

Soil contamination; biochar; pesticides; HOCs; PAHs; PTEs

Dibyendu Sarkar, Stevens Institute of Technology, Hoboken, New Jersey, USA

Environmental Geochemistry, Soil Chemistry, Environmental Quality and Remediation, Human Health Risk Assessment, Green Technology

Jörg Schaller, Universität Bayreuth, Bayreuth, Germany

Nutrient, silicon and metal(loid) cycling; element fixation during litter decomposition; crop plant nutrition and trace element accumulation; invertebrates; silicon effect on metal binding; metal toxicity; carbon turnover; silicon turnover; rare earth element; ecosystem processes; silicon nano particles

Wada Shin-Ichiro, Kyushu University, Fukuoka, Japan

Richard Shore, Centre for Ecology and Hydrology (CEH), Bailrigg, Lancaster, UK

Philip Smith, Texas Tech University, Lubbock, Texas, USA

Ecotoxicology, ecological risk assessment, wildlife toxicology

Stefania Squizzato, Clarkson University, Potsdam, New York, USA

Jordi Sunyer, CREAL, Barcelona, Spain

Filip Tack, Universiteit Gent, Gent, Belgium

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

Shu Tao, Peking University, Beijing, China

Doris Vetterlein, Umweltforschungszentrum (UFZ) Leipzig-Halle GmbH, Halle/Saale, Germany

Zhenyu Wang, Ocean University of China, Qingdao, China

Environmental geochemistry Toxicology

Jason White, Connecticut Agricultural Experimental Station, New Haven, Connecticut, USA

nanotoxicology, food safety, bioremediation and phytoremediation

Paul Williams, Chinese Academy of Sciences (CAS), Beijing, China

1] Toxic trace elements 2] 2D high-resolution chemical imaging 3] Rhizosphere Chemistry/ Soil-plant interactions 4] Diffusive Gradients in thin films (DGT) 5] Arsenic/Selenium Biogeochemistry 6] Bioavailability of metals 7] Human health impacts of arsenic, cadmium and lead 8] Urban & Sustainable agriculture 9] Advanced analytical approaches for contaminant quantification 10] Soil & Water pollution

Bert Wolterbeek, Delft University of Technology, Delft, Netherlands

plant physiology, air pollution (methods, effects), (bio)monitoring, radionuclides, kinetics, dynamics, metals, radioecology

Feng Xiao, University of North Dakota, Grand Forks, North Dakota, USA

Perfluorochemicals (PFCs) and perfluoroalkyl substances (PFASs); Perfluorooctanoate (PFOA) and perfluorooctane sulfonate (PFOS); Biochar, char, soot, black carbon, and activated carbon; Adsorption; Water chemistry; Drinking-water treatment; Emerging contaminants and environmental monitoring; Geographic Information System; Exploratory data analysis; Exposure assessment.

Scott Young, Nottingham, Nottingham, UK

Bioavailability, speciation and mobility of trace metals and radioisotopes in the environment and specifically with the geochemical controls over trace element deficiency and toxicity

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

persistent organic pollutants, bioavailability, plant uptake of organic contaminants, plant uptake of nanoparticles, plant uptake of heavy metals, soil accumulation of contaminants, adsorption mechanisms of organic contaminants, adsorption mechanisms of heavy metals, synchrotron X-ray absorption spectroscopy analysis, metabolism and biotransformation of organic contaminants

Fangjie Zhao, Nanjing Agricultural University, Nanjing, China

Biogeochemistry of trace elements, uptake and detoxification of heavy metals in plants, bioremediation

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Introduction

Environmental Pollution is an international journal that seeks to publish papers that report results from original, novel research that addresses significant environmental pollution issues and problems and contribute new knowledge to science.

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The editors do not wish to publish papers that describe results from routine surveys and monitoring programs that are primarily of local interest. Descriptions of well-known pollutants, such as legacy pollutants, in yet another location are not of interest. Papers about sewage, waste and wastewater treatment and management, agronomy, remediation, biomonitoring, bioremediation and phytoremediation are not acceptable.

It is unnecessary to ask for permission to the Editor in Chief before submitting manuscript. Kindly check the guidelines and see if your paper is within the scope of the journal, if yes, please go ahead and submit it..

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BEFORE YOU BEGIN

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The resubmission of previously rejected manuscripts is by invitation only.

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Please submit, with the manuscript, the names, addresses and e-mail addresses of five potential referees who are well-qualified to review the manuscript, if they are asked to review it. Reviewers are asked to evaluate the originality, significance and technical quality of the work, as well as the clarity of the manuscript, and the relevance of the subject matter to the journal. The final decision for publication of all manuscripts is made by the Editor-in-Chief.

PREPARATION

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[dataset] Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T., 2015. Mortality data for Japanese oak wilt disease and surrounding forest compositions. Mendeley Data, v1. <http://dx.doi.org/10.17632/xwj98nb39r.1>.

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If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.

Divide the article into clearly defined sections. Please ensure your paper has consecutive line numbering - this is an essential peer review requirement.

Figures and tables embedded in text

Please ensure that any figures and tables included in the single file are placed at the end of the main text in the manuscript. If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.

Peer review

This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of one independent expert reviewer to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. [More information on types of peer review.](#)

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Use of word processing software

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the [Guide to Publishing with Elsevier](#)). See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

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A cover letter must be sent with the manuscript and must include:

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