ENVIROMENTAL POLLUTION

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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 publication. 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.

**IMPACT FACTOR**

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**ABSTRACTING AND INDEXING**

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Air Pollution Control Association Journal
Biological and Agricultural Index
Current Contents/Agriculture, Biology & Environmental Sciences
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Energy Information Abstracts
Environmental Periodicals Bibliography
GeoSciTech
SCISEARCH
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Eddy Zeng, Jinan University, Guangzhou, China

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

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Kimberly Hageman, University of Otago, Dunedin, New Zealand  
Payam Dadvand, Universitat de Barcelona, Barcelona, Spain  
Maria Cristina Fossi, Università di Siena, Siena, Italy  
Kimberly Hageman, University of Otago, Dunedin, New Zealand

**Associate Editors:**

Sarah Harmon, University of South Carolina Aiken, Aiken, South Carolina, USA  
Aquatic toxicology; Water pollution; Heavy metals toxicity; Fecal coliform pollution; Mercury toxicity.

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Yong Sik Ok, Korea University, Seoul, The Republic of Korea  
Jörg Rinkelbe, University of Wuppertal, Wuppertal, Germany  
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

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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  
Art Chappelka, Auburn University, Auburn, Alabama, USA  
Arctic, marine ecosystems, birds, metals, organo-compounds, biomonitoring, biological effects  
Jürgen Burkhardt, University of Bonn, Germany  
Andrzej Brytnerowicz, 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.

**Editorial Board:**

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 for innovative biomonitoring technics for evaluating risks posed by air pollutants. Ozone, nitrogen and sulfur oxides, particulate matter, fluoride, 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

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 Kankaanpaa**, Finnish Institute of Marine Research, Helsinki, Finland

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

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

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

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, nanotoxicology, carbon nanotubes.

**Stergios Piritsos**, University of Crete, Iraklion, Crete, Greece

"Biomonitoring of air pollution, trace elements and nitrogen using lichens. Climate change issues and lichens. Lichen and hydrogen production. Lichen physiology and pollution. Sensitivity issues of lichens. Lichen diversity and vegetation in Mediterranean Ecosystems".
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(lloid) 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, Qingduo, China

Environmental geochemistry

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

Bert Wolterbeek, Delft University of Technology, Delft, Netherlands

Scott Young

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

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

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It is unnecessary to ask for permission to the Editor in Chief before submitting a 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.

**Types of paper**

- **Full Research Papers:** Results from completed investigations reporting original and previously unpublished work. Full Research Papers should not exceed 8000 words (including abstract, figures and tables but excluding references).
• **Short Communications:** Brief communication of urgent matter or the reporting of preliminary findings to be given expedited publication. These follow the same format as full papers, except that Results and Discussion sections should be combined. Manuscripts should not exceed 5000 words.

• **Review Papers:** Authors may submit manuscripts that provide in-depth critical review of a special subject. These reviews must provide a Synthesis and Critical Evaluation of the state of the knowledge of the subject and indicate research directions. The Editors also periodically invite review articles. Manuscripts should not exceed 10,000 words.

• **Discussion:** Discussion (commentary) papers may be submitted that express opinions and concerns, suggest research priorities and question conventional methodologies and conclusions. Manuscripts should include an Abstract, Introduction, Presentation of the Concerns or Analysis and Conclusions. References, Tables and Illustrations should be used sparingly. The manuscript should not exceed 12 double-spaced pages. The Editors will evaluate all manuscripts for suitability of publication.

• **Correspondence:** Readers are encouraged to write to any of the Editors (Letter to Editor) and raise issues and concerns about papers published in the journal. Editors or authors will reply to letters.

• **Special Issues:** Proposals for Special Issues of Full Research Papers that focus on a specific topic or theme will also be considered. 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.

Please note that the word count includes main text, figures, tables and not the reference list. **Each small table or figure counts for 300 words, and large tables or multiple panel figures may count for 600 or even more words.**

**BEFORE YOU BEGIN**

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* **Manuscript Submission**
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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

NEW SUBMISSIONS
Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process. As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

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Figures and tables embedded in text
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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.
**REVISED SUBMISSIONS**

*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.

**Cover Letter**

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

- The novelty, scientific significance and importance of the manuscript.
- The names and valid, current e-mail addresses [institutional email addresses ONLY] for five (5) potential reviewers who are well-qualified to review the manuscript if they are asked to review it. Potential reviewers should be from the international scientific community and not from one country or region.
- The name and e-mail address [institutional email addresses ONLY] of the corresponding author.

**Article structure**

*Subdivision - unnumbered heads*

Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross-referencing text: refer to the subsection by heading as opposed to simply "the text".

**Introduction**

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

**Material and methods**

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

**Results**

Results should be clear and concise.

**Discussion**

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Conclusions**

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