ENVIRONMENTAL 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 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.

**IMPACT FACTOR**

2016: 5.099 © Thomson Reuters Journal Citation Reports 2017

**ABSTRACTING AND INDEXING**

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Air Pollution Control Association Journal
Biological and Agricultural Index
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Environmental chemistry; Analytical chemistry; Ecotoxicology; Persistent organic pollutants; Flame retardants; Pesticides; Mass spectrometry; Gas/liquid chromatography.
Payam Dadvand, Universitat de Barcelona, Barcelona, Spain
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Yong Sik Ok, Korea University, Seoul, 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

AUTHOR INFORMATION PACK 26 Aug 2017 www.elsevier.com/locate/envpol 3
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 techniques 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

Takayoshi Kolke, 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, nanocotoxicity, carbon nanotubes

Stergios Pirintzos, 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"

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 metalloid cycling; element fixation during litter decomposition; crop plant nutrition and trace element accumulation; invertibrates; silicon effect on metal binding; metal toxicity; carbon turnover; silicon turnover; rare earth element; ecosystem processes; silicon nanoparticles

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

Wanda Shao-Chun, Ocean University of China, Qingdao, China

Agricultural Toxicology

Jason White, Connecticut Agricultural Experimental Station, New Haven, Connecticut, USA
Bioavailability, speciation and mobility of trace metals and radioisotopes in the environment and specifically with the geochemical controls over trace element deficiency and toxicity

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.

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- **Full Research Papers:** Full Research Papers should not exceed 8000 words (including abstract, figures and tables but excluding references).

- **Short Communications:** 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.

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

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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.

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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

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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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• 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.

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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**
The main conclusions of the study may be presented in a short Conclusions section, which may stand
alone or form a subsection of a Discussion or Results and Discussion section.

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superscript letter immediately after the author's name and in front of the appropriate address. Provide
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address of each author. Authors are requested to provide only institutional email addresses.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of
  refereeing and publication, also post-publication. Environmental Pollution discourages multiple
corresponding authors from the same institute. Ensure that the e-mail address is given and
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