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Protein Binding Associated with Exposure to Fluorotelomer Alcohols (FTOHs) and Polyfluoroalkyl Phosphate Esters (PAPs) in Rats

| ARTICLE in ENVIRONMENTAL SCIENCE & TECHNOLOG | GY · JANUARY 2014 |
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Instructions to authors for *Environmental Science* & *Technology*

Updated May 2014

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Ethics Form - Template for Special Issue Proposals

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- 1. Explicit Policy Relevance: providing decision support or related valuable information for near- or medium-term decisions, faced by regulatory agencies, intergovernmental programs, industry, consumers, and/or research funders
- 2. Fundamental Science and/or Engineering Content: the extent to which scientific and engineering methods are applied and extended to derive new knowledge
- 3. Fundamental Social Science Content: the extent to which social science methods from law, political science, economics, psychology, and related human behavioral studies are applied and extended to derive new knowledge

Critical Reviews. Critical Reviews are thoroughly documented assessments of selected areas of the environmental science and technology research literature. These are limited to 10,000 word-equivalents. Critical Reviews generally include more than 100 references. Critical Reviews should increase readers' knowledge through discriminating comparisons and insightful organization of the material. Criteria for acceptability include current importance of the field under review, thoroughness of the literature coverage, clarity, and clear identification of research needs.

Correspondence. Readers are encouraged to provide scholarly comment on articles appearing in the research section. Both comments and responses are termed "Correspondence"; both are limited to 1000 word equivalents. Supporting Information is not allowed. Comments must raise scientific or technical questions about an article; correspondence that is mainly opinion will not be accepted. Correspondence should be submitted within 6 months of the date of publication of the original article. The author(s) of the original article will be allowed to respond. Correspondence on previously

published correspondence will not be considered. Personal invective will not be tolerated. Correspondence is peer-reviewed at the option of the Editor. Financial interests and funding sources that might detract from an author's objectivity should be disclosed in the cover letter. The editors will determine whether the material disclosed to them should be published as part of the correspondence.

Additions and Corrections (Errata). When a correction to published material must be made, it should be done quickly. *ES&T* is willing to publish corrections to long-published work if the author provides a convincing argument; the decision rests with the Editor. Additions are a form of Errata; they are not a mechanism for publishing updates. Errata must be uploaded on Paragon Plus under the manuscript type Additions and Corrections. This submission must include the authors and title of the original manuscript. It should also include either a citation, DOI number, or the original manuscript number.

Front Matter

Features. These 5000 word equivalent maximum manuscripts provide a balanced examination of significant developments and issues affecting the environmental community. Features cannot have Supporting Information. Probing timely topics from multiple perspectives—scientific, regulatory, technical—provides readers with an authoritative and up-to-date understanding of the subject. Features are written in a magazine or journalistic style rather than as a scientific article. Authors can assume that the average news and features reader has had 1 year of university-level chemistry, physics, and environmental science/engineering. Authors must include a 3-5 sentence synopsis titled "Abstract," written at a level comprehensible to the scientifically literate general public.

Structure your Feature like a good lecture: begin with first principles then develop the main theme. The introductory paragraph should speak to the content of the article, but not in the manner of a research abstract. We suggest you read previous Features to get a feel for this manuscript type: http://pubs.acs.org/toc/esthag/current. Note that review of Features differs somewhat from the review of research manuscripts. Note also that the magazine style of a Feature permits more liberal citation to stable websites, though authors must ensure that the content accuracy of their Feature is also supported by relevant citable literature. If upon drafting a Feature, authors find it difficult to exclude research data, please consider submitting a Research Article or Policy Analysis instead. If the topic cannot be easily confined to 5000 words and/or there is an extensive list of references, a Critical Review would be a better option. Short manuscripts with a commentary style should be revised into a Viewpoint.

Viewpoints. These short "op-ed" style manuscripts provide authors with a venue to comment on an issue of pressing importance to the *ES&T* readership community. **Viewpoints are not peer-reviewed but are subject to editorial approval. ES&T welcomes viewpoints of a scientific nature, no viewpoints of an exclusively political nature will be considered for publication.** Successful Viewpoints clearly articulate a point of view to the reader and avoid summarizing a particular research area or study. A limit of 1000 words + author affiliations + 5 references + 1 single frame figure with 50 word caption OR a 350 word Table will be strictly enforced – submissions exceeding this maximum will not be considered.

Letters to the Editor. Readers are encouraged to comment on articles published in the front matter: Features, Viewpoints, Comments, and Perspectives. Contributions are limited to 500 words + 250 words of references + author affiliations. They should be uploaded within 2 months of the print publication date of the original material. The author(s) of the original material will be allowed to reply to letters, provided they do so rapidly. If you wish to comment on research content, please submit a Correspondence.

Elements of a manuscript

The remarks that follow are most relevant to research articles, but should be read by all authors. The <u>submission checklists by manuscript type that follow</u> should be followed by all authors to ensure that their manuscript meets the expectations in form.

Line Numbers. Submit all manuscripts with line numbers. The manuscript abstract and text must appear in a single, double-spaced column; lines in the abstract and text must be numbered consecutively from the beginning to the end of the manuscript in a separate column at the left.

Title. Use specific and informative titles. Titles should briefly convey the subject of the paper: a 20-word title is too long. If trade names are used, give generic names in parentheses. Key words in titles assist in effective literature retrieval.

Authorship. List the first name, middle initial(s), and last name of each author. Omit professional and official titles. An author's affiliation should be based on where they were when the work was performed. When the present address of an author is different, include the new information in a footnote. In a paper with more than one author, the name of the corresponding author, to whom post-publication inquiries should be addressed, carries an asterisk (*). Provide an email address for the corresponding author; include telephone and fax numbers, if possible.

Abstract. A 150-200-word abstract must accompany Research Article, Policy Analysis, or Critical Review manuscripts. Describe the purpose, methods or procedures, significant new results, and conclusions. Do not break the abstract into sections. Define any abbreviations used in the abstract. Write for literature searchers as well as journal readers. Include major quantitative data if they can be stated briefly, but do not include background material. Do not include reference numbers in the abstract. For Features, include a 3-5 sentence synopsis titled "Abstract", written at a level comprehensible to the scientifically literate general public.

TOC/Abstract Art. As noted above, TOC/Abstract art appears next to the abstract and is mandatory for Articles, Policy Analyses, Critical Reviews, and Features. TOC/Abstract Art presents a "visual abstract" of the research and must accompany the manuscript at submission. The graphic can be illustrative or photographic.

Text. Consult a current issue for general style. Assume your readers to be professionals who are not necessarily expert in your particular field; spell out all acronyms on first use, even if this was done in the abstract. ES&T does not allow footnotes, with the exception of an author information footnote on the title page.

When you prepare a manuscript, use the document mode or its equivalent in the word-processing program; that is, do not save files in "Text Only" (ASCII) mode. Do not

include any page-layout instructions such as placement information for graphics in the file. Use hard returns only to end headings and paragraphs, not to break lines of text. Do not insert spaces before punctuation. References must conform to the format printed in the journal and must include titles. Ensure that all characters are correctly represented throughout the manuscript: for example, 1 (one) and 1 (ell), 0 (zero) and O (oh), x (ex) and \times (multiplication sign). Please ensure that "Track Changes" or other editing content is disabled upon submission.

Write concisely. Heed the word limits; a request to exceed them will result in very critical editorial review. Do not repeat information, graphics, or tables that have appeared elsewhere. Use illustrative data rather than complete data where appropriate. Shorten manuscript text by designating appropriate material as Supporting Information (see below).

Divide the article into sections, three are often sufficient: Introduction, Experimental, and Results and Discussion (see below). Do not use footnotes; include the information in the text. Number all pages and lines of the manuscript.

Introduction. Clearly state the purpose and significance of the research and put it into the context of earlier work in the area. Do not attempt a complete survey of the literature. If a recent article has summarized work on the subject, cite that article only, and not the sources it cites.

Experimental (Materials and Methods). In this section, describe pertinent and critical factors involved in the experimental work but avoid excessive description. In many cases, details not essential for understanding the paper can be placed in Supporting Information. Do not submit drawings of standard apparatus that can be succinctly described in the text. List and describe preparation of special reagents only. Omit details of procedures that are common knowledge to those in the field or that you have published previously. A brief mention of published procedures may be included; leave details to the literature cited.

Results and discussion. Here you can discuss your findings, postulate explanations for data, elucidate models, and compare your results with those of others. Be complete but concise. Avoid irrelevant comparisons or contrasts, speculations unsupported by the new information presented in the paper, and verbose discussion. Results and discussion may be combined or separated.

Do not include a Conclusions or Summary section in research Articles. Include major conclusions in the body of the Results and Discussion sections.

Tables. Tables should be furnished with appropriate titles of one phrase or sentence; details or definitions should be placed at the bottom. Tables should be numbered consecutively with Arabic numbers (i.e., 1, 2, . . .). Double-space them with wide margins, and prepare tables in a consistent format. Tables may be created using a word processor's text mode or table format feature. The latter is preferred. Ensure that each data entry is in its own table cell. If the text mode is used, separate columns with a single tab and use a hard return at the end of each row.

Graphics and web-enhanced objects. To facilitate the publication process, please submit manuscript graphics using the following guidelines:

- 1. The preferred submission procedure is to embed graphic files in a Word document. It may help to print the manuscript on a laser printer to ensure all artwork is clear and legible.
- 2. Additional acceptable file formats are: TIFF, PDF, EPS (vector artwork) or CDX (ChemDraw file). If submitting individual graphic files in addition to them being embedded in a Word document, ensure the files are named based on graphic function (i.e. Scheme 1, Figure 2, Chart 3), not the scientific name. Labeling of all figure parts should be present and the parts should be assembled into a single graphic.
 - •EPS files: Ensure that all fonts are converted to outlines or embedded in the graphic file. The document settings should be in RGB mode. NOTE: While EPS files are accepted, the vector-based graphics will be rasterized for production. Please see below for TIFF file production resolutions.
- 3. TIFF files (either embedded in a Word doc or submitted as individual files) should have the following resolution requirements:
 - •Black & White line art: 1200 dpi
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 - -The RGB and resolution requirements are essential for producing high-quality graphics within the published manuscript. Graphics submitted in CMYK or at lower resolutions may be used, however, the colors may not be consistent and graphics of poor quality may not be able to be improved.
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 - •Consistently sizing letters and labels in graphics throughout your manuscript will help ensure consistent graphic presentation for publication.
- 5. A graphic should be submitted for use as in the Table of Contents and Abstract. This graphic should give the reader a quick visual representation of the essence of the paper without providing specific details. The best images for these uses are simple, relatively free of text and technical characters, and make use of color for visual impact.
- 6. For more information, please visit http://pubs.acs.org/page/4authors/submission/index.html.

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Nomenclature. Nomenclature should conform to current American usage. When possible, authors should use systematic names similar to those used by Chemical

Abstracts Service (CAS) or IUPAC. Chemical Abstracts (CA) nomenclature rules are contained in Appendix IV of the current Chemical Abstracts Index Guide. The ACS website has links to nomenclature recommendations at www.acs.org. IUPAC recommended nomenclature is available at www.acs.org. IUPAC recommended nomenclature is available at www.chemgmw.ac.uk/iupac.html. For CA nomenclature advice, contact answers@cas.org. Use SI units as much as possible – if you must use Imperial or U.S. units, place the SI equivalent in parentheses after the first use. For specialized nomenclature, include a nomenclature section at the end of the paper, giving definitions and dimensions for all terms. We suggest that you provide the CAS numbers of less familiar compounds. If subscripts and superscripts are necessary, place them accurately. Avoid trivial names. Trade names should be defined at the point of first use (registered trade names should begin with a capital letter).

Formulas and equations. Chemical formulas should correspond to the *ACS Style Guide*. Chemical equations should be balanced and numbered consecutively along with mathematical equations. Mathematical arguments should be as brief as possible.

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Acknowledgments. Include essential credits in an Acknowledgment section at the end of the text. Meeting presentation data or other information regarding the work reported are included here. Sources of financial support must be acknowledged. We remind you that all authors must read and adhere to ACS's Ethical Guidelines to Publication of Chemical Research.

References. Literature references must be numbered with Arabic numerals in the order of their first citation in the text, and the corresponding numbers must be inserted at the appropriate locations in the text. The corresponding text numbers must be presented as superscript, closed up to the last character, and outside any punctuation marks. Provide for review copies of any references that are in obscure publications or are unpublished. Avoid references to works that have not been peer-reviewed. Give complete information, using abbreviations for titles of periodicals as in the CAS Source Index (CASSI) or *The ACS Style Guide*, 3rd ed., 2006. Periodical references should contain authors' surnames followed by initials, title, journal abbreviation, year, volume number, and page range.

Reference styles. All article types in *ES&T* use the same reference style. Authors are encouraged to use peer-reviewed works and books. This list is meant as a style guideline/template, but for clarification, please refer to *The ACS Style Guide*, 3rd ed., 2006.

Journal article

Travis, E. R.; Hannink, N. K.; van der Gast, C. J.; Thompson, I. P.; Rosser, S. J.; Bruce, N. C. Impact of transgenic tobacco on trinitrotoluene (TNT) contaminated soil community. *Environ. Sci. Technol.* **2007**, *41* (16), 5854–5861; DOI 10.1021/es070507a.

Book with author

Criss, R. E. *Principles of Stable Isotope Distribution*; Oxford University Press: Oxford, U.K., 1999.

Book with editors

Coghill, A. M., Garson, L. R., Eds. *The ACS Style Guide*, 3rd, ed.; Oxford University Press: New York, 2006.

Chapter in edited book

Snape, I.; et al. Contamination, regulation, and remediation: an introduction to bioremediation of petroleum hydrocarbons in cold regions. In *Bioremediation of Petroleum Hydrocarbons in Cold Regions*; Filler, D. M., Snape, I., Barnes, D. L., Eds.; Cambridge University Press: New York 2008; pp 1

Thesis

Masson, J.-F. Surface plasmon resonance sensors for biochemical and chemical monitoring. Ph.D. Dissertation, Arizona State University, Tempe, AZ, 2005.

Institutional report (e.g. U.S. or international government; private institution)
Biofuels: DOE lacks a strategic approach to coordinate increasing production
with infrastructure development and special needs; Highlights of GAO-07-713;
United States Government Accountability Office: Washington, DC, 2007;
www.gao.gov/new.items/d07713.pdf.

Law

Energy independence and security act of 2007. Public Law 110-140, 2007; http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/html/PLAW-110publ140.htm.

Legal decision

State of New Jersey v. EPA, No. 05-1097 (D.C. Cir. Feb 8, 2008).

Website-homepage

Environmental Science & Technology Website; http://pubs.acs.org/journals/esthag/index.html.

Webpage within a large site

Tracking the millennium goals-map; www.mdgmonitor.org/map.cfm?goal-6&indicator--0&cd-.

For references to journal articles, an issue number after volume number is helpful but not mandatory. DOI numbers are also helpful but not mandatory unless that is the only identifying information for an article in press or published online (e.g., ASAP).

Citing by DOI

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The accuracy of the references is the responsibility of the author(s). Reference accuracy is critical because readers have the ability to link to the original literature. References to personal correspondence or to unarchived material obtained from the web are discouraged. "Anonymous" is not acceptable as an author; if the author is unknown, list the reference by company, agency, or journal source. Do not list references as "in press"

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Supporting Information. Authors are encouraged to shorten the text of research manuscripts by using the Supporting Information (SI) to present ancillary information and material of interest mainly to specialists. In particular, the Experimental Section should provide the detail needed for the reader to determine whether the interpretations are supported by the data, but experimental details, including schematics of apparatus and maps of study sites, should be reported in SI. Detailed calculations, derivations, databases, and ancillary spectra should appear in SI. Authors are strongly encouraged to provide detailed data (as graphics and/or tables) in SI to support data presented in summary form or parameters extracted from the data that appear in the main text. However, please do not indiscriminately place large amounts of extraneous data and other materials in Supporting Information.

Supporting Information is not permitted for Features, Viewpoints, Letters to the Editor, Correspondence, or Errata.

SI should be formatted with a cover sheet listing authors, manuscript title, and the number of pages, figures, and tables. SI pages must be numbered consecutively, starting with page S1. Tables and figures should be numbered Table S1–Sn, Figure S1–Sn. A one- or two-sentence description of the SI section should appear in the main manuscript immediately after the Acknowledgments.

This material will appear in the electronic version of the paper on the *ES&T* website, and its availability will be noted in the printed version of the journal. SI is available to everyone who accesses the *ES&T* website, and it will be archived. It is also indexed and abstracted by CAS.

A list of acceptable electronic file types for SI is given on the web submission site with a list of viewers available at http://pubs.acs.org/page/4authors/tools/viewers.html. All SI files of the same type should be submitted as a single file (rather than as a series of files containing individual images or structures). For example, all SI available as PDF files should be contained in one PDF file, if possible, and all CIFs should be submitted as a single file. Where appropriate, SI should be consolidated into a single word-processing file with graphics copied and pasted (embedded).

Directions for Data Deposition, Computer Codes and other material

A primary research report should contain sufficient detail and reference to public sources of information to permit the author's peers to repeat the work. When requested, the authors should make a reasonable effort to provide samples of unusual materials unavailable elsewhere, including, but not limited to, clones, microorganism strains, antibodies, computer codes, etc., to other researchers, with appropriate material transfer agreements to restrict the field of use of the materials so as to protect the legitimate interests of the authors.

Sequence data. DNA sequence data must be submitted to GenBank (http://www.ncbi.nlm.nih.gov/genbank/), EMBL Nucleotide Sequence Database

(http://www.ebi.ac.uk/embl/) or the DNA Data Bank of Japan (http://www.ddbj.nig.ac.jp/).

Protein sequence data should be deposited with the Protein Identification Recourse at Georgetown University Medical Center, Washington (http://pir.georgetown.edu/), the European Bioinformatics Institute (EBI) (http://www.ebi.ac.uk/) or the Swiss Institute of Bioinformatics (http://www.isb-sib.ch).

Microarray Data. Manuscripts that present microarray data should follow the MIAME (Minimum Information About a Microarray Experiment) guidelines (http://www.mged.org/miame). Data must be submitted to the GEO (Gene Expression Omnibus) (http://www.ncbi.nlm.nih.gov/geo) or ArrayExpress Archive (http://www.ebi.ac.uk/arrayexpress) databases.

For sequence data and microarray data the relevant accession numbers should be available at the time that the revision is submitted and should be listed at the end of the Experimental section in the revised version of the manuscript.

Data from proteomics experiments. Proteomic experiments must meet the standards established by the Journal of Proteome Research. More information is available in the Publication Guidelines for the Analysis and Documentation of Peptide and Protein Identifications

(http://pubs.acs.org/paragonplus/submission/jprobs/jprobs_proteomics_guidelines.pdf). Protein sequences should be handled in the same way as described above and accession number and database source should be included.

Computer codes. When computer codes are developed or used and are an essential part of a manuscript, sufficient detail must be given, either within the paper or in the Supporting Information. Types of languages that are used in the computer codes, compiler/interpreter, and operating system with a specific version must be provided or properly cited. Upon request, after appropriate material transfer agreements to restrict the use of the materials so as to protect the legitimate interests of the authors, codes, and input data must be made available for others to validate the calculations. Regardless the fact that the source code is open or closed source, it must be properly cited in the References and Footnotes.

Computational chemistry calculations. When computational chemistry calculations are performed, input data must be given either within the paper or in the Supporting Information, including force field parameters, equations defining the model (or references to where such material is available in the open literature), methods and approaches, and basis sets. If the software used for calculations is generally available, it must be properly cited in the references and footnotes. References to the methods upon which the software is based must also be provided.

Summary and Submission Checklist by Manuscript Type

Authors are encouraged to check that their manuscript includes all of the items listed below. (Any items in parentheses are optional). Text shaded in gray constitutes the indicated word equivalent limit. Details as to their formatting may be found in this document above and via the ACS Author and Reviewer Resource at http://pubs.acs.org/page/4authors/index.html.

Feature – 5000 Word Equivalents – shaded areas included in word count

Description: Balanced examination of significant developments relevant to environmental science & technology community; written in magazine style, assuming one year of university-level physical and environmental sciences/engineering knowledge; peer-reviewed.

| Item | Notes | Check |
|---|--|-------|
| Query Letter | Contact Managing Editor before submission with short outline; wait for approval. | |
| Title | Magazine style – approachable and inviting to generalists | |
| Author(s) with affiliations | Indicate corresponding author with * | |
| TOC/Abstract Art | Mandatory with submission | |
| Abstract | 3-5 sentences written for a lay audience | |
| Text, figures, tables, boxes. | Clearly label figures and tables within document, not just in file name | |
| (Acknowledgements) | | |
| Author(s) biographical statement | Institutions and titles plus any other information not to exceed 200 words | |
| Line numbers | | |
| References | | |
| | Supporting information cannot be included | |
| Contact Office (questions & topic approval) | Managing Editor, ACS, Washington, DC | • |

Viewpoint – 1000 Words + Five References + One Single Frame Figure and 50 word caption OR One 350 word Table + Author Affiliations – shaded areas included in word count

Description: Short commentary on issue of interest to *ES&T* readership; written "op-ed" style; *not on matter published in ES&T*; **not peer-reviewed, but subject to editorial approval;** *Viewpoints not adhering to the length restrictions will not be considered.*

| Item | Notes | Check |
|------------------------------|--------------------------------------|-------|
| Title | Concise and brief | |
| Author(s) with affiliations. | Indicate corresponding author with * | |

| Text | 1000 Words Maximum | |
|-----------------------------------|--------------------------|--|
| Figure OR Table | One Figure, Single Frame | |
| | – 50 word caption max | |
| | or | |
| | One 350 Word Table | |
| Line numbers | | |
| References | Five Maximum | |
| | No TOC art or SI | |
| Contact Office (questions) | Managing Editor, | |
| | ACS, Washington, DC | |

Letter to the Editor – 500 Words + 250 Words of References + Author Affiliations

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Description: Brief comment on Feature, Viewpoint, or Comment previously published in *ES&T* within 6 months of previous piece's publication; subject to editorial approval

| Item | Notes | Check |
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| References | 250 Words Maximum | |
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Research Article – 7000 Word Equivalents – shaded areas included in word count

Description: Completed and fully interpreted results of original and significant research relevant to environmental science and technology; peer-reviewed.

| Item | Notes | Check |
|-----------------------------|--|-------|
| Cover Letter | Rationale for relevance to ES&T | |
| Title | Concisely informative | |
| Author(s) with affiliations | Indicate corresponding author with * | |
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| Abstract | 150-200 words | |
| Text, figures, tables. | Clearly label figures and tables within document, not just in file name. | |

| | Do not include a summary/conclusion section. | |
|-----------------------------------|--|--|
| Acknowledgements | | |
| Line numbers | | |
| References | | |
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| Contact Office (questions) | Editor-in-Chief, ES&T, Iowa City, IA | |

Policy Analysis – 7000 Word Equivalents – shaded areas included in word count

Description: Original research in environmental management and policy, especially where science and engineering interface with public policy; peer-reviewed.

| Item | Notes | Check |
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| Cover Letter | Rationale for relevance to ES&T | |
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| Item | Notes | Check |
|------|-------|-------|
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| Acknowledgements | |
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Special Issues: Focus and Tribute

Up to 4 times a year, *ES&T* publishes a special issue. Focus issues consist of a Feature article and a group of peer-reviewed research manuscripts in an area of current environmental importance. One of the special issues may be a Tribute issue that commemorates the career of a distinguished environmental researcher. The Tribute issue may contain a related Feature article and/or a staff-written "Perspective." The research section contains a group of peer-reviewed scientific manuscripts, usually in the research area(s) of the honoree.

There is a great demand for special issues. They are scheduled 1 or more years in advance of publication. If you wish to suggest a special issue to *ES&T*, please email the Editor-in-Chief's office at est@uiowa.edu and copy (*cc*) the Managing Editor at m_hotze@acs.org. Special issues will not be scheduled until the Editor-in-Chief's office approves, in writing, a detailed proposal, that includes how manuscripts will be invited, a list of potential contributors, and a timeline.

Manuscripts submitted for special issues are usually invited submissions. If you would like to have a manuscript considered for a particular special issue, please email est@uiowa.edu prior to submission.

Special Issue Template

| 1. What is the theme of the issue? Secondarily, what title do you propose for the issue? |
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| 2. Provide the names and affiliations of all proposed guest editors. Which guest editor will be the primary contact? |
| 3. Please describe current research and qualifications of each guest editor, and explain why this group of editors is a good choice to edit this issue. |
| 4. Please explain why this is an appropriate time for this specific issue, for example: conference or symposium, timeliness of topic. |
| 5. Does ES&T currently cover this topic or topical area? If not, why should we? |
| 6. What other journals have covered, or may in the future, cover this topic? |
| 7. Each special issue is handled by one of ES&T's Associate Editors, who works with the guest editors. This Associate Editor is responsible for all final decisions. Which ES&T Associate Editor do you suggest? |
| 8. List mechanism(s) for recruiting authors that will result in appropriate depth and breadth. Specify mechanisms to reach out beyond a symposium or other nucleating event. |