

Vol. 21, No. 3, September, 2022

ISSN (Print): 0972-6268; ISSN (Online) : 2395-3454

# NATURE ENVIRONMENT & POLLUTION TECHNOLOGY

*A Multidisciplinary, International Journal  
on Diverse Aspects of Environment*



**Technoscience Publications**

website: [www.neptjournal.com](http://www.neptjournal.com)





# Technoscience Publications

A-504, Bliss Avenue, Balewadi,  
Opp. SKP Campus, Pune-411 045  
Maharashtra, India

[www.neptjournal.com](http://www.neptjournal.com)

## Nature Environment and Pollution Technology

(An International Quarterly Scientific Research Journal)

### EDITORS

**Dr. P. K. Goel (Chief Editor)**

Former Head, Deptt. of Pollution Studies  
Y. C. College of Science, Vidyanagar  
Karad-415 124, Maharashtra, India

**Dr. K. P. Sharma**

Former Professor, Deptt. of Botany  
University of Rajasthan  
Jaipur-302 004, India

**Managing Editor :** Mrs. Apurva Goel Garg, C-102, Building No. 12, Swarna CGHS, Beverly Park, Kanakia, Mira Road (E) (Thane) Mumbai-401107, Maharashtra, India

**Published by :** Mrs. T. P. Goel, Technoscience Publications, A-504, Bliss Avenue, Balewadi, Pune-411 045, Maharashtra, India

**E-mail :** [contact@neptjournal.com](mailto:contact@neptjournal.com); [operations@neptjournal.com](mailto:operations@neptjournal.com)

### INSTRUCTIONS TO AUTHORS

#### Scope of the Journal

The Journal publishes original research/review papers covering almost all aspects of environment like monitoring, control and management of air, water, soil and noise pollution; solid waste management; industrial hygiene and occupational health hazards; biomedical aspects of pollution; conservation and management of resources; environmental laws and legal aspects of pollution; toxicology; radiation and recycling etc. Reports of important events, environmental news, environmental highlights and book reviews are also published in the journal.

#### Format of Manuscript

- The manuscript (*mss*) should be typed in double space leaving wide margins on both the sides.
- First page of *mss* should contain only the title of the paper, name(s) of author(s) and name and address of Organization(s) where the work has been carried out along with the affiliation of the authors.

*Continued on back inner cover...*

... Continued from inner front cover

- The text of the manuscript should run into **Abstract, Introduction, Materials & Methods, Results, Discussion, Acknowledgement** (if any) and **References** or other suitable headings in case of reviews and theoretically oriented papers. However, short communication can be submitted in running with **Abstract and References**. The references should be in full with the title of the paper.
- The figures should preferably be made on a computer with high resolution and should be capable of withstanding a reasonable reduction with the legends provided separately outside the figures. Photographs may be black and white or colour.
- Tables should be typed separately bearing a short title, preferably in vertical form. They should be of a size, which could easily be accommodated in the page of the Journal.
- References in the text should be cited by the authors' surname and year. In case of more than one reference of the same author in the same year, add suffix a,b,c,.... to the year. For example: (Thomas 1969, Mass 1973a, 1973b, Madony et al. 1990, Abasi & Soni 1991).

### List of References

The references cited in the text should be arranged alphabetically by authors' surname in the following manner: (Note: The titles of the papers should be in running 'sentence case', while the titles of the books, reports, theses, journals, etc. should be in 'title case' with all words starting with CAPITAL letter.)

- Dutta, A. and Chaudhury, M. 1991. Removal of arsenic from groundwater by lime softening with powdered coal additive. *J. Water Supply Res. Techno. Aqua.*, 40(1) : 25-29.
- Hammer, D.A. (ed.) 1989. *Constructed Wetlands for Wastewater Treatment-Municipal, Industrial and Agricultural*. Lewis Publishers Inc., pp. 831.
- Haynes, R. J. 1986. Surface mining and wetland reclamation. In: Harper, J. and Plass, B. (eds.) *New Horizons for Mined Land Reclamation*. Proceedings of a National Meeting of the American Society for Surface Reclamation, Princeton, W.V.

### Submission of Papers

- The paper can be submitted by e-mail as an attachment in a single WORD file at **contact@neptjournal.com**
- The paper can also be submitted online in a single WORD file through the **online submission portal** of journal's website: **www.neptjournal.com**

### Attention

1. Any change in the authors' affiliation may please be notified at the earliest.
2. Please make all the correspondence by e-mail, and authors should always quote the manuscript number.

**Note:** In order to speed up the publication, authors are requested to correct the galley proof immediately after receipt. The galley proof must be checked with utmost care, as publishers owe no responsibility for mistakes. The papers will be put on priority for publication only after receiving the processing and publication charges.

# Nature Environment and Pollution Technology

**(Abbreviation: Nat. Env. Poll. Tech.)**

**(An International Quarterly Scientific Journal)**

Published by



**Technoscience Publications**

A-504, Bliss Avenue, Opp. SKP Campus  
Balewadi, Pune-411 045, Maharashtra, India

In association with

**Technoscience Knowledge Communications**

Mira Road, Mumbai, India

For further details of the Journal, please visit the website. All the papers published on a particular subject/topic or by any particular author in the journal can be searched and accessed by typing a keyword or name of the author in the 'Search' option on the Home page of the website. All the papers containing that keyword or author will be shown on the home page from where they can be directly downloaded.

**[www.neptjournal.com](http://www.neptjournal.com)**

©**Technoscience Publications:** The consent is hereby given that the copies of the articles published in this Journal can be made only for purely personal or internal use. The consent does not include copying for general distribution or sale of reprints.

Published for Proprietor, Printer and Publisher: Mrs. T. P. Goel, A-504, Bliss Avenue, Balewadi, Pune, Maharashtra, India; Editors: Dr. P. K. Goel (Chief Editor) and Prof. K. P. Sharma