



## Role of Trees in Phytoremediation of Soils/Areas Polluted with Trace Elements

Guest Editors:

**Prof. Dr. Magdalena  
Krzyszowska**

**Prof. Dr. Danuta Antosiewicz**

**Prof. Dr. Mirosław Mleczek**

Deadline for manuscript  
submissions:  
**closed (1 January 2022)**

### Message from the Guest Editors

Therefore, in this Special Issue, which concerns the use of trees in the phytoextraction/phytoremediation of TE-contaminated soils, we welcome articles (original research papers, perspectives, hypotheses, opinions, reviews, modeling approaches, and methods) that focus on the following topics:

- TE uptake and accumulation;
- TE transport from roots to the stem and leaves;
- Resistance of different tree species to substrates which are highly contaminated with TEs;
- The efficiency of different tree species in TE phytoextraction and phytostabilization;
- TEs' effects on trees—both detrimental alterations and the symptoms of plant defense response—at all levels of plant organization (including wood chemistry, e.g., content of cellulose and lignin);
- Improvement of the efficiency of different tree species in TE phytoextraction and phytostabilization, both by the inoculation of microorganisms (e.g., bacteria and fungi) and by the construction of transgenic trees;
- Trees in the restoration of TE-contaminated soils—practical applications and long perspective.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Dilantha Fernando**  
Department of Plant Science,  
University of Manitoba, Winnipeg,  
MB R3T 2N2, Canada

## Message from the Editor-in-Chief

*Plants* is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

## Contact Us

---

Plants Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/plants](http://mdpi.com/journal/plants)  
[plants@mdpi.com](mailto:plants@mdpi.com)  
[X@Plants\\_MDPI](https://twitter.com/Plants_MDPI)