

Special Issue

Alternatives to Mineral Nitrogen Fertilizers in Agriculture: State of the Art, Challenges and Future Prospects

Message from the Guest Editor

In order to develop an environmentally friendly agriculture, it seems mandatory to investigate alternatives that could result in a reduction in mineral N-fertilizers without compromising yield productivity. In this Special Issue, we invite the scientific community to share their investigations related to the minimization of environmental impacts of nitrogen application in agriculture and the optimization of fertilization. Research articles and reviews including agronomic, chemical, biological or multidisciplinary aspects covering these topics (but not limited to) are also welcome:

- Biological and symbiotic nitrogen fixation;
- Legume crops or Vegetation cover;
- Environmental contamination of nitrogen fertilizers;
- Nitrogen emissions (NH₃, N₂O, NO or N₂);
- Manure and organic fertilisers;
- Enhanced-efficiency nitrogen fertilisers;
- Nitrogen transformation in organic waste treatments: composting, vermicomposting and anaerobic digestion;
- New technologies for nitrogen recovering from organic waste;
- N-cycle in soils: nitrification, denitrification, etc.

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2024)



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About the Journal

Message from the Editor-in-Chief

Nitrogen, the element that is intimately associated with essentially all processes on Earth, is the broad focus of a new online, open access journal. The intention of this publication is to offer a venue for research papers, reviews, short notes, and communications that have as a nexus this critical element.

Editor-in-Chief

Prof. Dr. Stephen Macko
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Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, CAPlus / SciFinder, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.7 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the second half of 2025).

Journal Rank:

CiteScore - Q2 (Agricultural and Biological Sciences (miscellaneous))