# **Special Issue**

# Mathematical Ecology: Towards the Theory of Ecosystem Stability Based on the Cycle of Substances and Limiting Factors

### Message from the Guest Editor

Mathematical ecology is a discipline that uses mathematics to study the interaction of organisms and the communities they create against the background of external factors using mathematical modeling. In this issue, the focus will be placed on the following general fundamental problems and their modeling:

- the connection of the stable existence of the Earth's biosphere with the cycle mechanism(s); possible types of "dead ends" in the cycle;
- the Darwin-Vernadsky paradox and the existence of the biosphere;
- approaches to similarization of ecosystems;
- artificial biospheres as possible models of the biosphere;
- general model description of the dynamics of forest and water ecosystems.

### **Guest Editor**

Dr. Andrey Degermendzhy

Federal Research Center "Krasnoyarsk Science Center" Siberian Branch of the Russian Academy, Akademgorodok, 50/50, Krasnoyarsk 660036, Russia

### Deadline for manuscript submissions

closed (30 November 2023)



## **Forests**

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 4.4



mdpi.com/si/166136

Forests
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
forests@mdpi.com

mdpi.com/journal/ forests





## **Forests**

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 4.4



### **About the Journal**

### Message from the Editor-in-Chief

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have Forests be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

#### Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

### **Author Benefits**

### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

### Journal Rank:

JCR - Q1 (Forestry) / CiteScore - Q1 (Forestry)

### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.2 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the second half of 2024).

