# **Special Issue**

# Controlled Environment Agriculture for Sustainable Farming

### Message from the Guest Editor

Controlled environment agriculture (CEA) is the cultivation of plants in a controlled and optimized environment, where factors like temperature, humidity, light, and nutrient levels are precisely managed. This practice enables year-round production and ensures high-quality crops. CEA provides several benefits, such as improved crop yield, decreased dependence on external resources, reduced environmental footprint, and the ability to grow crops in challenging climates or limited land areas. It represents an innovative and sustainable farming approach that can tackle the food production challenges of our evolving world. While CEA has the potential to enhance sustainability in agriculture, it is important to carefully manage its implementation and address potential challenges. Keywords

- controlled environment agriculture
- sustainable agriculture
- vertical farming
- greenhouse cultivation
- hydroponics
- aquaponics
- water/nutrient management
- resource efficiency
- innovation in agriculture

### **Guest Editor**

Dr. Anna Siedliska

Department of Metrology and Modelling of Agrophysical Processes, Institute of Agrophysics Polish Academy of Sciences, Doświadczalna 4, 20-290 Lublin. Poland

### Deadline for manuscript submissions

closed (20 April 2025)



# Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



### mdpi.com/si/178610

Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

mdpi.com/journal/ sustainability





## Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



## **About the Journal**

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

### Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

#### **Author Benefits**

### Open Access:

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

### **High Visibility:**

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

