

## 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

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### Deadline for manuscript submissions

closed (20 April 2025)



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