

# STEP Talks!

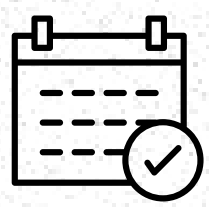
STEM Research  
Equality, Diversity and Inclusion

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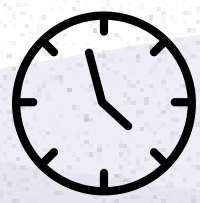


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## How to feed 8 billion people: the role of STEM in addressing this global challenge



Dec 18, 2024



15h30 CET  
14h30 Portugal



Sala de Atos 1  
Online (Zoom)

### Summary:

In a world with over 8 billion inhabitants, the problem of food security and the challenge of ensuring safe and nutritious foods for all is increasingly relevant. Although estimates suggest that the current food production would be enough to feed the world's population, while millions suffer from hunger and nutrient deficiencies, others face health issues related to overconsumption and obesity. Considering this complex scenario and the increasing population in the world, a paradigm shift is necessary in global food systems to ensure access to nutritious food without compromising the planet's resources.

This presentation will explore how science, technology, engineering, and mathematics (STEM) can contribute to address this societal challenge and achieving the UN Sustainable Development Goal "Zero Hunger: End hunger, achieve food security, improve nutrition, and promote sustainable agriculture". Several examples will be given, from the exploitation of alternative protein sources and agri-food by-products to advancements in food preservation and packaging, aiming to achieve healthier and more sustainable food systems.

### Speaker: Joana S. Amaral

**Joana S. Amaral** graduated in Pharmaceutical Sciences and completed her PhD in Nutrition and Food Chemistry at the Pharmacy Faculty of the University of Porto. She is a Coordinator Professor at the Polytechnic Institute of Bragança and a research member of the Mountain Research Center. She was president of the Food Chemistry Division of the Portuguese Chemical Society and is currently the chair of the Food Chemistry Division of the European Chemical Society (EuChemS). Her two main research lines comprise (i) the development of methodologies for food authentication and detection of food fraud, and (ii) the study of nutraceuticals, extraction of bioactive compounds from medicinal plants and agri-food by-products and the evaluation of bioactive properties.

