# Special Issue

# Advanced Nanomaterials and Nanotechnology in Agricultural Applications

## Message from the Guest Editors

After the food crisis triggered by the COVID-19 pandemic, the world has been hit by multiple crises that have severely reduced global food productivity. We need to improve agricultural productivity to achieve and maintain global food security. Nanomaterials and nanotechnology have great potential in agriculture. This Special Issue seeks submissions that address advanced nanomaterials and nanotechnology in agricultural applications. In this Special Issue, original research articles and reviews are welcome. Research areas may include, but are not limited to, the following:

- Using nanopesticides and nanofertilizers to increase crop productivity;
- Using nanominerals to improve soil quality;
- Using carbon-based and metal-based nanomaterials to stimulate plant growth;
- Using nanosensors to provide smart monitoring;
- Using nanotechnology to explore transgenic plants;
- Using nanomaterials to remediate polluted farmland soil;
- Using nanomaterials to treat agricultural waste with high efficiency.

## Guest Editors

Dr. Cheng Peng
School of Resource and Environmental Engineering, East China University of Science and Technology, Shanghai 200237, China

Dr. Sadia Saif
Department of Environmental Sciences, Kinnaird College for Women, Lahore 54000, Pakistan

## Deadline for manuscript submissions

closed (31 July 2023)

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

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# About the Journal

## Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

## Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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