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## An Evolutionary and Environmental Perspective of the Interaction of Nanomaterials with the Immune System-The Outcomes of the EU Project PANDORA

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### Message from the Guest Editor

Dear Colleagues,

We would like to take the occasion of the conclusion of the EU project PANDORA for making a summary of what we have learned regarding the interaction of engineered nanomaterials with the defensive systems of living organisms. PANDORA had the ambition of looking for common mechanisms of recognition and reaction, based on the high evolutionary conservation of innate immune mechanisms from plants to human beings. Whether nanomaterials could pose threats to the organisms' integrity or whether immune defensive mechanisms can successfully deal with them is the question to which we have tried to respond. The PANDORA partners will provide their conclusions and opinions, based on the data they have generated, on the consequences of the interaction between nanomaterials and the innate immune system in their specific models' organisms, spanning *A. thaliana*, terrestrial isopods, earthworms, mussels, sea urchins, and humans. Other colleagues, outside PANDORA, are warmly invited to contribute their view and help in completing the picture.

Prof. Diana Boraschi  
*Guest Editor*



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## 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.

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