# Topical Collection

## Agriculture 4.0: From Precision Agriculture to Smart Farming

### Message from the Collection Editors

Agriculture 4.0, the natural evolution of precision agriculture, makes it possible to face these challenges by allowing an intelligent and controlled application of inputs, optimized management of production from field to table, integration of different technologies in agriculture, etc. The use of software, applications, networks of sensors, all supported by Internet of Things (IoT) technologies, make data easily manageable and accessible. The agriculture in the future will increasingly use sophisticated technologies such as robots, field sensors, aerial imagery, GPS technology, software completely interconnected by IoT networks allowing farms to be more profitable, efficient, safer and more environmentally friendly. Among the topics we highlight:History of Precision Agriculture, Sensing Technology for Precision Farming (satellite, aerial, UAV, proximal sensing platforms, etc.), Data Processing and Utilization in Precision Agriculture, Image Processing, Control of Precision Agriculture Production, Big data analysis applied to precision agriculture, Intelligent Agricultural Machinery and Field Robots, Traceability Smart Agriculture, Precision Farming Economics.

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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