

Special Issue

Beyond Agriculture 4.0: Design and Development of Modern Agricultural Machines and Production Systems

Message from the Guest Editors

An increase in production efficiency cannot take place by destroying the natural resources of farmland. As a consequence, it became necessary to develop machines that would be able to carry out agrotechnical treatments dedicated to individual plants. In this context, a very important role is the design and development of new equipment and technologies to support farmers with state-of-the-art solutions that include automation elements, sensors, information systems and real-time calculation of thresholds, design, low energy consumption, better working conditions for the operator, lower losses in the process, etc. This special edition focuses on the role that the synergistic interaction of classic mechanical systems with mechatronic and data management systems can play in increasing the productivity of agriculture while reducing its impact on the natural environment. In view of the above, highly interdisciplinary quality studies and research are encouraged in areas such as: agriculture, engineering design, simulation and modeling, mechatronics, autonomous vehicles, post harvesting systems, environment, and prevention of injury/health risks for the operator.

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Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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