



## 3D/4D Printing in Advanced Robotics Systems

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### Message from the Guest Editors

Additive manufacturing technologies also known as 3D printing have evolved over the past 30 years, as evidenced by the strong development of 4D printing and modern innovative construction materials. This is particularly true for prototype production such as the production of industrial robots and robots for special applications. Dimensional accuracy as well as mechanical and tribological properties of models manufactured with 3D printing are already accurate to the point where it is possible to manufacture fully functional parts of machines and robots.

The Special Issue aims to investigate the analysis of the use of 3D/4D printing for the production of ready-made robot components, including prototype and mass production, using materials based on both plastics, ceramics and metal powders.

An important sub-topic is simulation research results of geometrically complex models manufactured using 3D/4D printing, in particular those that are impossible to produce with other conventional technologies.

Additionally the topic also concerns the study of mechanical properties, dimensional and shape accuracy with an emphasis on surface quality, as well as tribological properties of models produced by 3D printing technologies, including practical aspects of research on the use of 3D/4D printing technology in the production of real construction elements of industrial robots.

Finally, we are interested in the results of research on the reduction of model construction time and the consumption of model and support material through optimization using 4D printing. Also of interest are the results of research on properties of 3D/4D models produced in applications for industrial robots other than those aforementioned.





## Editor-in-Chief

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## Message from the Editor-in-Chief

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