



In Situ Full-Field Deformation Measurements on Advanced Manufacturing Processes

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Message from the Guest Editors

Dear Colleagues,

Recently, several full-field optical techniques (white-light and interferometric techniques) have been developing. The type of data provided by these optical techniques is intrinsically full-field and contact-free, in contrast to conventional pointwise and contact measuring apparatus. Consequently, the assessment of deformation measurements across a whole region of interest has been gradually opening new research interests and perspectives in the branch of mechanics and engineering. These techniques have been consolidated both in scientific research and industry.

The recent advent of advanced manufacturing processes, which will include additive manufacturing, customised functionally graded materials (FGM) and advanced composite material, can tremendously benefit from this generation of full-field driven data. In situ and small-scale image-based observations of manufacturing and technological processes are an active area of development and research. The access of full-field measurements should enhance our understanding of the physical manufacturing processes being undertaken for better modelling and prediction and for inspection purposes.





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Message from the Editor-in-Chief

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