



## Advances in Modelling for Additive Manufacturing

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Deadline for manuscript  
submissions:

**closed (1 April 2021)**

### Message from the Guest Editors

Dear Colleagues,

The topic of Additive Manufacturing has seen a dramatic increase in research activity in recent years, with significant attempts to better understand processes at a fundamental level, develop hardware and software technologies that will enable better process monitoring, control and optimisation, as well as develop computational frameworks to ensure robust manufacture. At the core of many research efforts is the non-trivial task of development and use of mathematical models to capture and understand process-powder-part behaviours. A range of mathematical modelling methods are used, such as physics-driven analytical and numerical methods as well as data-driven methods relying on data-science and machine learning attempts. In this special issue, we aim to exemplify state-of-the-art modelling approaches with application to additive manufacturing, towards demonstrations of better understanding underlying AM physics and processes, as well as demonstrations of standalone models or integrated model-based systems that aim to monitor, control or optimise an AM process.





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## Message from the Editor-in-Chief

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