



THE UNIVERSITY of EDINBURGH

School of Engineering

IMP seminar

13:00-15:00, Wed 26 April

Sanderson Classroom 3



Invited speaker: Prof Stephen T Newman

13:00 – 13.40 Presentation 1

Submitting Papers to International Journals - An Editor's Perspective

This presentation provides an overview of how an Editor views a paper which is submitted to their journal. It will identify different paper types, identify the issues to consider when identifying a target journal and do's and don'ts when submitting your paper. Examples of different papers will be provided, and different aspects author's need to consider during the submission process. The final part focuses on what feedback to give when the paper needs possible minor or major revision or what to do when a paper is rejected.

13.40 – 14.00 Q&A, Lunch break

14.00 – 14.40 Presentation 2

Additive Manufacturing of Large Components

Additive Manufacturing (AM) or 3D printing as recognised by the public, has grown substantially over the last 25 years into a predicted global business of over \$30 billion US by 2025. This growth has focused mainly on small intricate and complex components typically up to 250 mm³. Today AM is showing enormous potential to produce metal parts of over 1m in size. New machine designs and processes are being developed, which enable such large parts to be produced much more quickly and efficiently than using traditional forging or casting processes. This presentation will provide an overview of these new machines which use the AM Wire-Arc Direct Energy Deposition process also known as WAAM to produce large metallic components.

BIO

Stephen Newman is the Professor Emeritus of Innovative Manufacturing Technology in the Department of Mechanical Engineering at the University of Bath. He has 35 years of experience in European and National R & D programmes being involved in Eureka Factory, EU Framework V, VI and VII and Horizon 2020 programmes together with numerous National research programmes with a funding value of £12 million. His research over the years has been focussed on manufacturing processes specifically CNC machining, his latest work is in the area of process control and machining of wire-arc based additive manufacturing, process planning of additive and subtractive processes and new cutting tool technologies using the application of cryogenic cooling for improving CNC machining performance. Professor Newman has been Editor-in-Chief of the *International Journal of Computer Integrated Manufacturing* for 20 years and has published over 100 refereed journal papers and 150 conference papers.

