

# Mechanical Engineering Seminar Series

### Forming and Morphing Without Waste

## **Evros Loukaides**

**Assistant Professor** 

Department of Mechanical Engineering Materials and Structures Centre University of Bath



Tuesday, September 15, 2020 4:00 p.m.

ME Seminar Zoom link (QR Code below)

Password 5777



### Abstract

Shell structures remain a fundamental and fascinating topic, both in terms of manufacturing and performance. Ongoing challenges relating to climate change and increasing demand for product customization and more capable material systems motivate a significant proportion of recent research in this area. In this seminar we present some recent progress on developing more flexible manufacturing processes for forming sheet metal and composite materials. We also show how additive manufacturing can be employed to induce exotic properties such as multistability to thin structures, with applications in robotics, biomedical engineering and energy harvesting.

### Bio

Evripides G Loukaides is an Assistant Professor at the University of Bath. He has a diverse set of research interests, particularly relating to the mechanics and manufacturing of thin structures. Before joining the University of Bath, Evripides was a Postdoctoral Research Associate at the University of Cambridge and a Research Fellow at Darwin College. He is currently a Researcher in Residence at the Manufacturing Technology Centre in Coventry and a Research Affiliate of the International Academy of Production Engineers (CIRP). He obtained his PhD with the Advanced Structures Group at the University of Cambridge on the topic of multistable shells. Evripides conducted his undergraduate work at MIT and obtained a BS in Civil Engineering and a Minor in Mathematics. He also holds an MS in Civil Engineering from Columbia University.