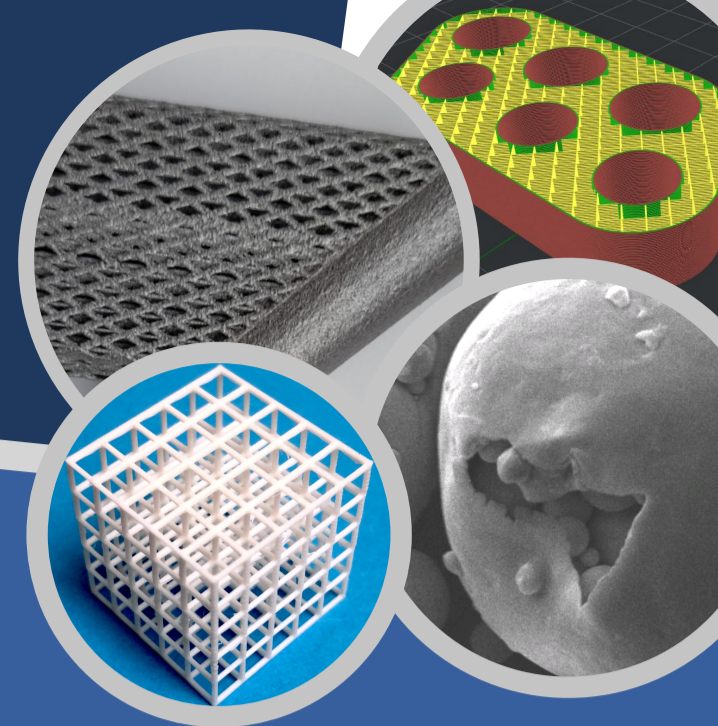


INTERNATIONAL SUMMER SCHOOL

New Advances in Materials for Additive Manufacturing

5th-9th September 2022, Brescia, Italy



PROGRAM

MONDAY, 5th SEPTEMBER 4D Printing

8.30: Registration

9.00 - 9.15

Welcome and introduction

Annalisa Pola - University of Brescia, Italy

9.15 - 10.45

From 3D Printing to 4D printing: state of the art, perspectives, challenges (ONLINE)

Mahdi Bodaghi - Nottingham Trent University, UK

Ali Zolfagharian - Deakin University, Australia

.....Break.....

11.15 - 12.45

Characterization of 4D printed structures

Stefano Pandini - University of Brescia, Italy

.....Lunch.....

14.30 - 16:00

Constitutive modelling of active materials and its application to 4D printing

Giulia Scalet - University of Pavia, Italy

.....Break.....

16.30 - 18:00

4D printing for biomedical and pharmaceutical applications (ONLINE)

Nicoletta Inverardi - Massachusetts General Hospital, USA

TUESDAY, 6th SEPTEMBER Materials selection and alloy design

9.00 - 10.30

GRANTA - Material and Process selection

Harriett Parnell, Mauricio Dwek, Luca Masi - Ansys,

GRANTA - Cambridge, UK

.....Break.....

11.00 - 12.30

GRANTA - Exercises on material and process Selection

Stefano Pandini - University of Brescia, Italy

.....Lunch.....

14.00 - 15:30

Design of new alloys for Metal AM

Riccardo Casati - Politecnico of Milan, Italy

.....Break.....

16.00 - 17:30

Advanced manufacturing and characterization of AM components

Dermot Brabazon - Dublin City University, Ireland

WEDNESDAY, 7th SEPTEMBER Metal Additive Manufacturing

9.00 - 10:30

Metallic powders production and characterization

Annalisa Pola - University of Brescia, Italy

.....Break.....

11.00 - 12:30

New advances in metal AM

Nesma Aboulkhair - University of Nottingham, UK

.....Lunch.....

14.00 - 15:30

Innovative heat treatment under pressure for AM components (ONLINE)

Anders Magnusson - Quintus Technologies, Sweden

.....Break.....

16.00 - 17:30

Shape memory alloys for AM

Mari Laura Tocci - University of Brescia, Italy

20.00 **Social Dinner (Rendez-vous in Piazza Loggia)**

THURSDAY, 8th SEPTEMBER Simulation of AM processes

9.00 - 12:30

FLOW-3D AM: numerical simulation for optimization of process parameters

Filippo Palo - XC Engineering, Italy

.....Lunch.....

13.30 - 17:00

DEFORM AM: from the forecast of residual stresses after production to applications for binder jetting

Cristian Viscardi - Ecotre Valente, Italy

17.30 **Visit of Brescia (Rendez-vous in Piazza Vittoria)**

FRIDAY, 9th SEPTEMBER Gender in research - Theatre teaches

9.00 - 10:30

Gender in EU-funded research

Mariasole Bannò - University of Brescia, Italy

.....Break.....

11.00 - 12:30

Theatre teaches: art based methods for non-technical skills

Mariasole Bannò - University of Brescia, Italy

Andrea Albertini - Compagnia teatrale La Betulla, Italy

12.30 **School closing and graduation**

CLASSES ARE HELD IN ROOM N11 (ground floor)