



SEMINARS AND WORKSHOPS



MATERIALS AND PROCESS CHALLENGES IN ADDITIVE MANUFACTURING OF HIGH PERFORMANCE ALLOYS

Dr. Christian Leinenbach (EMPA/EPFL)

Dr. Leinenbach's talk will introduce how the defect and microstructure formation in alloys during laser-based MAM can be controlled by modifying the alloy composition and/or by adapting the process.

October 18th, 2022



BIOMEDICAL-RELATED PCMS

Prof. Kinga Pielichowska (AGH University of Science and Technology)

October 25th, 2022



SEM PRESENTATION

Ing. Ludovica Rovatti

Hints on material characterization through the «Analisi Materiali» laboratory equipment

24 and 25 October 2022





STARTING COURSES – PHD SCHOOL

CREATIVE DESIGN THINKING

Prof. Maria Rita Canina, Prof. Carmen Bruno

The objective of the course is to equip multidisciplinary PhD students with fundamental knowledge on creativity and a toolbox that will augment their creative and design abilities and mindset to face challenges in their own professional fields. The toolbox is constituted by a design thinking process and a series of tools and techniques that will boost their Creative Thinking to reach innovation. Students will learn different creativity tools and established skills in their utilization over different problems and areas, adopting different approaches to problems and developing innovative solutions out of them. The course foresees a learning by doing approach where they will apply the toolbox step by step to face a challenge, stimulating a creative working environment. Indeed, the objective of the Creative Design Thinking is the establishment of a creative environment in the working group in order to trigger the individual creative potential when implementing innovation. The key concepts on which the course is based are: creativity as the ability to "lateral thinking", a human-centred approach that puts people at the center of the design process and a method which involves co-participation.

From 5th to 17th October 2022



PHD IN MECHANICAL ENGINEERING

BIO-INSPIRED SYSTEMS

Prof. Simone Cinquemani

The course introduces the basic concepts of bioinspired systems and biomimetics and it is mainly focused on the synthesis of mechanical systems taking inspiration from biological world

From the end of October 2022



PHD IN INFORMATION TECHNOLOGY

OBJECT-ORIENTED MODELLING AND SIMULATION

Prof. Francesco Casella

The course presents the basic concepts of equation-based, object-oriented modelling (OOM) and of the Modelica Language, the methodology to turn Modelica models into simulation code, some relevant industrial applications and current research trends. Main goals: understanding how OOM works and how it can be used effectively for one's research, requiring system-level physical modelling of engineering systems of various nature.

From 10th to 14th October 2022

