ORGANIZERS







Renaissance Cloister by Sangallo Faculty of Civil and Industrial Engineering

SEPTEMBER 19-23 2022

Rome, 19-23 September

Conference & Exhibition











































Seeing beyond

CO-ORGANIZERS



















INSTITUTIONAL **PARTNERS**











FROM UNIVERSITY TO MARKET U4I as a Driver for Technology Transfer

September 22

Co-organized with:



WORKSHOP COMMITTEE

Hermes GIBERTI, University of Pavia Francesco PERI, University of Milano-Bicocca Giuseppe ROSACE, University of Bergamo

The ability to create innovation plays a central role in economic growth and quality of life but it is also increasingly important in addressing the many social challenges. Therefore, in developing effective innovation-oriented R&D policies, it is crucial to understand how research-based expertise can contribute to prosperity and address social challenges. Moreover, due to the difficulty of collecting all the necessary competencies in a single organisation, innovation integrates knowledge from many different fields (e.g., chemistry, physic, technology, design, economics), becoming a process of constant interaction between academic researchers and the market. To ensure wide-ranging exploitation of the research and technological innovation results developed at the founding Universities, the University for Innovation Foundation (U4I) has organized the workshop entitled "From University to market: U4I as a driver for technology transfer." Researchers from the Universities of Bergamo, Milano Bicocca and Pavia will present the results of scientific research, possibly already translated into innovative products, processes or services, promoting on this occasion the meeting between university research, business, and the market favoured by the stage provided by the NanoInnovation 2022 event.

22 SEPTEMBER

09:00 - 10:30		WS.VI.1 - TT.V.F
New products or manufacturing process development		
Chair: Hermes GIBERTI, University of Pavia		
WS.VI.1.1 TT.V.F.1	Claudia SCOTTI, University of Pavia N245 asparaginase: a new option for Acute Lymphoblastic Leukaemia treatment	
WS.VI.1.2 TT.V.F.2	Giuseppe RUSCICA, University of Bergamo Distributed acoustic sensing as a tool for subsurface mapping and seismic event monitoring a proof of concept	
WS.VI.1.3 TT.V.F.3	Ferdinando AURICCHIO, University of Pavia A novel wideband microstrip to additively fabricated waveguide transition	
WS.VI.1.4 TT.V.F.4	Anna ESPINOZA, University of Milano Bicocca Development of a new technology for biological soil remediation	
WS.VI.1.5 TT.V.F.5	Valentina TROVATO, University of Bergamo Strategies for removing chemical finishes from post-consumer outdoor fabrics	

Strategies for removing chemical finishes from post-consumer outdoor fabrics

Valentina Trovato

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The management of post-consumer awnings and outdoor textiles has become relevant during the last years due to their extensive use, suggesting an ever-growing interest in the sustainable disposal of this "waste". The attention to their recovery and reuse is due to both the synthetic nature of these textiles and the chemical finishes applied on their surface to make them long-lasting resistant to water and atmospheric agents. In this perspective, strategies for removing hazardous finishing chemicals from the waste of acrylic fabrics were performed in the framework of the REACT project, an EU research focused on innovative investigations and processing techniques for obtaining fully recycled textiles compatible for reuse. The proposed strategies were successful in the total removal of chemical finishes from post-consumer textiles. Moreover, during their use over the years, the long-lasting sunlight exposure slightly acts on the partial finishing leaching from outdoor fabrics, thus representing an environmental concern. Therefore, looking to increasingly sustainable processes, the proper management of post-consumer outdoor textiles and the chemical substances removed is essential for obtaining recycled fabrics to be reused in second life by involving the most recent environmentally friendly and safe for human health finishing for high performance.