

**PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 EARLY STAGE GRANT LASTING 12 MONTHS FOR CONDUCTING RESEARCH PURSUANT TO ART. 22 OF LAW NO. 240/2010 AT THE DEPARTMENT OF MANAGEMENT, INFORMATION AND PRODUCTION ENGINEERING (SC 09/B2 - INDUSTRIAL MECHANICAL SYSTEMS ENGINEERING - SSD ING-IND/17 - INDUSTRIAL MECHANICAL SYSTEMS ENGINEERING) TYPE B**

*announced with decree of the Chancellor Rep. no. 669/2019 of 16.10.2019 and posted on the official registry of the University on 16.10.2019*

**RESEARCH PROJECT**  
**"Sustainability & Circular economy in the textile industry"**

**Research structure:** Department of Management, information and production engineering

**Duration of the grant:** 12 months

**Scientific Area:** 09 - Industrial and information engineering

**Academic recruitment field:** 09/B2 - Industrial mechanical systems engineering

**Academic discipline:** ING-IND/17 - Industrial mechanical systems engineering

**Scientific Director:** Prof. Stefano Dotti

The research project is part of the activities carried out by the textile technological laboratory "A.J. Zaninoni" afferent to the Department of Management Engineering, Information and Production on the impact of sustainability issues and the circular economy on textile system.

The object of the research is therefore the study of the impact of environmental, social and economic sustainability on the textile supply chain and it aims to analyze the state and the potential of the Italian textile production system in sustainable terms and verify which advantages and disadvantages can arise when applying concepts of sustainability and circular economy.

The research, which will be conducted at national level, involves the analysis and description of these areas through the definition of a study of the scenarios, able to highlight the connotative aspects, the critical points, the potential and the innovation factors induced by the demand for sustainability. In parallel, through the implementation of specific case studies, the repercussions that the sustainable approach and the concepts of circular economy can determine in terms of professional system, organizational structure, skills will be focused. The work will be developed in four phases aimed at creating and validating an innovative framework of "sustainability & circular economy".

PHASE 1 - Analysis of the literature and state of the art - The objective of this phase is to identify the existing gaps exist through an in-depth analysis of the state of the art of literature scientific and managerial on the links between Sustainability (economic, environmental and social sector) and the circular economy.

PHASE 2 - Definition of a research model - Following the analysis of the literature and the definition of the research gaps (PHASE 1), this phase is dedicated to structuring an adequate research model. This model underpins the collection of the data necessary for the analysis, conducted through case studies of companies operating in the textile sector.

PHASE 3 - Conducting case studies in textile companies. The research model developed in PHASE 2 will be used to draft the "Case Study Protocol" that will guide the data collection and interviews that will be conducted in different business cases.

PHASE 4 - Development of the framework "Sustainability and circular economy" - Based on the results obtained from the "within-case" and "cross-case" analysis of information gathered in the phases previous (PHASE 3 and 4), the reference framework "Sustainability & circular economy" is developed.