

## centre for mechanical technology and automation

## **Mobilizing Projects**

## **MP1 - Sustainable Manufacturing Solutions**

## 3. Manufacturing for Circular Economy



DDS - Development of New Generation of Tools based on Scientific Rules for Performance and Sustainability

**Principal Investigator: Victor Neto** 

Funding entity: ANI - Agência Nacional de Inovação,

S.A./POCI 2020, **ID:** POCI-01-0247-FEDER-046977

**Total Budget:** 817,057.03 €; **TEMA Budget:** 250,957.01 €;

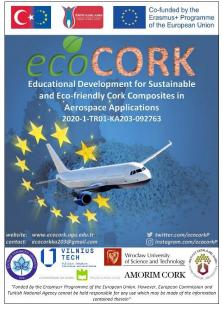
Duration: From 2021 to 2023

**TEMA Team:** Tatiana Zhiltsova, Mónica Oliveira, Jorge Ferreira, António Gil Campos

Consortium: MOLDIT - Indústria de Moldes S.A., Universidade de Aveiro, and CENTIMFE -

Centro Tecnológico da Indústria de Moldes, Ferramentas Especiais e Plásticos

**Summary:** Project DDS aims to develop a new generation of molding tools with high added value and high performance. To this end, it is intended to promote technological advances through the development of design rules based on thermomechanical optimization by finite elements, which ensure the requirements demanded by the market in terms of performance during the expected lifetime and integrate new structural characteristics that provide it with improved performance, with lower energy and raw material consumption and shorter cycle times. This project thus seeks to respond to the recurrent oversizing of moulding tools in terms of material and their properties.



ECOCORK - Educational Development for Sustainable and Eco-friendly Cork Composites in Aerospace Applications

Principal Investigator: Fábio Fernandes

Funding entity: ERASMUS+; ID: 2020-1-TR01-KA203-

092763

**Total Budget:** 269,045.00 €; **TEMA Budget:** 51,270.00 €

Duration: From 2020 to 2023

TEMA Team: Ricardo Sousa; António Pereira

**Consortium:** Amorim Cork Composites, S.A.; Fundació Institut Català del Suro; Politechnika Wroclawska; Universidade de Aveiro; Vilniaus Gedimino Technikos

Universitetas

**Summary:** ECOCORK aims to develop educational tools for gaining environmental awareness in the manufacturing of cork composites as well as understanding the importance of eco-friendly cork composites in the development of sustainable solutions for the aerospace industry.