

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.