

**PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 EXPERIENCED GRANT LASTING 24 MONTHS FOR CONDUCTING RESEARCH PURSUANT TO ART. 22 OF LAW NO. 240/2010 AT THE DEPARTMENT OF ENGINEERING AND APPLIED SCIENCES (A.R.F. 03/B2 - PRINCIPLES OF CHEMISTRY FOR APPLIED TECHNOLOGIES - A.D. CHIM/07 - PRINCIPLES OF CHEMISTRY FOR APPLIED TECHNOLOGIES (CUP: F52F16001350001) TYPE A WITHIN THE FRAMEWORK OF THE 2017/2018 STARS PROGRAMME - II PART 2018**

*announced with decree of the Chancellor Rep. no. 119/2019 of 27.02.2019 and posted on the official registry of the University on 06.03.2019*

**RESEARCH PROJECT**

**"Experimental study of productive processes from biological resources - BIOFAT"**

**Research structure:** Department of Engineering and applied sciences

**Duration of the grant:** 24 months

**Scientific Area:** 03 - Chemistry

**Academic recruitment field:** 03/B2 - Principles of chemistry for applied technologies

**Academic discipline:** CHIM/07 - Principles of chemistry for applied technologies

**Scientific Director:** Prof. Isabella Natali Sora

The project aims to develop innovative technological solutions to produce hydrocarbons from renewable resources, such as vegetable fats. It is planned to develop an electrolytic cell for the synthesis of Kolbe, which uses materials suitable to reduce the process of anodic passivation and the accumulation of semi-solid hydrocarbons between the electrodes. Specifically, the aims of the project include the preparation and selection of innovative electrodes, aimed at facilitating an industrial type use of an electrochemical process of fatty acid transformation. The second objective of the project is the development of an innovative photochemical process for the production of dihydroxyacetone, starting from a byproduct of the oil and fats industry.