



## University of Udine (Italy)

### EOI UNIUD BIOAEROGEL MSCA-PF

Professor Lara Manzocco from the Department of Agricultural, Food, Environmental and Animal Sciences at the University of Udine (Italy), welcomes excellent postdoctoral candidates interested in applying for a Marie Skłodowska-Curie Postdoctoral Fellowships (MSCA-PF) in 2021 at this University (call deadline on October 12<sup>th</sup> 2021).

#### Brief description of the institution:

The University of Udine is a Public University founded in 1978. It has 15,414 students (a.y. 2019-2020), 646 researchers and 542 technical and administrative staff (updating 31/12/2020).

The scientific research is performed by 8 Departments and supported by a central administrative office.

In the period 2014-2021 UNIUD has been involved in many different research project: territorial cooperation (i.e. Interreg): 27 projects, 10 coordinated; HORIZON 2020: 34 projects, 8 coordinated; other EU grants (e.g. LIFE, EUROFUND, COST, HERA, ESA): 15 projects, 2 coordinated; international grants: 31 projects, 29 coordinated.

Since May 2016 the University of Udine has officially obtained the HR Excellence in Research Award from the European Commission.

The total revenues of UNIUD for 2020 are 140,304,131 € and were 134,788,175 € in 2019.

The transfers from the Italian state on the “Fondo di Finanziamento Ordinario strutturale” are estimated in 76,552,055 € in 2020 and were 74,415,859 € in 2019.

Result of the administration (after taxes) in 2020 is 5,065,514 € and was 1,561,772 € in 2019.

The Department of Agricultural, Food, Environmental and Animal Science (Di4A), has 117 researchers, 62 technical and administrative staff (updating 31/12/2020), and is organized in 10 Sections: Aquaculture and wildlife resources, Environment, Agricultural biology and microbiology, Chemistry, Food chemistry and technology, Economy, Entomology and vegetal pathology, Animal and Veterinary Sciences, Vegetal biotechnology and science, Viticulture, oenology and alcoholic beverages.

The DI4A has several research laboratories in environmental, microbiological, chemical, biological sciences.

The DI4A was and is partner in many EU research projects and also collaborates with other Universities, Institutions, research bodies and the local economic system.

The DI4A organizes bachelor's and master's degree courses and also doctorate courses collaborating also with other universities and institutions.

### **Brief description of the Centre/Research Group:**

The Food Science group of the Di4a of the University of Udine has wide experience in the production and characterization of food-grade bioaerogels and, in general, of novel ingredients and functional foods. It disposes of scientific support and equipment for:

- traditional (air drying, freeze-drying, extrusion) and innovative (high pressure homogenization, pulsed electric fields, ultrasounds, hyperbaric storage, microwaves, supercritical-drying, pulsed light, UV-C light) food processing and preservation technologies;
- physico-chemical characterization of food (DSC, DLS, dynamometer, rheometer, TPA, spectrophotometer, spectrofluorimeter, UHPLC, GC-MS, NMR, confocal microscopy, SEM, ATR-FTIR);
- sensory analysis of food (laboratory equipped according to UNI-EN ISO 8589 standards for sensory analysis of food products);
- food functionality assessment (*in vitro* digestibility set-up, access to *ex vivo* models -cell culture and intestinal organoids- and to microbiota e microbiomes study).

### **Project description:**

The aim of the project will be to develop bioaerogels intended as key ingredients in the production of functional foods to deliver health through diet.

To this aim, the activities will focus on two main research themes: (1) Development of bioaerogels based on plant proteins; (2) Use of bioaerogels as functional ingredients in real food matrices to increase health profile.

The applicant will develop his/her activity within the framework of food science and food technology and nutrition.

### **To apply:**

To apply please send the CV to [lara.manzocco@uniud.it](mailto:lara.manzocco@uniud.it) before 15<sup>th</sup> August 2021.

The ideal candidate has experience in one or more of the following areas:

- Bioaerogel production and characterization
- Development of foods with specific nutritional functionalities
- Determination of food nutritional functionality