

Chemistry Research Center Vila Real, Portugal

The Chemistry Research Center - Vila Real is a training and research institution that performs research in fundamental and applied areas of Chemistry. It aims to use scientific knowledge for the welfare of the society developing new advanced materials with improved performance for application in different devices, new solutions to match the agro-food industrial activity with a healthy environment, new food products and new food safety monitoring techniques. The Food and Wine Chemistry Group develops research in oenology, wine safety, wine quality and wine technology.



**OENOVITI International give us
the possibility to network,
to participate in master
and PhD programs**



Chemistry Research Center Vila Real, Portugal

CURRENT PROJECT

MERGO - MOOC in Enology aimed at Reinforcing competences applying a Game-based approach and Olfactive learning for the wine tasting.

12 million, this is the number of olfactory cells in our noses. These cells allow recognition for an appropriate variety of odours. Olfactory cells relate to our deep memories and for a quick food assessment. One of those foods is wine. Contrarily to the majority of the academic lessons, in oenology is essential to support an intense laboratory activity where the student learn, with guidance, the acquiring multisensorial skills for the wine recognition (olfactive, gustative and visual): procedural learning that refers to laboratory and practical activities. Thus, unlike other fields where the theoretical aspect is prevalent, in oenology and wine tasting, it is central to the "sensory recognition" ability. The problem emerges in the case of distance learning. There are some experiences of MOOCs on wine tasting, but these only cover declaratory learning without laboratory activities. The MERGO project tackles this background. MERGO aims to bridge a MOOC developed by a strategic partnership of HEI and organisation in the wine business sector, bringing the procedural learning to recognise sensory features by using new ICT paradigms: the Tangible User Interfaces (TUIs) the gamification approach. The project will draft a pedagogical validated framework to develop ICT innovative tools that allow autonomous and distance training for students with some olfactory stimuli recognised by a digital interface and orchestrated by artificial intelligence modules (adaptive artificial tutors). MERGO project aims to enhance the knowledge triangle in this sector to put in a strong relationship between education, research, and innovation.