

POST DOCTORAT POSITION – UMR ŒNOLOGIE

ISVV Bordeaux

18 months

HOW PERCEPTUAL PHENOMENA INVOLVING WINE COMPOUNDS ARE ABLE TO EXPLAIN BORDEAUX RED WINES FRUITY AROMATIC EXPRESSION ? « BLEND »

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Project presentation

The fruity character of Bordeaux red wines is a key element identified by consumers of their hedonistic value. However, even if many researches have been performed to characterize volatiles able to participate to this character, knowledge concerning sensory phenomena involving mixtures of volatiles, particularly concerning some esters, should be developed.

The study « Bordeaux profile », supported by the Bordeaux Wine Council, allowed to draw up an inventory, both at sensory and compositional levels, of a specific part of the Bordeaux red wine offer. In order to bring explanatory element, the goal is, now, to consider a set of volatile compounds - from various origins and which impact has already been shown – in order to characterize their role in complex mixtures. Thus, sensory studies will be performed using expert panels and dealing with aromatic reconstitution as well as omission tests in various matrices taking into account the variability of compounds concentration observed in Bordeaux red wines.

Objectives

In the « Bordeaux profile » study, analyses of correlations between sensory evaluation results and those of physico-chemical data concerning volatiles linked to the fruity character allowed to highlight, for some compounds, significant gaps of concentration between the most appreciated wines and others. The goal of this post doc is, now, to try to determine the causal links between composition and aromatic expression developing aromatic reconstitutions. Effective sensory impacts, in mixture, of compounds representative of different chemical families involved in Bordeaux red wines aroma have to be specified and perceptual interaction phenomena (as masking or intensification effects or modulation of aromatic tones) with the highest sensory impacts on fruity aromatic expression have to be highlighted.

Candidate profile

PhD thesis and skills in analytical chemistry (particularly separative techniques dedicated to volatile quantification) and, ideally, in sensory analysis. An interest, or even an attraction, for wine and its tasting will be appreciated

CV and letter of motivation are to address to Jean-Christophe Barbe (jean-christophe.barbe@agro-bordeaux.fr) and Philippe Darriet (philippe.darriet@u-bordeaux.fr)

Salary

2200€ per month (net salary)

University of Bordeaux package