

A worldwide overview of innovative grape&wine research



Grape & Cellar sessions at Enoforum Web Conference 2021

The conference will be held **online** from **23 to 25 February from 4 to 7 p.m. (CET)**



We are proud to announce the details of Grape&Cellar sessions at the Enoforum Web Conference 2021.

Different ways of using new technologies based on **Artificial Intelligence (AI)** will be presented by Sigfredo Fuentes from the University of Melbourne and by José Cuevas-Valenzuela from Center for Research and Innovation of Viña Concha y Toro. The Australian research is focused on predicting flavor and aroma profiles of berries and final wines, while the system developed in Chile is aimed at early and accurate yield forecasting. The technical and economic potential of selective harvesting as one of the **Precision Viticulture's** tools for managing within-field variability will be presented by Matteo Gatti from Università Cattolica del Sacro Cuore di Piacenza.

Phenolic compounds represent a major interest for quality wine producers. Laura Rustioni from the University of Salento will show how a freeze-thaw treatment can improve phenolic ripening for potential use in challenging growing conditions. Robert Damberg from Charles Sturt University will explain how reflectance spectroscopy can be used to predict total phenolics in grape juice in order to objectively differentiate sparkling wine press juice fractions. José Luis Aleixandre-Tudo from the University of Stellenbosch will show how the use of fluorescence properties of phenolic compounds can help to quantify phenolic content non-invasively from a fermenting tank. The research presented by Andrea Natolino from the University of Udine will demonstrate the potential effectiveness of ultrasound on the **maceration process** to promote the extraction of skin compounds. The role of grape must extraction steps on the content of volatile thiol precursors in must fractions will be explained by Daniela Fracassetti from the University of Milan.

Numerous works in the Cellar session are devoted to enological products. Alberto De Iseppi from the University of Padova will present a study which aims at exploiting an undervalued **winemaking by-product**, wine yeast lees, by developing efficient methods for the extraction of yeast mannoproteins. Sergi Ferrer from the University of Valencia will demonstrate how the adaptation of **lactobacilli** towards low pH and SO₂ can help to develop malolactic fermentation in base musts for sparkling wines. An approach to **bio-acidification** of wines via lactic acid production during fermentation as a tool to correct insufficient acidity in grapes from warm(ing) climates will be presented by Anna Hranilovic from the University of Adelaide. Santiago Benito from the Universidad Politécnica de Madrid will present research developing a method that comprises combining the use of two **non-Saccharomyces** yeasts as an alternative to the traditional malolactic fermentation. The research presented by Antonio Castro Marin from the University of Bologna contributes to filling the gap regarding the potential side-effects of addition of **chitosan** on the physico-chemical parameters of red wines. Giorgia Perpetuini from the University of Teramo will demonstrate how the biofilm formatted by **C. Zemplinina** can contribute to wine aroma profile. The goal of the work presented by Adeline Vignault from the University of Bordeaux was to verify and confirm the effectiveness of oenological **tannins** on wine color stabilization. The research by Silvia Motta from CREA aims at comparing certain analytical methods used to characterize oenological tannins and the measure of oxygen consumption rate, in order to provide oenologists with a rapid method to test the antioxidant capacity of tannin based products.



The objective of work presented by Sonia Guri-Bairget from IRIAF (Castilla La Mancha) was to investigate the possibility of partially or completely **replacing sulphur** in white wine production through the use of the prefermentative saturation of musts with CO₂. Antonio Morata from the Universidad Politécnica de Madrid will show how to speed the **yeast autolysis** using ultrasound technology. Lucía González-Arenzana from the Instituto de Ciencias de la Vid y del Vino will present a study about the application of cold plasma at atmospheric pressure to sanitize **oak** wood staves.

During the virtual congress it will be possible to vote on the presentations in order to select the winner. The winner and the finalists will then be invited to the later events taking place in person, in order to present their research work in more detail.

In addition to the ENOFORUM Prize of € 10,000 for the winning work, thanks to sponsorships, further prizes have been established:

- Oenoppia finances the award for the best classified among research on enological products
- SIMEI-UIV finances the award for the best classified among research on technologies showcased at SIMEI
- ASSOENOLOGI finances the award for the best classified among Italian research

In addition to Enoforum Web Conference, this year VINIDEA organizes two events provisionally scheduled in person, the first in the USA in Sonoma County, California (from 5 to 6 May) and, the second, in Italy in Vicenza (from 19 to 20 May).

ENOFORUM WEB CONFERENCE is patronized by the **OIV** (International Organisation of Vine and Wine), and enjoys the partnership of several other scientific organizations: **IVES** (International Viticulture and Enology Society), **IFV** (Institut Français du Vin), **PTV** (Plataforma Tecnologica del Vino), **SIVE** (Società Italiana di Viticoltura ed Enologia), **AWRI** (Australian Wine Research Institute), **ASVO** (Australian Society of Viticulture and Oenology), **SASEV** (South African Society of Enology and Viticulture).

The conference is **free of charge** for all wine professionals worldwide, thanks to the support of the sponsors **OENOPPIA** (Oenological Products and Practices International Association), **SIMEI-UIV** (Salone Internazionale Macchine per Enologia e Imbottigliamento – Unione Italiana Vini), **ENOMAQ** (Feria Internacional de la Maquinaria, Tecnicas y Equipos para vitivinicultura).

Simultaneous translation of all presentations, given in **English** by the speakers, is offered free of charge thanks to the sponsors: OENOLOGUES DE FRANCE for **French**, ASSOENOLOGI for **Italian**, EXCELL IBERICA for **Spanish**.

In addition to the **ENOFORUM Award** of € 10.000 to the research best voted by attendees, OENOPPIA, ASSOENOLOGI and SIMEI-UIV have established **special Awards** of € 2,500 for the best research in specific categories.