

## Special Issue

# Exploring Fermentation, Flavor and Structural Compounds in Wine

### Message from the Guest Editors

This Special Issue aims to highlight recent advances in the investigation of wine composition, focusing on the interaction between fermentation, structural compounds and flavor development. Fermentation is central to wine aroma and flavor, as yeast converts grape sugars into ethanol and produces a diverse array of volatile compounds that contribute to aroma complexity. Simultaneously, grape-derived structural compounds, including tannins, anthocyanins and other phenolic molecules, shape mouthfeel, color, astringency and oxidative stability. Polysaccharides and proteins, originating from both grapes and yeast, further influence viscosity, colloidal stability and interactions with phenolics, contributing to overall texture and sensory expression. The wine's final character arises from the interaction between fermentation products and structural constituents, with ethanol affecting phenolic extraction and perception and yeast activity modulating volatile aromas and macromolecular interactions. Understanding these chemical and biochemical processes provides insight into how winemaking practices govern wine composition, stability and quality.

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### Guest Editors

Dr. Sandra Pati  
Dr. Pasquale Crupi  
Dr. Maria Tufariello

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### Deadline for manuscript submissions

20 July 2026



## Foods

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### Message from the Editor-in-Chief

*Foods* (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, *Foods* has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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