Your *new* journey starts here...

From researchers to winemakers and marketers, describing wine is all part of the job. **Interested in learning more about a career in wine?**

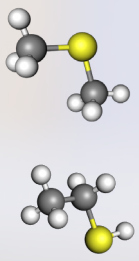
Meet us where science and creativity come together at **nzwine.com/careers.**

Pinot Noir is the top red wine variety in New Zealand by hectares, with each growing region expressing its own unique flavours. As this wine ages, it develops aromas and flavours that make up its complexity. In all, more than 40,000 chemical compounds have been detected that make up Pinot Noir's chemical matrix, and researchers believe that there are more to uncover. Current research is still exploring the chemical markers associated with taste and aroma descriptions, as well as the growing and winemaking practices that contribute to them.

Here's a look at some compound classes in Pinot Noir that we know about and that Bragato Research Institute considers important in our wines:

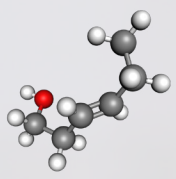
VOLATILE SULFUR COMPOUNDS

Volatile sulphur compounds (VSCs) possess a very low sensory threshold and are associated with strong unpleasant sensory descriptors such as rubber, cooked onions, garlic and cabbage. Together with other wine aroma compounds, however, they are known to add to the overall bouquet.



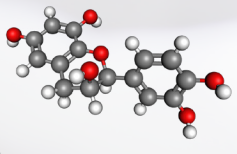
C6-ALCOHOLS

C6-alcohols, like hexan-1-ol can be found in green plant tissue that make it into the fermentation tank, such as bunch stems. The aroma they impart is described as grassy, or herbaceous.



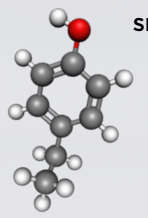
TANNINS

Tannins are larger polyphenol structures that are contributors to wine astringency. Smaller polyphenols can also contribute bitter tastes to wine. Tannins change considerably during wine aging.



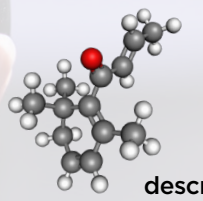
VOLATILE PHENOLS

Volatile phenols are aromatic-oil like compounds found in very small traces. Some like eugenol can be pleasant, imparting a spicy clove-like odour, while others like 4-ethylphenol can give barnyard, or mousy aromas, indicative of faults in wine, but interestingly, desired in some Belgian beers.



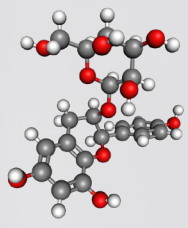
NORISOPRENOIDS

Norisoprenoids like damascenone belong to a family of chemicals known as rose ketones. Despite their very low concentration, they are important contributors to fruity, rose and berry aroma descriptors found in some wines.



ANTHOCYANINS

Anthocyanins are the major contributors to the colour of red wine. They belong to a class of polyphenols that are largely water soluble and provide shades of red and purple that vary with wine pH. Foods rich in anthocyanins include blueberries and raspberries.



LEGEND

Compounds are expressed in different stages of the winemaking process:

PREPARATION · COLD MACERATION · FERMENTATION · MALOLACTIC FERMENTATION AND AGING

NEW ZEALAND WINE
PURE DISCOVERY

BRAGATO RESEARCH INSTITUTE
RANGAHAU KAREPE, WĀINA O AOTEAROA

Working together to deliver wine and viticulture education with

> *Central Campus, Otago Polytechnic* > *Eastern Institute of Technology* > *Lincoln University* > *Massey University* > *Nelson Marlborough Institute of Technology* > *Primary ITO* > *University of Auckland*