

VeriVin in 2019: a year of success



The Company in 2019

As many of you may know, VeriVin has spent several years developing patented technology capable of analysing complex liquids non-destructively, whilst they are still sealed in their container.

There have been many developments in the last year, and there is much news to share, from the assembly of our first customer-facing plug-and-play prototype “Frankie”, to

the launch of our Pioneer’s Programme and the results of our case studies with wine, whisky and honey. We also have many plans for next year, including the **One Million Bottle Challenge**, in which we aim to get the “vinoprint” of 1 million bottles of wine into our database by the end of 2020, and the development of a new battery-powered “on-field” version of Frankie.

VeriVin’s first prototype

We have our first customer-facing prototype! We have designed a unique Raman probe, specific for the collection of faint signals, such as those that emitted from a bottle of wine. The machine passed several stress tests, working in different temperatures and humidities and travelling safely on an airplane to Argentina, as carry-on -- which was no mean feat. Our prototype is now regularly employed for data collection and analysis of wines, whiskeys, honeys and some other new exciting substances... VeriVin is now ready to approach the market and supply customers with beta versions of the machine, as well as provide a fully functioning data analysis service. Get in touch!

IOP Business Award

We are excited to announce that VeriVin won a prestigious Business Start-up Award from the Institute of Physics in October. This award recognises the significant contribution that physicists and physics make in industry across all sectors. The awards are a celebration of entrepreneurship, excellence in innovation and the successful implementation of physics into a product or service. The VeriVin team travelled to the Palace of Westminster in October to receive the award and present the company.



Pioneers Programme

In 2019 we launched our Pioneer's Programme, to engage with early users of our technology and tailor our offering to the needs of each specific sector. The programme has so far been a success, bringing us in contact with major players in the food and beverage industry, from small producers to large multinational companies, sellers and auction houses.

Fine Wine Database

VeriVin has privileged access to private collections of fine and rare wines in Oxfordshire, and is in the midst of building up its database of wine fingerprints from the most renowned producers and wine regions, in particular Burgundy, Boudreaux and the Rhône. We have tested bottles dating from the most recent vintages back to the 1970s.

Growing Team

We have added two more members to the VeriVin Software Team this January. One will be specialised in data analysis and the other in the development of a solid front-end interface for our customers. We are also pleased to be welcoming Dr. Marco Palumbo on board as our full-time COO. Marco has been with us as part-time Business Development Manager for six months already.



VeriVin with Layla Moran MP (centre) in the Palace of Westminster.

Argentina! Working with producers

In 2019 VeriVin started a collaboration with Costaflores Organic Vineyard, in Mendoza (Argentina) to monitor and detect the evolution of one vintage of wine over time. The same batch of wine was bottled in various different types of glass bottles with various different closures and stored under different types of illumination (e.g. UV, cold light, warm light, etc.). The evolution of the wine will be followed over time using both through-barrier and invasive analysis. During this trip, VeriVin also established a solid network in Mendoza and engaged with local research institutes and government. Government officials were especially keen to work with VeriVin on vetting the authenticity of their exports to regions where counterfeiting is an issue for them. Our next trip to Argentina will be in May.

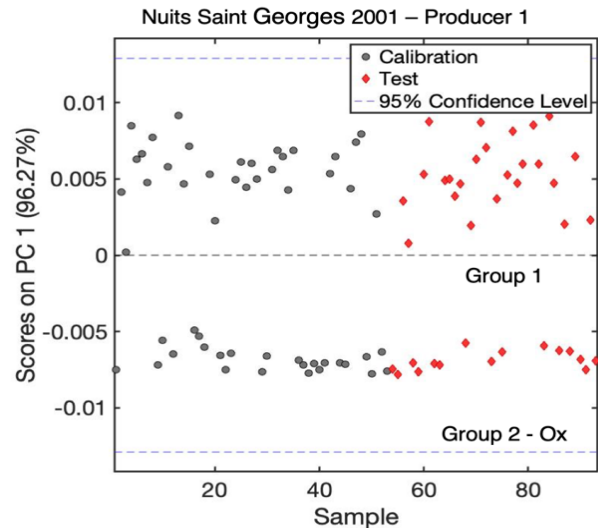


Part of the VeriVin team with "Frankie" and Mike Barrow of Costaflores Organic Vineyard in Mendoza.

Case Studies & Results

Detection of faulty bottles in a private collection

VeriVin is currently analysing the (very large) cellar of a private collector. During a recent session, we observed a divergence in the classification of a batch of bottles that was meant to be nominally identical. The bottles were blind tasted by a panel, who confirmed a marked difference between the two batches. In particular, one of the two groups appeared to suffer from significant oxidation. There was no difference in the storage conditions of these bottles and no difference in the corks. Jancis Robinson OBE MW kindly blind tasted them and confirmed our conclusions (tasting notes on her website).



VeriVin has been able to detect oxidation in wines before, but this had been artificially induced, so this was a big step for us, and further evidence of our ability to detect faulty wine without any previous knowledge of the batch.

Detection of diluted or adulterated whisky

Dilution of commercial spirits with water and industrial ethanol or homemade spirit is a common illegal practice that generates a significant loss for large-scale producers. These products may often be contaminated with toxic substances (such as methanol), becoming a serious risk for public health. VeriVin is consistently able to detect tainted bottles of whisky and separate them from authentic ones. Our models are also able to reliably detect methanol adulteration in whisky, at concentrations far lower than the legal limit in the EU.

Detection of glucose adulterated honeys and classification of Manuka honeys

Dilution of honey with cheap sugar syrups is another illegal practice that has been causing serious damage to supply chains and producers in the food and beverage industry, and heavily affecting the market. We have developed a model that is able to discriminate between adulterated and pure honeys as well as correctly identifying high-end Manuka honeys from other mainstream brands.

