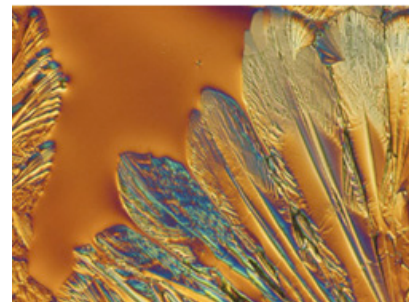
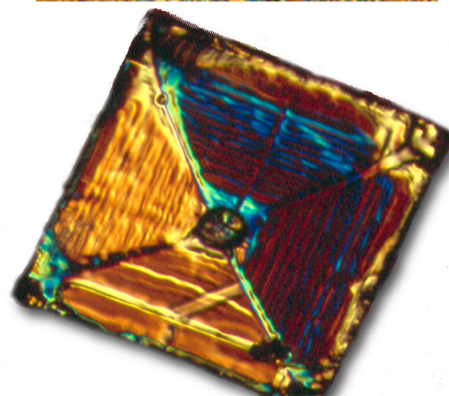


When you sip a cup of coffee or tea, do you attempt to describe it in your mind? Mmm good, just right, too bitter. If you enjoy a glass of wine, do pictures come to you that represent your experience? Smooth and silky, big and bold. Do you use words or images that reflect a full-bodied taste experience?



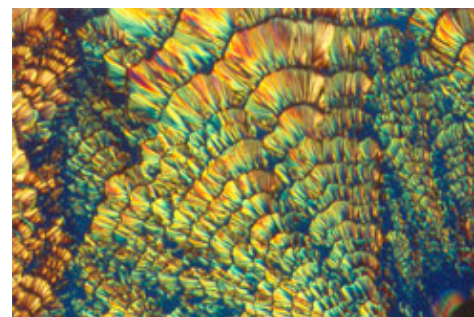
I happen to be a photographer of inner space, meaning I use a microscope to explore the world of life, cells, molecules, and tastes. Who would have thought that photographs of molecules could be art? This art from science has appeared in lots of publications and books, the most recent book being Wine's Hidden Beauty.



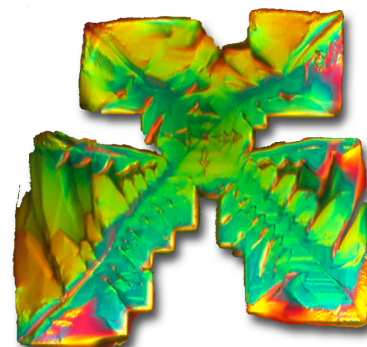
In an attempt to understand the diverse patterns and shapes I uncovered in wine, I delved into the basic molecules of taste. Was I in for a big surprise - perhaps you will be, too. Taste is a chemical sense; through our saliva we detect the chemistry of a molecule which triggers a sensation. Sweet and sour, salty and savory, bitter - are our 5 essential tastes.



Here are photomicrographs of the 5 essential tastes - can you guess/intuit which is which?



The surprise, for me, was to recognize or interpret a molecular form as an apt reflection of the words we use for a particular taste sensation. Would you expect something sweet to have a rounded molecular form or a prickly one? What about bitter? I interpreted the photographs as beings symbolic of the taste – like a taste code. If we dig further into what science writer Carol Yoon calls instinctual intelligence (Naming Nature), we begin to see that our words have roots in our biology, our nature.



In the wisdom of nature, these tastes also tell us about the essence of the molecule – they SHAPE OUR TASTE

- **Sweet**, for the most part, tells us something is an energy source and ready to eat.
- **Sour**, tells us that the fruit is not ripe yet or that the beverage has spoiled.
- **Savory** tells us this is a nitrogen source, something our cells need to survive.
- **Bitter** – a warning of potential toxicity
- **Salty** tells us this is a mineral source

The pictures from top to bottom: sweet - sucrose, table sugar; salty - sea salt; bitter - caffeine; savory - MSG; and sour rice vinegar.

Our molecules have much to show us, when we know how to look. To explore more of inner space, molecular design, wine and our cells, go to [www.SondraBarrett.com](http://www.SondraBarrett.com)

Sondra is a PhD biochemist with many years of academic research under her belt, and in her glass. Formerly on the faculty of the University of California Medical School, she now writes, delivers presentations and workshops, and enjoys a glass of wine and organic free trade coffee. Her first full color book on wine *Wine's Hidden Beauty* (2010) focuses on Wine, taste and the spiritual. Her book *Secrets of Your Cells* (published by Sounds True May 2013) also includes a few color photos of the tastes. Co-authoring *Ultimate Immunity* with dear friend and colleague Elson Haas, MD, she does workshops on immune health with Elson and on her own Cell intelligence. In 2015 at Black Stallion Estate for WineSpirit, she and Dr. Liz Thach, one of the first women who has achieved master of wine offered their interpretation of *Shaping Taste and the Wine Palate*. In January 2016 she will deliver *The Structure and Beauty of Wine* for the Institute of Masters of Wine. To schedule Sondra for a presentation, art show or exploration of your favorite tastes, email her at [sondra@sondrabarrett.com](mailto:sondra@sondrabarrett.com).