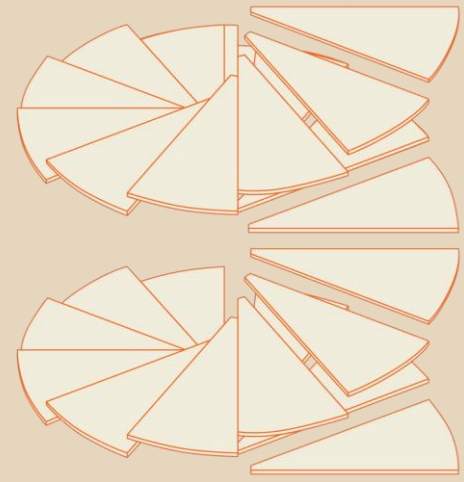


SPIRALING UPWARDS



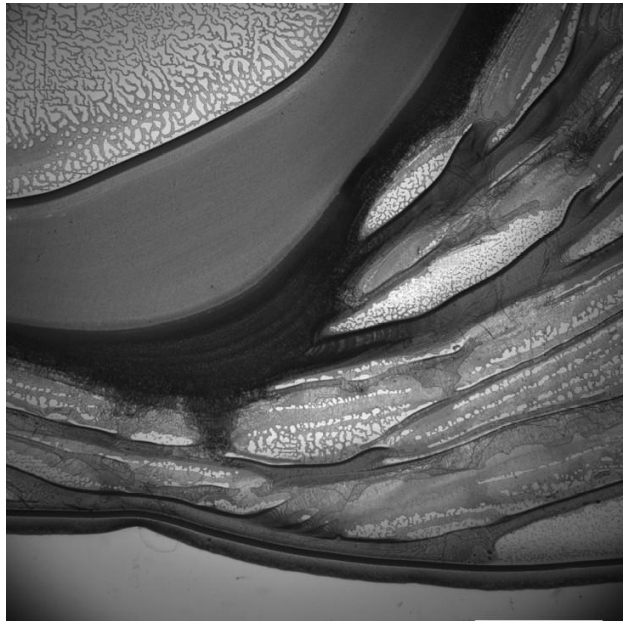
By: Nicole Sharp, Ph.D.

Date: Jan 14, 2025

DIY: Make Art From Drying Droplets

From the Artist

"Intricate patterns are left behind when a drop filled with particles dries on a surface. This drop was simply water mixed with particles and surfactant, but due to the complexity of the drying process, it left behind a rich footprint. At first, the drop dries slowly, forming thick particle ridges, followed by accelerated drying that forms the shape of delicate branches. Light illuminates the detailed patterns from behind and highlights the complex dynamics of a drying liquid front." - *Lebo Molefe*



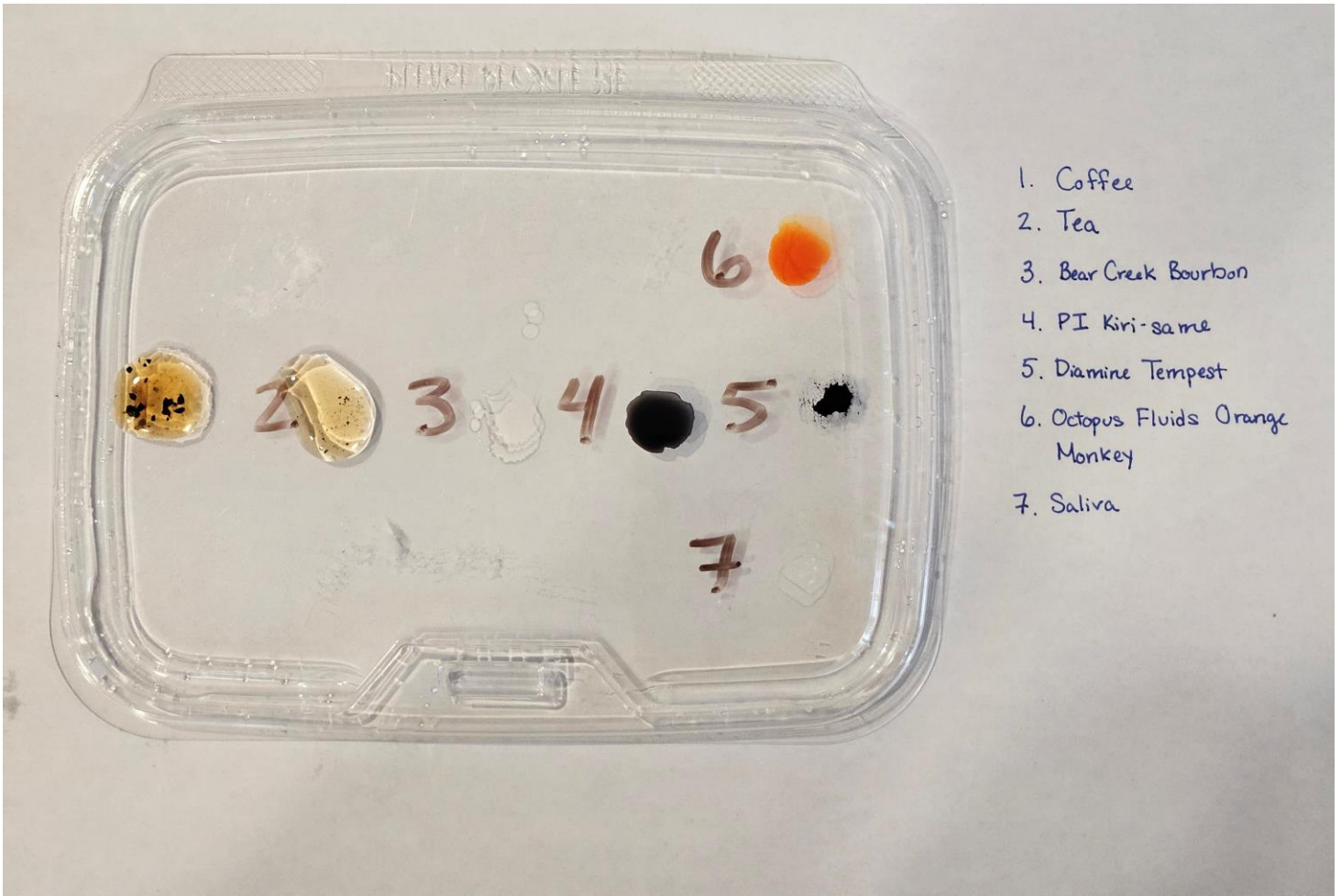
"Cascading Ridges" - Lebo Molefe

Supplies and Tools

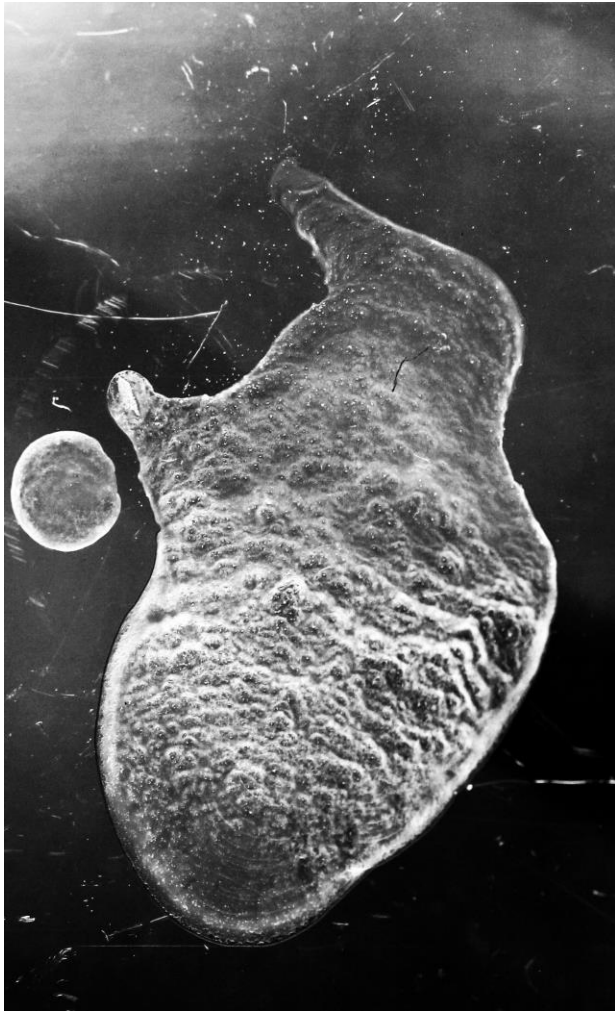
- ☐ A transparent surface – glass slides are great, if you have them, but plastic container lids work, too
- ☐ A variety of liquids, such as coffee, tea, milk, liquors, inks, soaps, etc.
- ☐ A way to magnify or image your results; e.g., a camera, magnifying glass, and/or **microscope**
- ☐ (optional) Photo editing software
- ☐ (optional) Tripod

Instructions

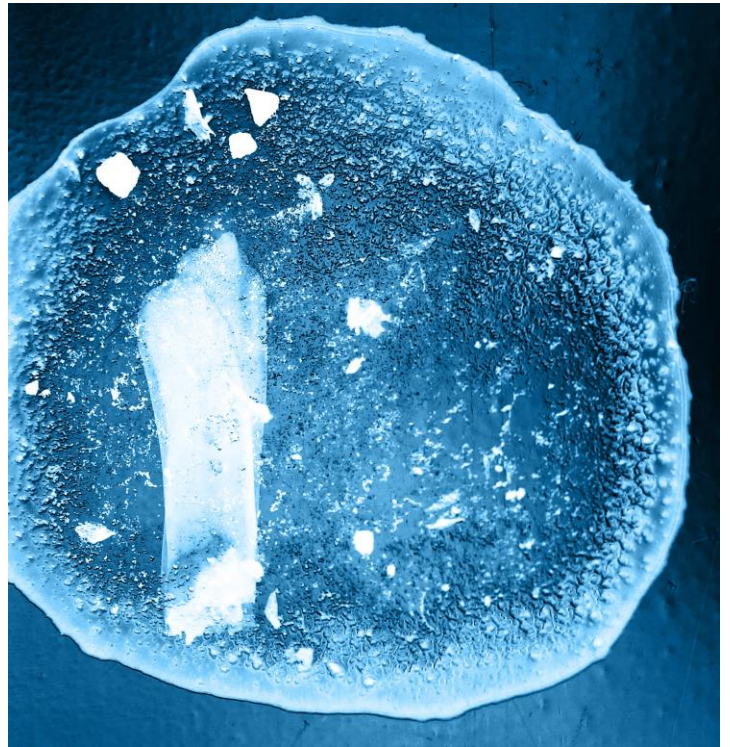
- **Gather your chosen fluids and your transparent surface.** I used the plastic lid off of a snack container and labeled each of my fluids with a number so that I would know what each one was. I dripped or spread a small sample of each of my test fluids.



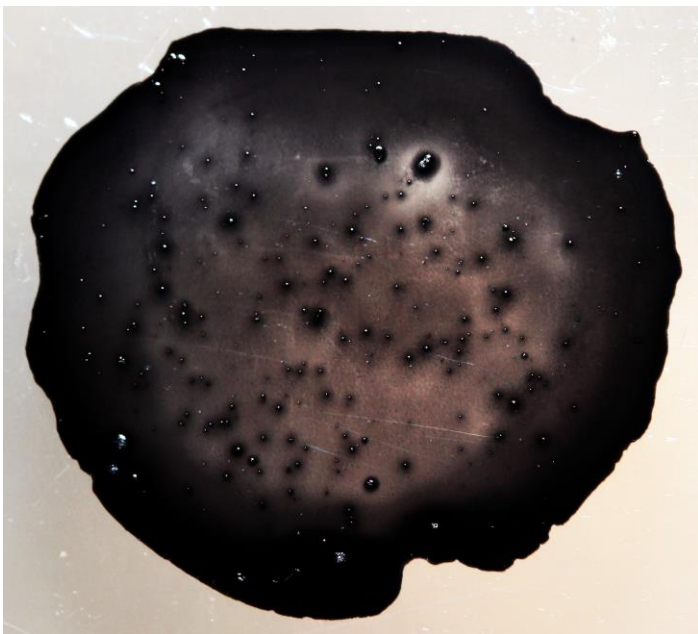
- **Let all of the samples dry out completely.** In my case, this took several hours of drying on a kitchen countertop.
- **Once dry, place the transparent surface over a light source.** In my case, I taped my plastic lid to a sunny window, which worked wonderfully.
- **Use a camera or other instrument to closely examine your residues.** A microscope or magnifying glass are ideal here, but I got good results using a DSLR camera fitted with a 60mm macro lens. Some cellphone cameras will have macro modes or can be outfitted with a macro lens that slides over the camera.
- **(optionally) Take images of your residues and enhance them with photo editing.** Playing with contrast and color can produce all kinds of fascinating and artistic effects. Below are some of my own results.



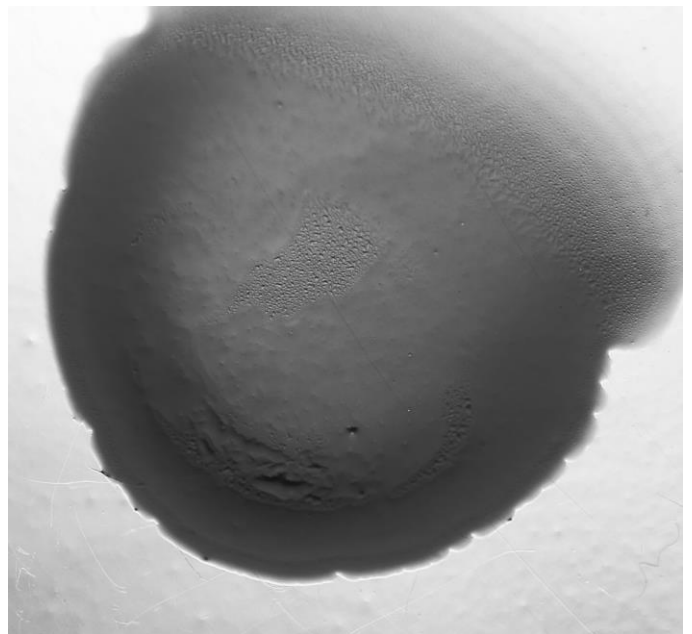
Bear Creek Bourbon Whiskey



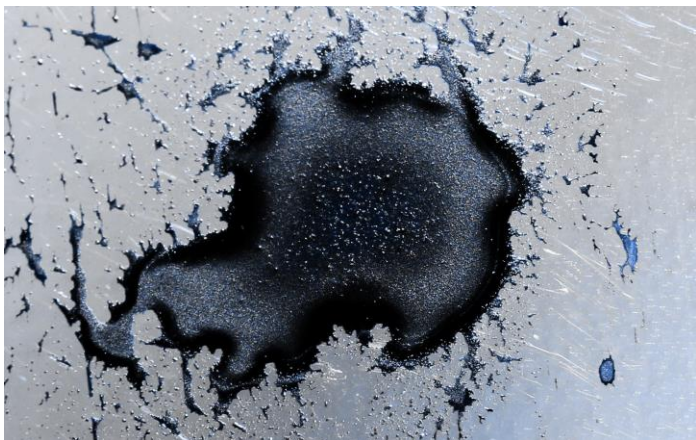
French-pressed coffee



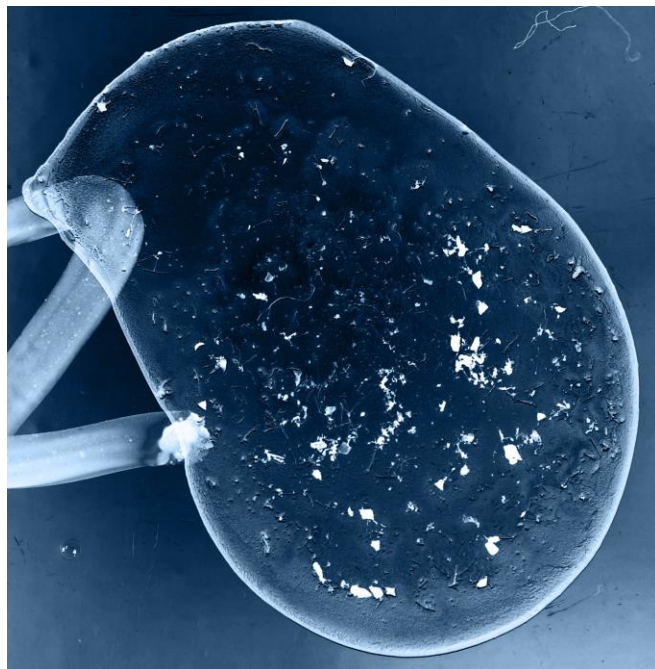
Pilot Iroshizuku Kiri-same fountain pen ink, a dye-based ink



Octopus Fluids Write and Draw Orange Monkey fountain pen ink, a pigment-based waterproof ink



Diamine Tempest fountain pen ink, a dye-based ink containing glittering particles



Lucile's Café Spice Tea, homebrewed from loose leaf



Human saliva

Resources and Inspiration

- [The physics behind coffee rings](#)
 - [Why coffee and whiskey dry so differently](#)
 - [Cracking films](#)
 - [Ernie Button's Vanishing Spirits](#)
 - [Foldscope](#)
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