

[shreanrafiq100@gmail.com](mailto:shreanrafiq100@gmail.com)

Extensive gallery: <https://medium.com/@shrean>

## Microscopy Highlights: February and March!

ShreanRafiq - Bangladesh

I love quiet reflection. It's always good to sit back and reminisce (positively) on bygones, cherish the fond memories, and learn from the mistakes.

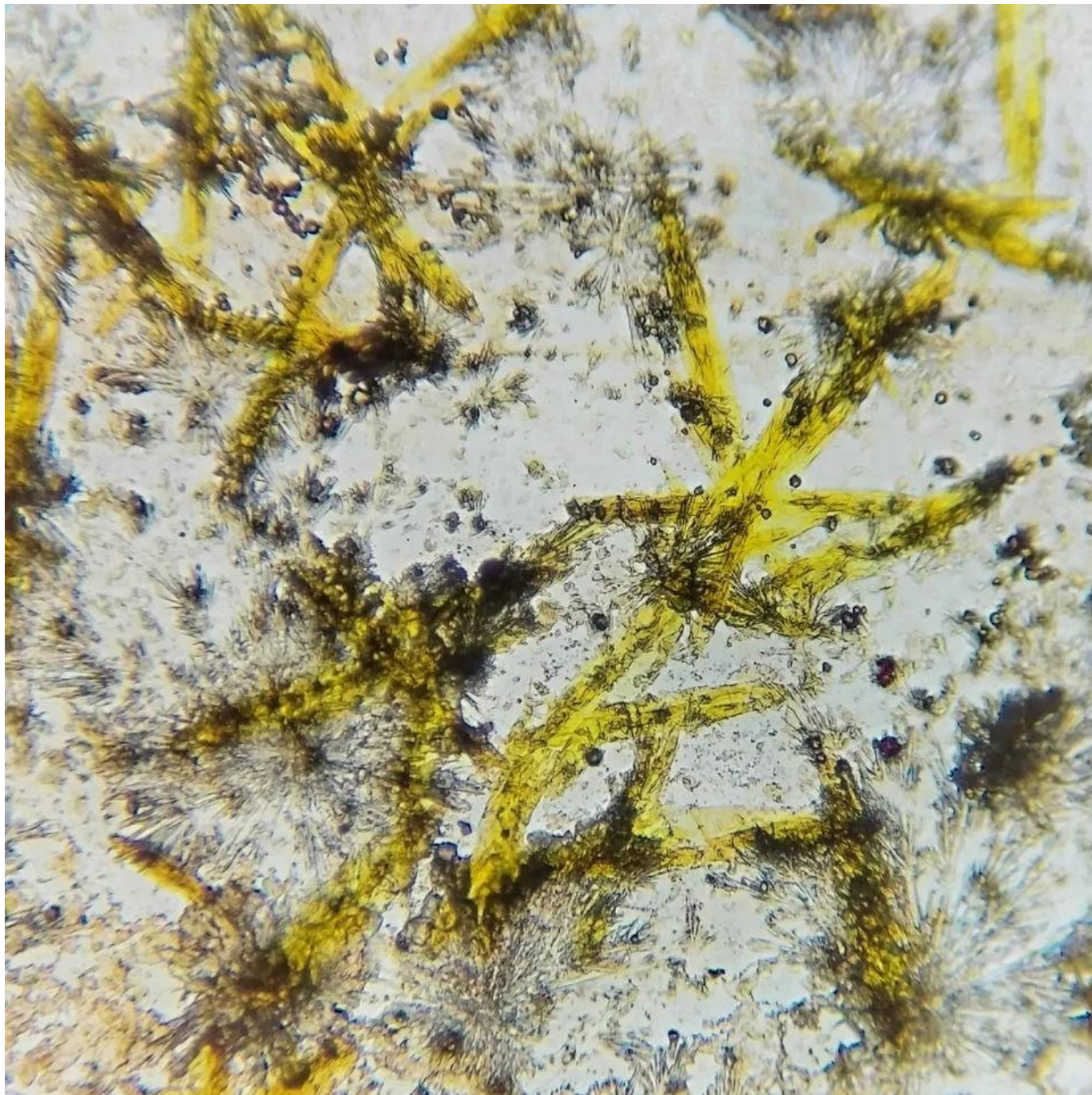
To that end, I have curated a gallery of some of the best pictures and moments from the last two months of microscopy. There are some spectacular candidates this time around (and some never-before-seens) so stick around!

Please enjoy.

Meta data provided at the end.

## FakeSaffron

Tried making crystals of Saffron-flavored food coloring. It was vivid and colorful.



Look at those yellow petals. Watch them burst out of the bits of black, spreading and fusing, glasslike and chaotic.

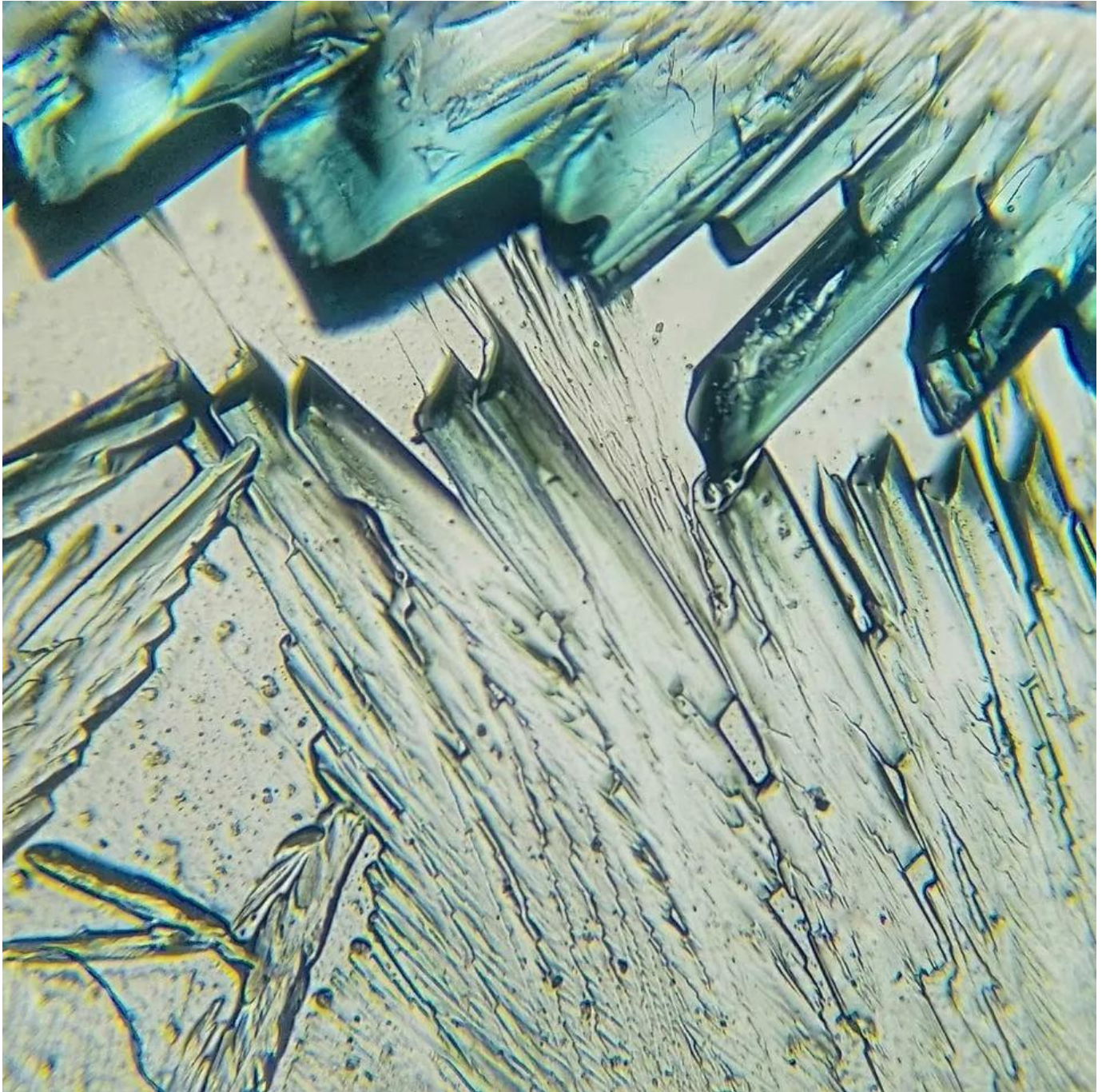
The coloring decomposed on heating and formed these wonderful purple smears.



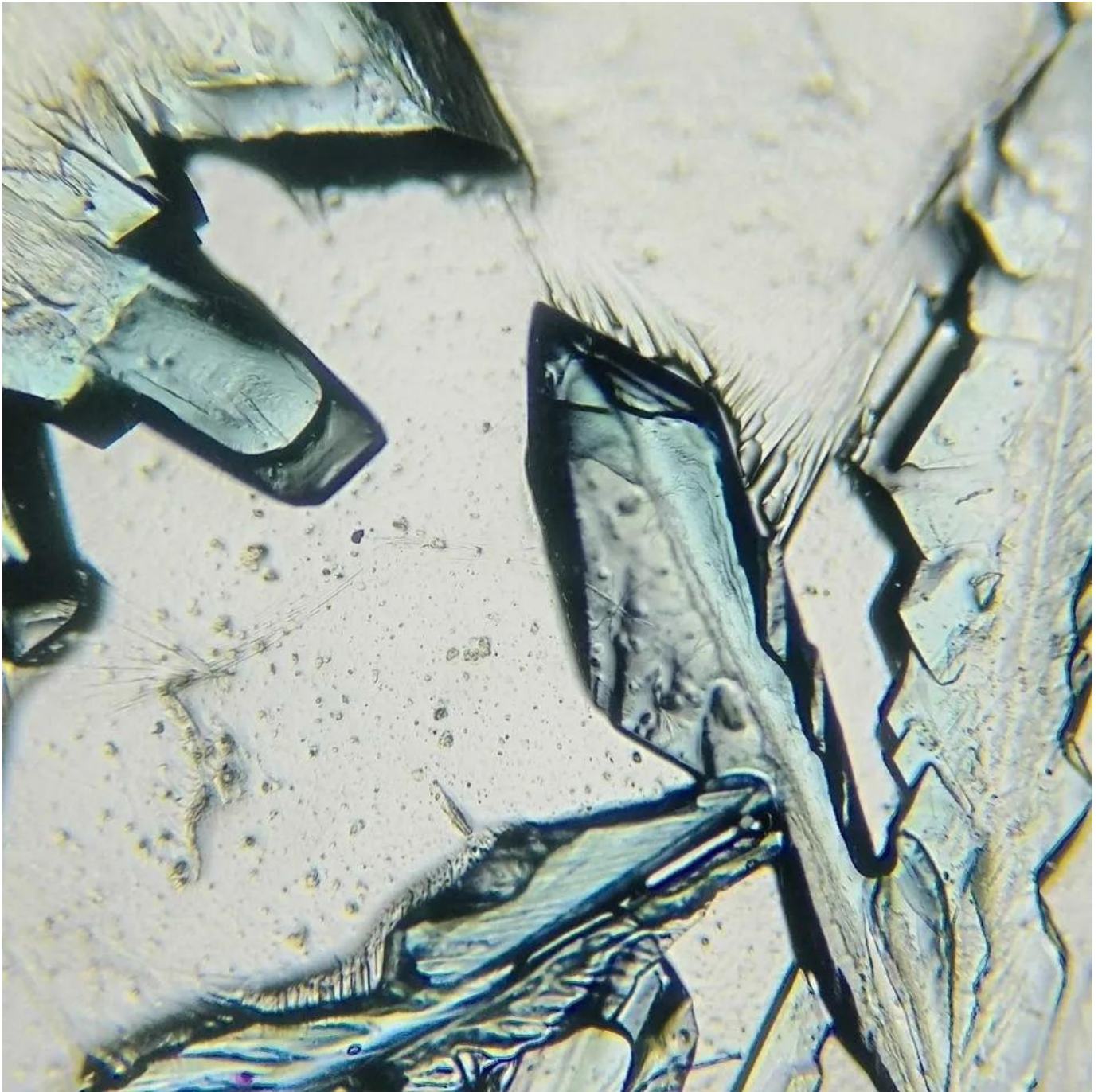
Hues of purple propagating like waves. Look at the dark patches, the tiny black spots speckled throughout the purple, the deep-blue, the range of the colors, the dark crests and light troughs, the complexity.

## Flame-Dried Crystals

I made Copper Sulfate crystals by quickly drying a drop of Copper Sulfate solution over a spirit flame.



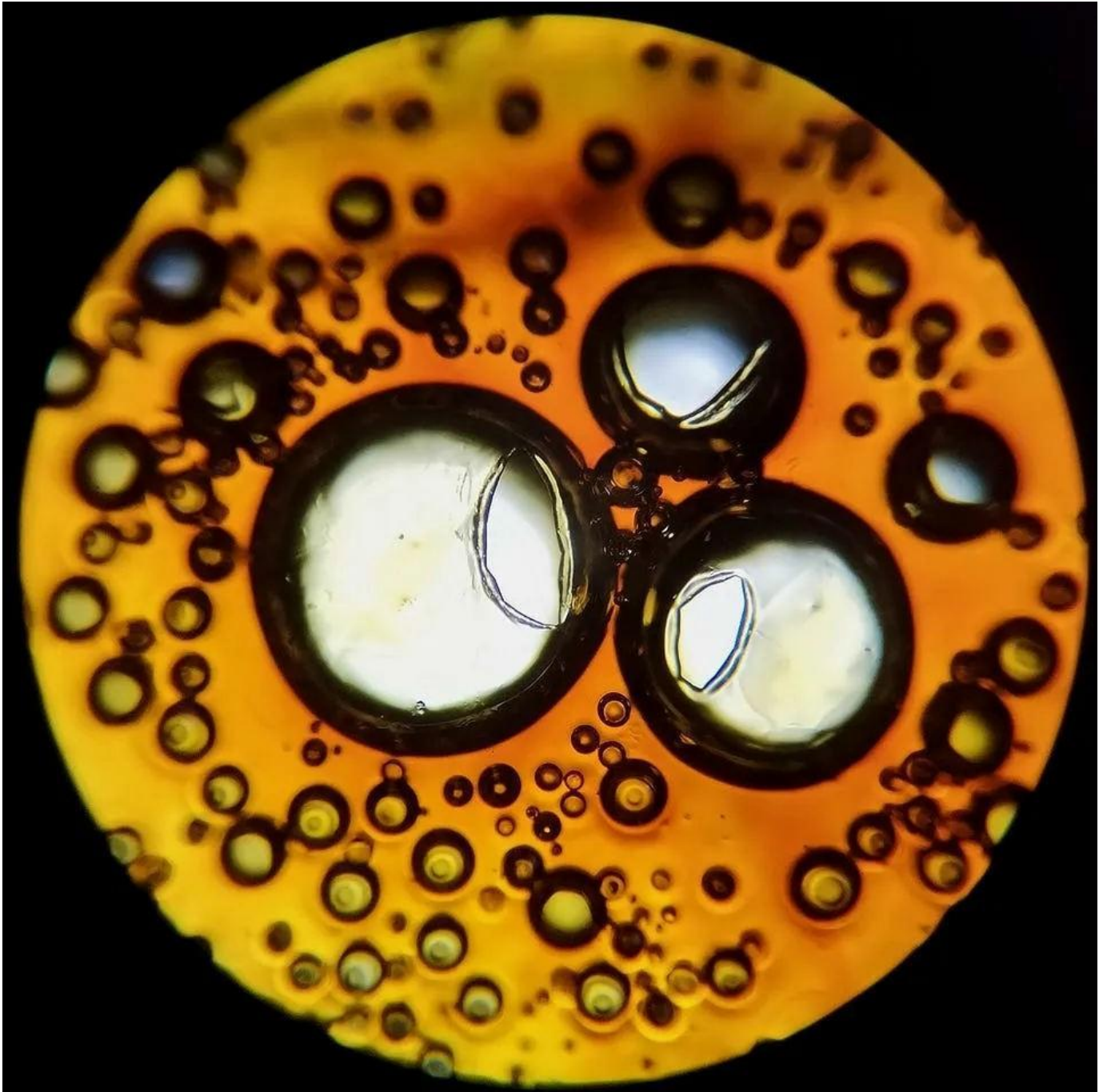
Look at the pattern, the shards, the jagged edges, and the elevation of the top crystals. Look at the hint of blue, the spot of color at the top. Look at the fragility of the bottom half, like glass, the wavelike progression, the tiny inconsistencies.



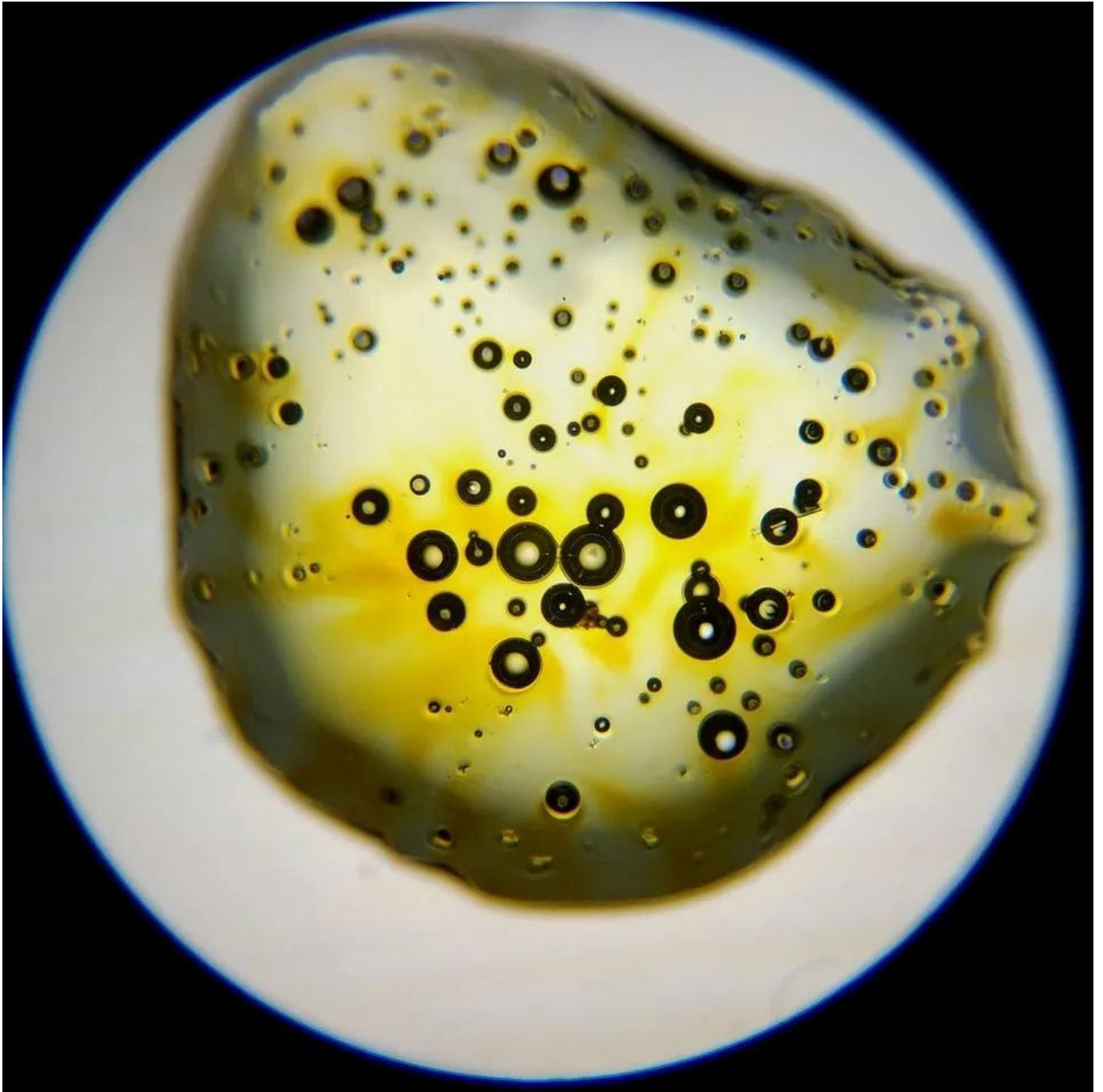
The crystals are like blades, but even more than the sharp edges, I like the texture, the slight ripples, and the impurities encapsulated in the little dots.

## Melted Sugar Looks Like Aliens

Attempted to make sugar crystals by quick-drying sugar solution over a spirit flame. Wrong method. Instead of forming crystals, it caramelized into these wonderful, bubble-filled blobs.



Like big, watery eyes, shattered and searching. The lovely orange background.



Look at the color, the pale yellow infusing through the droplet. The lovely bubbles, each a spot of white on black.

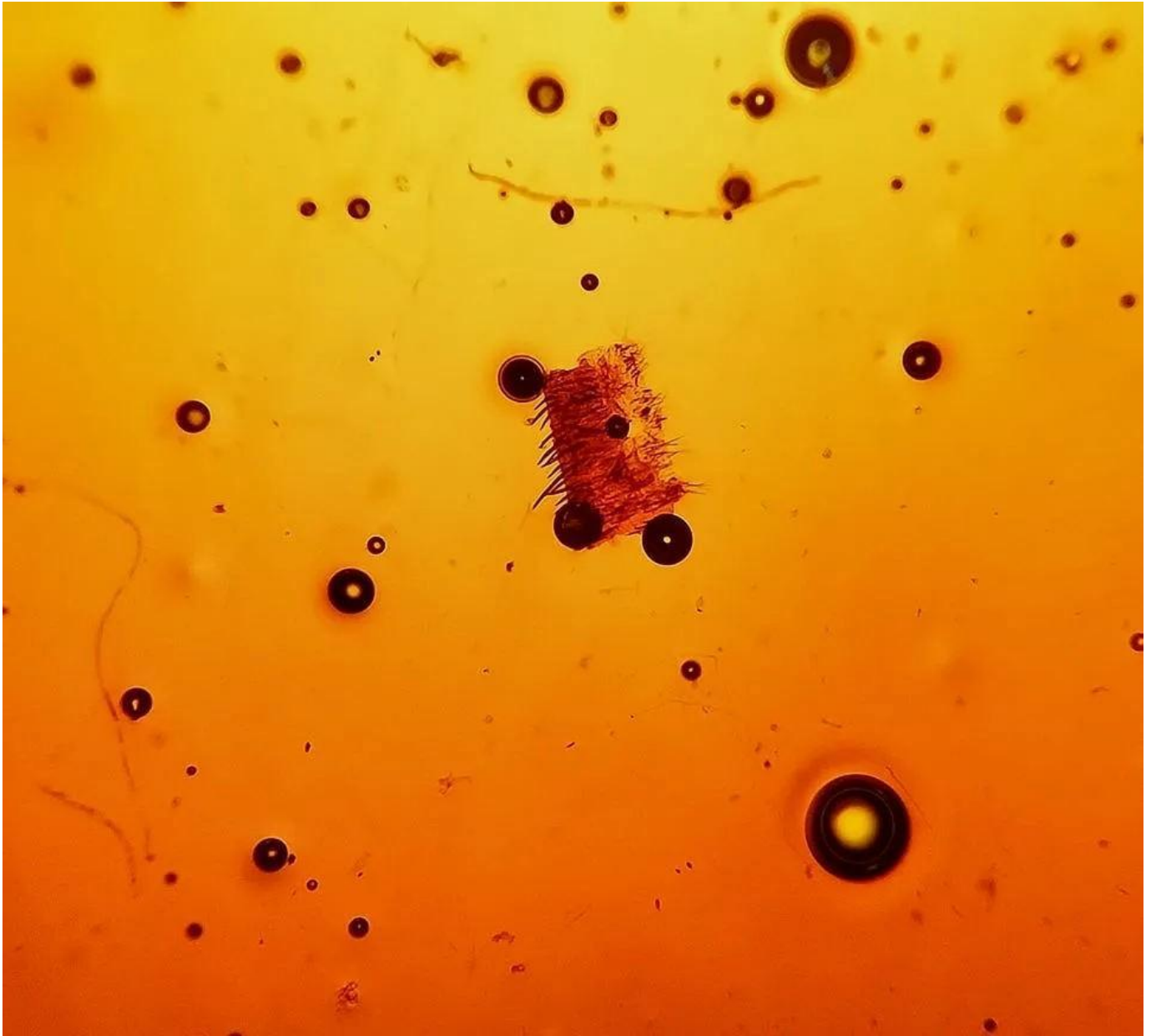


Blackened and smashed. It has the shape of a cell (a parasite, maybe?). Look at the smaller white holes and larger orange ones. The orange border with a gradient. It has an unpleasant aura, but I still love it.

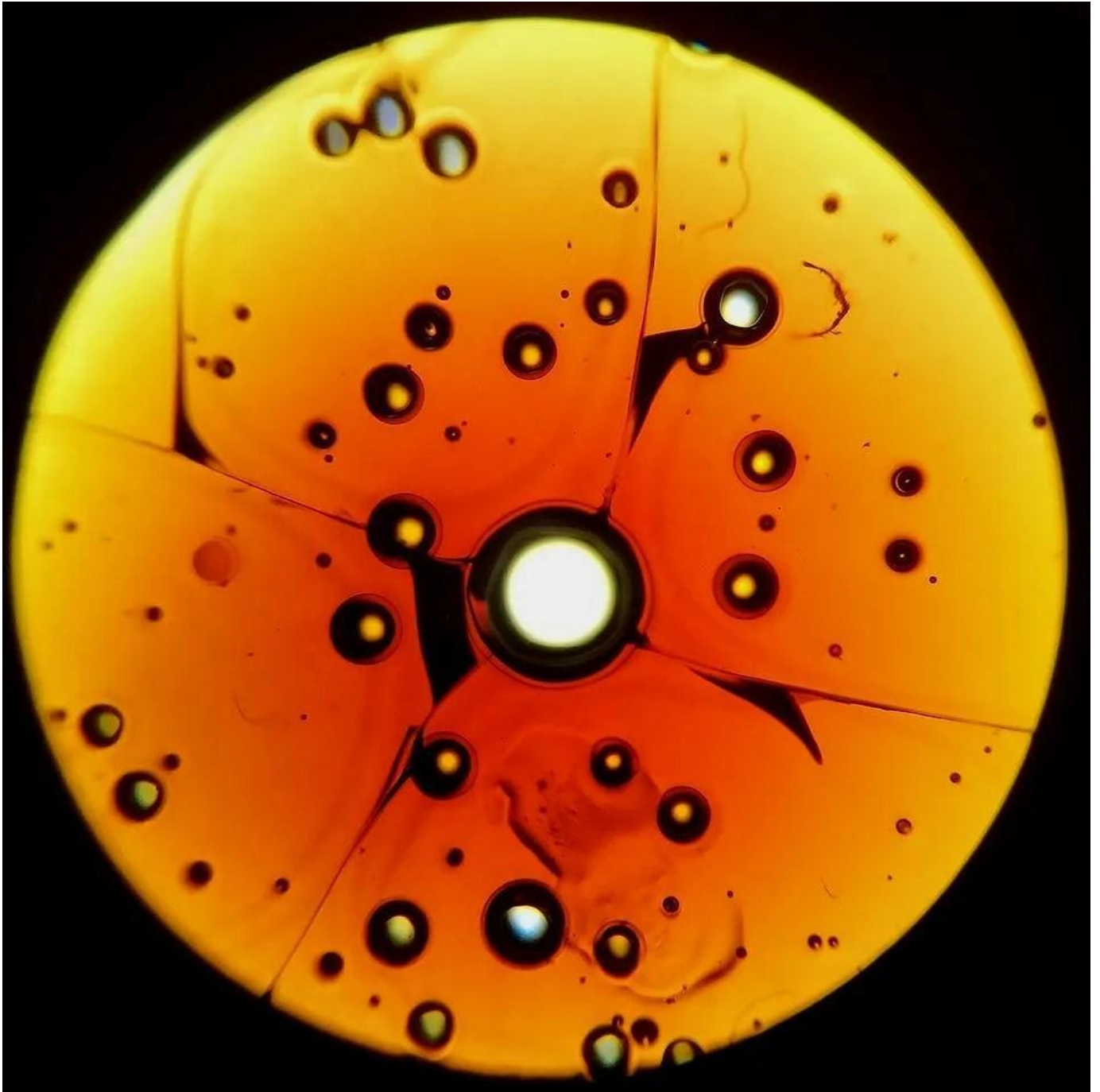




Unique. The lush orange-red background, the backdrop of blurry bubbles, the central circle, the shape inside, like tears welling, fluid and bulbous.



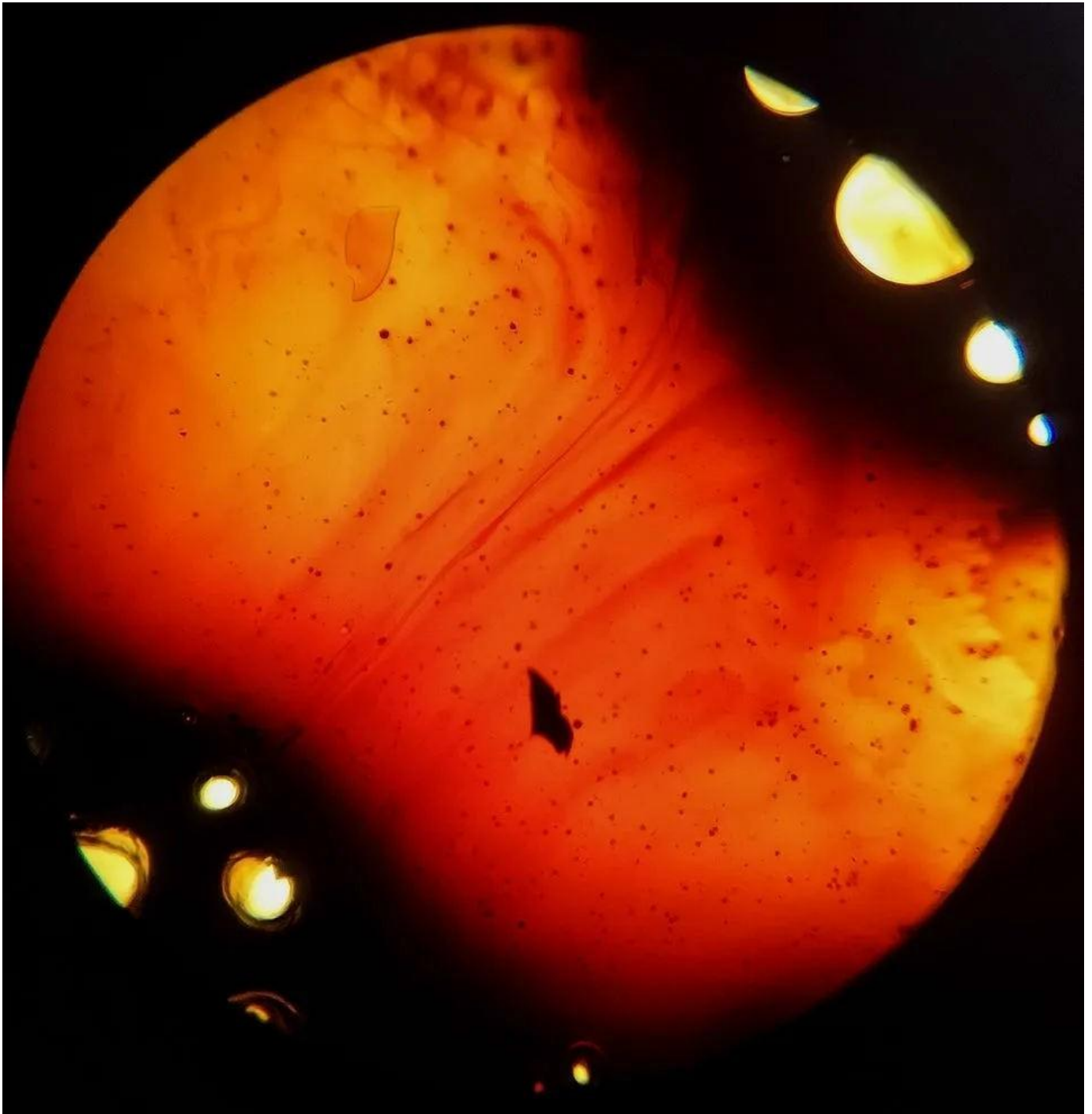
A bit of debris amongst the sugar. It's so hairy and bizarre. Rectangular with a dot for an eye, nestled between three bubbles. Gives you the creepy sensation of being looked at. I feel like he's sentient, that I can get to know him.



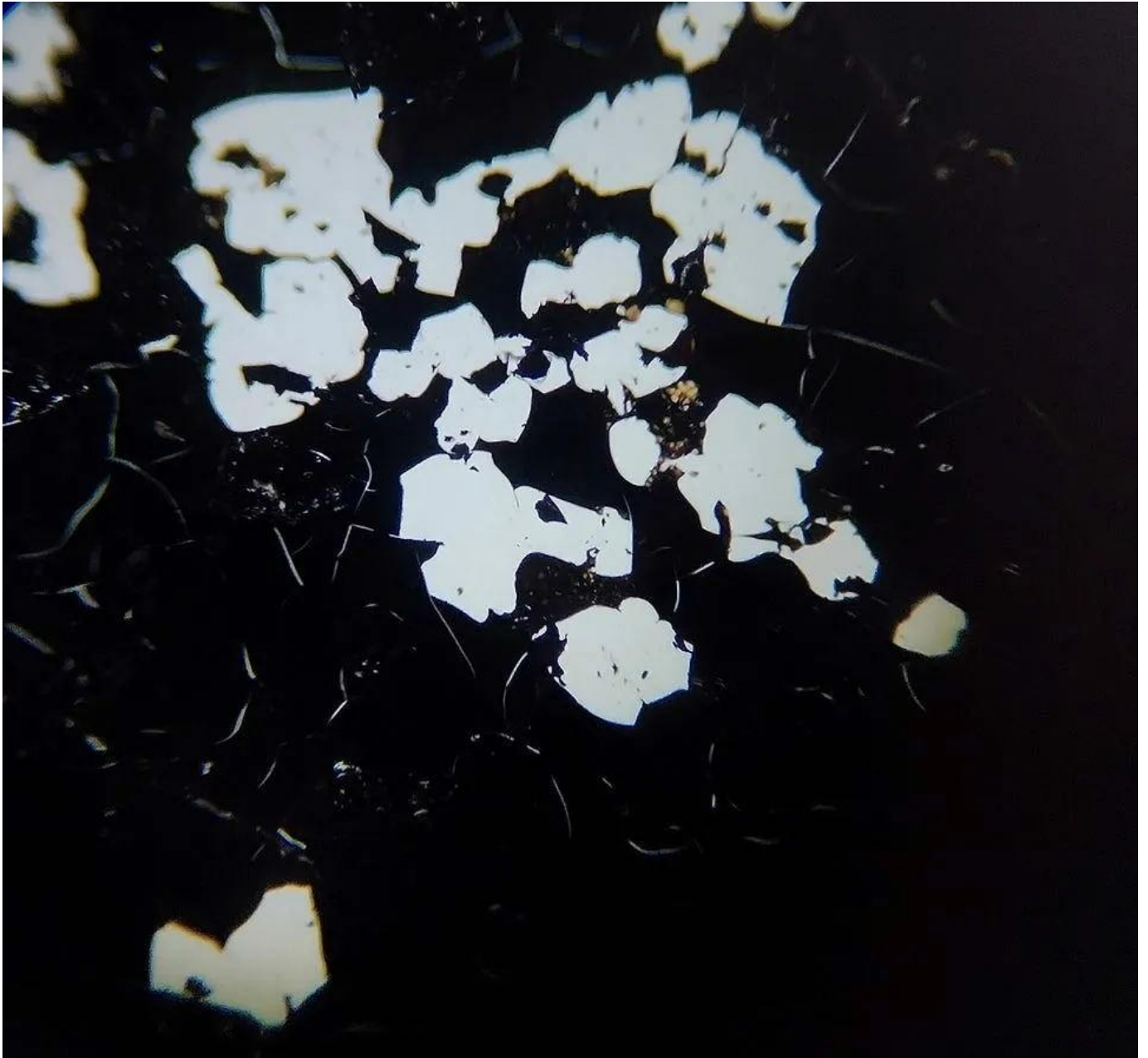
Shattered. broken. The arresting bubble, the cracks spreading outwards, the shards, the fading orange gradient, the tiny, barely discernable fluid texture. It's beautiful.

## Burnt Honeyis Lava

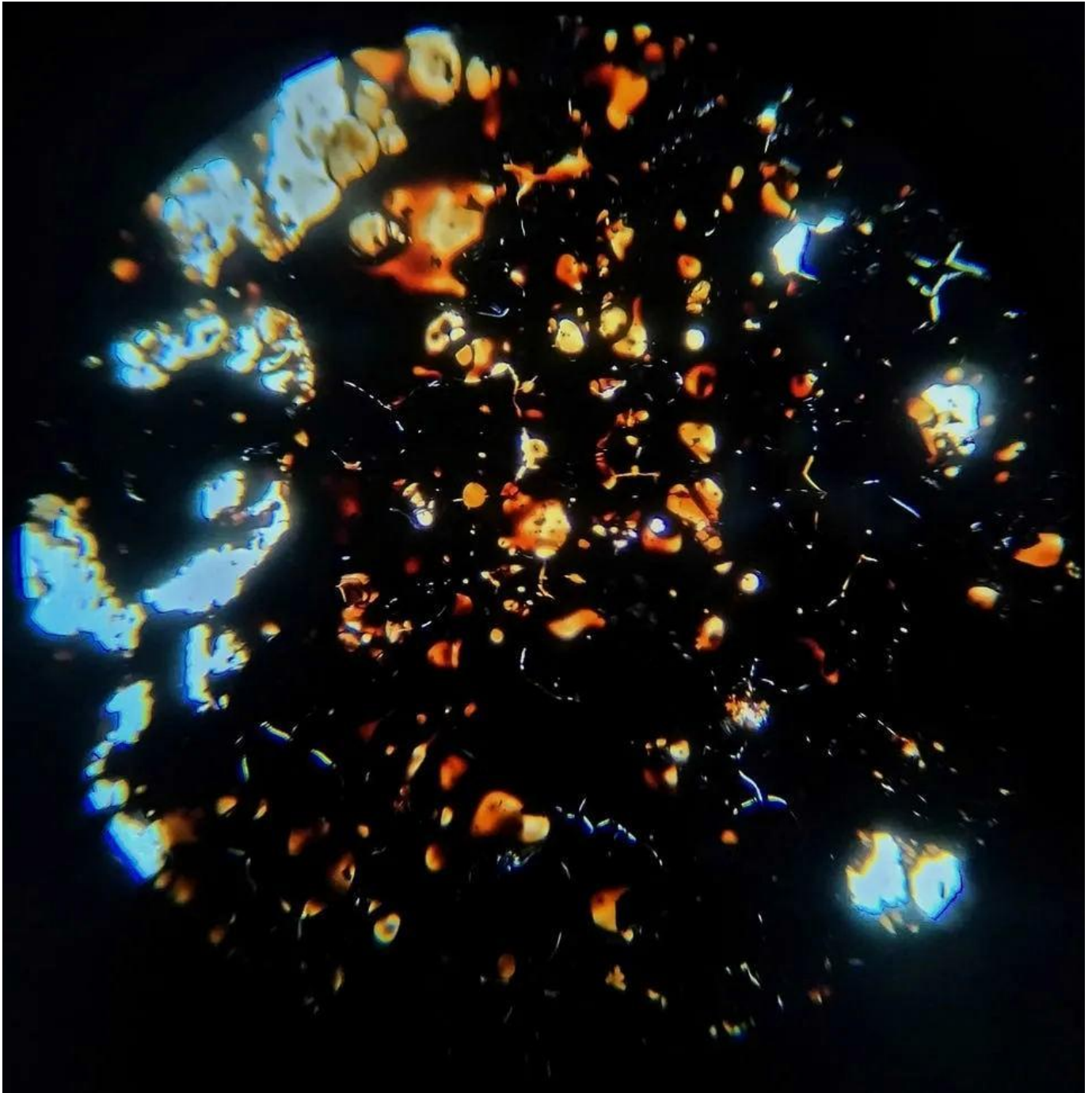
I heated a drop of honey on a slide and it combusted into furtive and colorful flames, which left in its wake a scab of burnt honey that (amazingly) looked like lava.



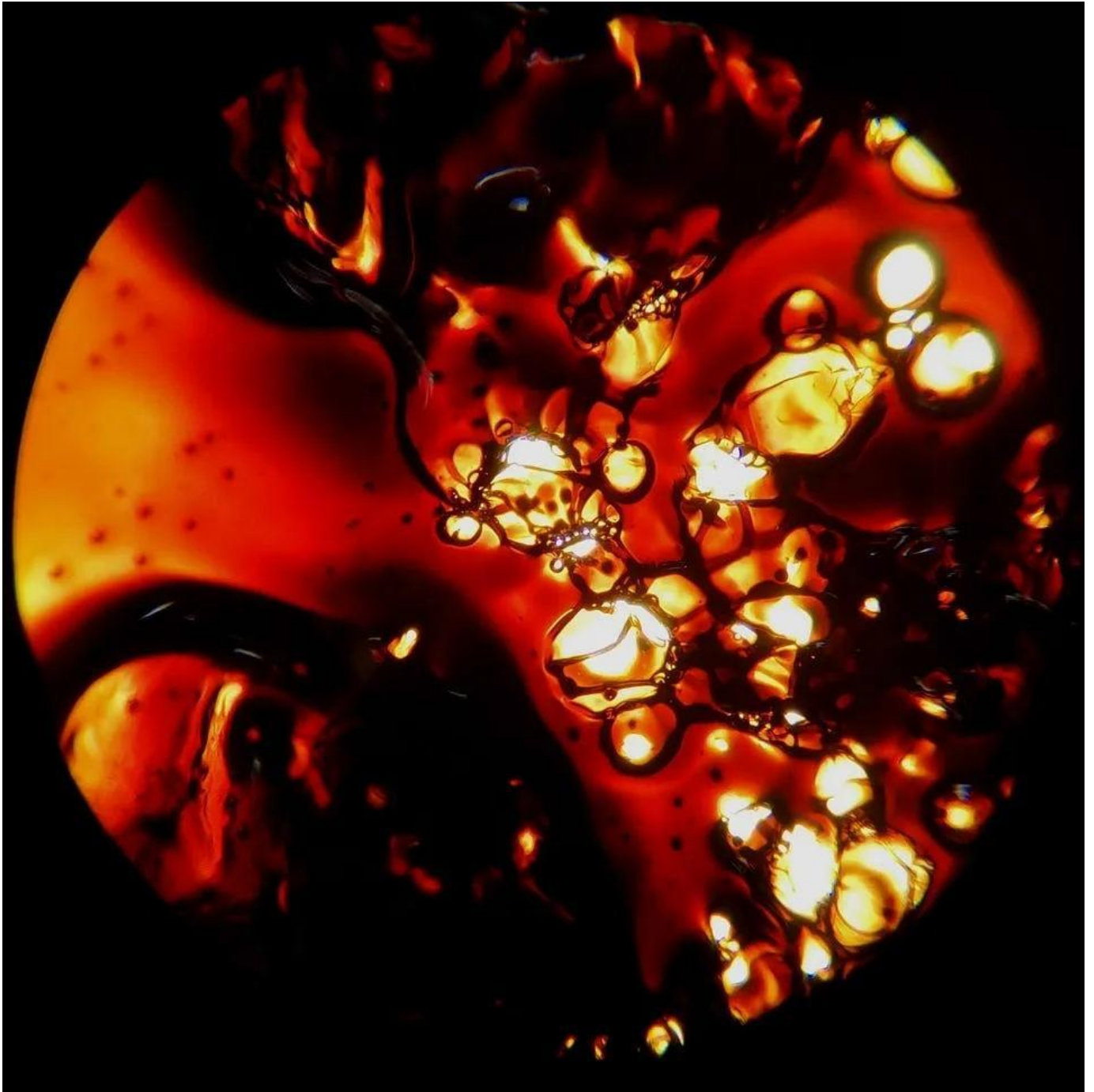
Fluid, colorful, wonderful. Look deeply at the swirls of the orange, the streaks, the spots. The light filtering through both sides, bright yellow bubbles on the top and bottom, the shadows, the winged debris in the middle. It looks like a bat, and I can't be convinced otherwise.



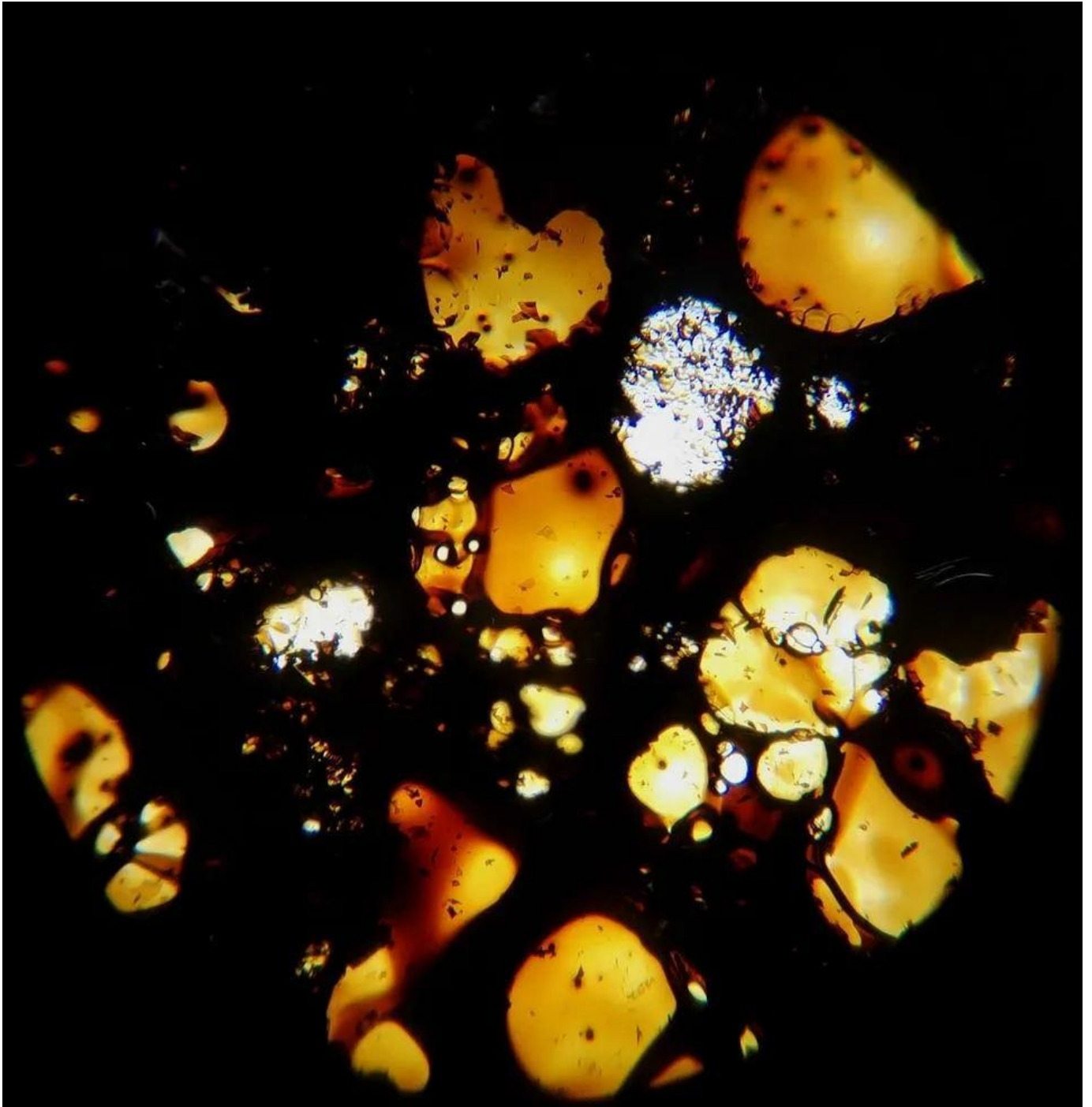
Look at the contrast between the blacks and the whites, the straight and semi-geometric nature of the holes, the whiteness beyond.



A wonderful combination of bright white light and bright orange honey. A partnership that amplifies both their appeal. The black soot masks the color and hides the light, and in doing so, makes it all the more vivid and striking.



Rich, dark, and fluid. The orange bubbles are bright enough to hurt. As if it's violent and boiling. The fluid- dynamics at play is eye-wateringly beautiful.

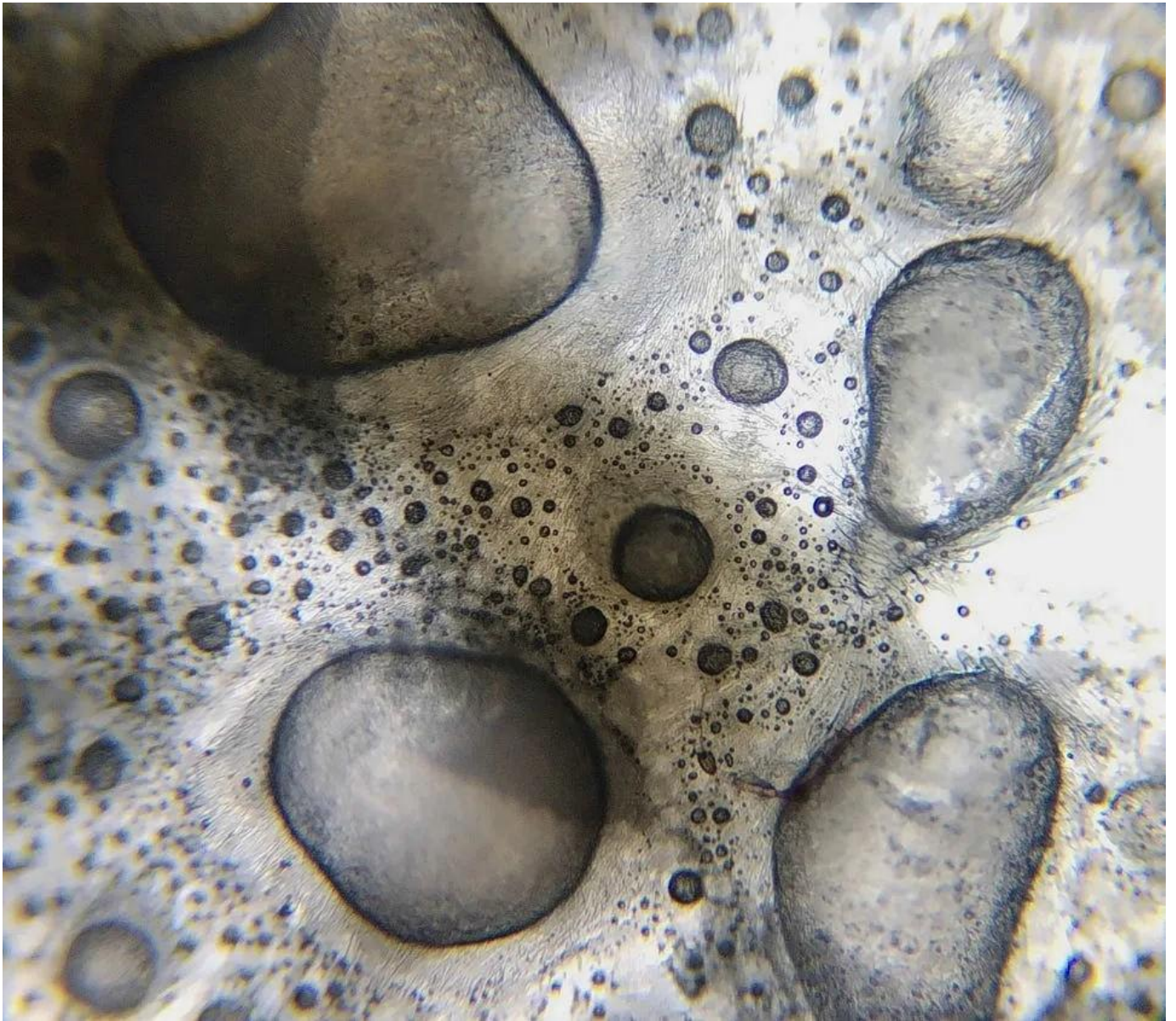


Notice the tiny details and minute fragments. They add so much beauty but are so easy to miss.



## Diseased Sodium Hydroxide

Tried making Sodium Hydroxide crystals using the same heat-over-flame method. This run failed more drastically than ever, but the results were still amazing.



Bubbles erupting out of the solution as all the water boiled off. The color looks as if it's been grey-scaled. Look at the texture in between the bubbles. The tiny lines, barely noticeable, but present.



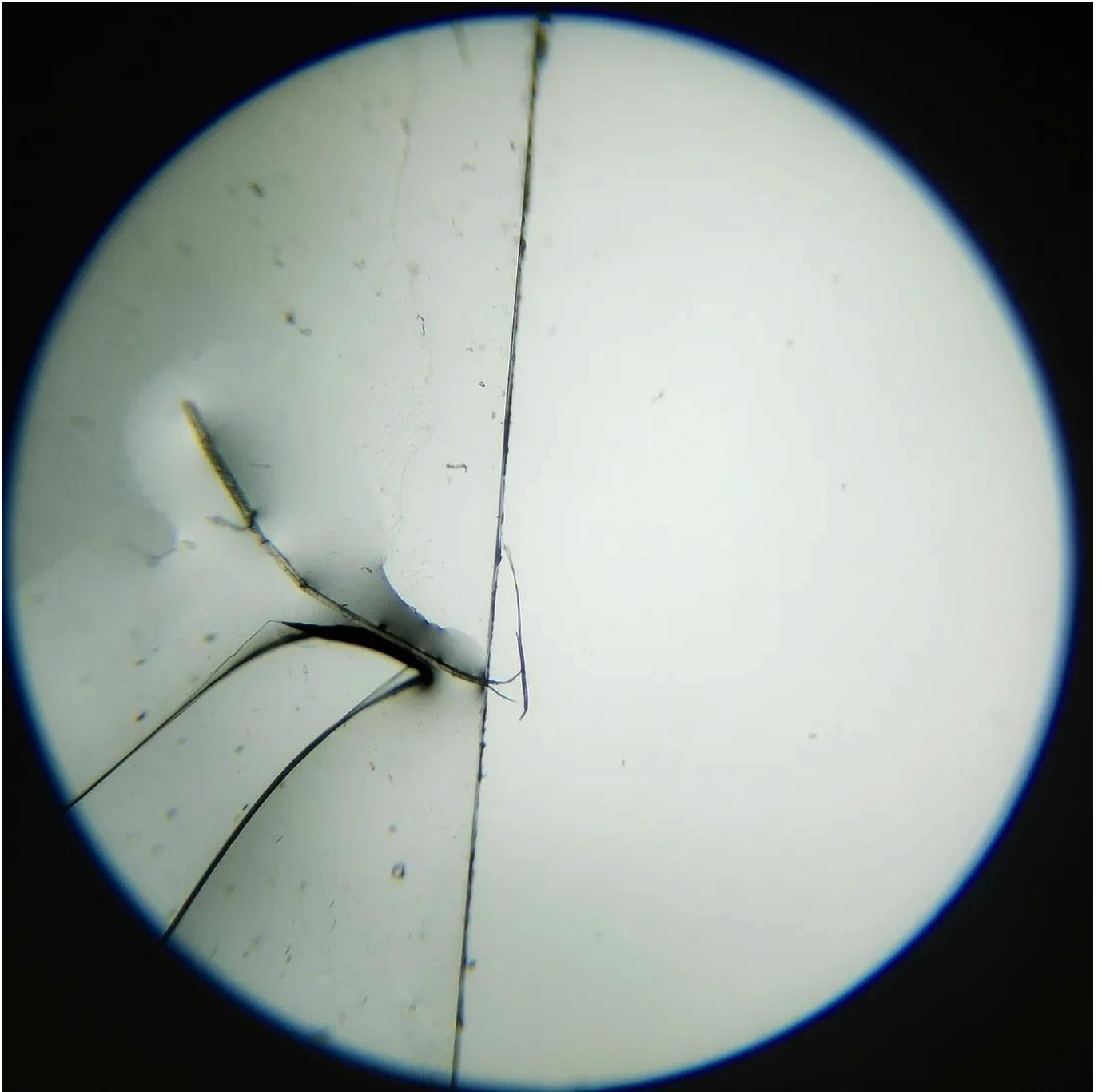
Shards forming. Thin, sharp, clear, brittle. The symmetry is mesmerizing if you look close enough. Here the molecules had at least a chance to crystallize, to form uniform, organized structures. A lovely picture.

## NeverBeforeSeens!

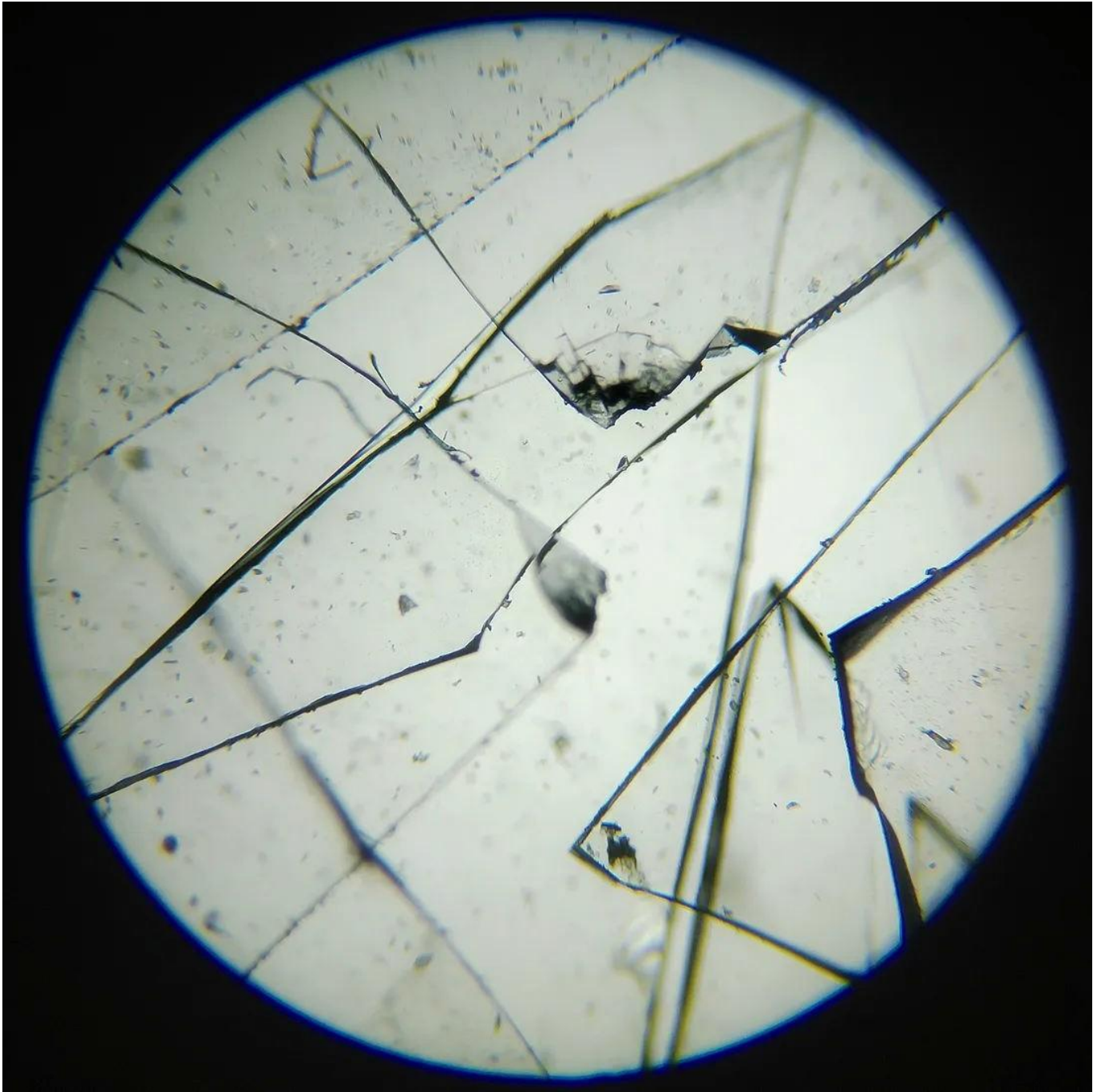
Here are some fantastic shots that (for whatever reason) didn't make it into their respective articles.



Looks like an abstract alien. Two feet, one hand, and a stick head. Goofy but also intimidating. (From honey microscopy. Probably just some junk floating around.)



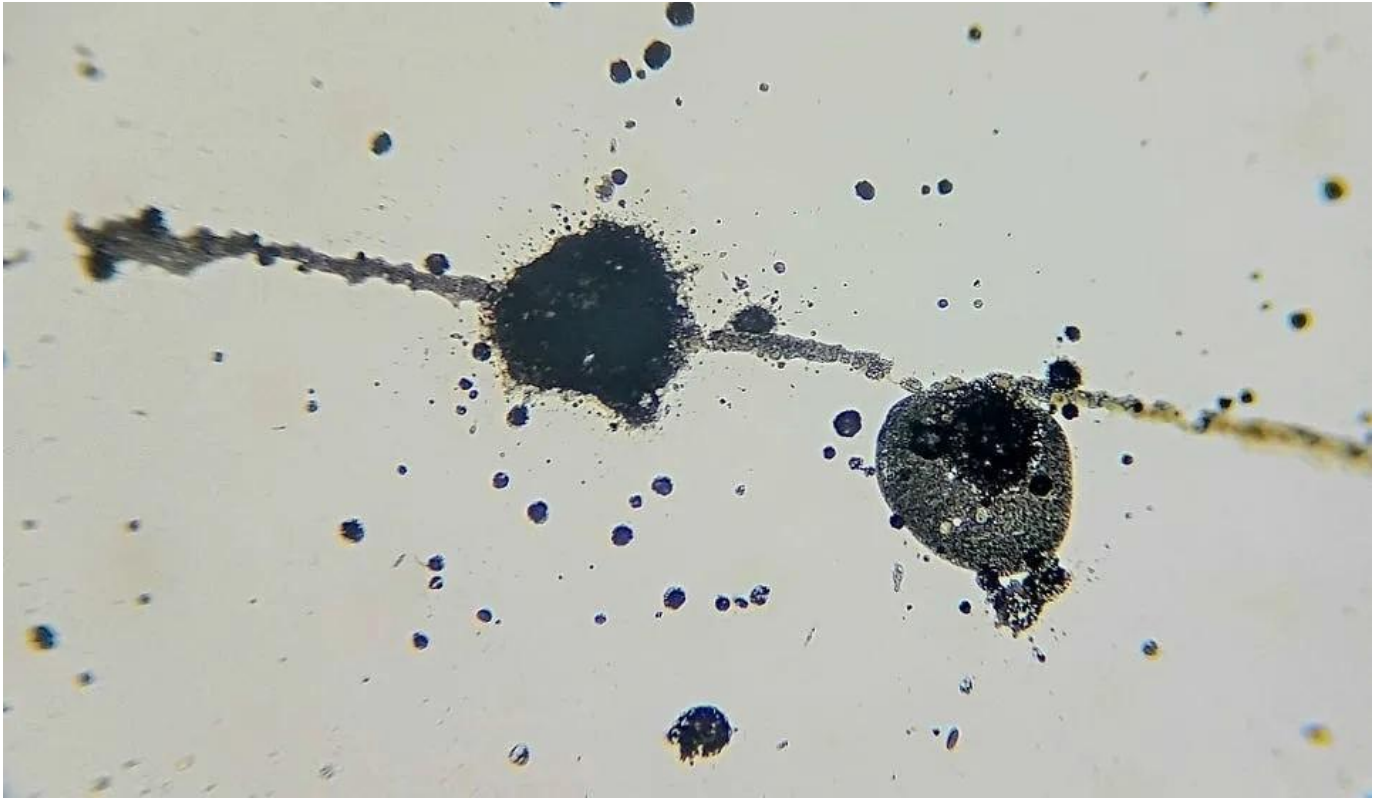
Some shattered glass. Poetic.



A jumble of shards. Look at the sharp edges, the cracks, the points, the fragments, the dirt, and how they all come together.

## HonorableMentions

I overheated some Copper Sulfate crystals and they decomposed (slightly hideously) into Copper Oxide. It was a subpar gallery, and the images were a bit contrasty, but they still deserve a shoutout.



As if I caught the explosion in motion. Look at the left dot bursting, the dark shrapnel it spewed out, the right spot splattered and sunk, the line going through the middle. It's a failed run, a destroyed specimen, but do you not see the beauty in this?

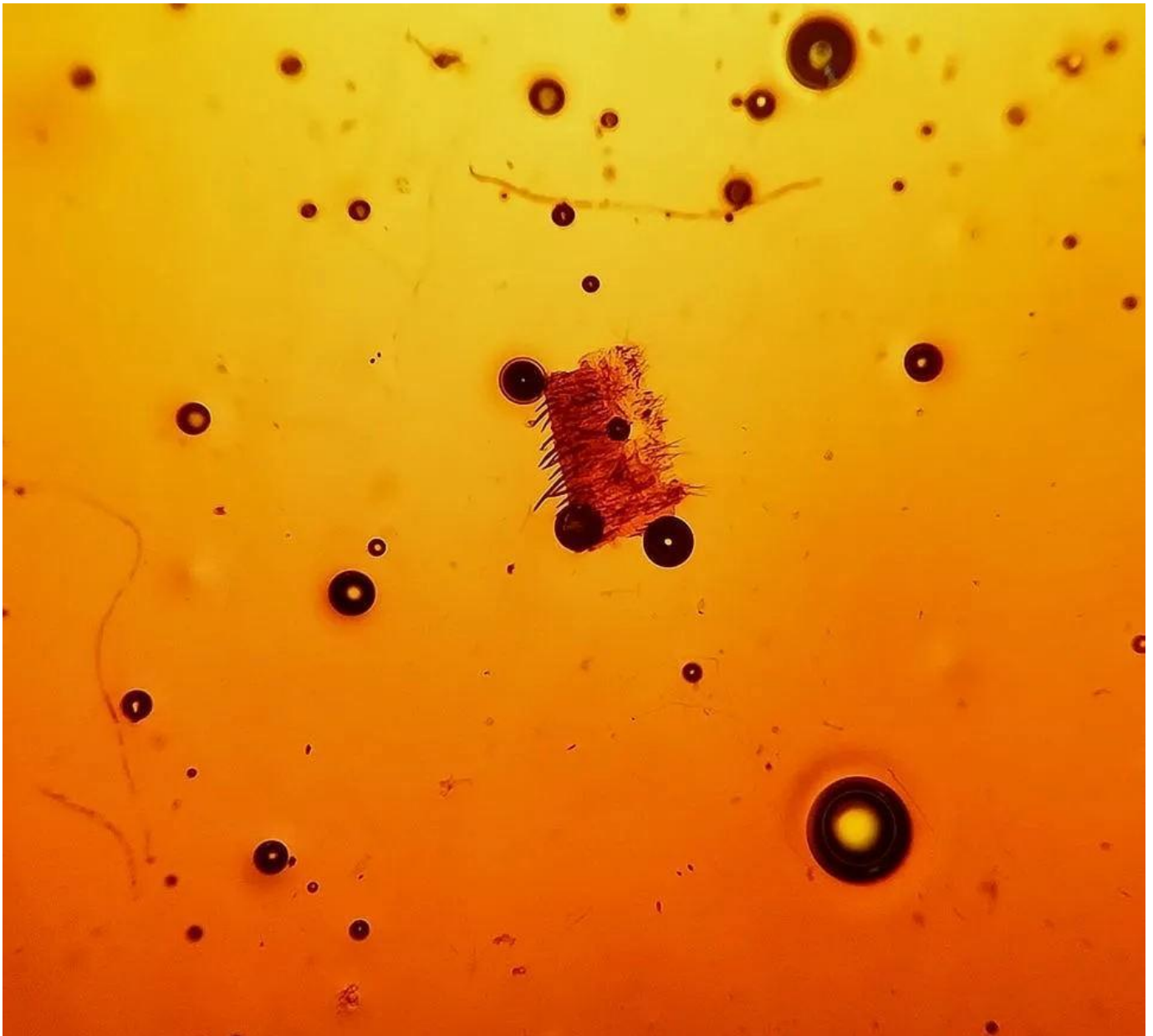
The week before last I couldn't make time for a post, so my discord-friend Andy Chatman (macnmotion) kindly filled in for me with with amazing video. Thanks again to Andy!

 International Marine Plankton BioBlitz 2024

YouTube Channel [Thai Microcosmos](#).

## Picture of Month(s)!

Hard pick. These have been two months of steadily good runs. However, if I have to give out my heart, I'll give it to



The picture is just so bright, colorful, and perfect. Everything about this picture- the background, the colors, the subject- is perfect. This goofy little guy is my friend, and I love making friends.



All images were viewed with a compound light microscope at 40x total magnification unless stated otherwise in the image description. Images were taken with a midrange phone camera, cropped, and adjusted.

For [more wonderful images](#), feel free to browse my [Medium Profile](#).

Published in the April 2025 issue of *Micscape* magazine.