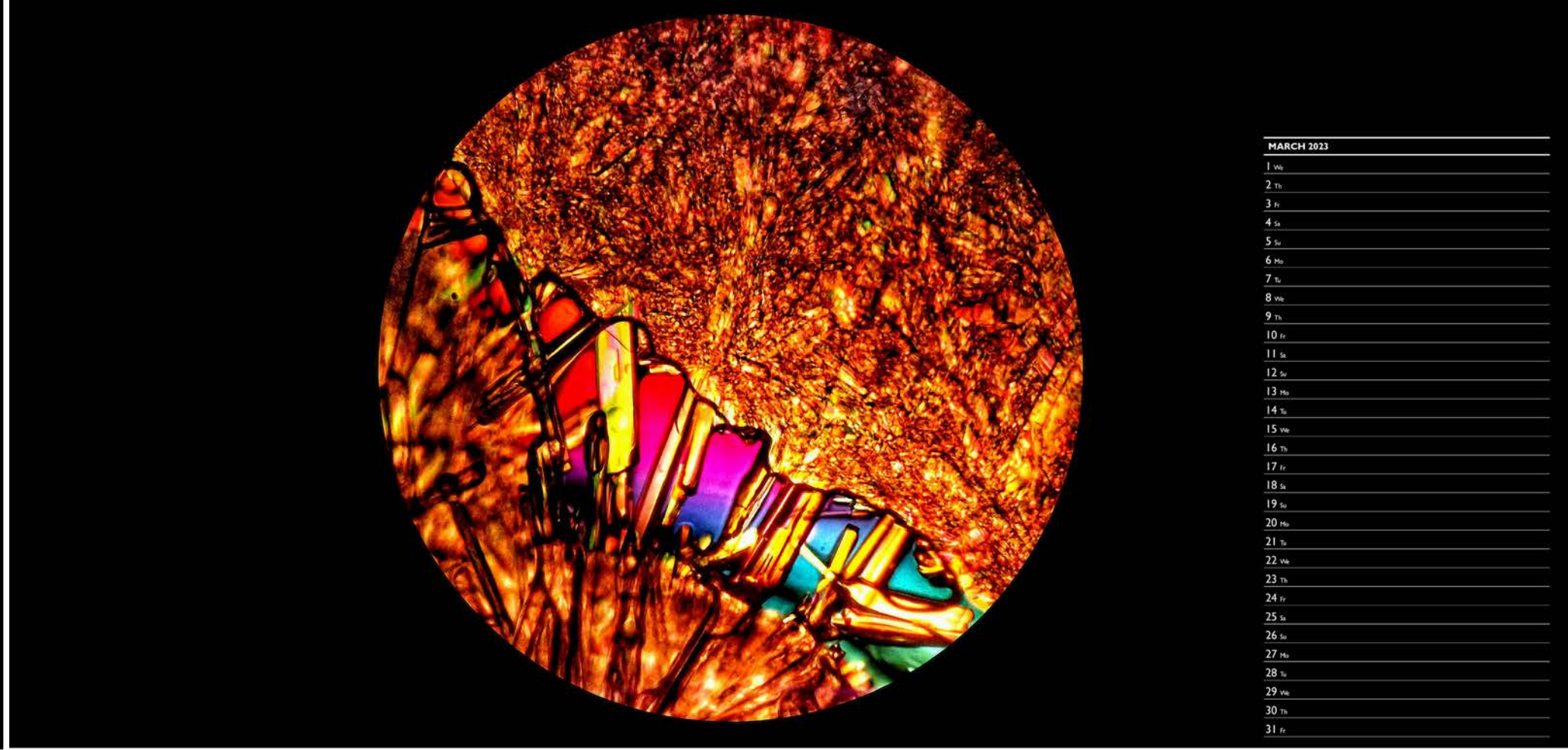


Pine stem
Transverse section of a Pine stem showing resin duct. Equipment Used: Brightfield image using a 5megapixel digital eyepiece camera on a Wild M20 Research microscope. Michael R. Gibson, Northamptonshire Natural History Society & Royal Microscopical Society. Image Credit: Prepared Biol slide by the late John Webb.

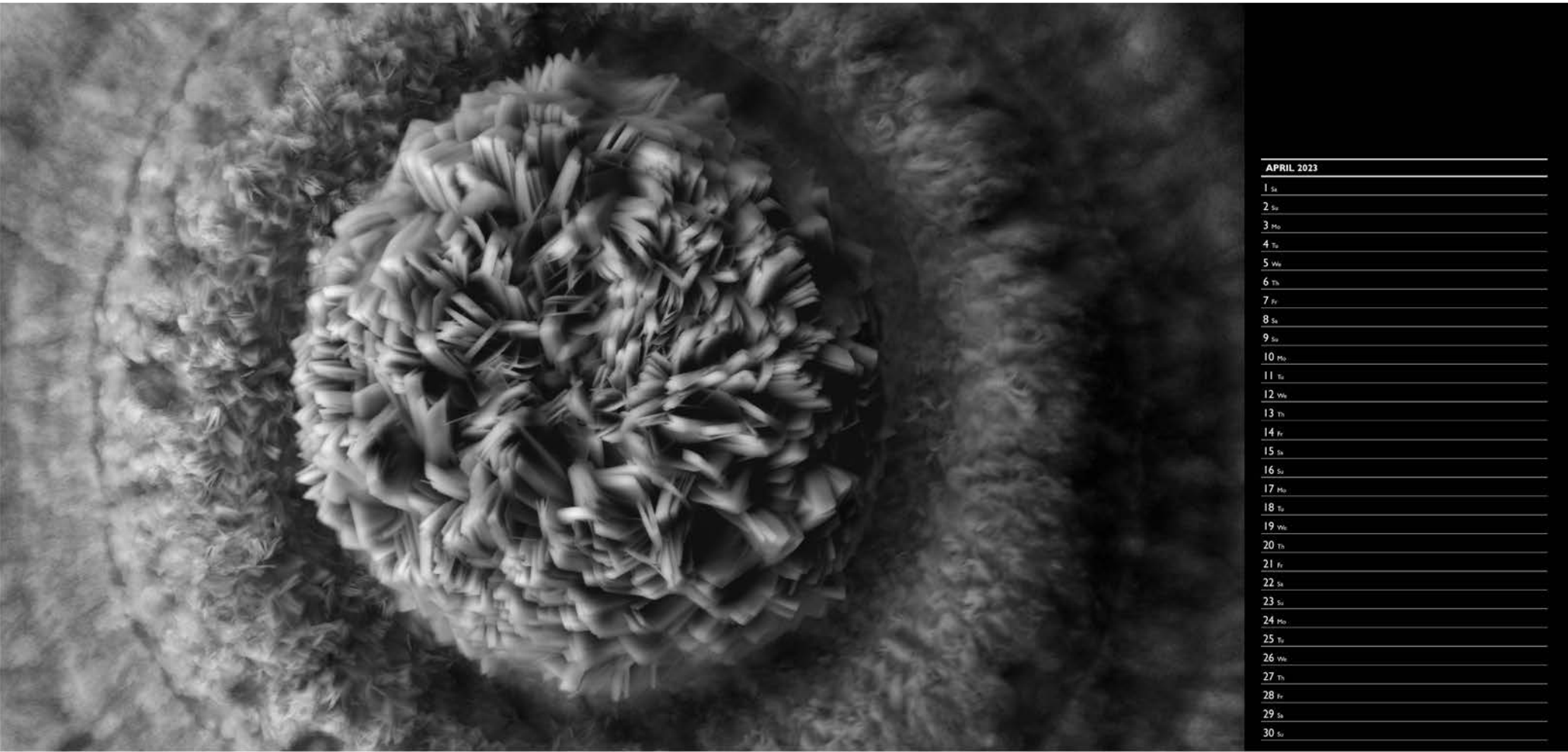


Fungi in spider web
Colourized SEM image of a fungi colony found in a spider web. A special collection method was applied to preserve the tension and the shape of a spider web as well as to allow for sample mounting. The sample was coated with 7nm of platinum on both sides. Image processed and colorized with use of Mountains Map software. Equipment Used: Quorum Q150V S Plus coater; Tecan Amher FIB-SEM. Anna Wolkiewicz, Quorum Technologies.

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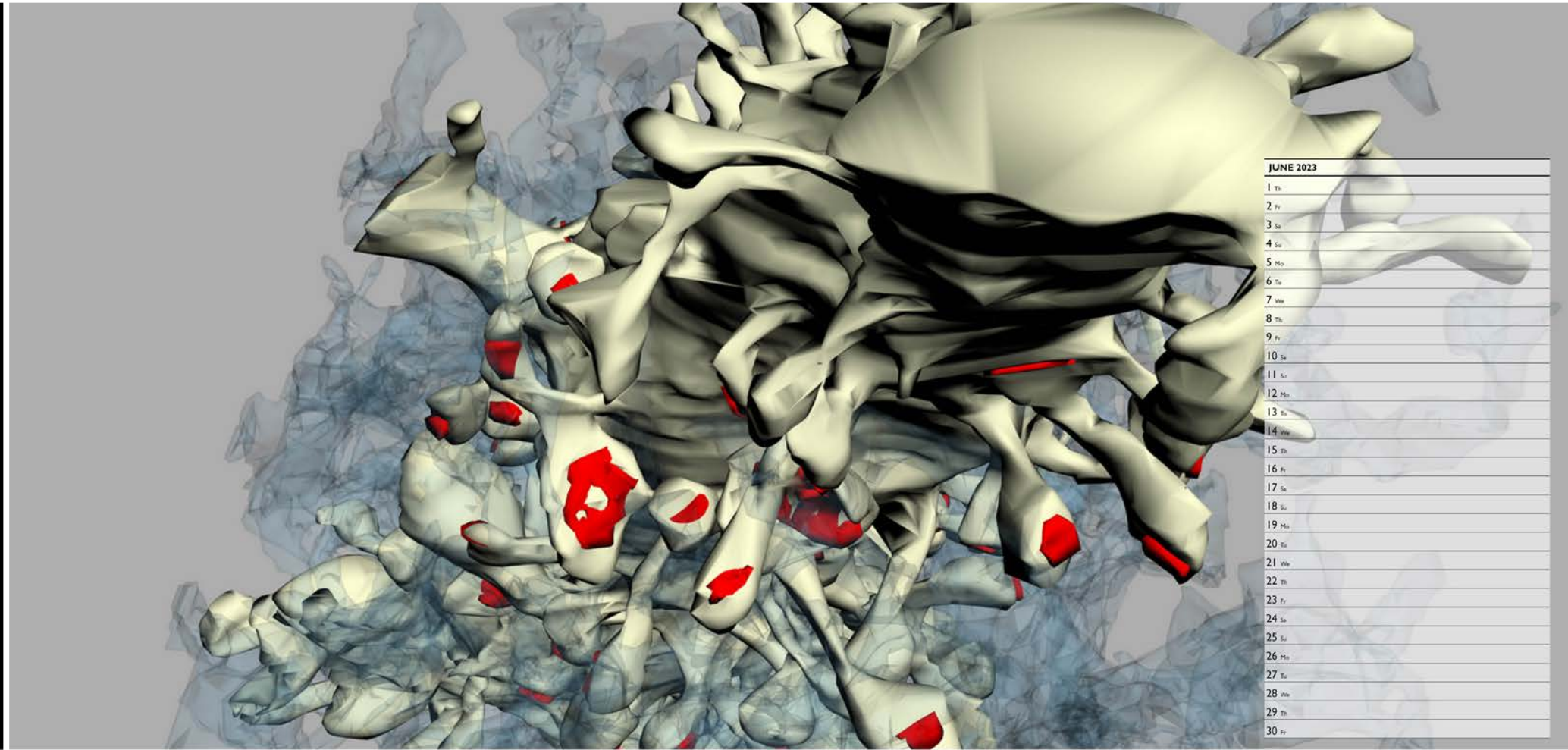
MgSO₄ crystals (recrystallized from Epsom Salt)
Viewed under a total magnification of 100X using diascopic C-Pol with variable compensation. Equipment Used: Leica DM4000M microscope with Xiaomi MI A3 camera. Slava SGO Koshovyyan.



Hydroxyapatite Chrysanthemum
A multilayered polycrystalline hydroxyapatite hemisphere grown in a diffusion-mediated mode. Equipment Used: Hitachi S-3400N SEM, stacking of three images (BSE-TOPO). Vladimir Shalovskii, St. Petersburg State University.



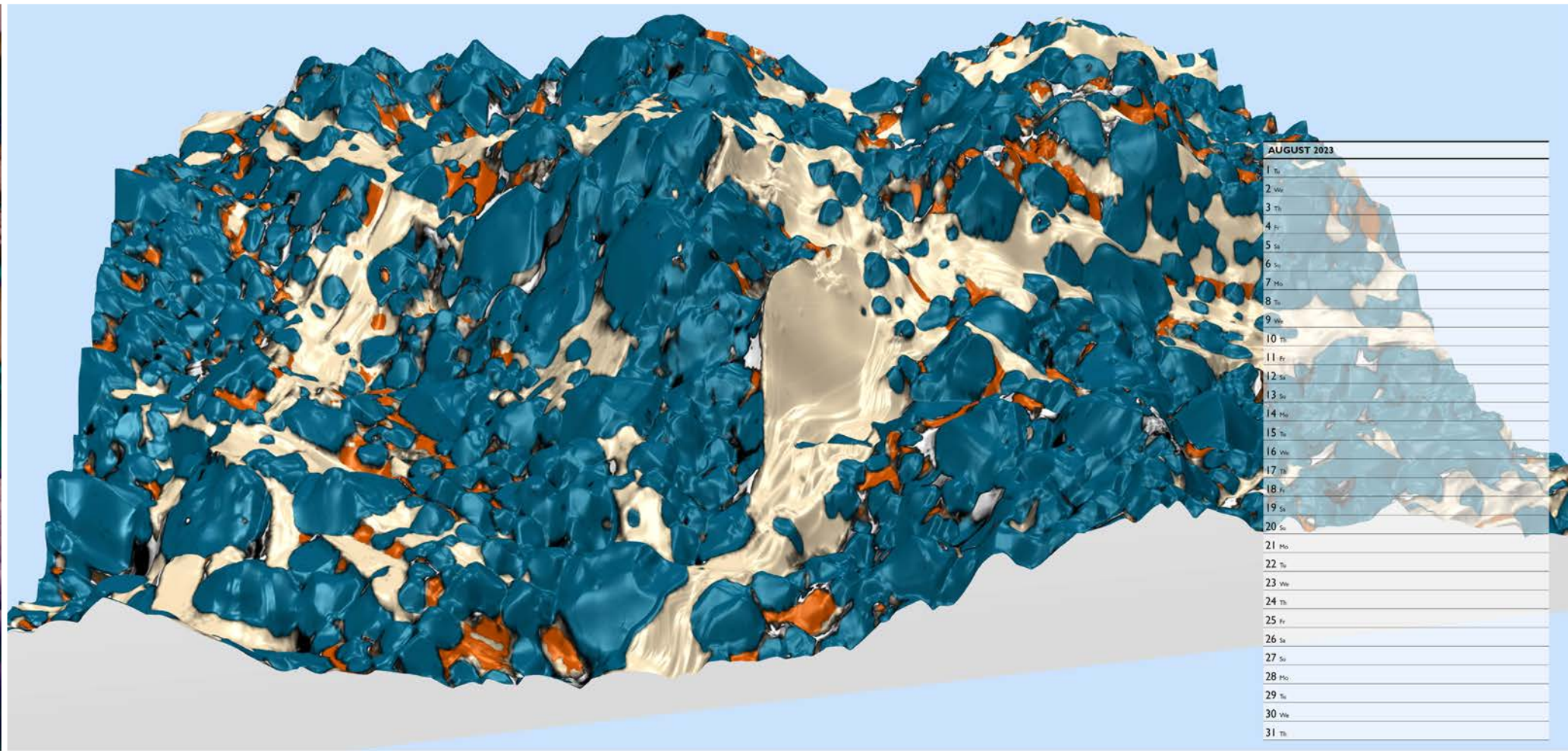
Jumping Spider
Side view of a jumping spider. Equipment Used: Dead, dried black spider was prepared for light sheet microscopy. Data acquisition based on autofluorescence alone using UltraMicroscope Blaza™. Rendering was done using Inaris. Simon F. Meitz, LaVision BioTec, a Mitihny Biotech company. Image Credit: Leo Bornemann, Tobias Jozanski, Simon F. Meitz.



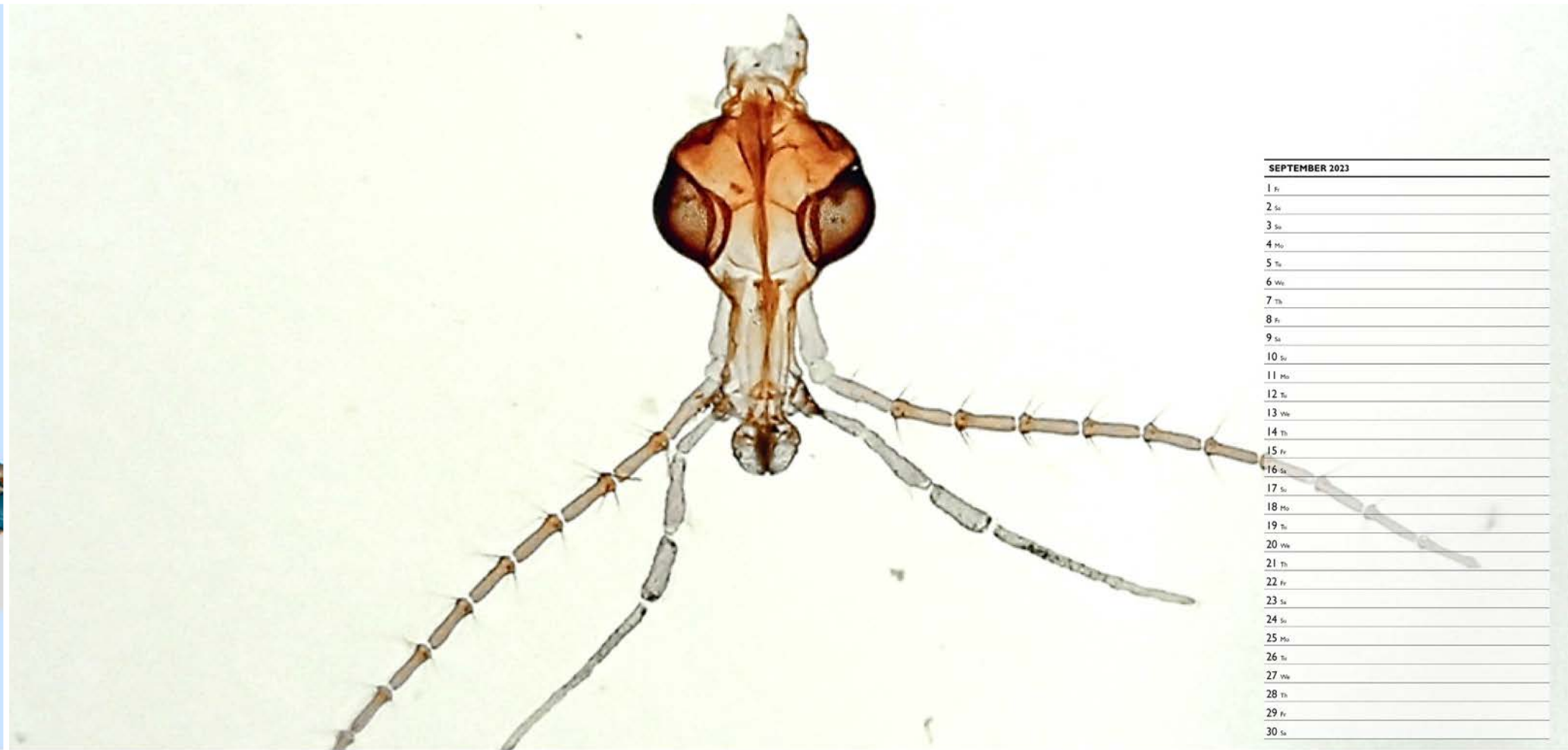
Still life of cerebral cortex
Dendrite of a pyramidal nerve cell from cerebral cortex surrounded by a glial network. On numerous drumstick-like dendritic spines, red-marked synaptic contacts are visible. Synapses are sites of electrochemical transmission of information signals and together with dendritic spines represent important structures for learning and memory formation. The image is a 3D reconstruction resulted from serial electron microscopy. Scale cube ~ 0.1 µm per side. Equipment Used: computer-aided serial electron microscopy. Josef Spáček, emeritus professor of pathology, Charles University Hospital, Hradec Králové, Czechia.



Chemical Flower
A chemical cocktail smeared on a glass slide self-assembles into a large number of convective cells. Within each cell there is a point called a nucleation site from which crystallization occurs via self assembly. This is a close up of one of the cells. The crystalline film itself is colorless and translucent to the unaided eye; however, when viewed through polarized light and using a retarder, an exquisite floral-like formation is revealed. The cocktail consists primarily of ammonium iron sulphate. Equipment Used: Olympus B5Si. Karl Gellert, Art of Science Photography.



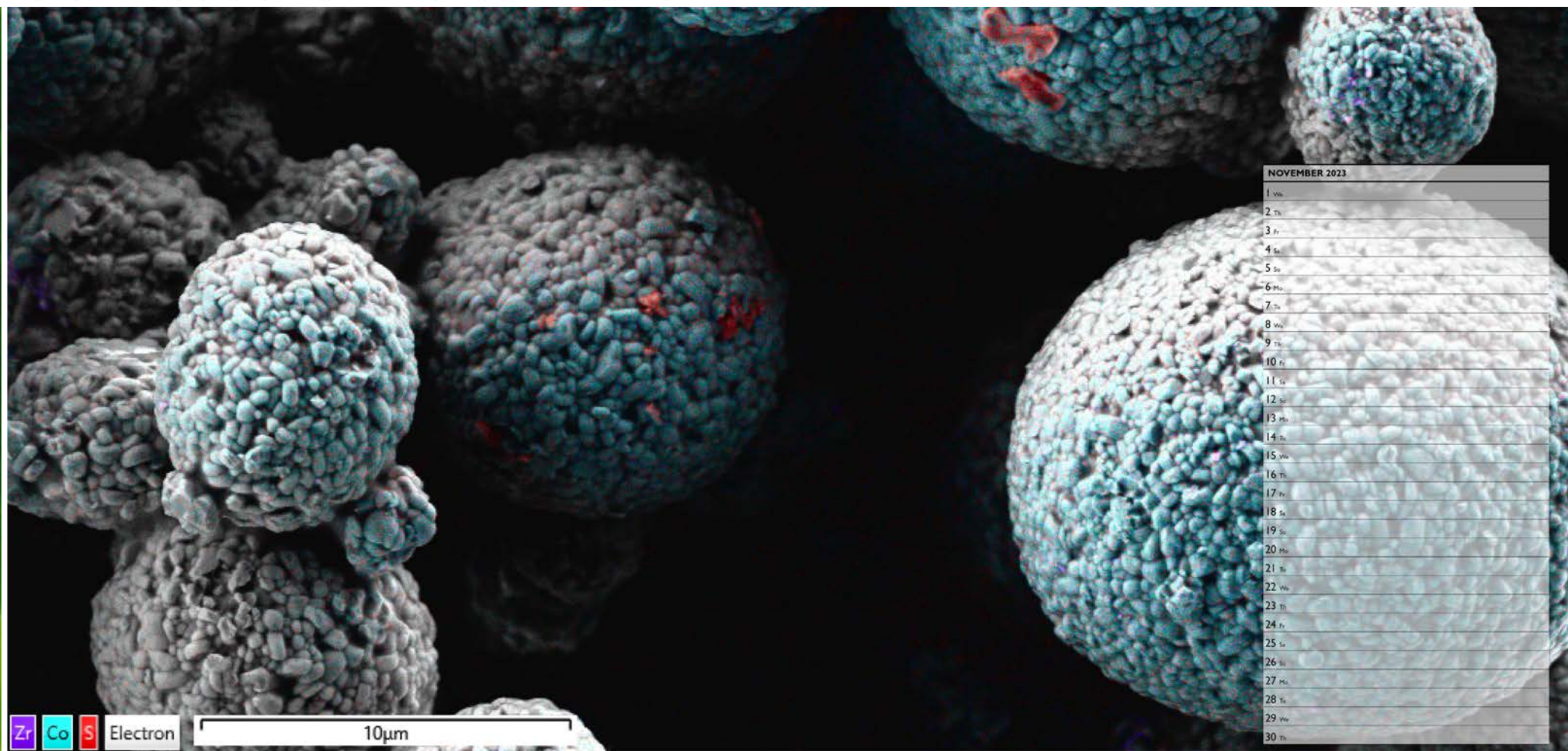
Mountain Valley
3D model of surface topography with an overlay of chemical composition on a Cobaltite sample generated with MountainsSpectra™ software. Equipment Used: JEOL SEM IT700HR and JEOL EDX system + SPM-EVIEW™ Map software powered by "Mountains". Digital Surf in collaboration with JEOL (France). Sample courtesy of Emmanuel Guillemin (CRISMAT) and Jean-Claude Meunier (JEOL France).



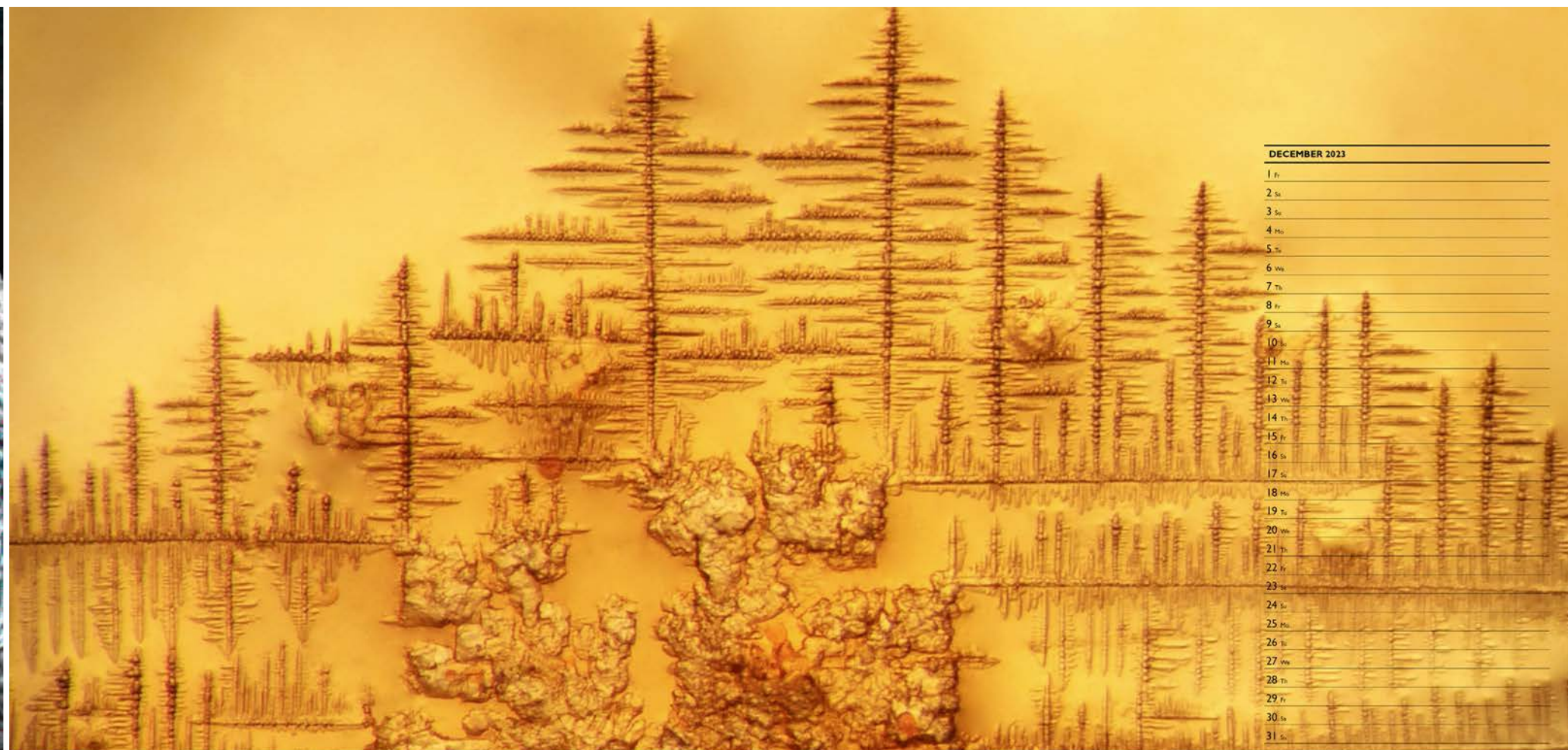
Head of cranfly
Antique slide, gifted to the Royal Microscopical Society in 2022. Imaged under a folding Swift microscope, which dates back to the early 20th Century. John Hanchison.



Avocado dream
A metastasis cancer cell topography in 3D. Studying the morphology and mechanical properties of the cells can help find effective ways of targeting for precise drug delivery. The height of the surface was colour-coded in shades of green, with the topmost part being cut off by brown. All colours were sampled from a picture of a yummy avocado. Equipment Used: LEOscope AFM-in-SEM. Radek Dán, NeuroVision Image Credit: Marek Cerman, St. Anne's University Hospital Brno, Czech Republic.



NPCH11 battery electrode precursor powder
SEM-EDX chemical analysis of battery electrode precursor powder. Equipment Used: Gemini 460 and Oxford Instruments Ultim Extreme windowless EDS detector. Dr. Lucie Spasovska. Image Credit: Lucie Spasovska and Alexandra Stamatopoulou.



An Enchanted Forest
Soy isocoumarin crystals in incandescent light, magnified 25x. Equipment Used: TriTech dissecting stereo-microscope with Lumix DMC-ZS60 camera. Rostislav Kozminskiy, Environmental Scientist.

