

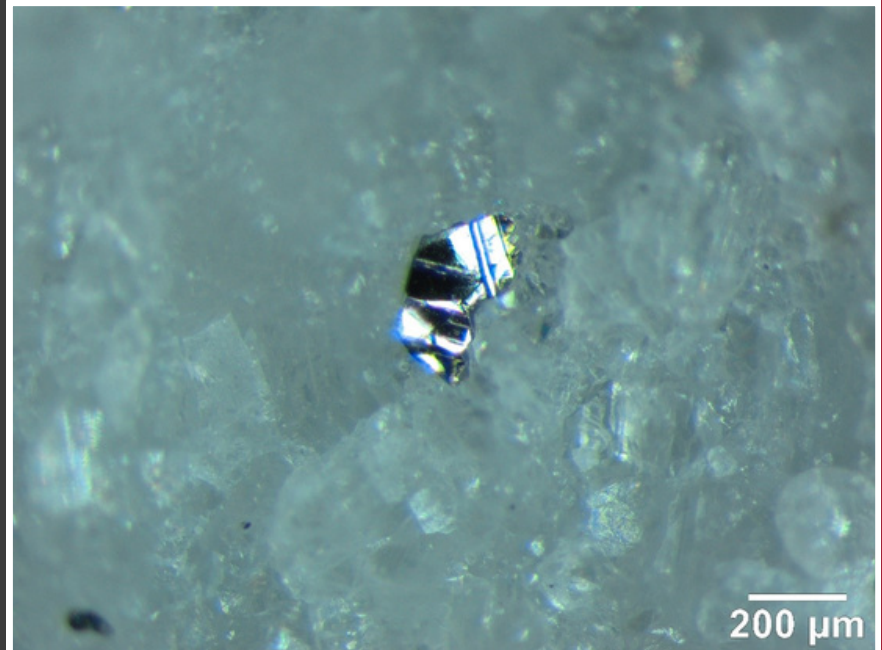
Picture this:

75 million years ago, before the ending of the Cretaceous period, the rocks in this region underwent a remarkable transformation in a geological pressure cooker, heated by fluids escaping from molten rocks intruding the continental crust of Southern California. At temperatures exceeding 500 °C (over 900 °F), a concerto of chemical reactions gave birth to a myriad of new minerals.

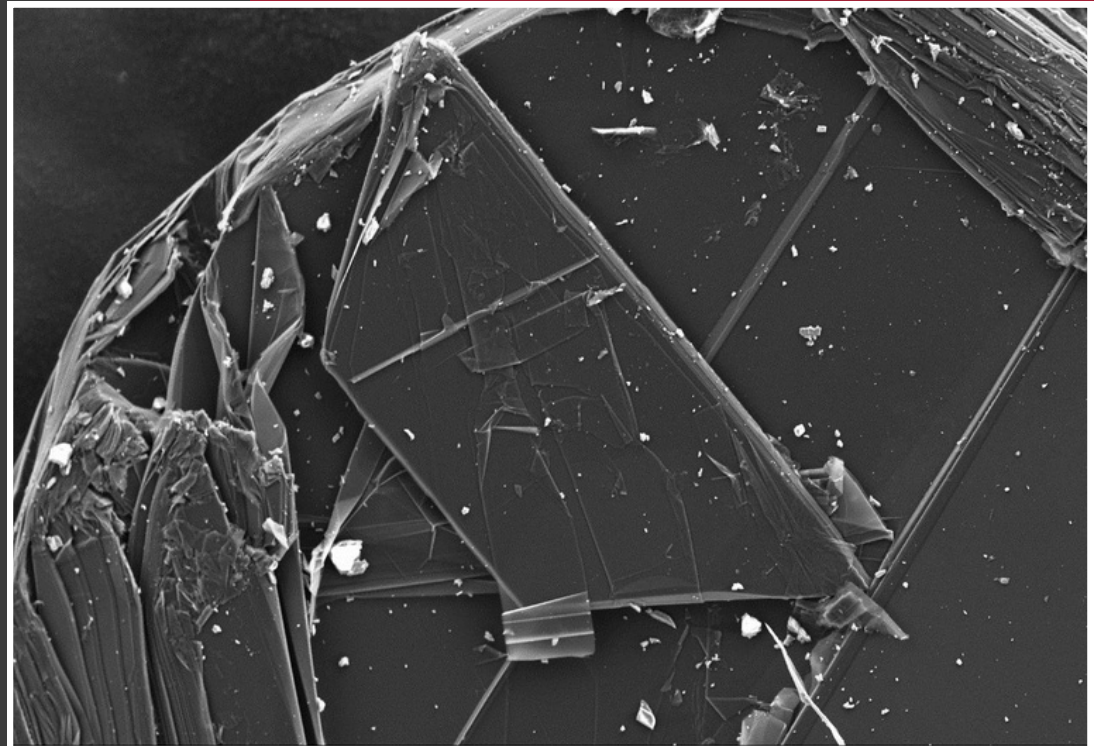
Our dedicated students have seized the opportunity to explore this hidden geological marvel, each conducting a mineral study on their individual rock samples. Armed with cutting-edge analytical equipment at Caltech, they have unraveled the secrets of these rocks, characterizing the diverse mineral constituents with precision.

Prepare to be amazed as we showcase some of the stunning photographs captured by our students using the scanning electron microscope. Join us in celebrating their passion for geology and the remarkable insights gained from this exploration of the geological treasures in our own backyard, from Glendale to Burbank.

Stay tuned for more updates and dive into the geological wonders that unfold in the hands of our talented Honors Geology students. Don't miss this chance to witness the incredible results of their exploration – it's a journey through rocks that you won't want to miss!



A graphite crystal set in the whitish matrix of calcium-magnesium carbonates and silicates from a recrystallized limestone outcrop in North Burbank. The soft nature of graphite is evident in this microscope image, showing its susceptibility to folding under the dynamic movements of the Earth's crust.



20 μm

Mag = 1.00 K X EHT = 10.00 kV WD = 6.2 mm Signal A = SE2 Date :27 Nov 2023

This Scanning Electron Microscope image captures details of a graphite flake from the same rock. The nano-thick sheets of carbon reveal intricate folding in the top left, while super-thin peeling is evident in the lower center.