“Cysteine Rose” Wins Electron Microscopy Image Contest

Italian Institute of Technology’s Andrea Jacassi is the grand prize winner of the Sixth Annual 2016 Thermo Fisher Scientific Electron Microscopy image contest for his “Cysteine Rose” image. The image, acquired using the FEI Helios NanoLab 650 DualBeam, focused ion beam/scanning electron microscope (FIB/SEM) and was selected by a vote of Thermo Fisher employees from more than 270 entries. Jacassi will receive a Canon EOS 80D DSLR camera package.

“This image shows an arrangement of cysteine crystals that bears a remarkable resemblance to a rose, though one with petals less than 20 μm in size,” said Jacassi. “My work focuses on the use of sophisticated FIB techniques to fabricate nanostructures for biological sensors. I later added the red color to the image to enhance its beauty and increase the affinity and memory of a rose.”

Cysteine is a proteinogenic amino acid with a well-known chemistry and important biological implications, making it a useful chemical component for testing molecular sensors. When cysteine precipitates from solution it forms crystals, which, in the image aggregated in a spiral shape mimicking the petals of a rose. Jacassi is a PhD student at the Italian Institute of Technology, working in the Plasmon Nanotechnology group led by Francesco De Angelis. He received his Master’s degree in Astrophysics and Cosmology from the University of Bologna.

More information:
https://www.fei.com/image-contest/