



LOOK AGAIN... LOOK AGAIN...

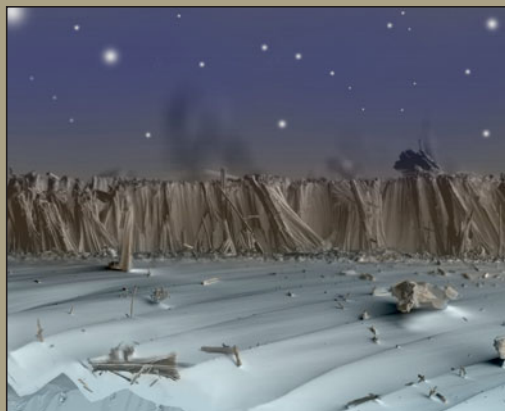
Just for Fun!

See if you can find the 8 differences in each set of images.

On the beach at night, alone

A composite of three scanning electron microscope (SEM) images of a carbonized silicon nanowire array taken at different focal lengths. Utilizing the NovelX mySEM low-voltage imaging system, near- and far-range images were taken with standard backscatter collection while the middle-range image was taken using the Topo mode in order to capture the relief of the silicon "dunes." The three images were combined and colored in photoshop. This scene takes its name from the Walt Whitman poem which describes the interconnected nature of the Universe, and the "vast similitude that interlocks all." While we work on the nanoscale, our efforts have an impact on the way humans interact with the world on the macroscale. Likewise, we find reflections of our macro world form in the shapes and forms of the nano one.

John Alper, University of California–Berkeley, USA



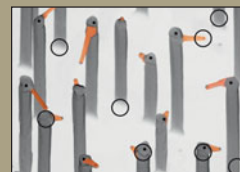
Dark side of the blue moon

Optical micrograph of a mesoporous thin film of tin-oxide nanoparticles. The film was prepared by spin casting a solution of the nanoparticles and a surfactant (Pluronic F-127) in THF (tetrahydrofuran) at 5000 rpm for 1 min, followed by annealing at 400°C for 30 min. The nanoparticles are ~2 nm in diameter, while the largest craters in the micrograph are ~40–50 μm across. Image dimensions are 720–540 μm.

Lena Trotochaud, University of Oregon, USA



June 2014 answer key



The answers will be in the October 2014 issue.

Images on the top were submitted to the Materials Research Society "Science as Art" competition. Images on the bottom were modified in Adobe Photoshop for this "Look Again" activity.