



# LOOK AGAIN... LOOK AGAIN...

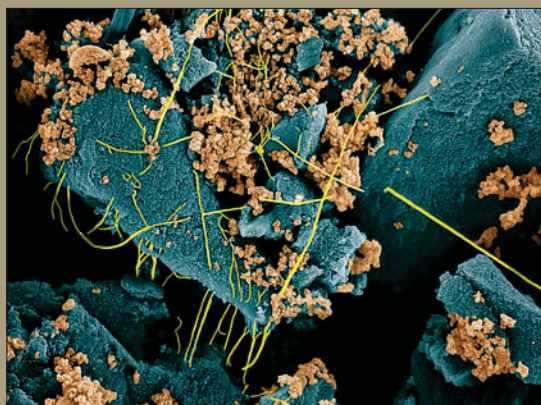
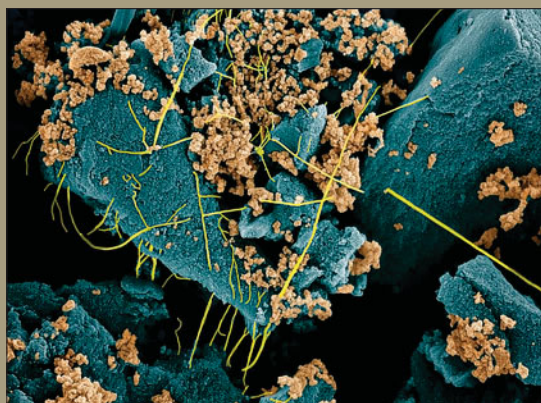
*Just for Fun!*

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

## Decorative nanocoal

The colorized scanning electron micrograph shows a freestanding composite electrode based on activated carbon particles (blue) with dimensions in the micrometer range with a high surface area (ca. 1800 m<sup>2</sup>/g) decorated with nanoscale carbon black particles (beige) to improve electrical conductivity. Ultrafine poly(tetrafluoroethylene) (yellow) nanofibers hold it all together.

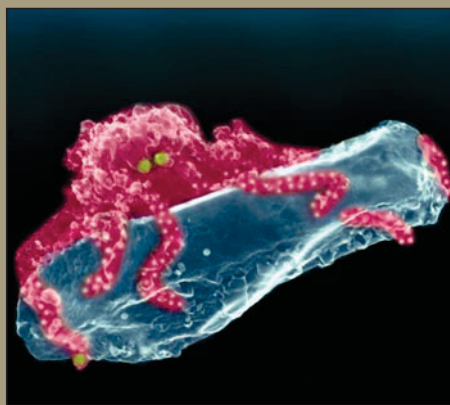
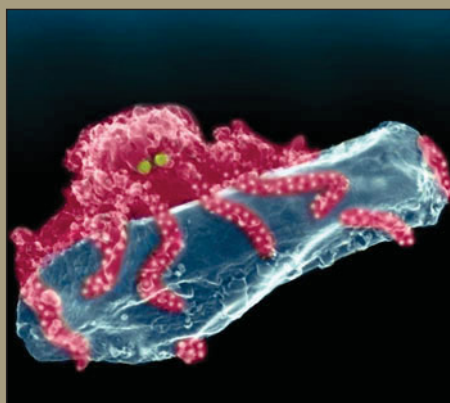
**Nicolas Jäckel**, Leibniz Institute for New Materials, Germany



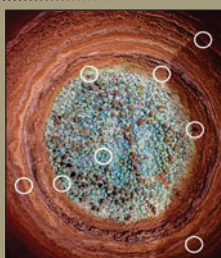
## Sea monster and the sub-nanoleague submarine

A STEM secondary electron image of Fe<sub>3</sub>O<sub>4</sub> grown on a Tb-doped lanthanum phosphate microrod is depicted as an octopus enveloping a submarine vessel (Adobe Photoshop Elements). The magnetic iron oxide allows controlled delivery of the phosphor materials for use as biomarkers.

**Brian Sneed**, Oak Ridge National Laboratory, USA



February 2017 answer key



Answers will be published in the June 2017 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.