

FIRST PLACE

"A blue/UV laser pointer was coupled into the handle of a cup, which guides the light and feeds it into a fluorescing liquid that lights up in green colors. The surrounding lab environment was darkened completely to highlight the effect. The image was taken in the lab at Leibniz-IPHT Jena."

> —**Tobias Tieß**, Leibniz-IPHT, Germany





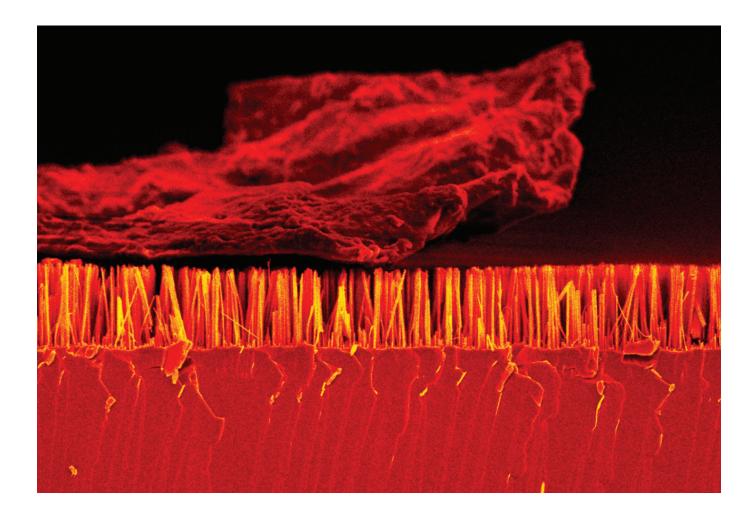


Congratulations to the winners of OPN's 13th annual After Image photo contest!

For this year's contest, OPN received 49 intriguing entries. We thank the panel of judges who provided insight on those images and helped select the winners: **Mihaela Dinu**, LGS Innovations, USA; **Dmitry Dylov**, Skolkovo Institute of Science and Technology, Russia; **Alexandre Fong**, TruTag Technologies, USA; **Bob D. Guenther**, Duke University, USA; **Brooke Hester**, Appalachian State University, USA; **Nick Lambert**, Precision Optical, USA; **Giovanni Milione**, NEC Laboratories America, USA; **Arlene Smith**, Avo Photonics Inc., USA; and **Stephen R. Wilk**, Xenon Corp., USA.

You can see all of this year's contest entries online at www.osa-opn.org/contest/2018.

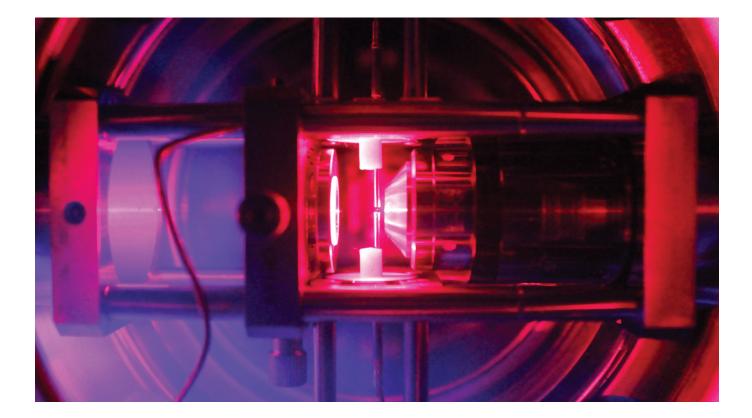




THIRD PLACE (tie)

"The image shows a chunk of dust on a silicon substrate with a nanowire-like structure on the surface—which together resemble a meteorite falling on a forest. The surface is coated with chromium for better resolution in the scanning electron microscope (SEM)."

-Bingtao Gao, Univeristy of Iowa, USA



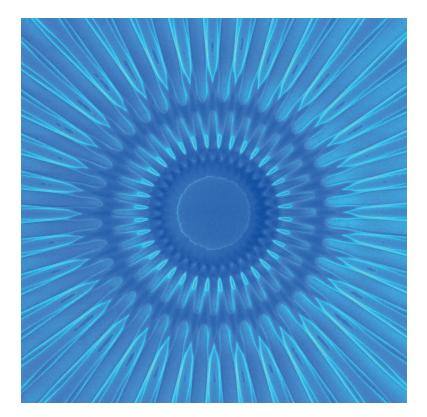
THIRD PLACE (tie)

"Tightly focused light from a microscope objective (right) forms an optical tweezer, able to trap and levitate a single silica nanoparticle in vacuum. Two electrodes apply an electric field that allows measurement of the particle's charge and mass, turning the instrument into a very sensitive force detector. The purple glow on the left comes from a plasma generated in the vacuum chamber, to control the net charge of the particle down to the single-elementary-charge level."

> --Francesco F. Ricci, ICFO-Institute of Photonic Sciences, Spain

Visit www.osa-opn.org/contest/2018 for a look at all the submissions to this year's After Image photo contest.





HONORABLE MENTION

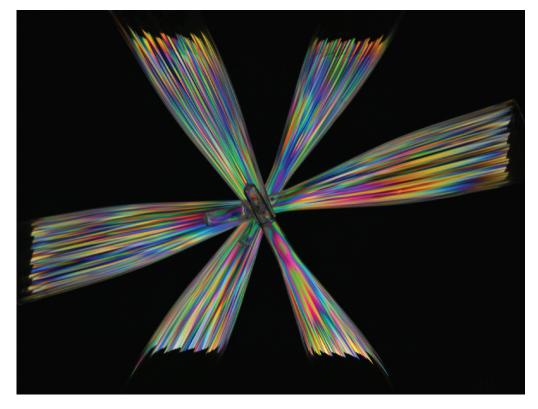
"This SEM image is the center of a resolution test for optical lithography (ultraviolet) using vacuum contact. While the straight lines were lost at the submicron scale of the pattern's center, a beautiful interference pattern was created."

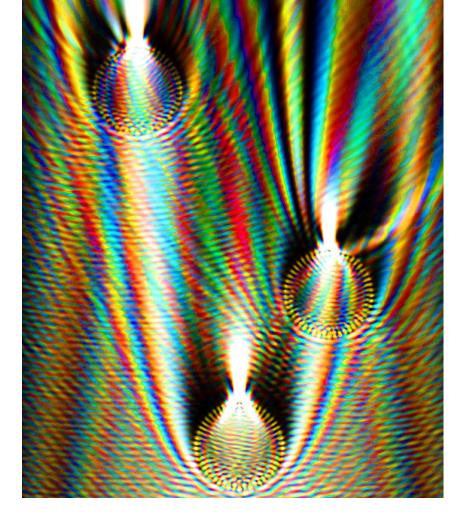
> *—Alexander C. Walhof,* University of Iowa, USA

HONORABLE MENTION

"Birefringent flower: an arrangement of plastic flutes between a linear and a circular polarizer. The colors represent wavelength-dependent retardance paths that rotate the polarization orientation through different angles."

> —**Samuel F. Pellicori**, Pellicori Optical Consulting, USA





HONORABLE MENTION

"Three spheres trapped in white light. Calculated intensity as particles are added reveals that each of the particles gives rise to a new power maximum near the place where the next particle settles."

> —**Shai Maayani**, Massachusetts Institute of Technology, USA

HONORABLE MENTION

"The spiral bow: as laser light scatters in a glass cylinder, the light rays split and bounce back and forth, making the long-term prediction of the rays' trajectories very difficult."

—Albetro A. Tufaile, Soft Matter Lab, EACH-USP, Brazil



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