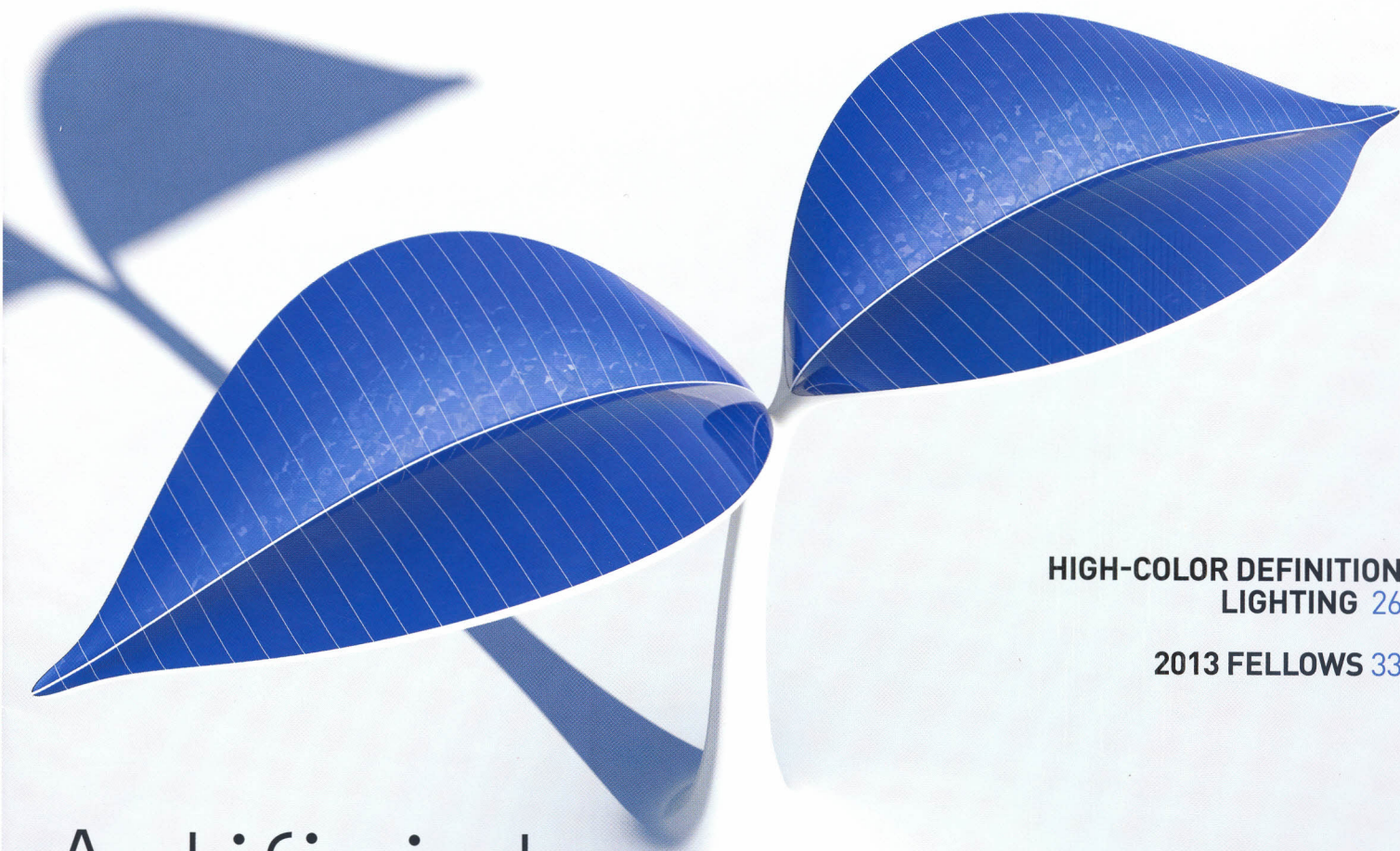


OPTICS & PHOTONICS NEWS



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Artificial Photosynthesis

SAVING SOLAR ENERGY FOR A RAINY DAY



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Artificial systems that mimic photosynthesis use water to create a stream of hydrogen that can be burned as fuel.

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18 Artificial Photosynthesis: Saving Solar Energy for a Rainy Day

In an effort to keep up with the world's growing energy needs, researchers consider a production method that is billions of years old—photosynthesis. Artificial photosynthesis could provide us with a way to capture the sun's energy and store it for later use. *Lynn Savage*

26 High-Color Definition Lighting with Broadband LEDs

With crisper color and more nuanced shading, broadband color and full-spectrum white LEDs are helping to extend the applications of solid-state lighting—into photography, material inspection, art and shop displays, and even Hollywood movies. *Faiz Rahman*

33 Meet OSA's 2013 Fellows

OSA is pleased to announce the 2013 class of Fellows, a distinction awarded to OSA members who have made significant contributions to the advancement of optics and photonics. From among the 149 candidates, 72 were selected for this honor and confirmed by the Board of Directors at its meeting in October 2012. *Kari Apter and Belinda Acre*

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COVER: Artist's concept of artificial photosynthesis. Thinkstock