PHOTONICS spectra

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## For Image Processing, More Power and More Challenges

Vision software makers must manage the data surge resulting from 3-D measurement, escalating pixel counts and more. In some ways, the machine vision market is no different than its consumer counterpart. Take, for instance, the question of megapixels. The big growth now is in 2- to 5-MP sensors, with 20+-megapixel sensors in niche markets.

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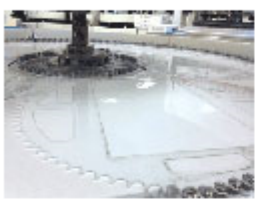
## Improving Slurry Recycling Makes Green Process Greener



A cerium oxide recycling program undertaken out of necessity has provided significant efficiency and cost cutting. The recycling process involves remixing the cerium oxide particles into a concentrate so that a reusable cerium oxide slurry is available for polishing applications.

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## UV Laser Radiation: Skin Hazards and Skin Protection Controls

The words "laser safety" bring to mind eye protection, but protecting the skin is also important. Skin-hazard descriptions and control requirements related to UV laser radiation can be found in the ANSI Z136 safety standard, the OSHA Technical Manual and the ACGIH handbook of threshold limit values. These references provide practical guidance on UV skin hazards. Controls – based on these references and on a few example calculations – can help keep UV laser users safe.

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## Diamond Enhances Laser Beams

Diamonds just might be a laser beam's best friend. A team from Macquarie University's Photonics Research Center has discovered how to increase the quality of high-power laser beams by exploiting the optics of an 8-mm diamond.

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## More News & Analysis



## Products from this Issue

### Nanosecond UV Lasers

Photonics Industries International Inc.

Combining its proficiency in intracavity harmonic generation with end-pumping diodes, Photonics Industries has introduced the DSH-355 series multifunctional diode-pumped solid-state nanosecond UV lasers.

More info >>

### IR Camera

DIAS Infrared Corp.

Made for high temperature applications in the metal industry, the Pyroview 512N infrared camera from Dias Infrared allows for non-contact temperature measurement at temperatures up to 1500 °C.

More info >>

### Three-CMOS Camera

Toshiba Imaging Systems

Toshiba Imaging has released the IK-HD5, a full HD, progressive-scan 3CMOS camera for use in color-critical applications including endoscopy, surgical microscopy, ophthalmology, infrared inspection and defense imaging systems.

More info >>

### Fiber Laser Isolators

Electro-Optics Technology, Inc.

With a monolithic design for beam pointing stability, the SLC 30W Fiber Laser Isolators from Electro-Optics Technology protect pulsed fiber lasers from back reflections during marking and engraving applications.

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