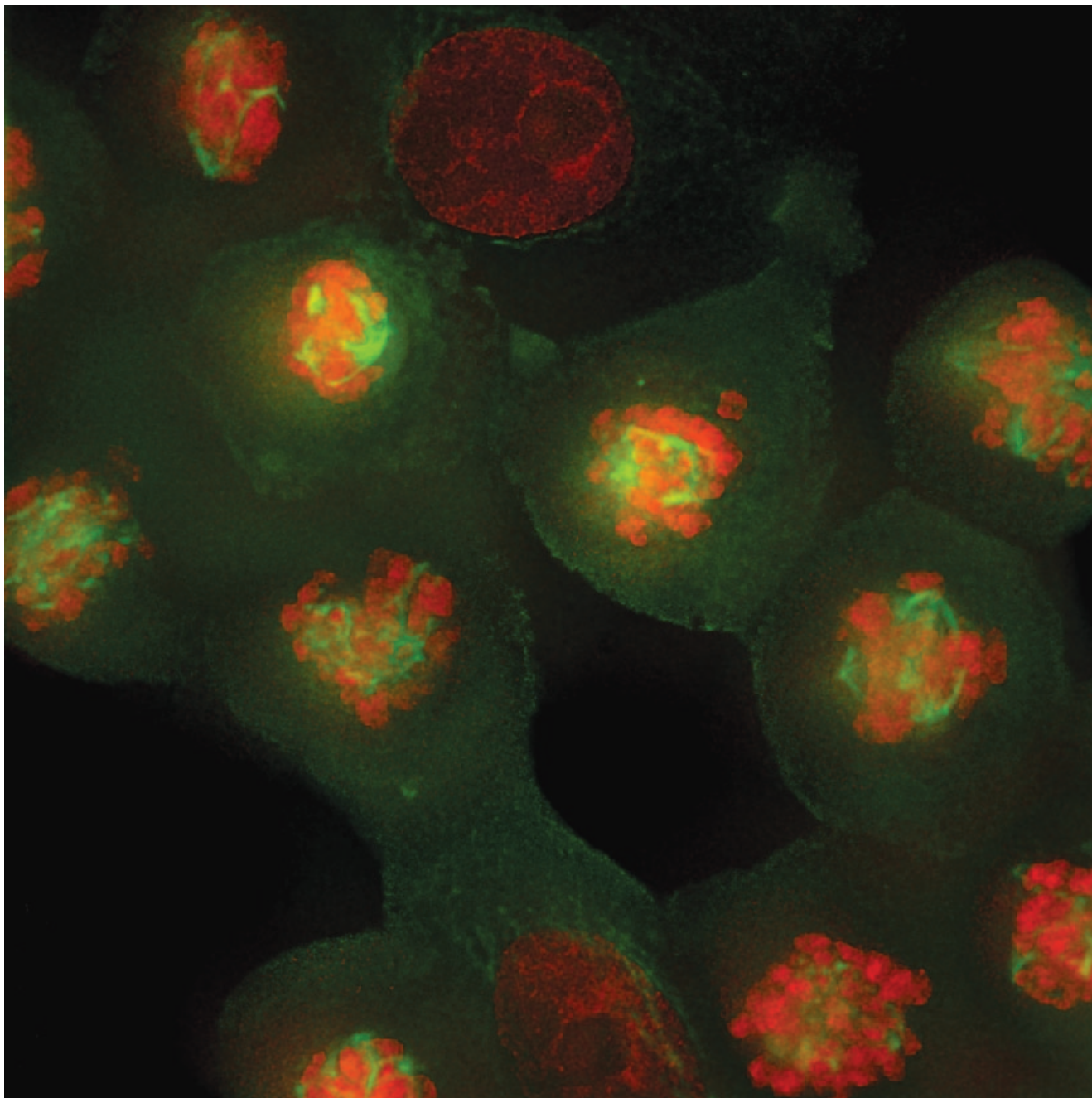


Microscopy TODAY

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Introducing the new Hitachi SU8000 UHR FESEM

Another First from Hitachi

For over 35 years, Hitachi has been a worldwide leader in Field Emission Microscopy surpassing all other manufacturers. Year after year each new product sets the industry standard for innovation, performance, and field proven reliability. The SU8000 is no exception. A new *Triple Detector System* provides more flexibility and optimization of signal detection to reveal surface information never seen before in any high resolution electron microscope. For the first time three high speed detectors separate, mix and control SE, low angle BSE and high angle BSE to reveal surface information and Z contrast only possible on the Hitachi SU8000 UHR FESEM.

Standard Feature

- Patented Triple Detector System
- Beam Deceleration for increased resolution and decreased radiation damage to the sample
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- Completely dry vacuum system, less than 30 second specimen exchange time
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- Integrated PCI image archival and image processing system
- Large analytical chamber with EDS ready hardware
- Easy operation with onscreen help functions
- Fast and accurate auto functions



Call or email today for more information or to schedule a hands on demonstration

925-218-2800 (ask for Steve) or e-mail request at sales@hitachi-hta.com

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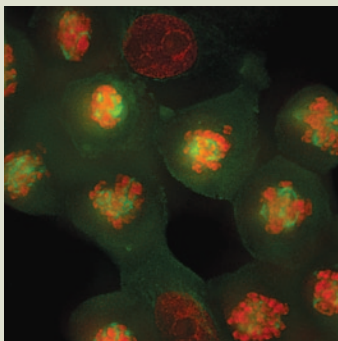
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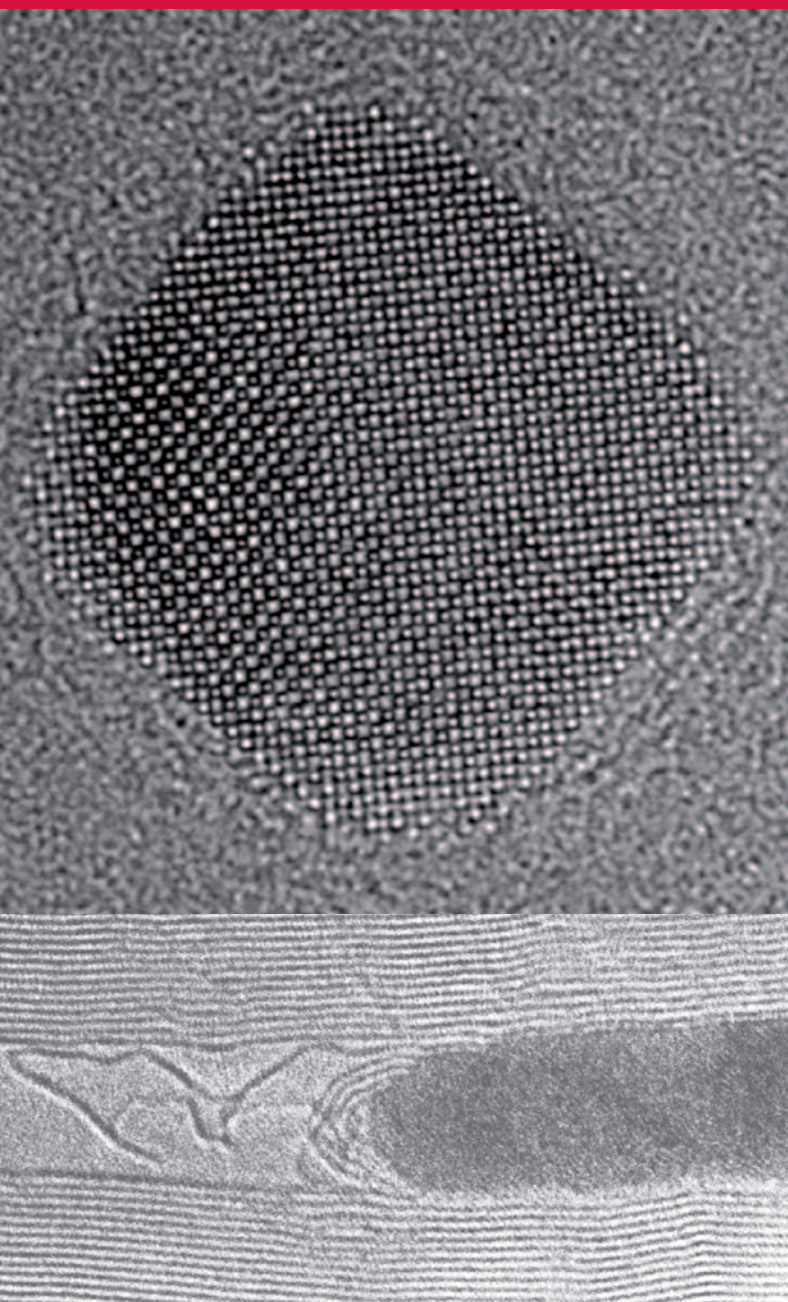


Maximum likelihood deconvolution of a fluorescence image of cultured proximal tubule cells from a pig kidney.

See article by Biggs.

Frontiers of energy research

Nanoscale solutions for global challenges



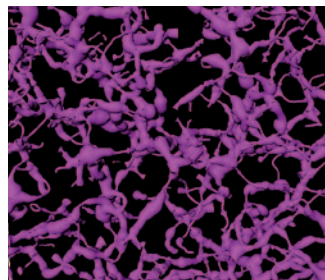
Discoveries at the atomic and nanoscales help solve challenges that affect all of us on a global scale, and FEI solutions are making a vital contribution to understanding the structure, property and function of energy-efficient solar cells, fuel cells and light emitting diodes, as well as enabling *in situ* visualization of catalytic reactions.

[See beyond at fei.com](http://www.fei.com)

Solid oxide fuel cell (left)
Kaneko *et al* NanoLetters (2007) 7(2).
Horizontal field width ~ 10 nm

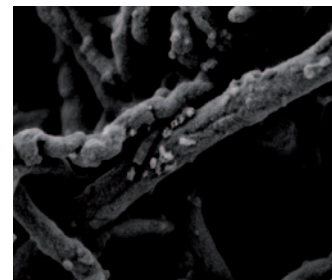
***in situ* catalysis** (below left)
Courtesy of M. Terrones, IPICT, Mexico
Horizontal field width ~ 25 nm

Solar cell



Courtesy of S. van Bavel, TU/e, Netherlands
Horizontal field width ~ 100 nm

Carbon nanotubes



Sample courtesy of R. Gauvin and C. Probst, McGill University, Canada
Horizontal field width ~ 500 nm