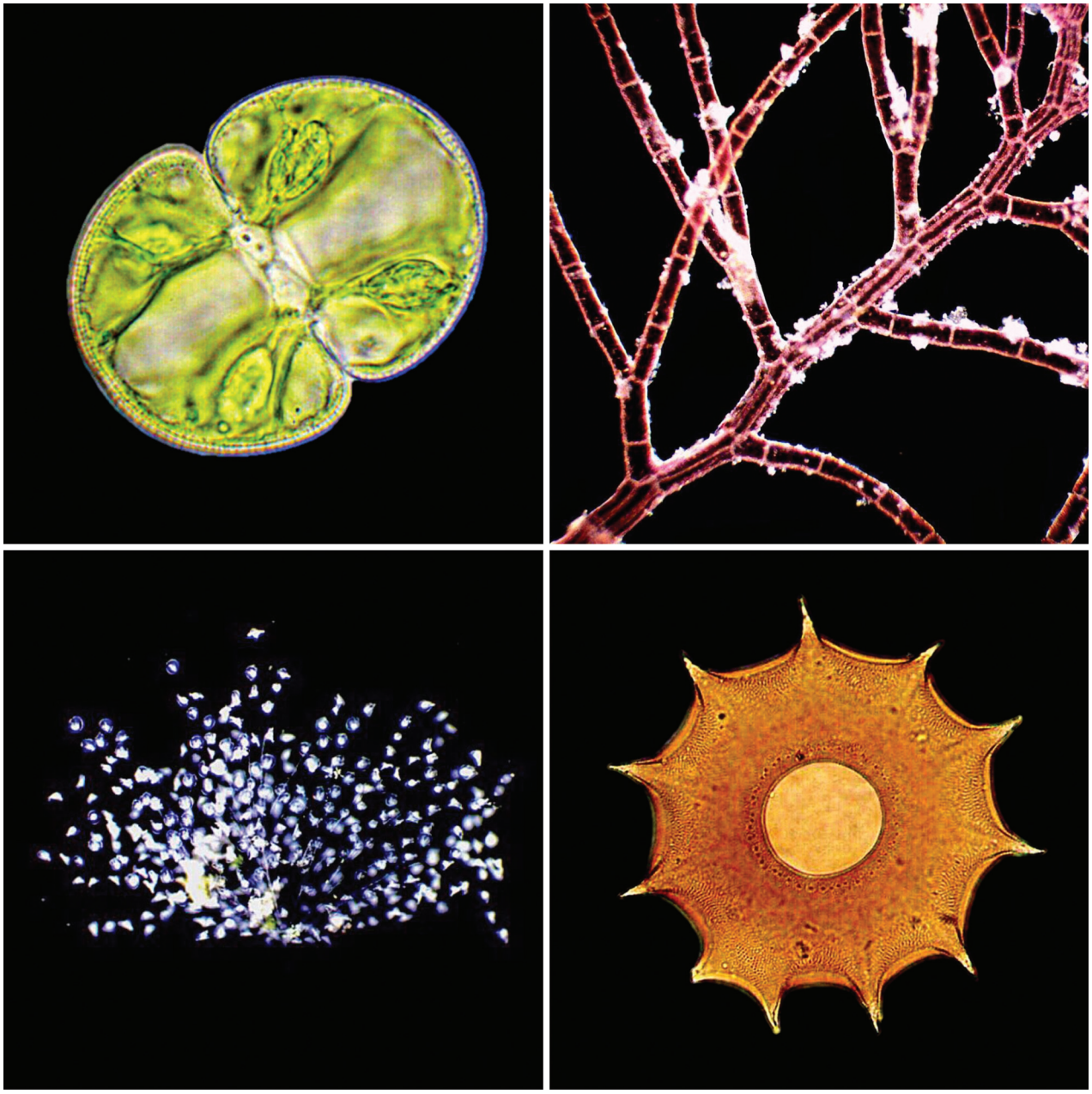
Volume 28 Number 6 2020 November

Microscopy TODAY



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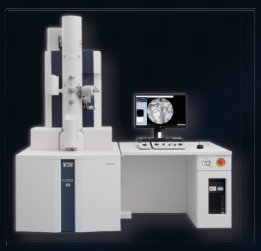

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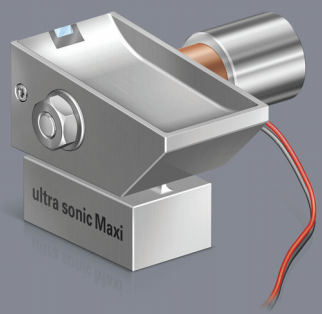
NEW ultra Maxi

The ultra Maxi is similar to our ultra 35° 4.0 mm but with a larger boat. Thickness range: 30-200nm

NEW ultra sonic Maxi

This new wider ultra sonic knife is specifically for compression-free serial sectioning in biological applications. Available in 3.0mm and 4.0mm sizes with 35° angle.



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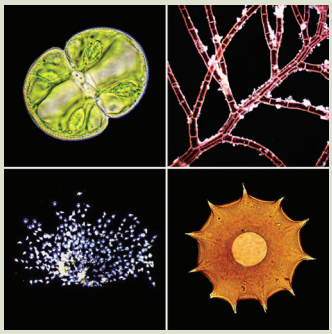


Example images of eukaryotic microorganisms from aquatic environments from the Julia van Etten Couch Microscopy project.

See article on page 28.

Scanning Probe Microscopy

Genetics and Imaging

Microscopy 101

Microscopy Pioneers

Highlights from *Microscopy and Microanalysis*

Departments

Fine detail of flower petal structure easily observable.

NanoSuit®

AQUEOUS SOLUTION

SEM imaging of biological objects in their natural state

What is NanoSuit?

NanoSuit is a novel technology which enables the observation of cells, microorganisms, etc. in a living state using SEM.

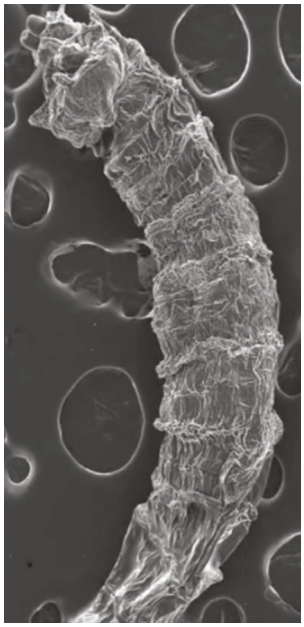
NanoSuit is an aqueous solution of a bio-compatible polymer that forms a very thin barrier layer on the surface of an object which holds moisture in the object under vacuum condition in electron microscopy. The barrier layer is electrically conductive.

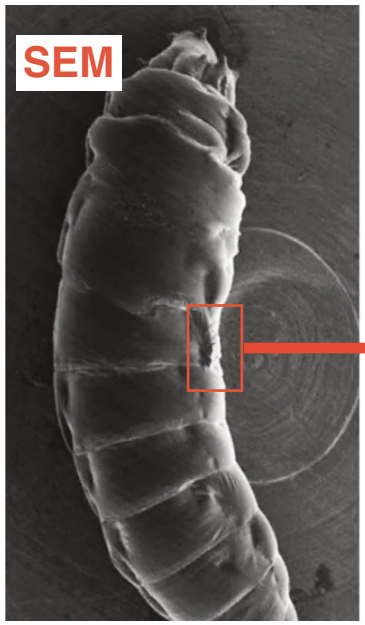
Therefore, NanoSuit makes it possible to observe biological objects with their natural image texture.

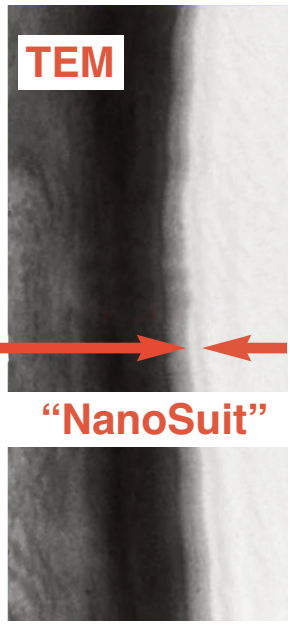
Quick and easy to use...

Simply drop the NanoSuit solution onto the specimen, then observe using SEM. ***You don't need any other fixation procedures.***

PLEASE CONTACT US FOR MORE INFORMATION







Fixed Drying Process

Currently used by many researchers, this process results in dehydration and deformation of biological specimens caused by the vacuum condition inherent to EM.

Origin of NanoSuit

NanoSuit was created to mimic the mucus layer of larva of Drosophila, which showed the ability to insulate specimens from the effects of vacuum when irradiated by plasma.

Molecularly Bonded Protective Layer

TEM observation shows the self-supportive layer. Tissues and cultured cells can also be observed in a natural state using this innovative solution.

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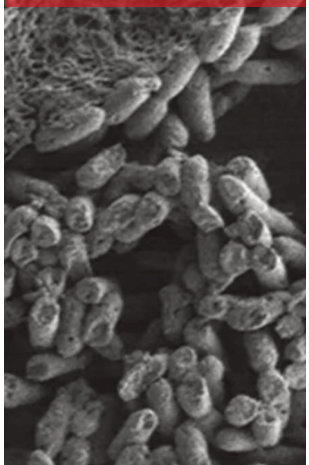
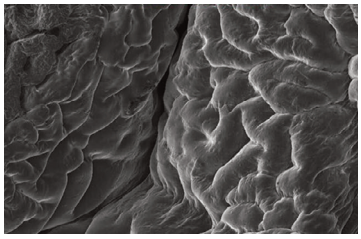
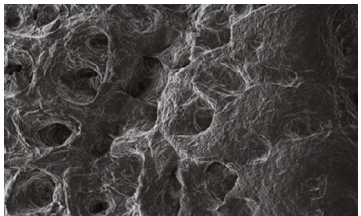
Individual Bacillus easily observable.





Distinguishing normal tissue (top) from cancerous tissue (bottom) at 500µm.



Individual cells easily observable.