DISCOVER MATERIALS

ZEISS

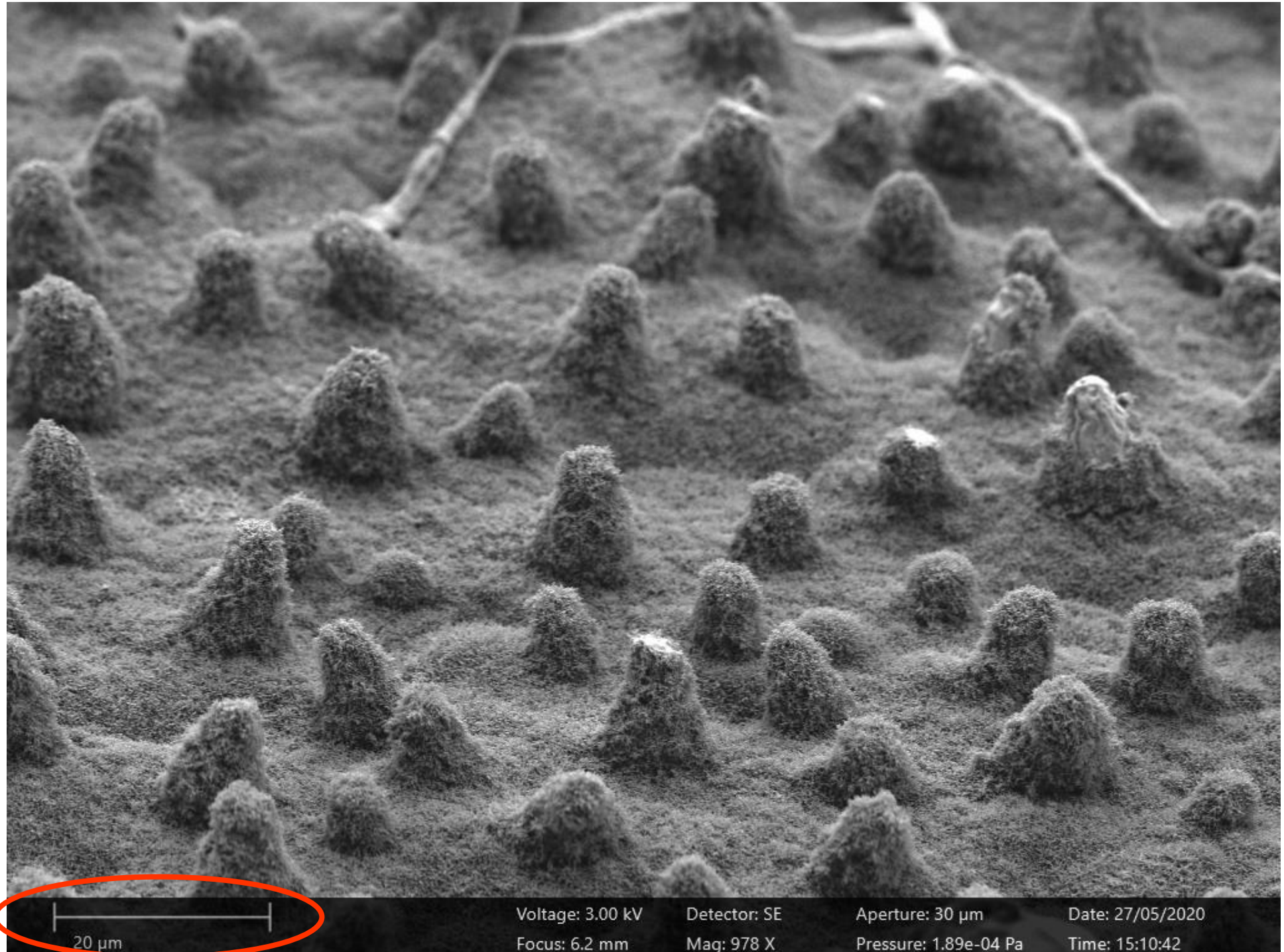
Seeing beyond

Electron Microscope image

Lotus leaf (x 978 magnification)

A link to one of our videos about biomimicry (learning from nature)

This scale bar is 20 micrometres - that is **20 millionths** of a metre which is about a quarter of the width of a human hair!



DISCOVER MATERIALS

ZEISS

Seeing beyond

Electron Microscope image

Lotus leaf
(x 6,360 magnification)

A link to one of our videos about biomimicry (learning from nature)


4 µm
Voltage: 3.00 kV
Focus: 6.3 mm
Detector: SE
Mag: 6.36 K X
Aperture: 30 µm
Pressure: 1.87e-04 Pa
Date: 27/05/2020
Time: 15:13:25

DISCOVER MATERIALS

ZEISS

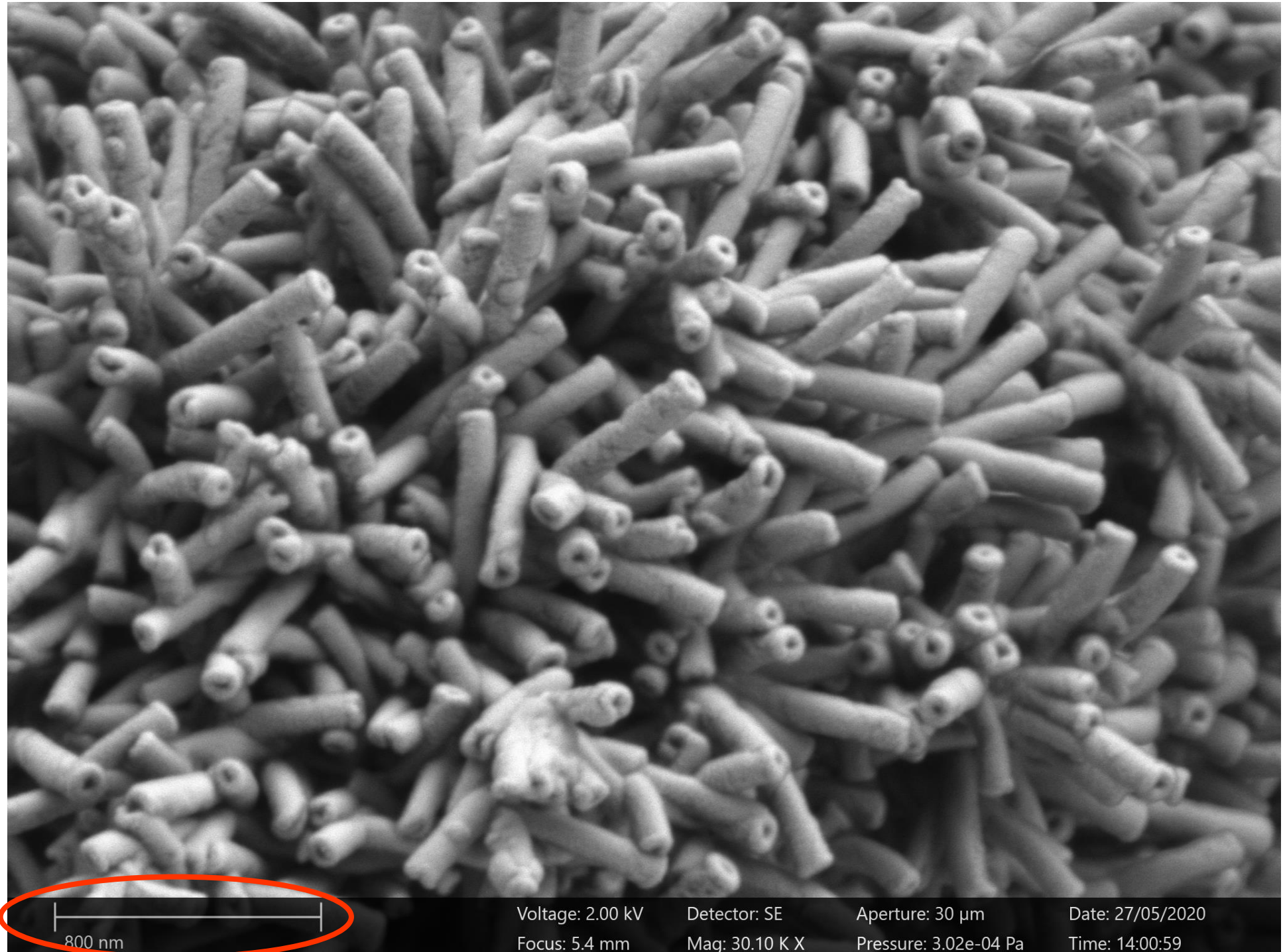
Seeing beyond

Electron Microscope image

Lotus leaf
(x 30,100 magnification)

A link to one of our videos about biomimicry (learning from nature)

This scale bar is 800 nanometres - that is **800 billionths** of a metre which is about a hundredth of the width of a human hair!



DISCOVER MATERIALS

ZEISS

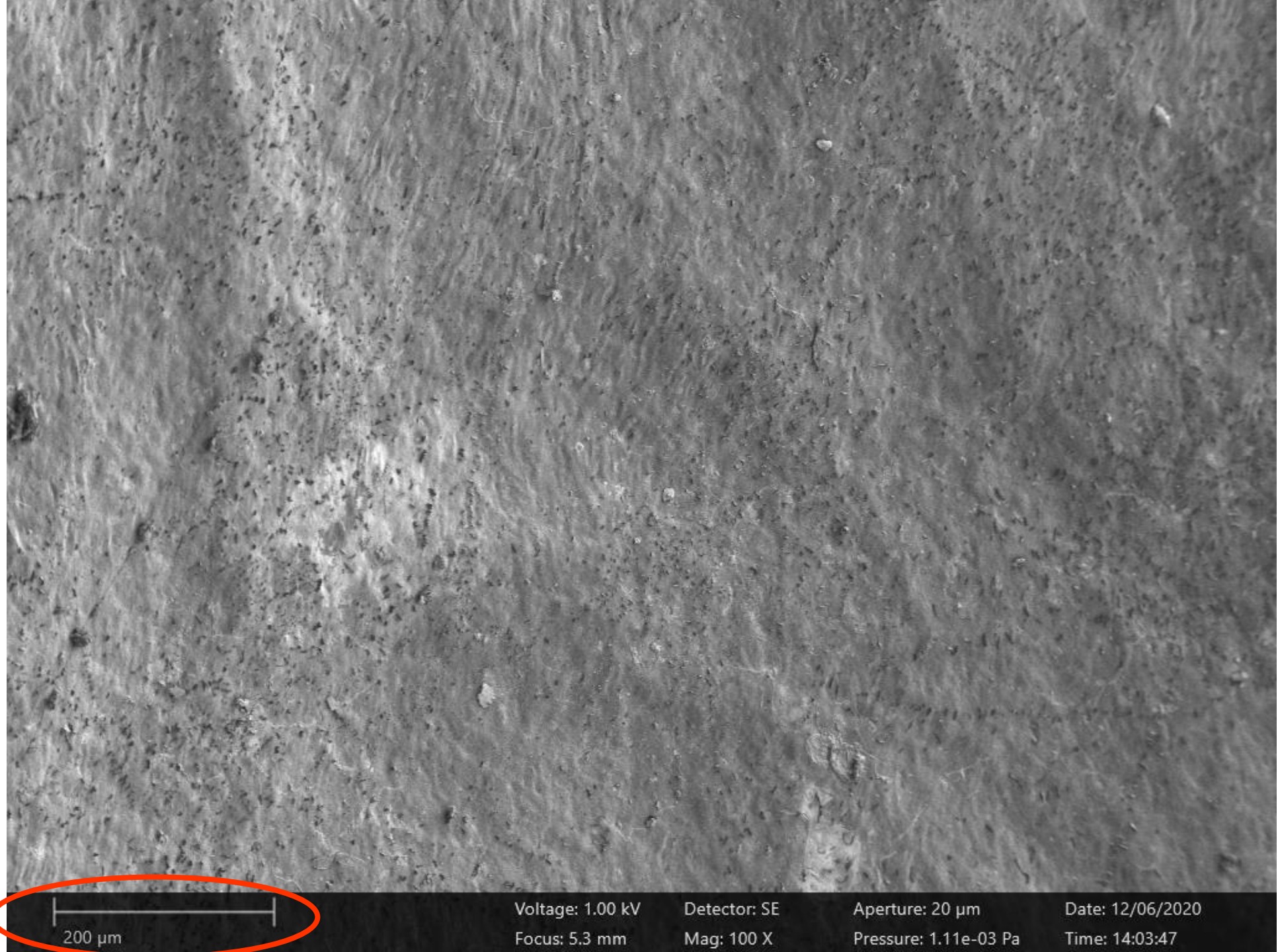
Seeing beyond

Electron Microscope image

Holly leaf (x 100 magnification)

A link to one of our videos about biomimicry (learning from nature)

This scale bar is 200 micrometres - that is **200 millionths** of a metre which is about two and half times the width of a human hair!



DISCOVER MATERIALS

ZEISS

Seeing beyond

Electron Microscope image

Holly leaf (x 1,000 magnification)

A link to one of our videos about biomimicry (learning from nature)

This is a **stomata** which is what a leaf breathes through. It is about 20 microns (or 20 millionths of a mater) in size so about a quarter of the width of a human hair

Note it is rough (and waxy) which keeps it dry and **superhydrophbic** allowing the leaf to take in more air.

DISCOVER MATERIALS

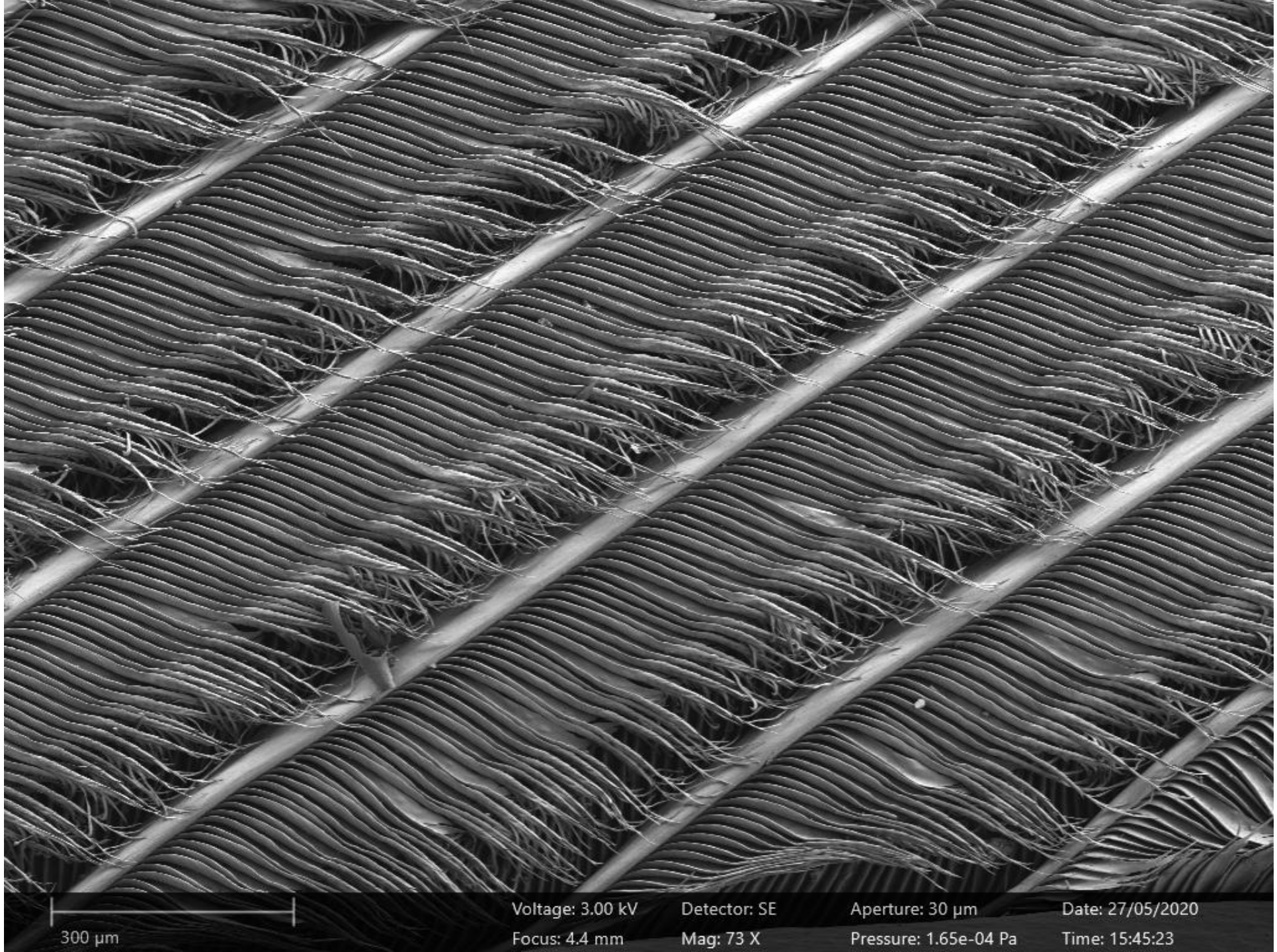
ZEISS

Seeing beyond

Duck Feather

(x 73 magnification)

A link to one of our videos about biomimicry (learning from nature)


300 µm
Voltage: 3.00 kV
Focus: 4.4 mm
Detector: SE
Mag: 73 X
Aperture: 30 µm
Pressure: 1.65e-04 Pa
Date: 27/05/2020
Time: 15:45:23

DISCOVER MATERIALS

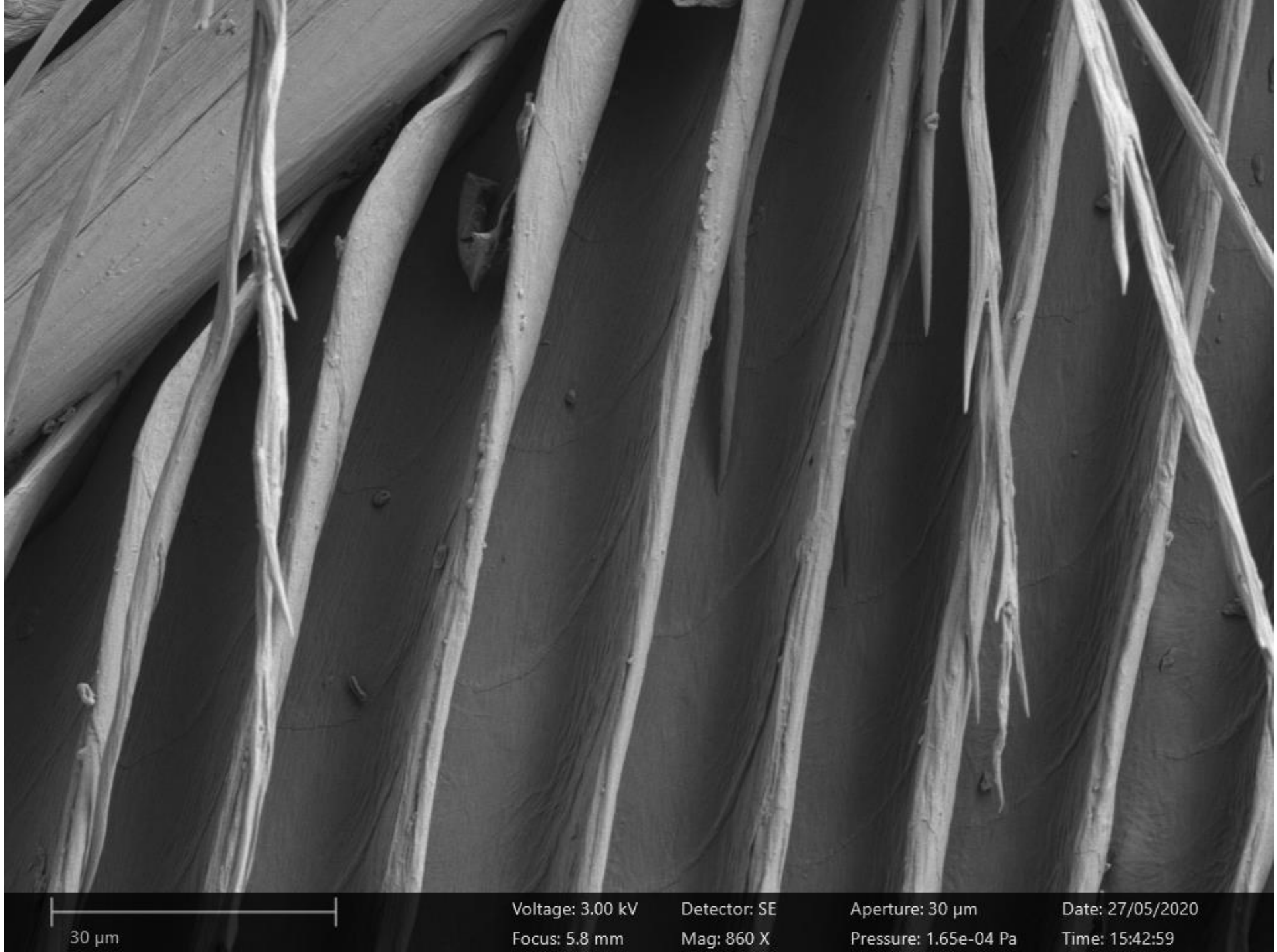
ZEISS

Seeing beyond

Duck Feather

(x 860 magnification)

A link to one of our videos about biomimicry (learning from nature)


30 µm
Voltage: 3.00 kV
Focus: 5.8 mm
Detector: SE
Mag: 860 X
Aperture: 30 µm
Pressure: 1.65e-04 Pa
Date: 27/05/2020
Time: 15:42:59