

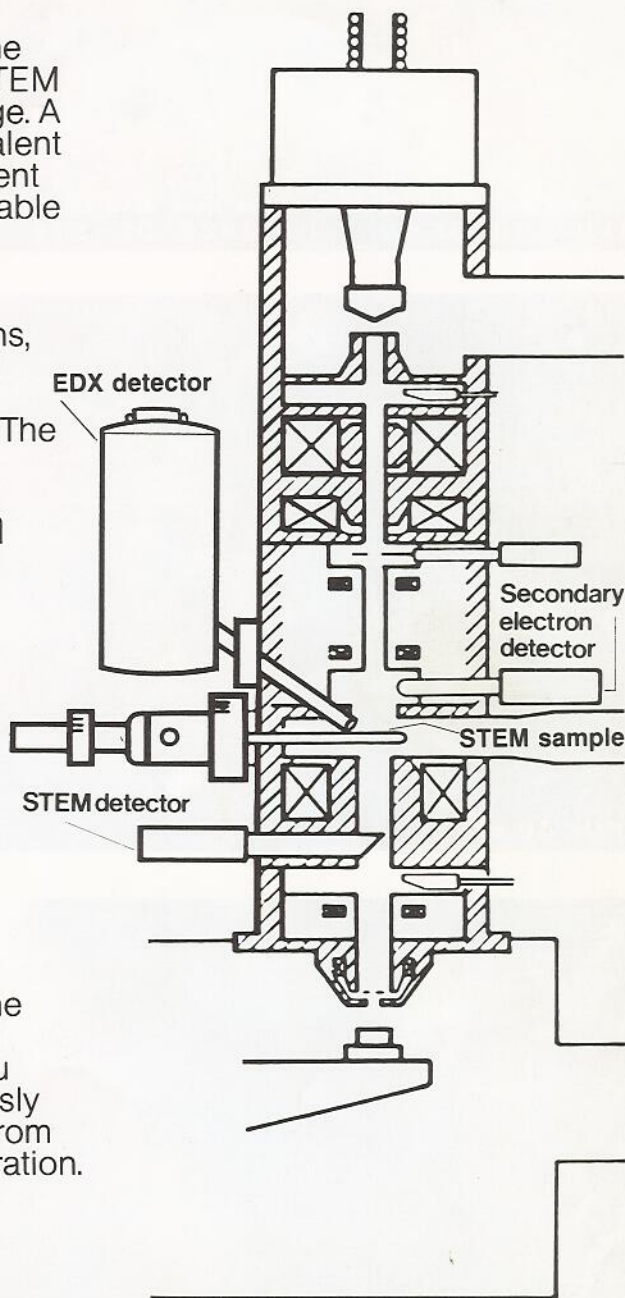
ISI-130 STEM

It has been shown that the scanning-transmission electron microscope (STEM) has the same 'penetration' capability as a conventional TEM using two and a half times the accelerating voltage. A 40 kV STEM, for instance, will achieve the equivalent performance of a 100 kV TEM. Further, the different signal collection mechanism of the STEM is capable of obtaining higher electronic gain, distributive microanalytical data and processed information invisible to the TEM.

With the introduction of the ISI 'S' zone lens, the ISI-130 STEM combines, as never before, all these advantages— together with a higher probe density and better electron collection efficiency. The user therefore obtains:

- **STEM at better than 30Å and with EDX microanalysis (25° take off angle at 0° tilt).**
- **SEM at better than 30Å and with EDX microanalysis.**
- **Full scanning signal processing for each mode.**

The micrographs overleaf show some of the results being achieved from 'thick' specimens in biological and materials science. If you think you have an application, or if you have been previously disappointed with scanning-attachment results from SEM or TEM, please call and ask for a demonstration.



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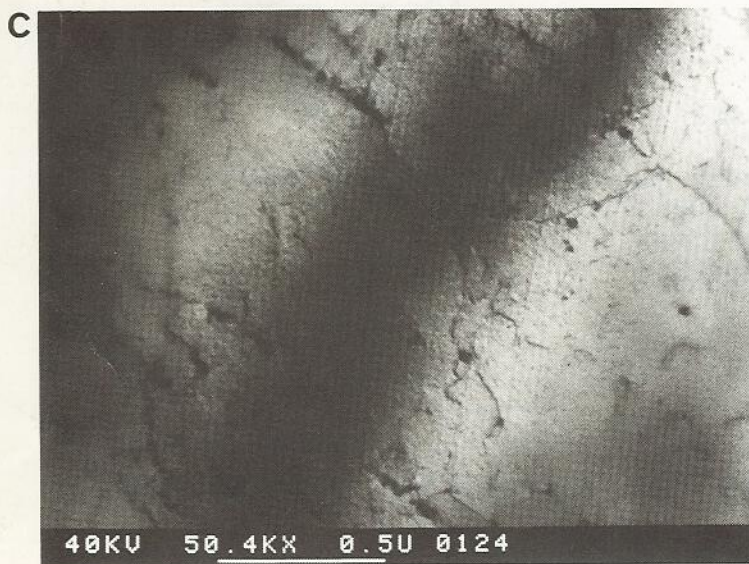
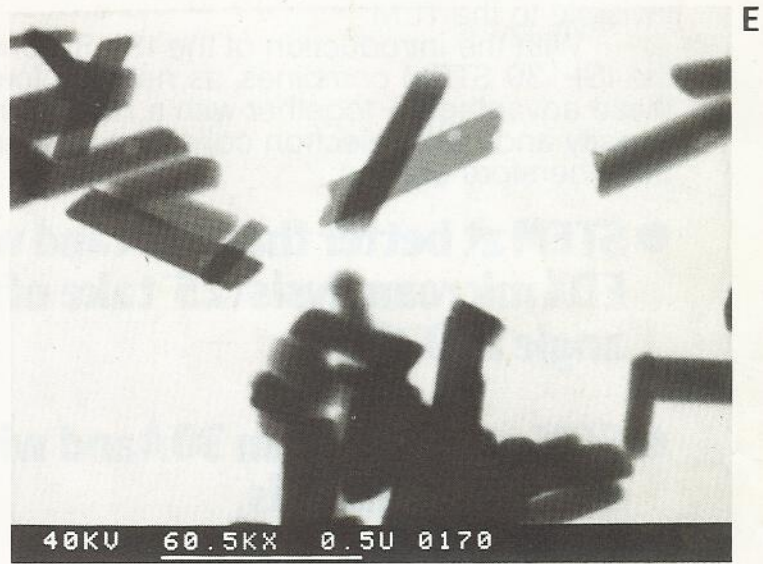
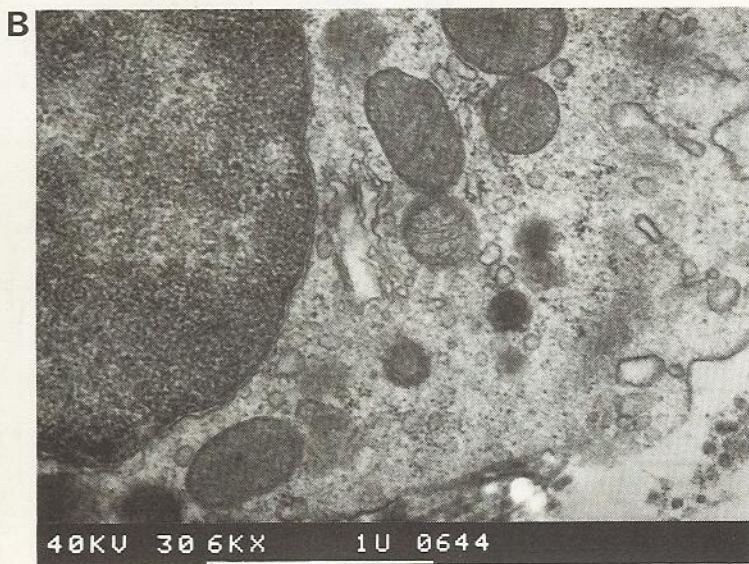
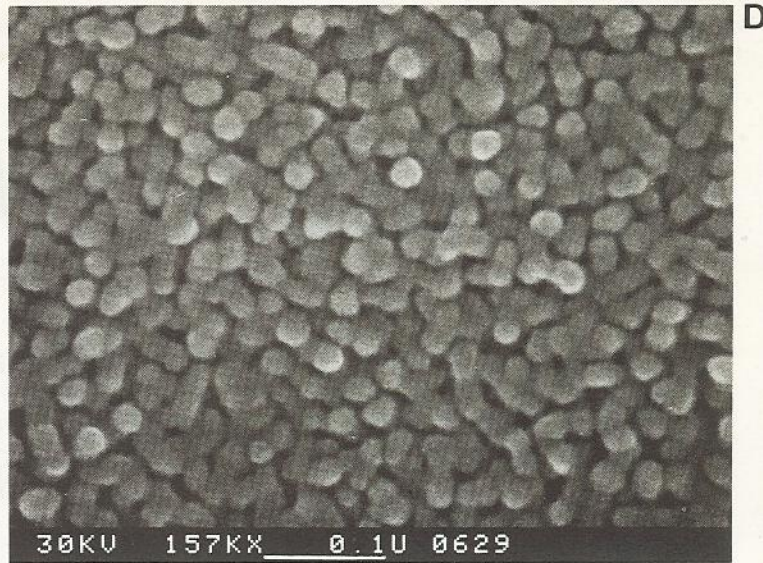
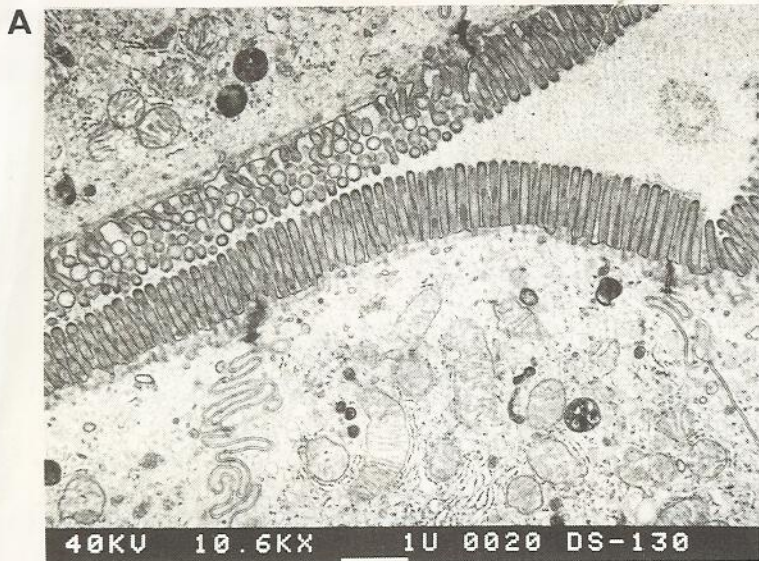
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ISI is also represented in France, Portugal, Italy, Austria and many other countries.



A STEM image, intestine of a mouse.
Specimen thickness 60 nm.

B STEM image, rat bladder.
Specimen thickness 100 nm.

C STEM image, stainless steel.
Specimen thickness 100 nm.

D SEM image, anodised aluminium bulk specimen.

E STEM image, paint pigment on Formvar film.
(Courtesy of ICI Pigments Division).