EDAX Compact Detector Unit

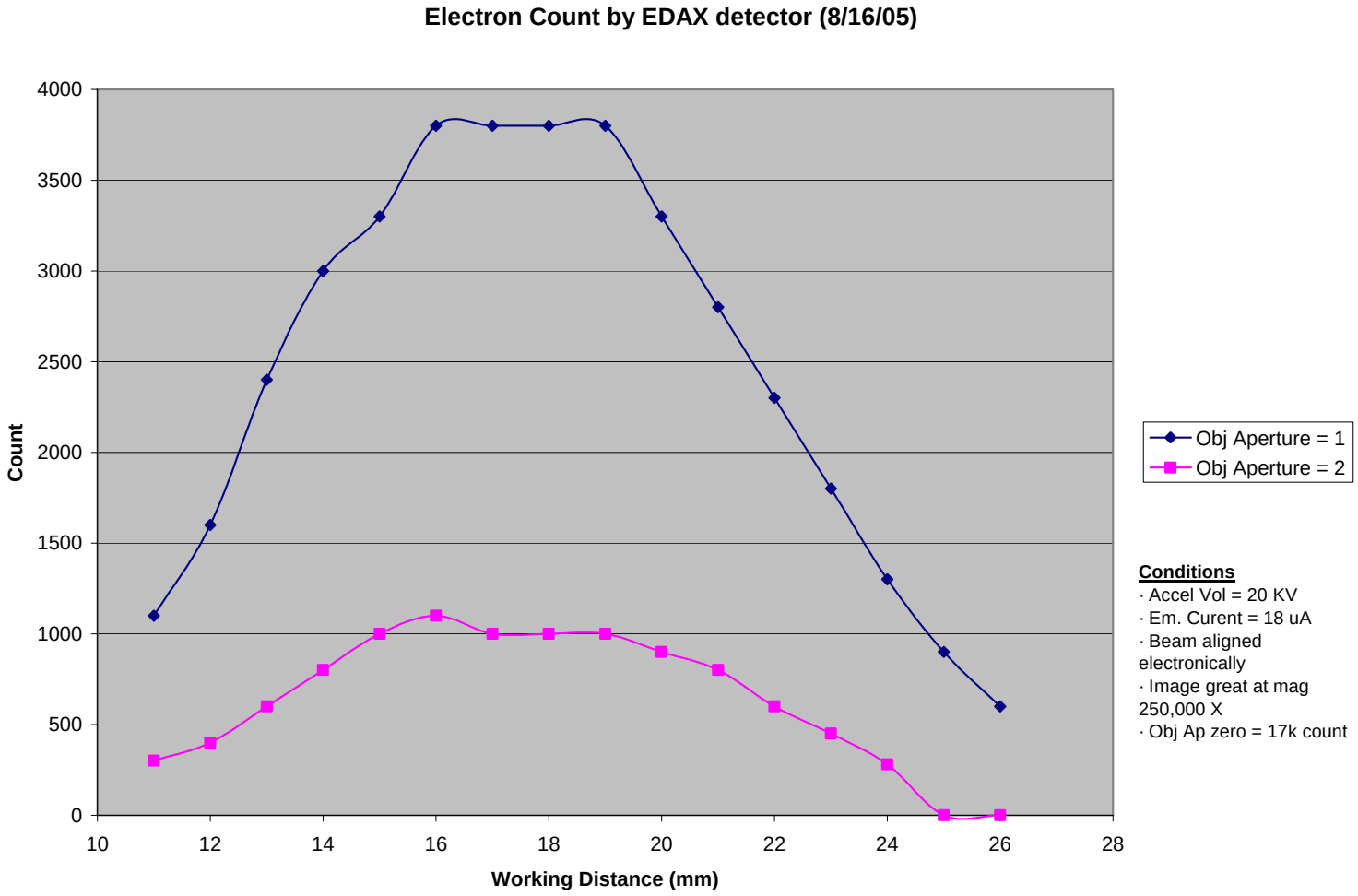
EDAX© detector is used for advanced materials characterization of energy dispersive X-ray microanalysis (EDS).

In 1992, EDAX introduced the Compact Detector Unit (CDU), a major breakthrough in Si(Li) detecting technology. Based on our successful standard detector, the CDU features a unique, low-profile dewar and special cold finger design which allows complete cool-down from a warm state in less than one hour.

This is a detector designed to be left at room temperature and is completely unaffected by repeated cycling. Cool the CDU when you need it, do your analysis and then forget about it. The CDU electronics include all circuitry necessary for powering down the detector and cycling it back to room temperature.

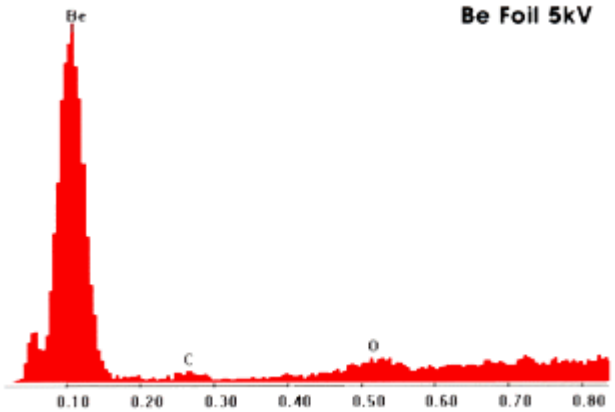
In addition to the rapid warm-cold cyclability, the CDU offers reduced LN2 consumption with performance equal to our standard 10-liter dewar model.

With Super Ultra Thin window technology, this standard detector is configurable for light element analysis down to Beryllium. It is available with $10mm^2$ or $30mm^2$ detector crystals.



Data from CAMD's EDAX CDU for determination of optimum working distance to detect high electron count.

Sample Spectra for SEM: **EDAX SAPPHIRE detectors provide the best resolution and light element performance of any Si(Li) detector in the EDS market today. Here are some examples showing the high quality spectral data produced by the SAPPHIRE detectors.**

<table>
<tr>
<td> 
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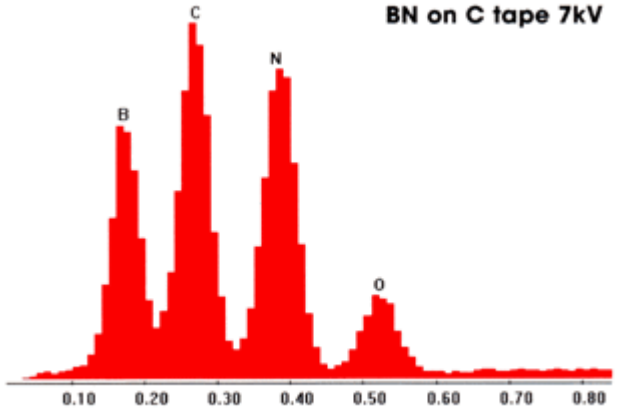
<td> 
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<tr>
<td>Be Foil at 5kV. Beryllium peak completely resolved from system noise.</td>
<td>BN on C tape 7kV. Adjacent light elements (B, C, N, O) resolved nearly to baseline.</td>
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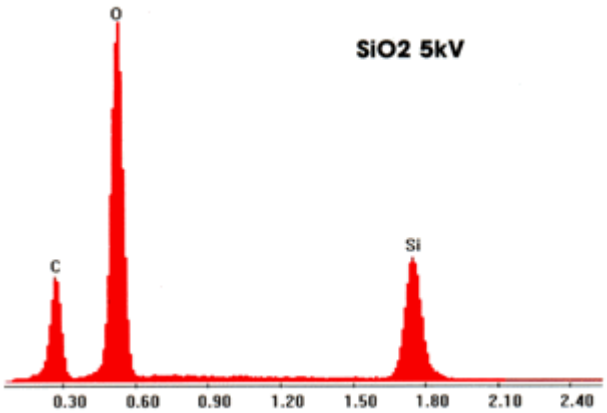
<td> 
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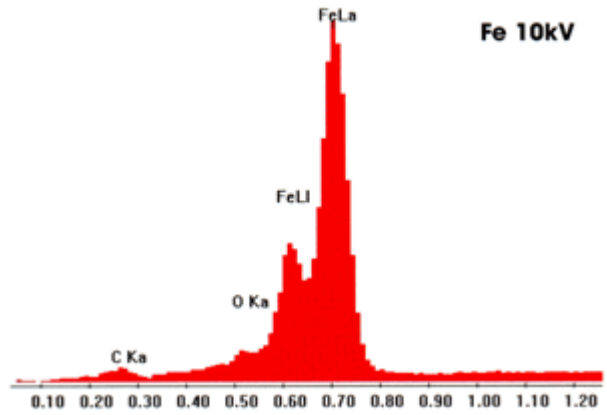
<td> 
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<tr>
<td>SiO2 5kV. Excellent peak-to-background and oxygen to silicon ratio.</td>
<td>Fe 10kV. Superior resolution of the L-series line for iron.</td>
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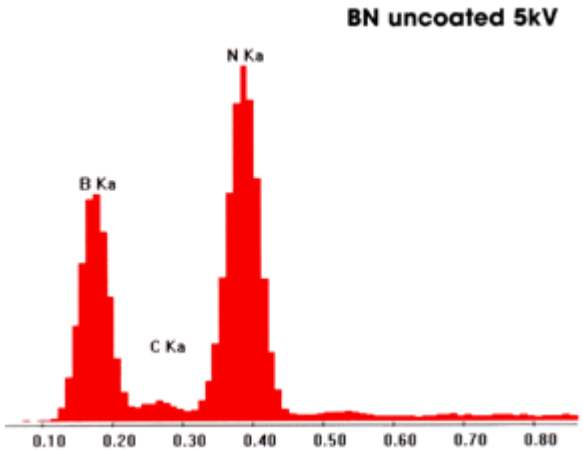
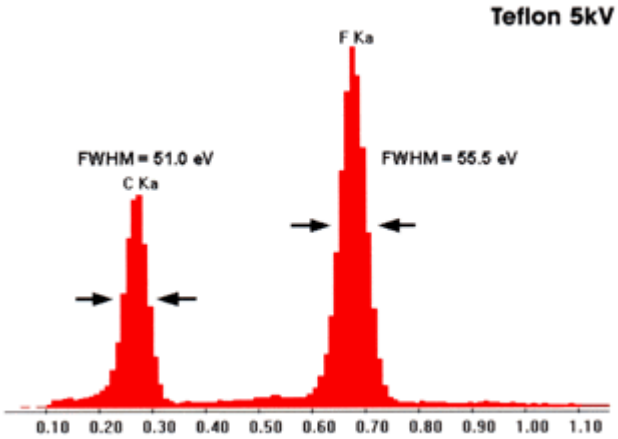
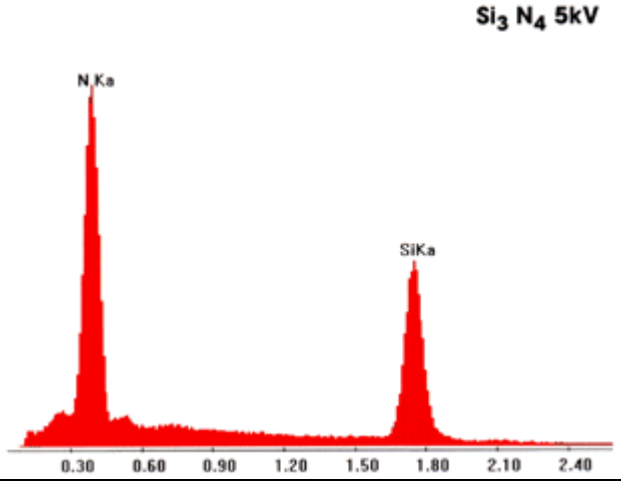
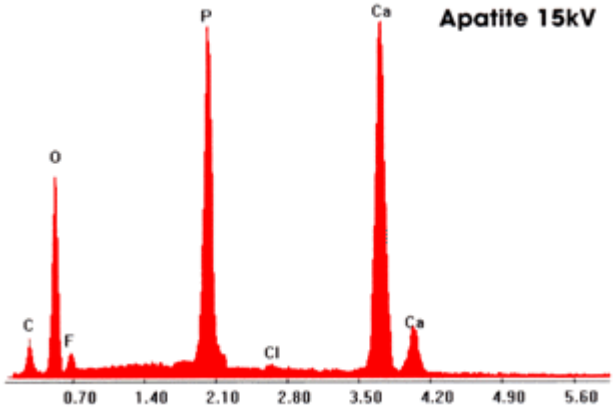
	
BN uncoated at 5kV. Excellent resolution of Boron and Nitrogen.	Teflon at 5kV. EDAX specifications for Carbon (<60eV) and Fluorine (<65eV) are conservative as one compares these specs to the typically achieved results shown here
	
Si3N3 at 5kV. Note excellent ratio of Nitrogen to Silicon	Superb peak-to-background performance shows low concentration of Fluorine

Images and text courtesy of www.EDAX.com