High Performance Analysis and Acquisition Options Available

**Spectrum Integration:**
Fully automatic integrated acquisition of EDS spectra with simultaneous WDS acquisition. Because the complete energy spectrum for all standards and unknowns are automatically stored along with all detector and acquisition parameters, the user can add and remove elements by EDS to be quantified with the WDS elements at any time, including off-line data processing.

**Matrix:**
An ultra fast quantitative correction COM server for creating user customized applications for matrix corrections (including 10 different ZAF and phi-rho-z algorithms, 6 different mass absorption coefficient tables (including NIST’s latest FFAST tables) and also user accessible quantitative spectral interference and MAN and off-peak background correction methods. Easy to use, fully documented and can be called from any COM compliant container such as Excel, Word, Access, Grapher, Surfer, Matlab or Visual Basic.

**Remote:**
A device independent COM server for creating user customized applications for stage, column and spectrometer control and acquisition of your microprobe instrument. Easy to use, fully documented and can be called from any COM compliant container such as Excel, Word, Access, Grapher, Surfer, Matlab or Visual Basic.

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**Probe for EPMA**
microprobe software written by people who use electron microprobes

**Accurate:**
- Rigorous, quantitative, iterative spectral interface correction
- High accuracy blank correction for improved trace element accuracy
- Hyper-exponential Time-Dependent-Intensity (TDI) correction
- Automatic Standard Drift Correction

**Fast:**
- Automatic Mean Atomic Number (MAN) background modeling
- Single click wavescans based on current analytical setup
- Aggregate intensity option for improved trace element sensitivity
- Optimized fast digitization features for large data sets

**Easy To Use:**
- Intuitive user interface with graphical background modeling and fitting
- Easy and powerful standard re-assignment capability
- Fully integrated EDS/ WDS quantitative and qualitative acquisition
- Toggle all corrections globally or on a sample/ element basis
- Unlimited site license for off-line data processing

**Flexible:**
- All user controls contain built-in “pop-up” help
- Complete support for JEOL 8800/8200/9500 and Cameca SX100
- Advanced native TCP/IP implementation for robust operation

**Compatible:**
Both JEOL or Cameca applications and Probe Software can operate simultaneously or independently!
unique features

not offered by any other microanalysis package

• Probe Software uses an industry standard relational database format (Microsoft Access). All data (unknown, standard and wavescan intensities, instrument conditions digitized coordinates, images, EDS spectra, peaking and PHA scans) are automatically saved to the user’s database file.

• Unlimited site license for copying Probe for EPMA to off-line computers for reprocessing of analytical data. Every user gets a free copy of the software for off-line analysis and processing!

• On-line, context sensitive HyperText linked help Files (800 pages) with search and bookmark and print capability, plus a new on-line Wizard for fast and easy new user training.

• Quantitative spectral interference correction for both major and trace element analysis using a matrix corrected and iterated method that is rigorously accurate even for extreme overlap situations.

• Quantitative graphical volatile element correction for any or all elements using both calibration reference or internally referenced “self” calibrations with linear or quadratic extrapolation to zero time.

• Integrated imaging for BSE, SE and CL with automatic display of analyzed positions. Unique “PictureSnap” feature for import of optically scanned sample images with live current position cursor, mouse click navigation and display of digitized or analyzed sample positions on the analog or optical image.

• Graphical background modeling with linear, average, high only, low only, exponential (user defined), slope and polynomial fit options.

• Full integration of WDS/EDS including storage of complete EDS spectrum and detector and analysis parameters, post processing of EDS analyses, spectrum display and export.

• A fully quantitative matrix iterated “blank” correction for super accurate trace element analyses in the low PPM ranges.

• Aggregate intensity option for acquiring trace elements on multiple spectrometers with quantitative propagation of counting statistics for improved sensitivity.

• Special modifications and new algorithms are our specialty. Probe Software provides access to a large community of expert users who really care about high quality EPMA analyses.

Probe for EPMA

Quantitative Spectral Interferences

Probe for EPMA seamlessly incorporates the scientific standard for fully quantitative spectral interference corrections for wavelength dispersive (WDS) x-ray intensities down to trace levels even with high magnitude overlaps. Based on a full iterated matrix correction procedure, Probe for Windows can even handle pathological cases of cascade and self-interfering spectral interferences.

Volatile Element Corrections

Based on a fully iterated procedure, Probe for EPMA can correct for both intensity loss and gain as a function of time and apply a matrix correction to the modified intensities automatically. All calibration parameters and values are saved for archival purposes and can be adjusted during data reprocessing.

Mean Atomic Number Background Modeling

Probe for EPMA offers a unique background modeling technique which allows fast and accurate background corrections without off-peak measurements for both major and minor elements along with linear, averaged, exponential and polynomial fit off-peak backgrounds for maximum flexibility and efficiency.

Complete Image Automation

Acquire any number of image sets based on any number of instrument conditions, with complete automation of spectrometer positions for on and off-peak images. Z axis stage control for maintaining x-ray focus over large areas is an integral part of Probe Image.

Arbitrary Beam and Stage Scan Areas

Using beam and stage scan instrument primitives, Probe Image’s sophisticated software algorithms can automatically acquire analog signal and x-ray intensity maps over samples areas of any defined shape with any pixel resolution. No limits to your imaging!

Advanced Digitizing

Fully Automated Peaking

Integrated Imaging