Portable X-ray Fluorescence Spectrometer Now Available

A portable X-ray fluorescence spectrometer allows on-site detection and analysis of metal and mineral elements, according to Aurora Tech, Inc. The highly miniaturized and self-contained unit weighs only 17 lb and works on the principle of differing X-ray energies per element. Radioisotope emitters in the sensor head excite X-ray fluorescence in the sample, and the unit records the element energy level and the percentage of the element in the sample. With the instrument's self-contained power, oscilloscope, and liquid crystal readout capabilities and the multichannel pulseheight spectrum analyzer, an analysis can be accomplished in about 30 seconds or

Contact: Ron Horrocks, Aurora Tech, Inc., 620 North Center Street, Building 1, North Salt Lake, UT 84054, (801)295-8145.

New Laboratory and Classroom Microscope and Accessories

The Alphaphot-Kt laboratory and classroom microscope provides the performance and versatility needed in microscopy laboratories operating with today's budget restrictions, according to Nikon Inc. For example, to meet the



sophisticated optical and illumination systems needed for phase-contrast photomicrography and oil-immersion techniques, the Alphaphot-Kt uses the Koehler illuminator to provide ample light output from a 20-W quartz-halogen, low-voltage source. The field diaphragm, which can be centered, is imaged on the specimen to maximize contrast.

The Alphaphot-Kt introduces a full range of newly designed E Achromat objectives: 4×, 10×, retractable 40×, and retractable 100× oil-immersion. Both the objectives and their matching eyepieces incorporate Nikon's CF optics for contrast and resolution. The CF widefield eyepieces can be locked into the body tube and are especially convenient for eyeglass wearers. Each eyepiece accepts 21-mm reticles and an eyepiece pointer. Coaxial coarse- and fine-focus controls ensure precise focusing throughout the entire magnification range. Coarse-focus tension is adjustable, and a positive stop is used to prevent damage to objective lenses and specimen slides. The ball-bearing mounted mechanical stage provides a travel range of 76 mm in the X direction and 40 mm in the Y direction. A vernier relocates specimen areas to an accuracy of 0.1 mm.

Accessories include a wide range of phase-contrast, dark-field, and bright-field condensers, all 160-mm tube length CF optics, CF M Plant Achromat bright-field optics, phase-contrast optics, DS-Epifluorescence, Epi-Brightfield illuminator, basic and advanced polarizing filter sets, other 33-mm and 45-mm filters, 21-mm reticles, and dual viewing, multiviewing, and drawing attachments and video accessories.

Contact: Nikon Inc., Instrument Division, 623 Stewart Avenue, Garden City, NY 11530, (516)222-0200.

Microscope Photometer System with Separate Control Unit

The Nikon FX photometer system used with the FX photomicrographic systems allows accurate microspectrophotometric quantitation with almost any upright or inverted microscope with a photo tube, according to Nikon Inc. The system attaches to any of the Nikon photomicrographic systems—UFX, HFX, AFX, and PFX. These systems deliver all light to the film and automatically control exposure with microprocessor and photomultiplier metering.

The photometer head incorporates the photomultiplier tube and its preamplifier and slot for filter placement. Interference filters are available for the most commonly used wavelengths: 470, 500, 530, 620, 650, and 670 nm. Filter band width is 15 nm, and maximum transmission is 40%. An interference filter

micrometer is available with motor and manual drive for use with a separate personal computer. A separate photometer control unit, which can be placed under the FX photomicrographic control box, provides a four-digit LED readout display, detection sensitivity control, data sampling option from 1 to 100, photomultiplier drive voltage control and data outputs for a computer, and a chart recorder.

Contact: Nikon Inc., Instrument Division, 623 Stewart Avenue, Garden City, NY 11530, (516)222-0200.

Kit Contains Disposable Full-Body Protection

Individuals mixing or applying potentially hazardous chemicals or pesticides can be protected by disposable full-body clothing available in extra-large, large, medium, and small sizes, according to Meador Swine Health Developers. The



body-protection kit contains a pesticide respirator with three extra filters, astro goggles, three hoods, three pair of Tyvek coveralls, three pair of 4-mil tie-on shoe covers, and three pair of rubber gloves.

Contact: Meador Swine Health Developers, Box 94, Lanark, IL 61046.

No endorsement of the products or services described or of the statements or claims made in these listings is assumed by PLANT DISEASE or by The American Phytopathological Society.