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The Secretary is Professor Dr R. Gijbels, Department of Chemistry, University of Antwerp (UIA), B-2610 Wilrijk-Antwerp, Belgium, to whom requests to join the Society and receive its newsletter, or enquiries about the Society, should be directed.

## New Commercial Products

*Announcements of new commercial products are published by the Journal of Applied Crystallography free of charge. The descriptions, up to 300 words or the equivalent if a figure is included, should give the price and the manufacturer's full address. Full or partial inclusion is subject to the Editor's approval and to the space available. All correspondence should be sent to the Editor, Professor M. Schlenker, Editor Journal of Applied Crystallography, Laboratoire Louis Néel du CNRS, BP166, F-38042 Grenoble CEDEX, France.*

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### DSM 940 – a New Economical Scanning Microscope from Carl Zeiss

The **DSM 940**, a new scanning electron microscope (SEM) for research and routine applications, is simple and efficient to use. Thanks to the use of microprocessors, optimum combinations of the electron-optical parameters are digitally stored and automatically called up when any of the basic functions, such as high voltage, is changed. The frame store permits instant assessment of the specimen and of the image quality on a clear steady-screen picture. This means a reduction in the use of photographic material since



The DSM 940 scanning electron microscope

photography is necessary purely for documentation purposes. A video interface for video recorder, hardcopy unit, image analysis programs and additional monitors are available for other recording and analysing techniques.

The electron optics of the **DSM 940** are designed to produce outstanding image quality over the whole voltage range. The high voltage is variable from 490 V to 30 kV in small steps. The triple-lens electron-optical system zooms through a magnification range from four to 200 000 times.

A turbomolecular pump produces a hydrocarbon-free vacuum in the column and the specimen chamber within two minutes. The specimen chamber is fitted with a eucentric stage, ensuring that the specimen area selected remains in the field of view and in focus even when the stage is tilted.

For element analysis the instrument can accept units for EDX (energy-dispersive X-ray analysis) and WDX (wavelength-dispersive X-ray analysis). The simultaneous use of several detectors for imaging secondary electrons, backscattered electrons and cathodoluminescence is also possible, allowing the **DSM 940** to be continuously adapted to new requirements.

*Carl Zeiss Oberkochen, Postfach 1369/1380, D-7082 Oberkochen, Federal Republic of Germany*

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### Carl Zeiss Launches the DSM 960, its Top-Class Scanning Electron Microscope

The new **Digital Scanning Microscope** from Carl Zeiss, the **DSM 960**, the flagship of the company's SEM range, can be adapted for a wide variety of tasks and can operate with all current signal detectors and analytical systems simultaneously.

All instrument functions are monitored and controlled by a central computer, which automatically ensures optimum imaging conditions even when basic operating modes are changed. Standard equipment includes valuable aids such as autofocus, variable raster, raster rotation and other refinements. An integrated frame store facility enables the user to assess specimen and image quality immediately on a clear steady-

screen picture and choose the display option he wants. A colour monitor is also available for pseudocolour display of backscattered electron images or triple-element mapping in combination with energy-dispersive spectrometry.

The electron-optical system incorporates the latest technology with digitized lens-current control and water-cooled lenses, producing outstanding resolving powers at the high and medium range voltages. It can be equipped with a lanthanum hexaboride cathode ( $\text{LaB}_6$ ), which emits extra high probe currents and guarantees maximum emission constancy and long life.

The specimen chamber is larger than usual with dimensions of  $270 \times 310 \times 270$  mm, providing enough room for the larger specimens even when tilted. A five-axis eucentric specimen stage holds the desired area in the field of view and in focus flat or tilted. Optional motorized control permits storage of up to 120 stage positions, with four coordinates each, which are automatically relocatable after programming.

An integrated camera produces images in seconds from the frame store or on-line.

Zeiss has a whole range of image analysis options available for the new **DSM 960**, from the basic instrument allowing user interaction to the fully automated system which can control both the SEM and an energy-dispersive X-ray spectrometer in combination.

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The DSM 960 scanning electron microscope