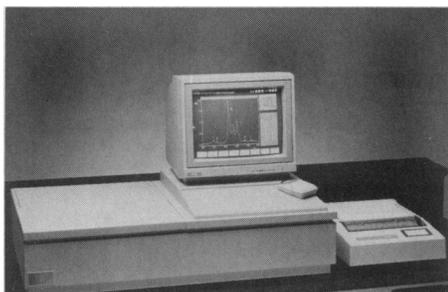


UV-VIS Spectrophotometer

The 8700 Series is a line of mouse-driven ultraviolet-visible light spectrophotometers. All models have a wavelength range of 190 to 900 nm and an absorbance range of -0.3 to $3.0 A$. A nonvolatile memory holds 24 kilobytes of information. Data manipulation routines are built into the series 8700 spec-



trophotometers, allowing data to be smoothed, tracked, expanded, compared, and rescaled. The resolution of spectral data is not restricted by the screen display: all results are plotted from the original data, not from a screen dump. Other features include a master holographic monochromator, silica-coated optics, and a speed of 2000 nm/min. Depending on the model, bandwidth is either fixed at 2 nm or variable from 0.2 to 2 nm, and either a color or monochrome monitor is included. Nicolet Instrument. Circle 553.

Video Analysis Software

JAVA software measures and quantitatively analyzes video images. Images for analysis may be entered from RS170 or National Television Standard Code composite video sources. Some predigitized computer images, such as computerized axial tomography, magnetic resonance imaging, and ultrasound, may also be entered. Measurement capabilities include densitometry, morphometric analysis, automatic line and edge digitizing, and automatic object counting. JAVA can process the image by contrast enhancement, histogram equalization, image filters, and low-pass, high-pass, Laplace,

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

Sobel, and user-defined convolutions. The software contains an internal 64,000 row by 16,000 column worksheet with editing functions. Or data may be transferred to other programs. JAVA requires an IBM XT, AT, or compatible computer; 640 kilobytes of memory; a hard disk; a mouse; a video display monitor; and a video digitizing board ("frame grabber"). \$795. Jandel Scientific. Circle 539.

Benchtop pH Meter

The pH 50 is a pH meter that measures pH to a thousandth of a unit. The meter has one-button standardization that automatically senses which buffers are being used, computes the temperature-adjusted buffer value, and then adjusts the meter reading for accurate measurement. When a reading is stable, the meter automatically locks onto the value and emits a signal. Other automatic features include selectable pH resolution and one- or two-point standardization. Ion-selective electrodes can also report directly in units of concentration. The pH 50 has resolutions of 0.1 mV and 0.1°C. \$995. Beckman Instruments, Scientific Instruments Division. Circle 536.

Intracellular Calcium Analyzer

The CAF-100 measures intracellular calcium (Ca^{2+}) concentration in living cells. Cells may be in suspension or in tissue. Platelet aggregation can be measured at the same time. Temperature may be manually controlled between 10° and 45°C or automatically set at 37°C. A magnetic stirrer is included for keeping cells in suspension. Measurements can be made with a calcium-binding dye such as Aequorin. Jasco. Circle 562.

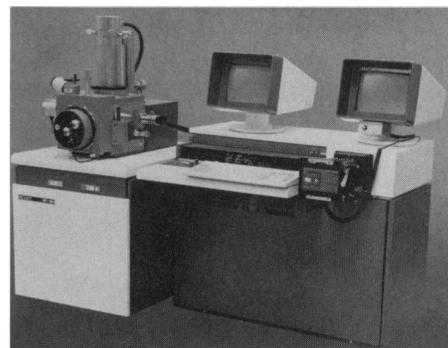
Mechanically Stressed Cell Culture

The Flexercell is a computerized vacuum-operated instrument that applies cyclic tension or compression to growing cells in vitro. It tries to mimic the in vivo conditions of heart, tendon, bone, and other cells that are normally under mechanical stress. The vacuum deforms rigid plastic-bottomed culture dishes with a 0.13% compression to cells on the inner surface, and it deforms flexible elastic-bottomed culture dishes to give 200% tension to cells. The elastic-bottomed plates have been treated with either genetic type I collagen or a tissue

culture. Cells may be examined on the culture dish with a bright-field microscope, or they may be removed and put on a slide. Flexcell. Circle 542.

Scanning Electron Microscope

The Wet-SEM is a scanning electron microscope that can operate in either a high- or a low-vacuum environment, allowing it to analyze specimens that are dry, moist, or liquid. Samples do not need to be coated,



fixed, dehydrated, or subjected to critical-point drying. Because the Wet-SEM can operate with high electron beam energies, an optional energy-dispersive x-ray detector enables it to provide elemental analysis. Magnifications from $\times 10$ to $\times 150,000$ are possible. Samples can be as large as 15 cm in diameter. \$72,500. International Scientific Instruments. Circle 538.

Literature

Test Measurement and Data Acquisition is a catalog of fast-Fourier-transform spectrum analyzers, digital scopes, logic analyzers, data acquisition cards, stepper motor control cards, data analysis software, and other personal computer-based instruments. Rapid Systems. Circle 443.

Personnel and Product Protection: A Guide to Laboratory Equipment explains how to select equipment for working safely in a laboratory. Labconco. Circle 546.

CALS Lab Manager is a brochure that describes a laboratory information management system that schedules tests, tracks sample status, collects and analyzes data, and reports test results for analytical laboratories. Beckman Instruments, Computer Inquiry Systems. Circle 550.

The Betascope 603 Blot Analyzer is a brochure about an instrument that images ^{32}P -labeled blots and displays an autoradiogram-like picture on a display or printout in 30 min. Betagen. Circle 551.

Science

Products & Materials

Science **241** (4862), 244.
DOI: 10.1126/science.241.4862.244

ARTICLE TOOLS <http://science.sciencemag.org/content/241/4862/244.citation>

PERMISSIONS <http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.