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## Gentle aeration

Lab-Line Instruments (Melrose Park, IL) introduces its Hi-Density Fermentor, an aeration device that is efficient, gentle, and eliminates many problems associated with standard batch fermentors. All parts that come into contact with the culture are autoclavable.

Write in 803 on Reader Service Card.

Flexible volumes A new range of low-cost, autoclavable fermentors with 1-10 li-

ter working volumes is now available from Electrolab (Gloucestershire, U.K.). The fermentors combine ease of use with sophisticated microprocessor control. The robust reliability of these units is backed up by a two year guarantee.

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# Speed control

Gallenkamp (Leicestershire, U.K.) launches a new laboratory fermentor designed for microbial applications in research and teaching. The Modular Fermentor can be interfaced with IBM compatible computers, and features a detachable 65W stirrer motor for variable speed control and a sampling device for sterile sampling and innoculation.

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## Side-by-side

The latest bioreactor system from LSL Biolafitte (Luton, U.K.) can control one or two bioreactors—in the 2-100 liter working volume range independently yet simultaneously. This has important user benefits in side-by-side trials, automatic seeding of fermentors, and purchasing costeffectiveness. Vessel configuration is flexible, allowing prokaryotic or eukaryotic culture.

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## **Optical sensor**

The MAX Cell Mass Sensor System from Cerex (Ijamsville, MD) usesadvanced optics and a patented debubbling system to provide on-line analysis of cell mass in bioreactors. This MAX sensor is the first in a series of optical-based sensors being developed by Cerex for biological process monitoring. Write in 802 on Reader Service Card.



Digitized

B. Braun Biotech (Allentown, PA) announces their modular Biostat. The Digital Control Unit provides multiloop digital control, covers the entire range of vessels, and is FDA validatable. Vessels range from 0.6 to 10 liters in glass, and from 2 liters to production volumes in steel.

Write in 807 on Reader Service Card.

## **Bioreactor system**

A new, adaptable fermentor/bioreactor system for production of secreted products from microbial, plant, or animal cells is available from New Brunswick Scientific (Edison, NJ). The BioFlow 3000 can be converted from a bacterial fermentor to a dedicated cell culture system by selecting the appropriate mode on a keypad screen and substituting the interchangeable vessel.



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## **Clean energy**

A 10,000 m<sup>3</sup> biogas fermentor is now available from Ekato (Buckshire, U.K.). Heavy fuel oil can be replaced by the biogas formed as a by-product of fermentation. The organic, highly concentrated waste water resulting from the production of organic acids is extensively decomposed during the first, anaerobic treatment stage. Write in 804 on Reader Service Card.

