

CHRONICLE

Genex Corp. suffered a major blow June 13, when it disclosed that its largest customer, G. D. Searle (Skokie, IL), would stop purchasing phenylalanine from Genex when current purchase orders run out October 31. Neither company gave a reason for the move. It is believed that Searle will have its own phenylalanine production plant-using technology licensed from Ajinomoto—onstream by then.

Phillips Petroleum's new methanol-regulated host-and-hardware fermentation system, combines the company's high-density fermentor and a newly discovered methanolsensitive yeast promoter isolated from Pichia pastoris. The system lets producers regulate gene expression in a simple basic medium, according to Phillips's biotechnology licensing coordinator, David W. Stroman.

In research news, Biogen (Cambridge, MA) said it has produced lipocortin, a rare human protein that could be used to treat inflammatory diseases. Erbamont N.V. (New York, NY) and Unigene Laboratories (Fairfield, NJ) genetically engineered a bacterial strain to produce a precursor of calcitonin (a human hormone that stimulates the incorporation of calcium into bones) and converted it into active product.

New agreements involving biotechnology firms:

- Cetus Corp. (Emeryville, CA) announced licensing and marketing agreements with Schering Aktiengesellschaft (F.R.G.), Compaigne ORIS Industrie (France), and Sekisui Chemical (Japan) for its cancer diagnostics.
- Rockwell International Corp. (Downey, CA) will work with Battelle Memorial Institute (Columbus, OH) on using Rockwell's equipment to produce collagen in space.
- BioTechnica Diagnostics, newly formed subsidiary of BioTechnica International (Cambridge, MA), will collaborate with the Forsyth Dental Center (Boston, MA) on tests to detect infectious diseases of the mouth.

The stability of recombinant plasmids in continuously cultured microorganisms is critical to many production-scale processes. Because plasmid-free cells grow more rapidly than

plasmid-containing ones, they can quickly take over a culture. Traditional selective pressures for maintaining plasmids—such as antibiotic resistance—are too expensive to be used on a large scale. Dewey Ryu (University of California, Davis) reported at Bio Expo 85 (Boston, MA) that he has developed a two-stage continuous culture bioreactor system that ensures plasmid stability and high product yields. Bacterial cells containing a temperature-sensitive recombinant plasmid are grown to high density at a temperature low enough to restrict expression of the plasmid. A slight increase in temperature then induces gene expression, resulting in high yields of the recombinant protein.



Membrane filtration for biotechnology.

Pasilac-DDS RO/UF/MF technology enhances concentration, separation and purification; and cuts costs in the process.

The thin channel, high velocity design of the Pasilac-DDS system gives you higher flux rates and minimizes fouling. Low internal volume provides short product hold-up time. The closed system prevents contamination and delivers higher cell concentrations even from extremely viscous liquids.

Unique plate and frame modular design

You can use virtually any flat sheet membrane with the Pasilac-DDS system. Changing any number of membranes is quick and



simple. And only the membranes are changed-never the support structure.

Exact lab-to-production scale-up

Unlike other systems, Pasilac-DDS designs its lab units to provide exact scale-up to RO/UF/MF production equipment. So, no matter what you're working with-antibiotics, cell harvesting, biopolymers, enzymes, etc.you'll know exactly what results to expect from a full scale Pasilac-DDS system.

On-site evaluation

For complete information on an evaluation of your product or a Pasilac-DDS system demonstration, contact: Pasilac, 660 Taft St. NE Minneapolis, MN 55413 * 612-331-7710 * TLX 29-0430





Write in No. 102 on Reader Service Card