

JAPAN ROUNDUP/

The Japanese Ministry of Construction plans to invest three billion yen from fiscal year 1985 to 1991 to develop a new wastewater treatment system using biotech.

Nitto Chemical Industry Co. will begin producing 4,000 tons of acrylic amide per year at its Yokoyama factory, using a microbial process, rather than the traditional copper catalyst method. The new process is based on wastewater treatment technology that used microbes that converted acrylonitrile (AN) into acrylamide, and then decomposed it through acrylic acid into carbon dioxide and water. Nitto researchers apparently looked for and found a way to halt the process at acrylamide.

Nippon Zeon (Tokyo) and The People's Republic of China have agreed on a five-year pact for R&D on animal cell culture to make pharmaceuticals and fragrances. A team of senior researchers will work at the Zeon Research Center (Kawasaki) and may eventually begin joint production, according to a Zeon official.

Showa Denko K.K. (Tokyo) and Diamond Shamrock (Dallas, TX) have cancelled their joint ownership of SDS Biotech. Each company will acquire the SDS venture in its respective country. The two firms will still cooperate on agricultural chemicals research.

Showa Denko K.K. Shoden (Tokyo) has developed a new protein-decomposing enzyme produced by an alkalophilic *Bacillus*. The company is supplying the enzyme to Kao Corp. for use in synthetic detergents. The enzyme remains active even at low or room temperature, dissolves easily, and is therefore a highly efficient cleaning agent. Shoden is also commercializing cholic acid derivatives, drug materials, and has designed a synthetic manufacturing process for tryptophan. a record 33.24 billion yen (\$130.3 million) on biotech R&D in fiscal 1985, up 6.1 percent from fiscal 1984. Planned programs include a gene bank and facilities for gene-splicing.

A joint information exchange network is underway between MITI (Ministry of International Trade and Industry) and BIDEC (Bio Industry Development Center), to provide \$19,680 to finance bioelectronics research at universities in Cambridge, Heidelberg, and Melbourne.

Hitachi (Tokyo) and Suntory (Osaka) are exploring several aspects of biomolecular electronics including biosensors, biobatteries, robot vision, neuronal interfaces, and artificial intelligence.

Asahi Chemical (Osaka) will begin clinical trials of human tumor necrosis factor (TNF) at City of Hope Medical Center (Duarte, CA) and is applying for patent rights.

The Japanese government will spend



<image>

Advanced Preparative HPLC for Research and Product Development

Perform even the most difficult purifications of pharmaceuticals, biologicals, biochemicals, or natural products rapidly and efficiently.

Reliable stainless steel column technology and flow rate capabilities to 800 ml/min. at 1800 psi in isocratic or gradient operation, provide the ultimate versatility in packing media selection.

For milligram to multi-gram scale purifications, the Lab 800A preparative HPLC is the answer.

Separations Technology Wakefield, Rhode Island • (401) 789-5660