

## In a fire, worry more about HCl than about CO

The hydrogen chloride that forms when polyvinyl chloride products burn tends to adsorb onto nearby surfaces, and thus may not travel like other combustion products. Tests at San Antonio's Southwest Research Institute (SwRI) show that other gases, such as carbon monoxide, remain stable and are likely to travel in a burning building. Fire experts say this transport phenomenon caused many of the deaths in the MGM Grand hotel fire in Las Vegas a few years ago. SwRI researchers have found that the rate of HCl decay depends on air circulation, humidity and the amount of surface area present. They have developed a mathematical model that predicts how much HCl will decay in a fire and how much will remain.

## ChemLink takes the sting out of heavy metals

An aqueous solution of antimony pentoxide suppresses the dehydrogenation activity typically promoted by traces of nickel in a fluid catalytic cracking unit, says ChemLink (Newtown Square, Pa.), a subsidiary of Atlantic Richfield. The company is promoting the additive as a way to permit refiners to tolerate higher contaminant metals in the feedstock.

## A new process takes on heavy oil

East Germany's Petrolchemisches Kombinat (PCK) is the first client for a plant using the high-conversion soaker-cracking (HSC) process developed by Mitsui Coke and Toyo Engineering. To be built at Schwedt by December 1988, the plant will help PCK to raise gasoline and diesel fuel production by thermally cracking 740,000 metric tons/year of residue from a 30,000-bbl/day visbreaking complex. Residue originating in a visbreaker will be processed by both the new HSC plant and PCK's own hydrogenation-desulfurization plant.

## Syntex markets a blood pressure drug in the U.K.

Syntex (Palo Alto, Calif.) will introduce in the U.K. this September the nicardipine for treating angina and high blood pressure. Syntex now markets nicardipine in Denmark for treating angina and hypertension, and in Spain for treating cerebrovascular insufficiency. In the U.S., Syntex has submitted an application to market nicardipine for angina and expects to file for its use for hypertension this year.

## Speculation about a wall around Chernobyl

The U.S.S.R. is believed to be sinking a wall 100 m deep along a 4-km perimeter at the Chernobyl nuclear plant. Basis for speculation is a \$23 million equipment contract signed by two Italian firms for deliv-

ery to the U.S.S.R.'s Metallurgimport. The bulk of the contract went to Italy's foundation specialist Casa Grande (Pordenone); roughly \$500,000 went to pump maker Varisco (Verona). Neither company would confirm that the equipment was targeted for Chernobyl. The 3-m-thick wall would be a mixture of cement and bentonite with a density of 4 tons/cu m. Apparently the wall will insure against contamination of the groundwater and the nearby Dnieper River.

## Two companies team up to market HGH

To commercialize genetically engineered human growth hormone (HGH), Bio-Technology General (New York City) has joined with American Critical Care, a unit of Baxter Travenol Laboratories that has been purchased by Du Pont. Clinical studies of HGH, produced by Bio-Technology General, are now under way, with a new drug application projected for next year. American Critical Care will have exclusive marketing rights to HGH in the U.S. and will be responsible for running clinical trials. Bio-Technology General will produce HGH, as well as receive licensing fees and royalties from HGH sales. The company's HGH is said to be identical to the human hormone, which is used to treat dwarfism.

## A DNA probe for the detection of *Campylobacter*

A rapid diagnostic test for detecting *Campylobacter* bacteria in stools has been introduced by Integrated Genetics (Framingham, Mass.). The new Gene-Trak assay—a nonisotopic, DNA-probe-based test—will be marketed to clinical laboratories. It's said to detect the presence of *Campylobacter*—a major cause of severe gastrointestinal infections—in stool samples in less than 16 hours, compared with 72-96 hours by culturing, the present test. Annual market potential in the U.S. could be at least \$25 million.

## A protein engineering system from Japan

Five Japanese companies led by Sumitomo Chemical and NEC Corp. have developed a biochemical expert system called BIOCES for protein engineering and pharmaceuticals and agricultural chemicals design. The system, which sells for \$125,000, incorporates drug receptor theory. It operates on a \$625,000 ACOS general-purpose computer, and is designed to create or modify existing proteins and investigate drug receptor relations. Color graphics terminals can produce three-dimensional models of proteins from their single-dimension structures. The other companies that helped develop the system are Sumitomo Pharmaceuticals, Kissei Pharmaceutical and its software subsidiary, Kissei Comtec Co.