

Uranium enrichment by gas centrifuge is cheaper than by gaseous diffusion

Gas centrifuge uranium enrichment would be "economically superior" to the current gaseous diffusion process, a joint study by the Tennessee Valley Authority, Electro-Nucleonics, Inc., and Burns and Roe Industrial Services Corp. concludes. According to the study, a \$1-billion gas centrifuge plant would produce enriched uranium at a "significantly lower" cost than would a \$3-billion gaseous diffusion facility. The findings of the report were disclosed last week by CENTAR Associates (Fairfield, N.J.), a joint venture of ENI Nuclear and ARCO Nuclear. CENTAR says it has used the study as the basis for making a proposal to the Energy Research and Development Administration to build and operate a gas centrifuge plant that would start up in 1981 and go into full production by 1987. Approximately 25% of the cost of the new facility, says CENTAR, would be provided by the company; the remainder would come from federally guaranteed bonds that CENTAR would issue. This arrangement is contingent upon a law that would end the government monopoly in uranium enrichment and provide the means for launching a private enrichment industry. The bill is now before Congress.

Study indicates possible link between vinyl chloride and heart disease

A possible link between vinyl chloride and heart and cardiovascular diseases has been discovered among employees at KemaNord's Stockvik, Sweden, plant. A study of data on all 771 employees at the plant from 1944 to 1973 showed 28 heart-related deaths occurred, while 18 would have been predicted from a comparison with the general Swedish population. But the above-normal mortality figure was restricted to workers employed less than three years. Also, northern Sweden, where Stockvik is located, has a higher heart and cardiovascular mortality rate than southern Sweden. And the plant employs a number of workers from Finland, which has a higher rate than Sweden. Sweden's Occupational Health Board plans further studies.

Pollution control spending in chemical industry continues to increase

Chemical industry investment in pollution control is currently running at the rate of 6.2% of capital expenditures and will go up to 8.1% by 1977, according to a survey by the Manufacturing Chemists Association of 130 of 186 member firms. And the yearly bill for operating that control investment now comes to \$502 million. Total industry investment for pollution control has reached \$2 billion and will go to \$4.6 billion by 1977, MCA reports. Water pollution control has taken most of that investment so far, \$1.2 billion, with an additional \$749 million for control of air pollution and \$120 million for solid wastes. Pollution control also takes 7.3% of the industry's energy consumption, according to the survey (*see also p. 19*).

Portable computers are introduced by IBM

Portable computers that can solve scientific and engineering problems are the newest entry from IBM. The new machines weigh 50 lbs., require 115-volt power. The 12 models cost from \$8,975 to \$19,975. The machines, called the IBM 5100, can be used to solve differential equations, algebra calculations, correlation analyses and "what if" situations for planners. Optional attachments include a printer and a tape unit.