

14. Epstein, J. A., Folve, E. J., Perrine, I. and Lee, S. W., *J. Lab. Clin. Med.*, 1944, **29**, 319.
15. Czerkinsky, G., Diding, N. and Ouchterbry, O., *Scan. J. Clin. Lab. Invest.*, 1955, **7**, 259; *Chem. Abstr.*, 1956, **50**, 7223e.
16. Robinson, R. C. V., Fercoit, T. N. and Robinson, Jr. H. M., *Arch. Dermatol.*, 1960, **81**, 681.

NEWS

ANAEROBES FOR IMPROVED SEWAGE TREATMENT

...“Agricultural engineers at Cornell University have devised a new system for treating sewage that can produce reservoir-quality water at little or no cost, according to the researchers [in Ithaca, New York]. By using an unusual bacterial technique to filter out heavy pollutants and then growing plants on the partially cleansed waste water, the Cornell system produces such commercial products as natural gas and nursery plants and trees while it cleans the water. Head researcher William J. Jewell devised a first-stage biological treatment system that removes ‘as much sludge, soluble organics and suspended solids as possible’ before using the water to grow plants. In the process, which has been patented by Cornell, anaerobic bacteria are attached to small particles of pulverized corncobs, which are then suspended in the waste water. These bacteria, which grow in the absence of oxygen, are very slow-growing and thus do not accumulate in the system. However, they rapidly convert soluble

organic materials in the waste water into methane gas. ‘Currently,’ Jewell said, ‘most sewage treatment systems use aerobic bacteria and a large amount of energy for first-stage treatment and end up with a lot of sludge.’ He said it costs the nation about half a billion dollars a year just to aerate sewage so that aerobic bacteria, which depend upon oxygen, can remove some of the organic material. In the Cornell system, the initial treatment gets rid of most of the suspended solids and some of the toxic materials in waste water, which is then ready for hydroponic agriculture. The hydroponically grown plants remove nutrients and most of the remaining pollutants in the water. To produce drinking water, a third step would be needed to remove remaining pollutants.” [Jane E. Brody in *New York Times*, 3 Nov. 87, p. C1; C4. Reproduced with permission from Press Digest, *Current Contents*®, No. 21, May 23, 1988, p. 13. (Published by the Institute for Scientific Information®, Philadelphia, USA.)]

POLISH ACADEMY OF SCIENCES

Prof. C. N. R. Rao, Chairman of the Science Advisory Council to the Prime Minister, and Director, Indian Institute of Science, Bangalore, has been elected a foreign member of the Polish Academy of Sciences. Prof. Rao is the first Indian

to be elected to the Polish Academy of Sciences. Prof. C. N. R. Rao, is the President of the Current Science Association and Editor of Publications of the Indian Academy of Sciences, Bangalore.
