

THE SYNTHESIS OF UNUSUAL ORGANOFLUORINE COMPOUNDS

Hsu-Nan Huang, Wayne D. Clark, Wen-Huey Lin and Richard J. Lagow*

The University of Texas at Austin, Department of Chemistry, Austin, TX 78712 (U.S.A.)

Recently a number of very new and interesting classes of compounds have been synthesized. These new species include the first perfluoro crown ethers, new high molecular weight perfluorocarbon cyclic compounds such as perfluoro-cyclotetradecane, and a very interesting class of perfluoroethers of medium molecular weight that are nearly spherical in shape which have been nicknamed 'perfluoro ball bearings'. Additionally the synthesis of bulky organofluorine compounds with pendant SF₅ groups such as 1-pentafluorosulfur perfluoro-neopentane and a number of other equally interesting organofluorine sulfur compounds will be discussed.