

Ramakrishna, T.; Jayaraman, N., 2003, "Synthesis of poly(propyl ether imine) dendrimers and evaluation of their cytotoxic properties", *J. Org. Chem.*, 69, 9694 – 9704.

In this Article, synthesis of poly(propyl ether imine) dendrimers of up to three generations constituted with ether as the linker component and imine as the branching component is reported. 3-Aminopropan-1-ol is used as a monomer for the synthesis and synthetic protocols are established to prepare dendrons and dendrimers in excellent yields often. The constitutions of the dendrons and dendrimers reported herein may be considered in line with the most widely used poly(amido amine) and poly(propyl imine) dendrimers. In comparison with these two most successful dendrimers for a variety of studies, we have established herein that an ether functionality can also be invoked to constitute dendrimers, in addition to the imine functionality. Also, the synthetic methods allow us to install either a carboxylic acid or an alcohol or an amine at the peripheries of dendrons and dendrimers. We have also evaluated the cytotoxic properties of the dendrons and dendrimers, so as to open up possibilities for their incorporation in biological and related studies.