

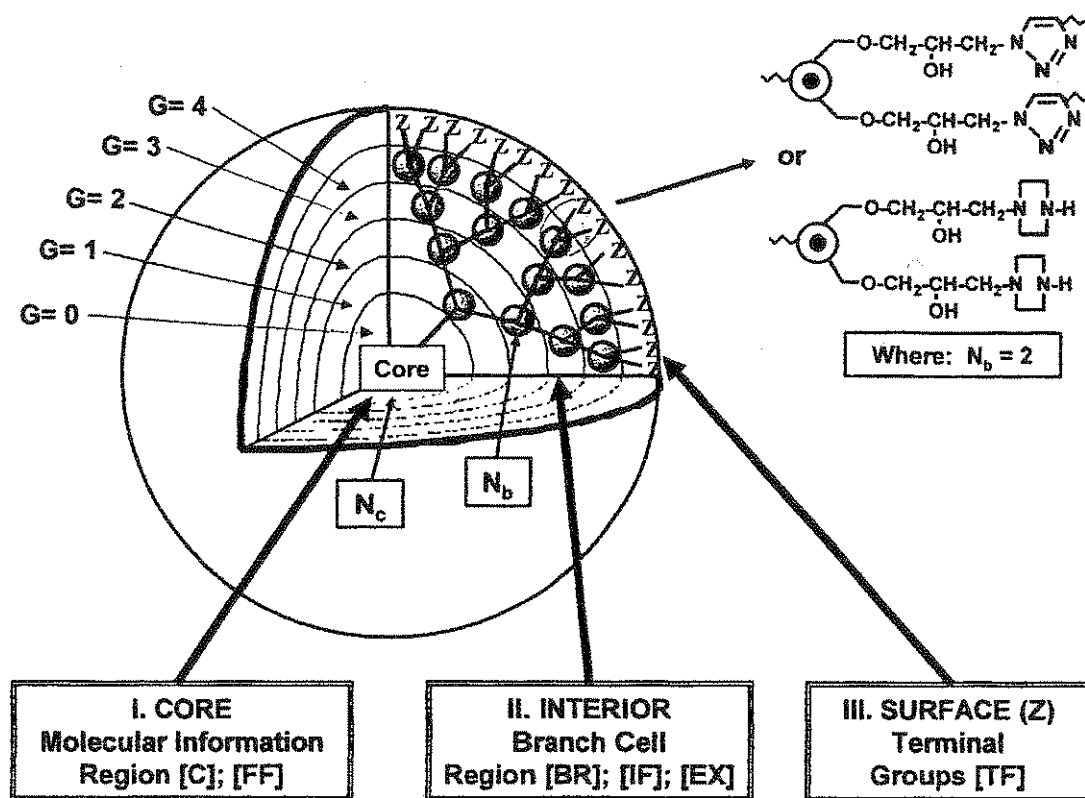


Figure 1

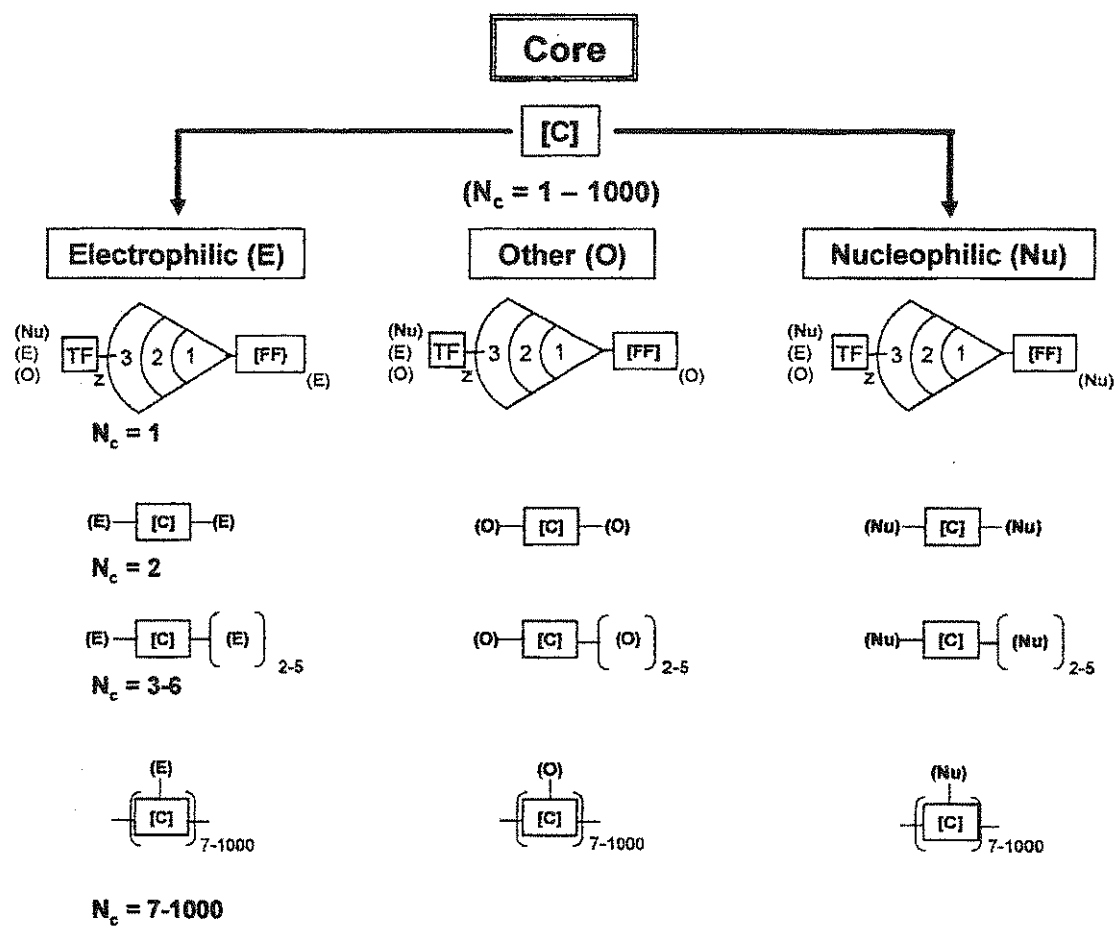
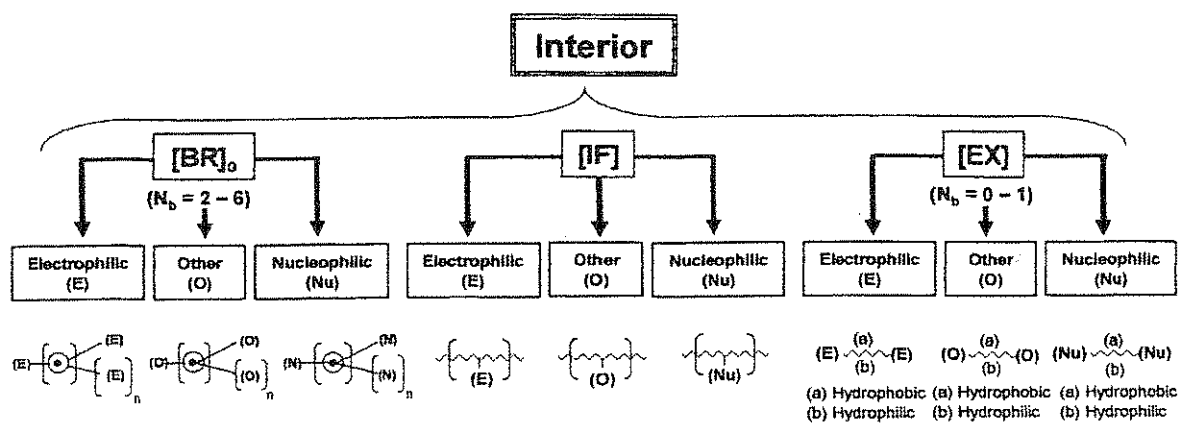


Figure 2



Where: $n = 1-4$

Figure 3

Branch Cell Structure Resulting from a Tetra Glycidyl Ether

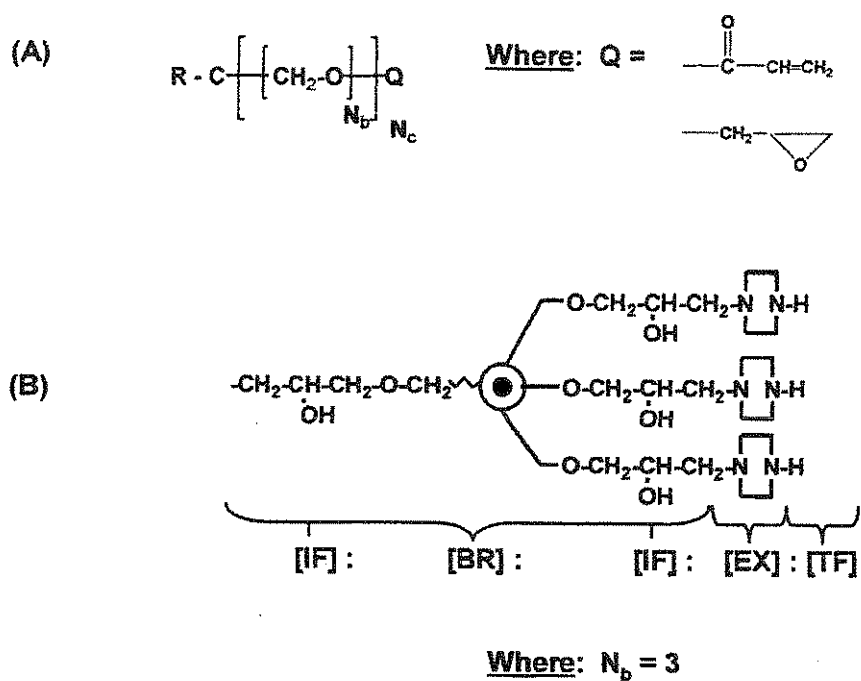
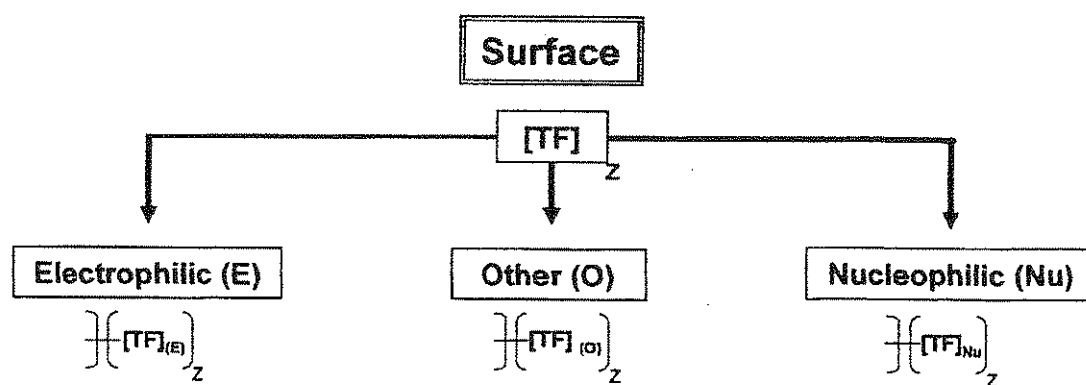


Figure 4



Where: $z = N_c N_b^G$

Figure 5

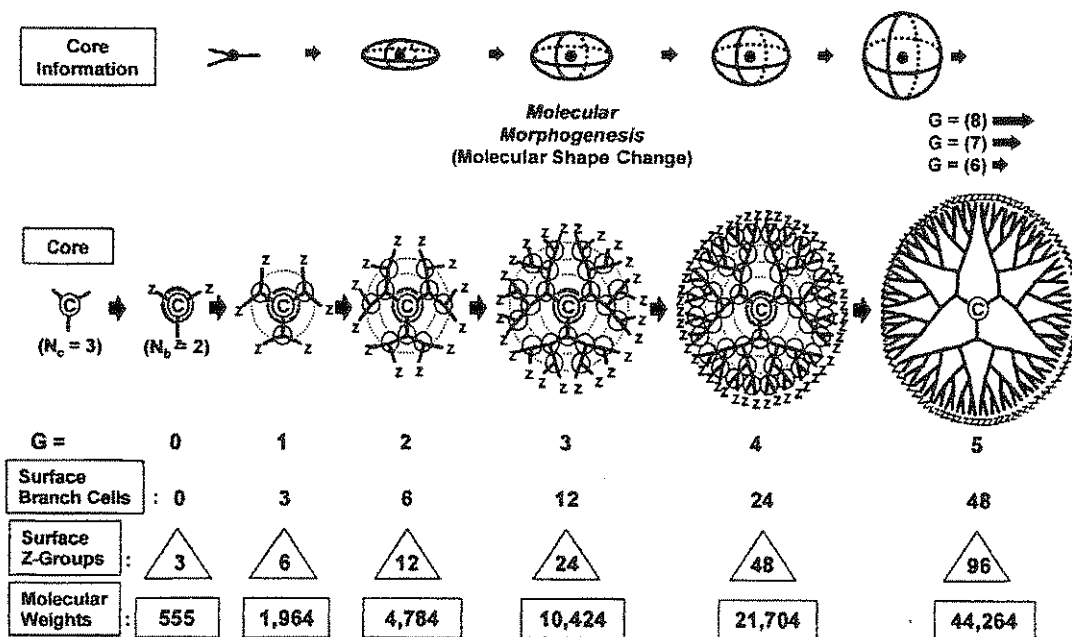


Figure 6

Nanoscale Sterically Induced Stoichiometry (N-SIS) Effects

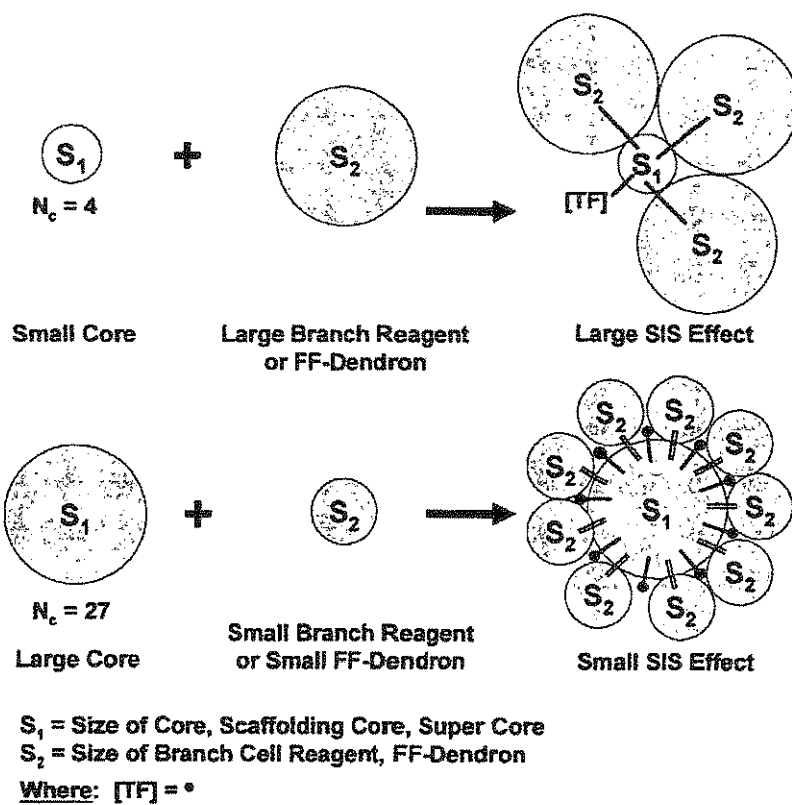


Figure 7

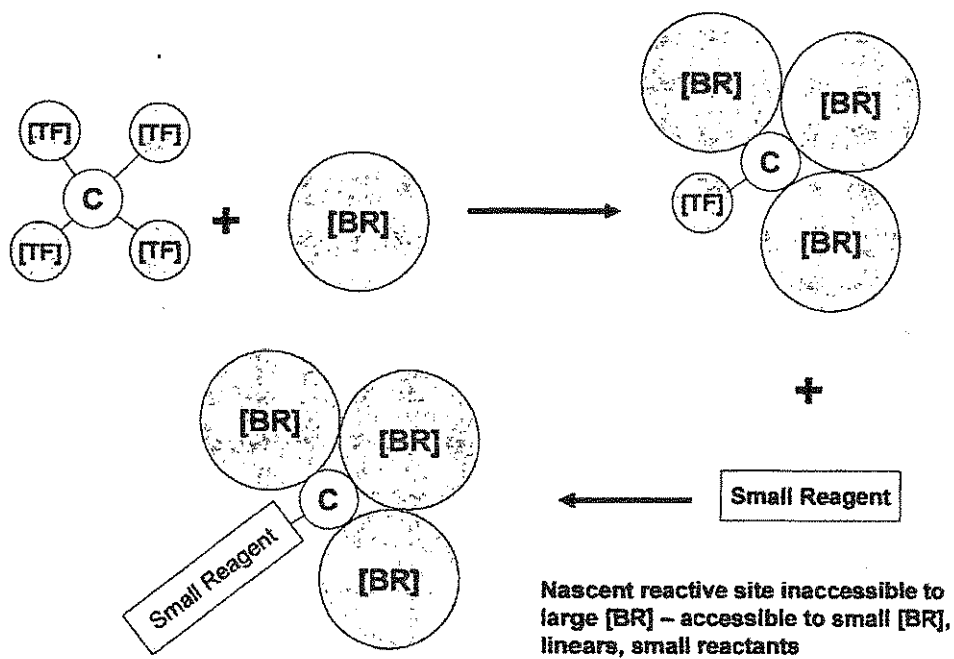
N-SIS Induced Formation of Nascent Functionality/Reactivity

Figure 8

**Combinatorial Reactivities of Nucleophilic (Nu), Electrophilic (E), Other (O)
(e.g., Free Radical) Features of the Core [C], Branch Cell Reagent [BR], Extender
[EX], Focal Point Functional Dendron (FF-D) and Terminal Functionality [TF]**

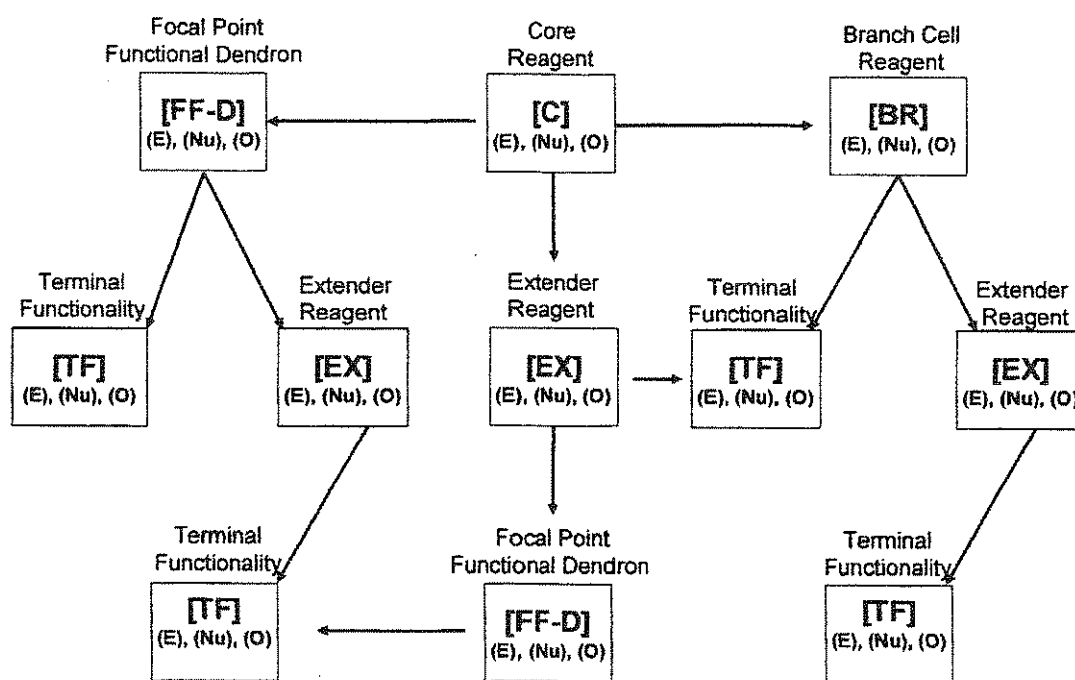


Figure 9

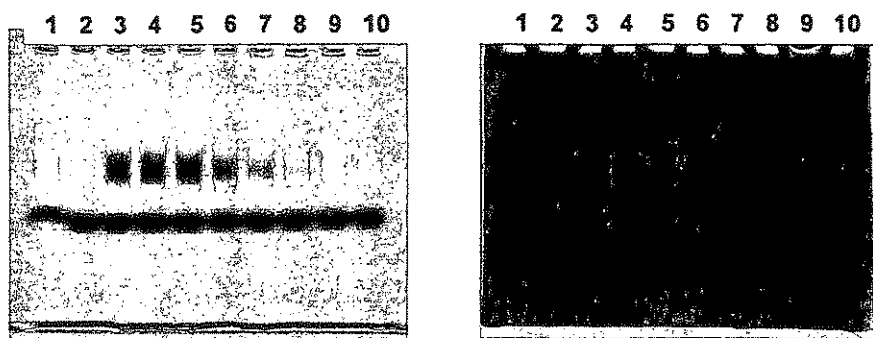


Figure 10

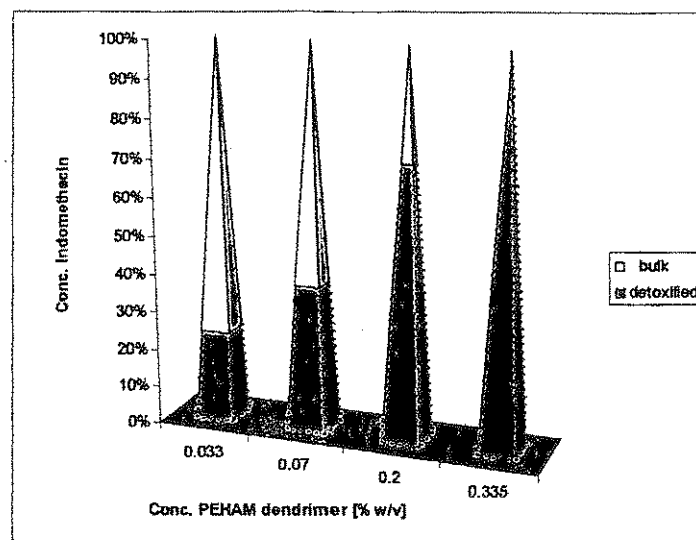


Figure 11

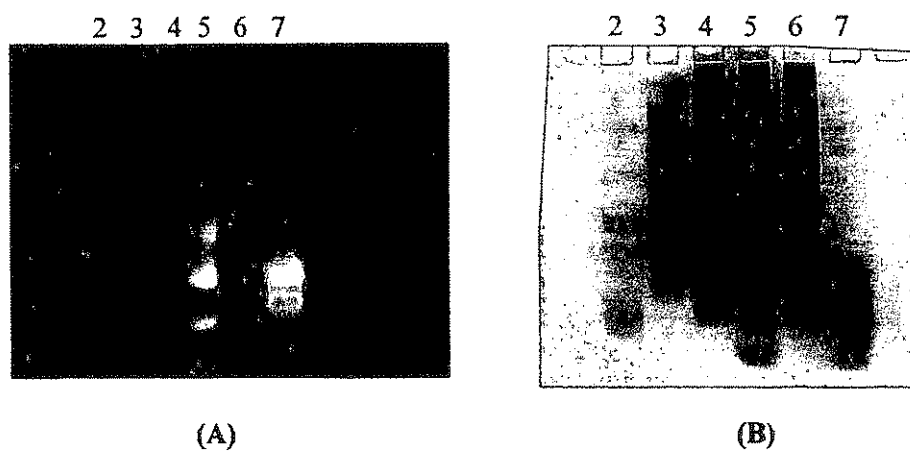
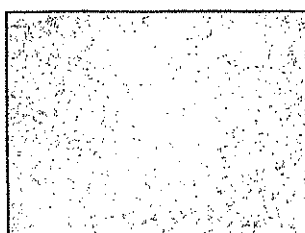


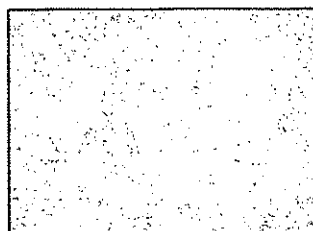
Figure 12

FITC-PEHAM
2 hr.



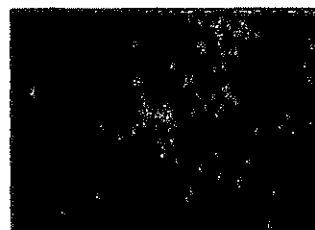
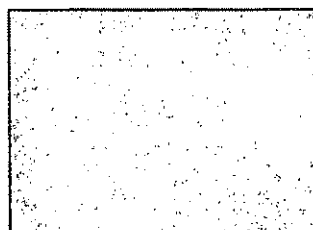
A

FITC-PEHAM
5 hr.



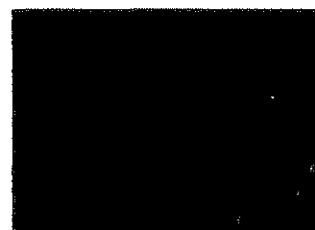
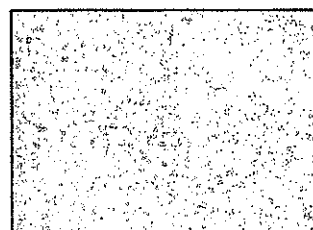
B

FITC-PEHAM
24 hr.



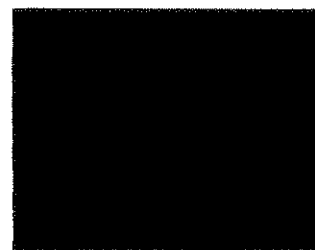
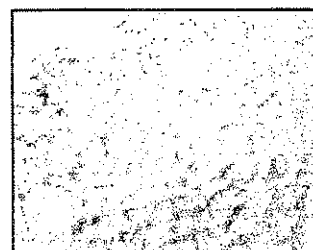
C

PEHAM



D

FITC



E

Figure 13

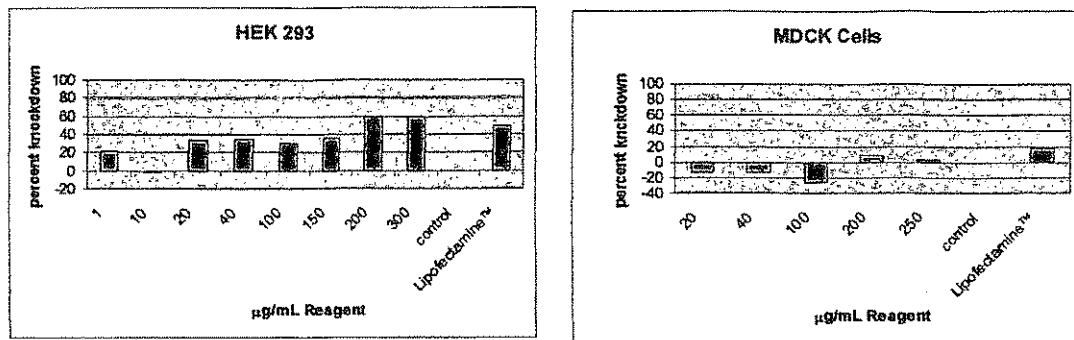


Figure 14

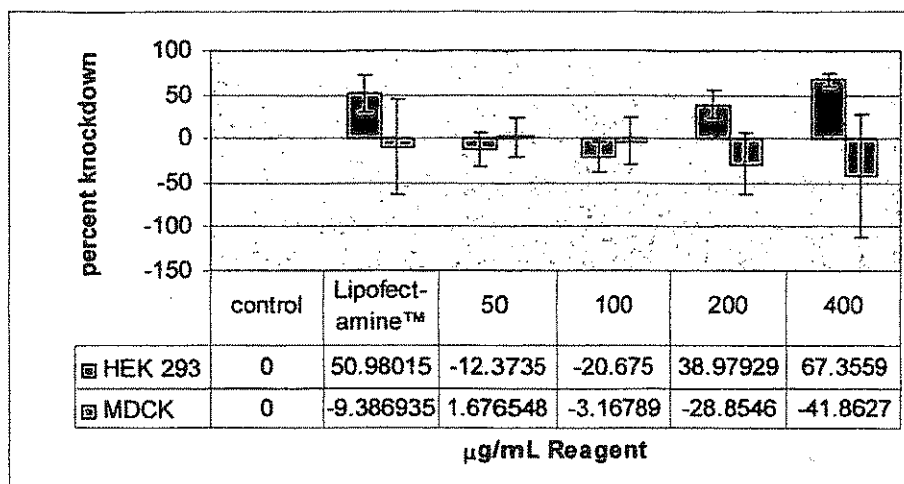


Figure 15

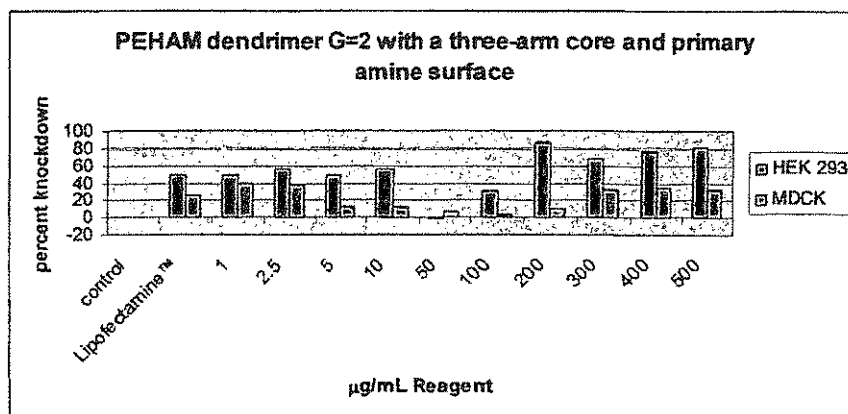


Figure 16

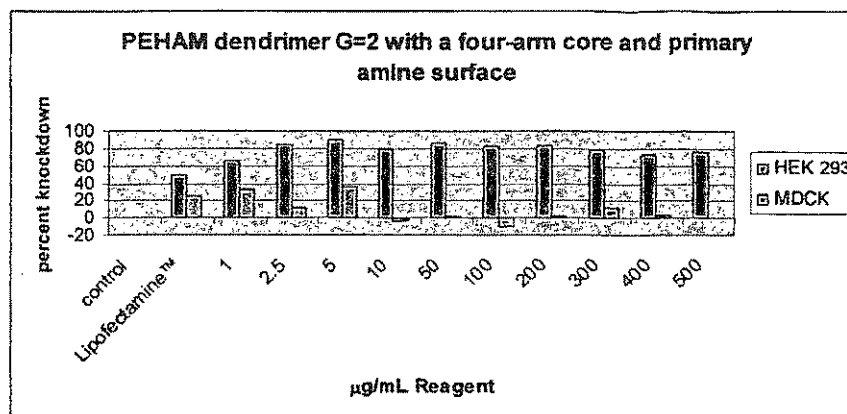


Figure 17

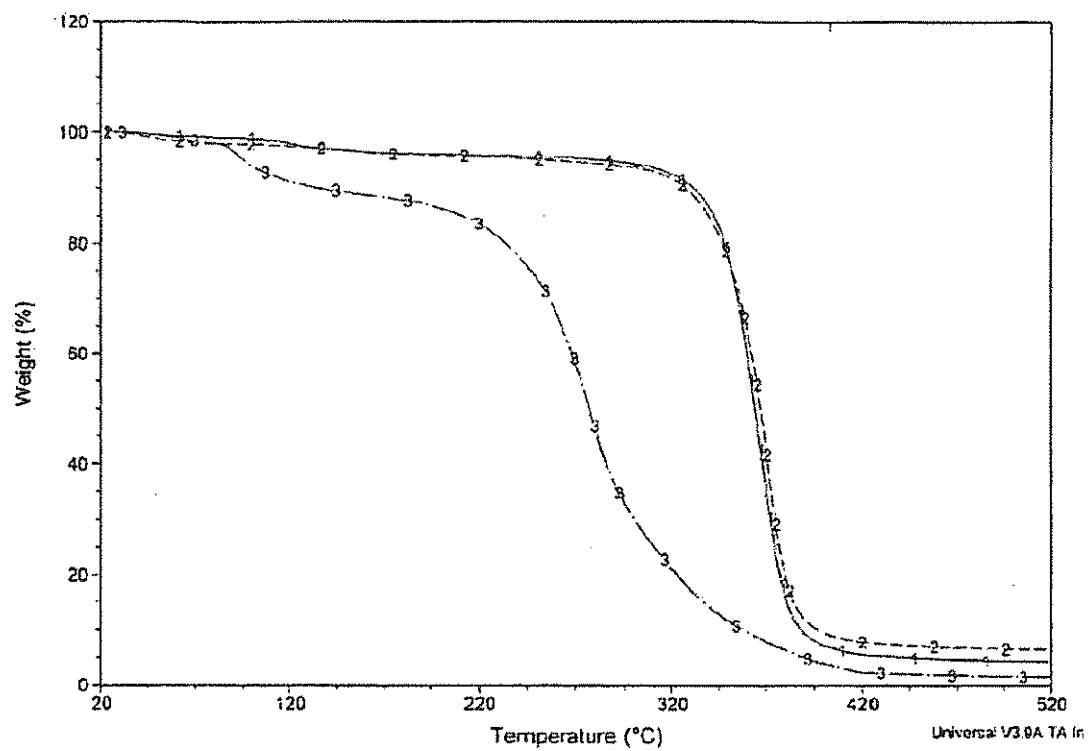


Figure 18

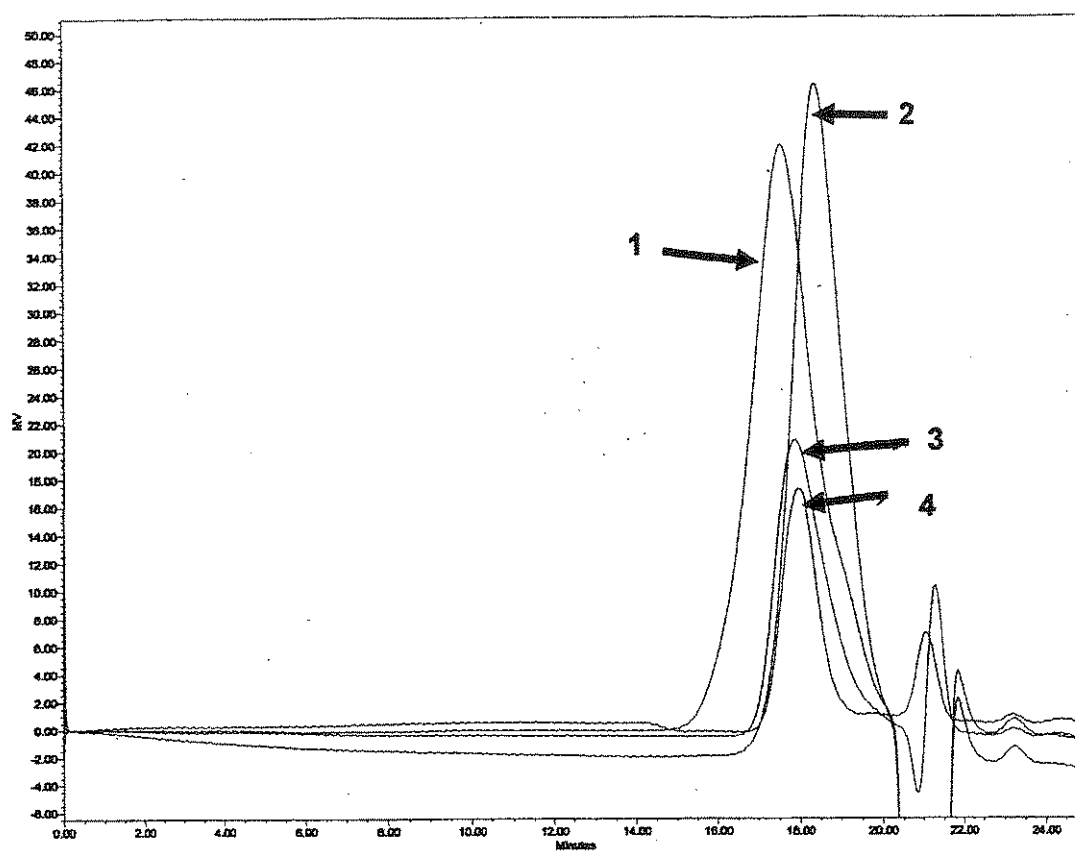


Figure 19

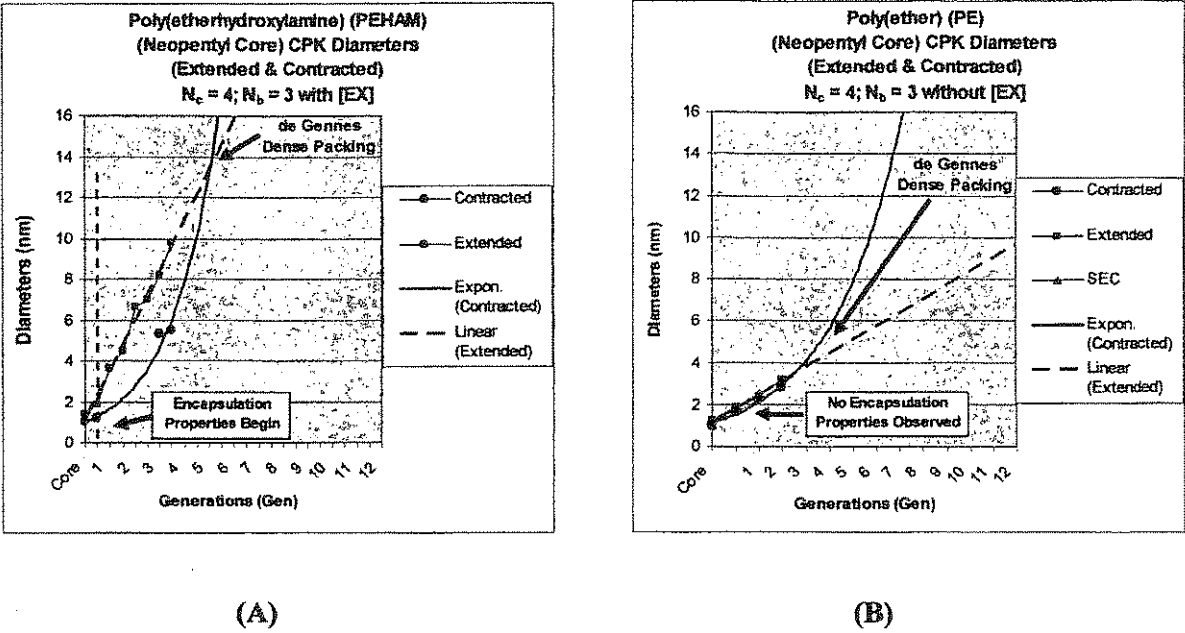


Figure 20

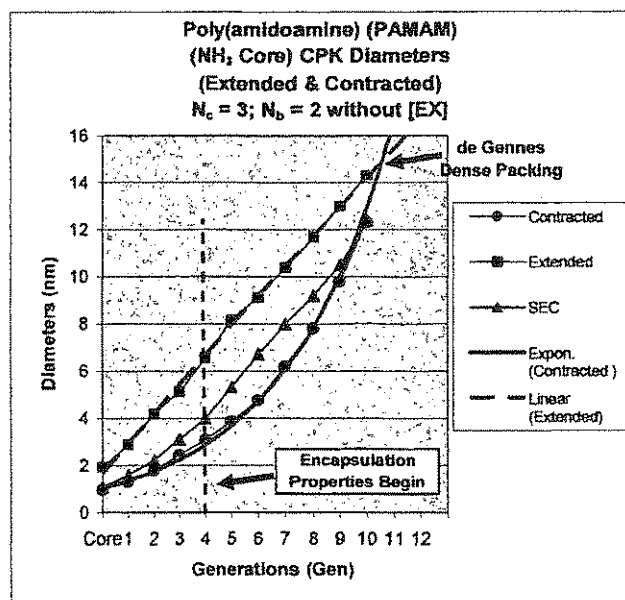


Figure 21

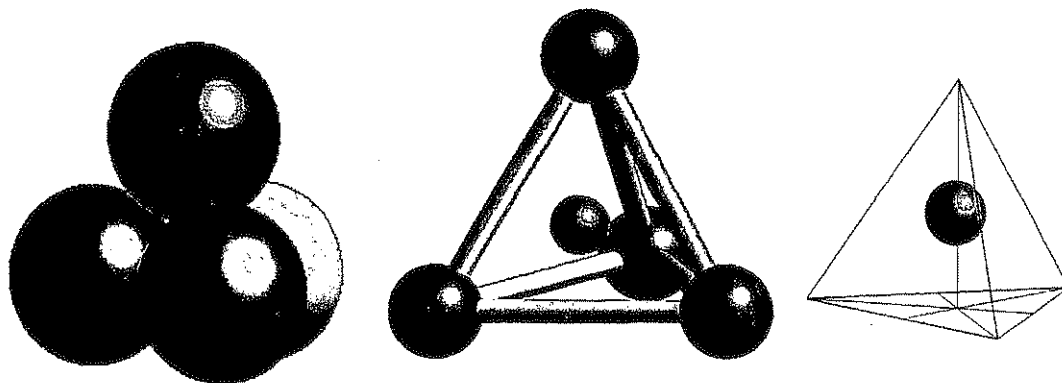


Figure 22



Figure 23

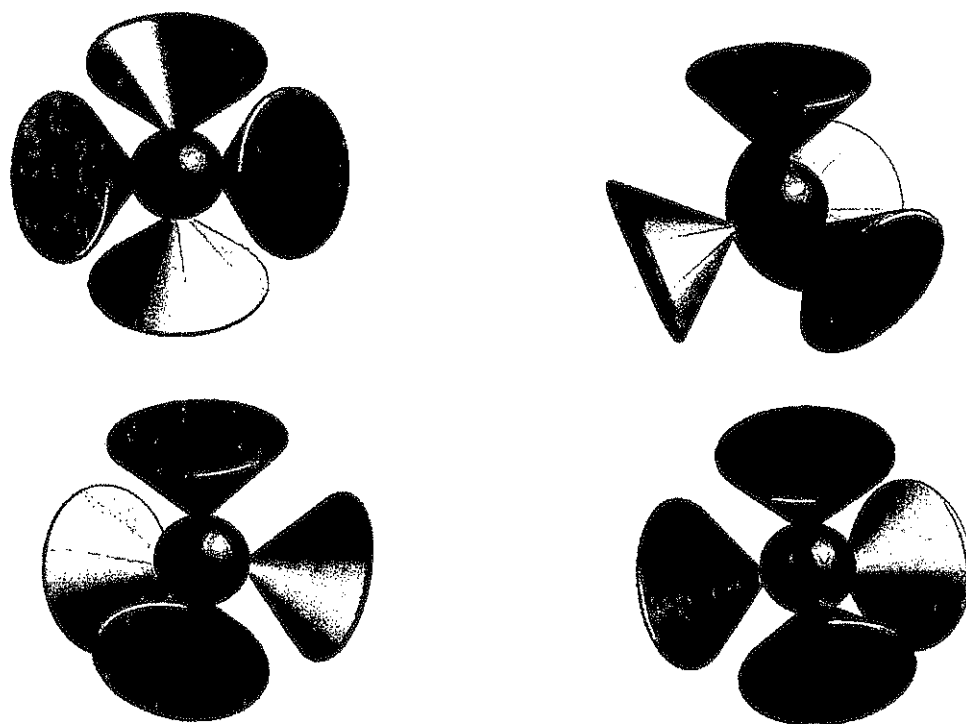


Figure 24

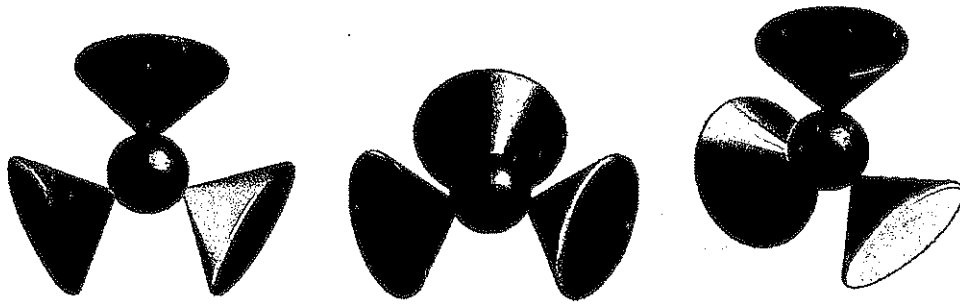


Figure 25