





































































































































































































































































































































































































































































































































































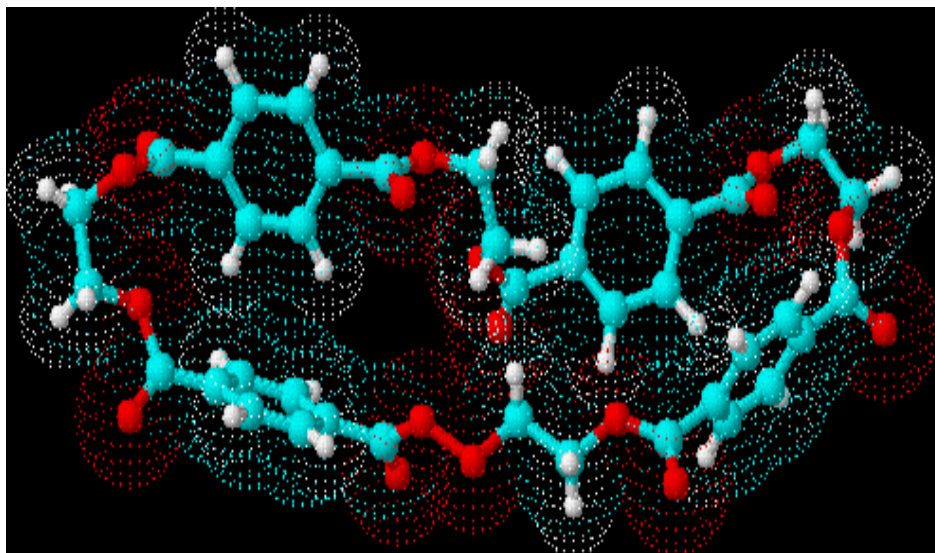




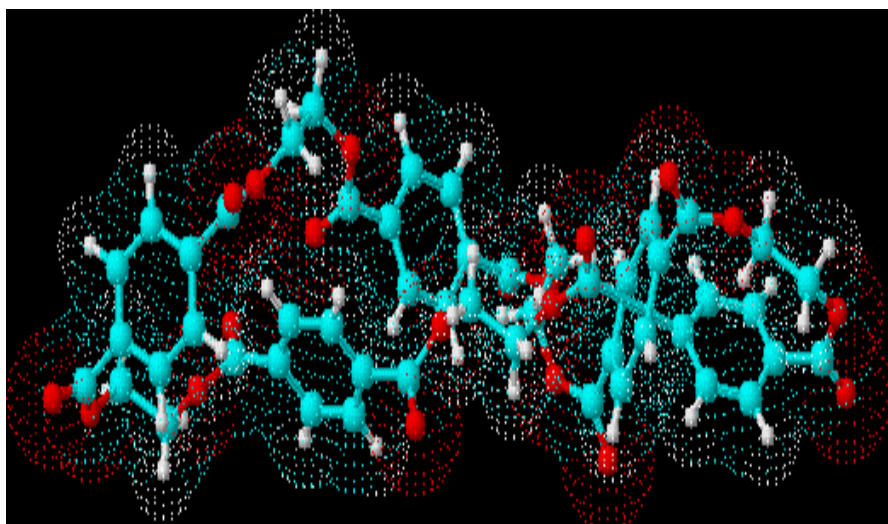






**M<sub>4</sub>****Figure 9.4** Structure of ethylene terephthalate oligomer M<sub>4</sub>

Molecular formula	= C <sub>40</sub> H <sub>34</sub> O <sub>17</sub>
Molecular Weight	= 786.688
Composition	= C(61.07%) H(4.36%) O(34.57%)
Molar Refractivity	= 194.37 ± 0.3 cm <sup>3</sup>
Molar Volume	= 563.9 ± 3.0 cm <sup>3</sup>
Parachor	= 1585.2 ± 4.0 cm <sup>3</sup>
Index of Refraction	= 1.605 ± 0.02
Surface Tension	= 62.4 ± 3.0 dyne/cm
Density	= 1.395 ± 0.06 g/cm <sup>3</sup>
Dielectric Constant	= Not available
Polarizability	= 77.05 ± 0.5 10 <sup>-24</sup> cm <sup>3</sup>

M<sub>5</sub>

**Figure 9.5** Structure of ethylene terephthalate oligomer M<sub>5</sub>

Molecular formula	= C <sub>50</sub> H <sub>40</sub> O <sub>20</sub>
Molecular Weight	= 960.841
Composition	= C(62.50%) H(4.20%) O(33.30%)
Molar Refractivity	= 232.55 ± 0.3 cm <sup>3</sup>
Molar Volume	= 734.0 ± 3.0 cm <sup>3</sup>
Parachor	= 1917.1 ± 6.0 cm <sup>3</sup>
Index of Refraction	= 1.546 ± 0.02
Surface Tension	= 46.5 ± 3.0 dyne/cm
Density	= 1.309 ± 0.06 g/cm <sup>3</sup>
Dielectric Constant	= Not available
Polarizability	= 92.19 ± 0.5 10 <sup>-24</sup> cm <sup>3</sup>