The graphs show the energy (kJ/mol) as a function of distance (R in Angstroms) for the (CH₃)₂O-C₆H₅Br and (CH₃)₂O-C₆H₅Cl molecules. The energy is plotted on the y-axis, and the distance on the x-axis. The graphs depict the potential energy surfaces for the staggered and eclipsed conformations of the molecules.

For (CH₃)₂O-C₆H₅Br:
- The red line represents the energy for an electron towards the staggered conformation.
- The blue line shows the energy for an electron towards the eclipsed conformation.
- The purple line indicates the energy for an electron away from both conformations.

For (CH₃)₂O-C₆H₅Cl:
- The red line represents the energy for an electron towards the staggered conformation.
- The blue line shows the energy for an electron towards the eclipsed conformation.
- The purple line indicates the energy for an electron away from both conformations.
\((\text{CH}_3)_2\text{O-C}_6\text{H}_5\text{NMe}_2\)