

9. Determine enthalpy of isomerization of cis and trans-2-butene in Argus Lab.
10. Compare the HAH bond angles for the second row hydrides (BeH_2 , CH_4 , NH_3 , H_2O) and compare with the results from qualitative MO theory.

References (Theory):

1. Levie, R. de. (2001), **How to use Excel in analytical chemistry and in general scientific data analysis**, Cambridge Univ. Press.
2. Lewars, E. (2003), **Computational Chemistry**, Kluwer academic Publisher.
3. Cramer, C.J.(2004), **Essentials of Computational Chemistry**, John Wiley & Sons.
4. Hinchcliffe, A. (1996), **Modelling Molecular Structures**, John Wiley & Sons.
5. Leach, A.R.(2001), **Molecular Modelling**, Prentice-Hall.

References (Practical):

1. Lewars, E. (2003), **Computational Chemistry**, Kluwer academic Publisher.
2. Cramer, C.J. (2004), **Essentials of Computational Chemistry**, John Wiley & Sons.
3. Hinchcliffe, A. (1996), **Modelling Molecular Structures**, John Wiley & Sons.

Note: Some of the papers are same as in B Sc (H) Chemistry and B Sc Physical Sciences.