

Group 4: Zirconium and Hafnium (& Rutherfordium)

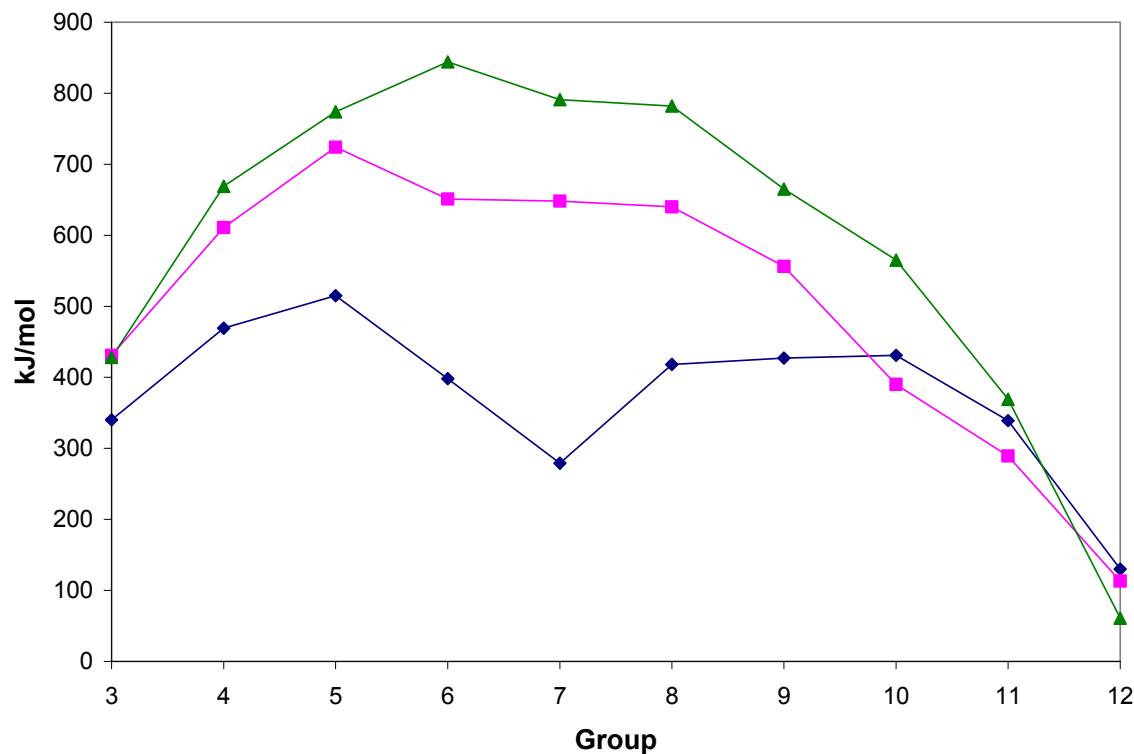
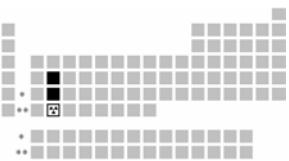


Figure 4.1 Atomization enthalpies of the d-block metals

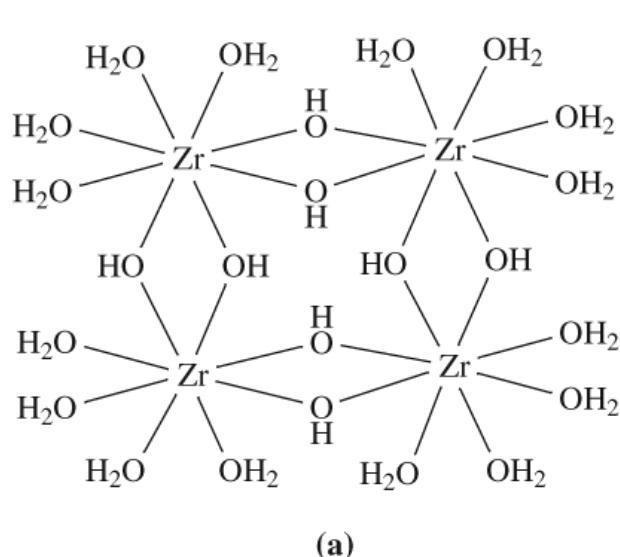


Figure 4.2 The structure of $[Zr_4(OH)_8(H_2O)_{16}]^{8+}$ (from *Inorganic Chemistry*, Housecroft & Sharpe)

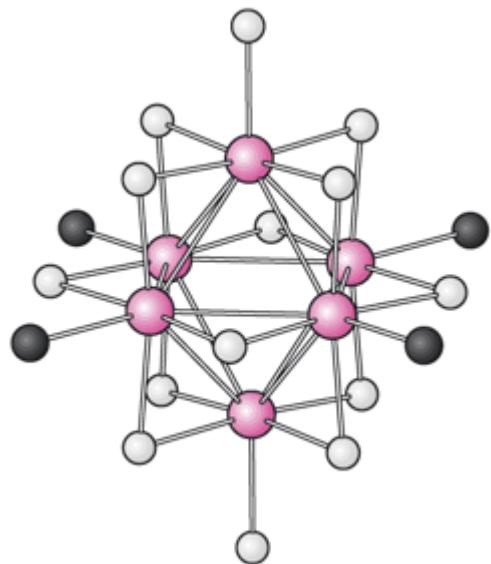


Figure 4.3 The structure of $[Zr_6Cl_{14}(PPr_3)_4]$