A Thermodynamic Study of the Charge Transfer Complexes of Iodine with Different *tert*-Butylcalix[4]crowns

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Formation of the charge-transfer complexes between calix[4]crowns (**1** – **4**) and iodine in chloroform solution was studied using UV-vis spectrophotometry. The stability constants and the thermodynamic data of the resulting 1 : 1 complexes were determined and was found to decrease with increasing the size of the crown moiety of the calixcrown. All complexes formed were found to be enthalpy stabilized, and all except the complex of **2** were entropy destabilized.

Key words: Charge Transfer Complexes, Calixcrowns, Thermodynamic