LIST OF TABLES

Tab II.1  Crystal and detector angles for Erbium L$_{III}$ absorption edges 37
Tab II.2  Crystal and detector angles for Vanadium K-absorption edges 38
Tab II.3  Crystal and detector angles for Prasedomium L$_{III}$-absorption edges 39
Tab III.1  Lattice constants, $T_c$ and oxygen content of the $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ samples 59
Table IV.1  Energy positions of various spectral features in vanadium K-edge spectra in vanadium compounds. 85
Table IV.2  Structural parameters for Vanadium compounds. 87
Table IV.3  Values of structural constants. 89
Table V.1  $d\rho_{abs}/dx$ for single crystals of Zn- and Co-doped Y123, and $d\rho_{rem}/dx$ for polycrystalline samples of Zn- and Co-doped Y123. 113
Table VI.1  a,b and c parameters for the Pr- and Ce- doped Er-124 samples 133