

Figure 11: Typical ^{57}Fe Mössbauer spectra of sample Ae75#20 ($\text{hd}_{25}\text{ae}_{75}$) recorded at different temperatures and evaluated with the quadrupole splitting distribution approach: (a) $T = 80$ K, (b) $T = 170$ K, (c) $T = 250$ K, (d) $T = 400$ K, (e) $T = 473$ K and (f) $T = 573$ K.

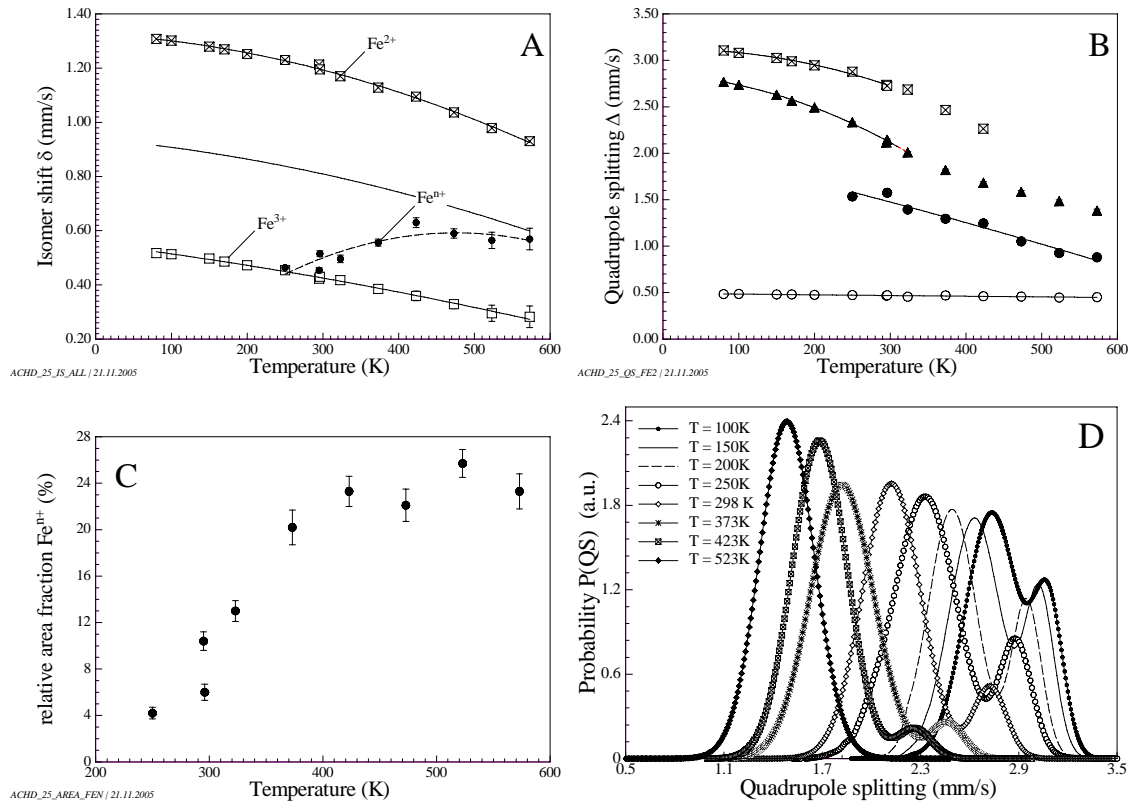


Figure 12: Variation of Mössbauer ^{57}Fe hyperfine parameters for sample Ae25#20 (hd₇₅ae₂₅) with temperature: (a) isomer shift for all Fe species, (b) quadrupole splitting for all Fe subcomponents (c) fraction of iron in the Fe^{3+} state (for total iron = 100 %); (d) variation of Fe^{2+} quadrupole splitting distribution curves with temperature. Error bars are smaller than the symbols if not visible. Lines fitted to the data are guides to the eye.