

1031

1032

1033

1034

1035

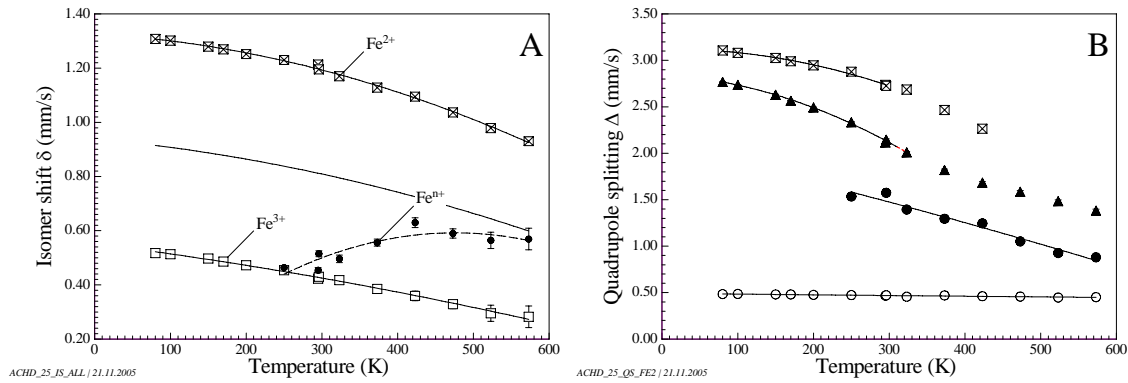
1036 Figure 11: Typical ^{57}Fe Mössbauer spectra of sample Ae75#20 (hd₂₅ae₇₅) recorded at different

1037 temperatures and evaluated with the quadrupole splitting distribution approach: (a) T = 80 K,

1038 (b) T = 170 K, (c) T = 250 K, (d) T = 400 K, (e) T = 473 K and (f) T = 573 K.

1039

1040



ACHD_25_IS_ALL | 21.11.2005

ACHD_25_QS_FE2 | 21.11.2005

ACHD_25_AREA_FEN | 21.11.2005

1041

1042

1043

1044 Figure 12: Variation of Mössbauer ^{57}Fe hyperfine parameters for sample Ae25#20 (hd75ae25)

1045 with temperature: (a) isomer shift for all Fe species, (b) quadrupole splitting for all Fe

1046 subcomponents (c) fraction of iron in the Fe^{n+} state (for total iron = 100 %); (d) variation of1047 Fe^{2+} quadrupole splitting distribution curves with temperature. Error bars are smaller than the

1048 symbols if not visible. Lines fitted to the data are guides to the eye.