

Figure 3.12. Experimental measurements of the magnetization of the organic free radical "DPPH" (in a 1:1 complex with benzene), taken at B=2.06 T and temperatures ranging from 300 K down to 2.2 K. The solid curve is the prediction of equation 3.32 (with  $\mu=\mu_{\rm B}$ ), while the dashed line is the prediction of Curie's law for the high-temperature limit. (Because the effective number of elementary dipoles in this experiment was uncertain by a few percent, the vertical scale of the theoretical graphs has been adjusted to obtain the best fit.) Adapted from P. Grobet, L. Van Gerven, and A. Van den Bosch, Journal of Chemical Physics 68, 5225 (1978). Copyright ©2000, Addison-Wesley.