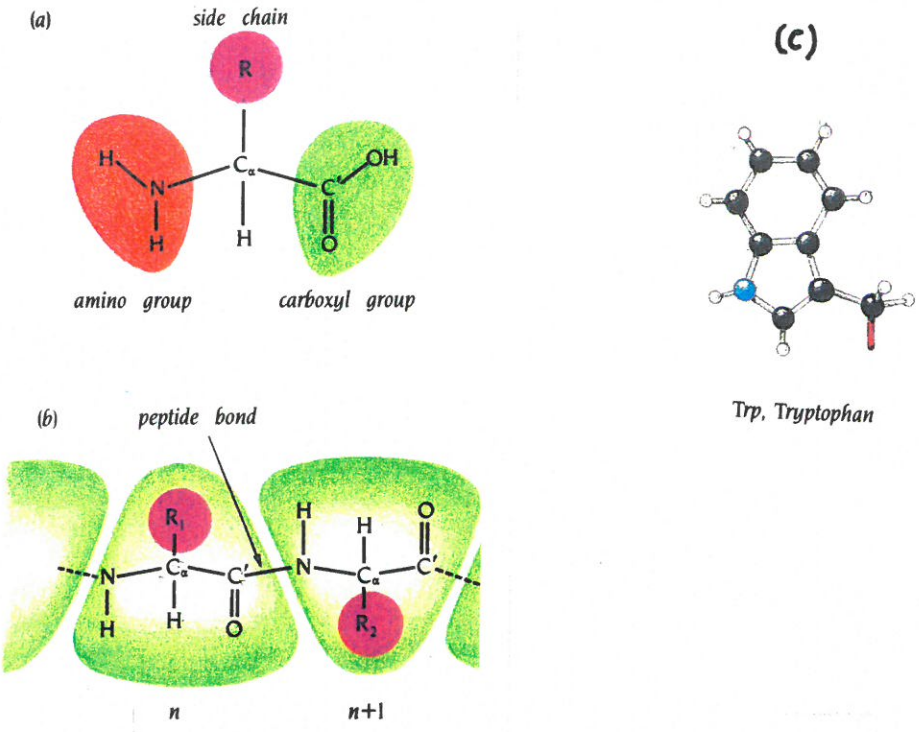
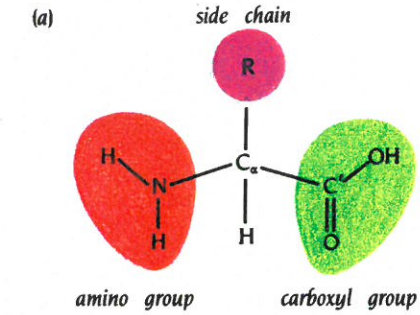
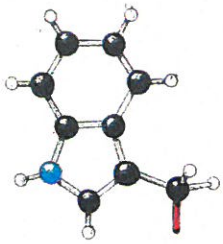


Fig. 2.D.7 (Colour online)

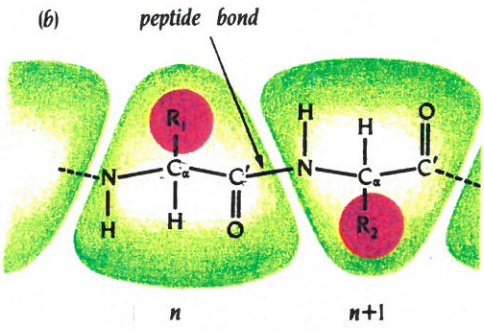
Proteins are built up by amino acids that are linked by peptide bonds into a polypeptide chain. (a) Schematic diagram of an amino acid, illustrating the nomenclature used in this book. A central carbon atom C_α is attached to an amino group, NH_2, a carboxy group C′OOH, a hydrogen atom, H, and a side chain, R. (b) In a polypeptide chain the carboxy group of amino acid n has formed a peptide bond, C–N, to the amino group of amino acid n+1. One water molecule is eliminated in this process. The repeating units, which are called residues, are divided into main-chain atoms and side chains. The main-chain part, which is identical in all residues, contains a central C_α atom attached to an NH group, a C′=O group, and an H atom. The side-chain R, which is different for different residues, is bound to the C_α atom.

(c) example of side chain associated with the amino acid Tryptophan, also denote Trp or W. Black spheres stand for carbon atoms (C), blue for nitrogen (N). Small, white spheres stand for hydrogen (H).





Trp, Tryptophan



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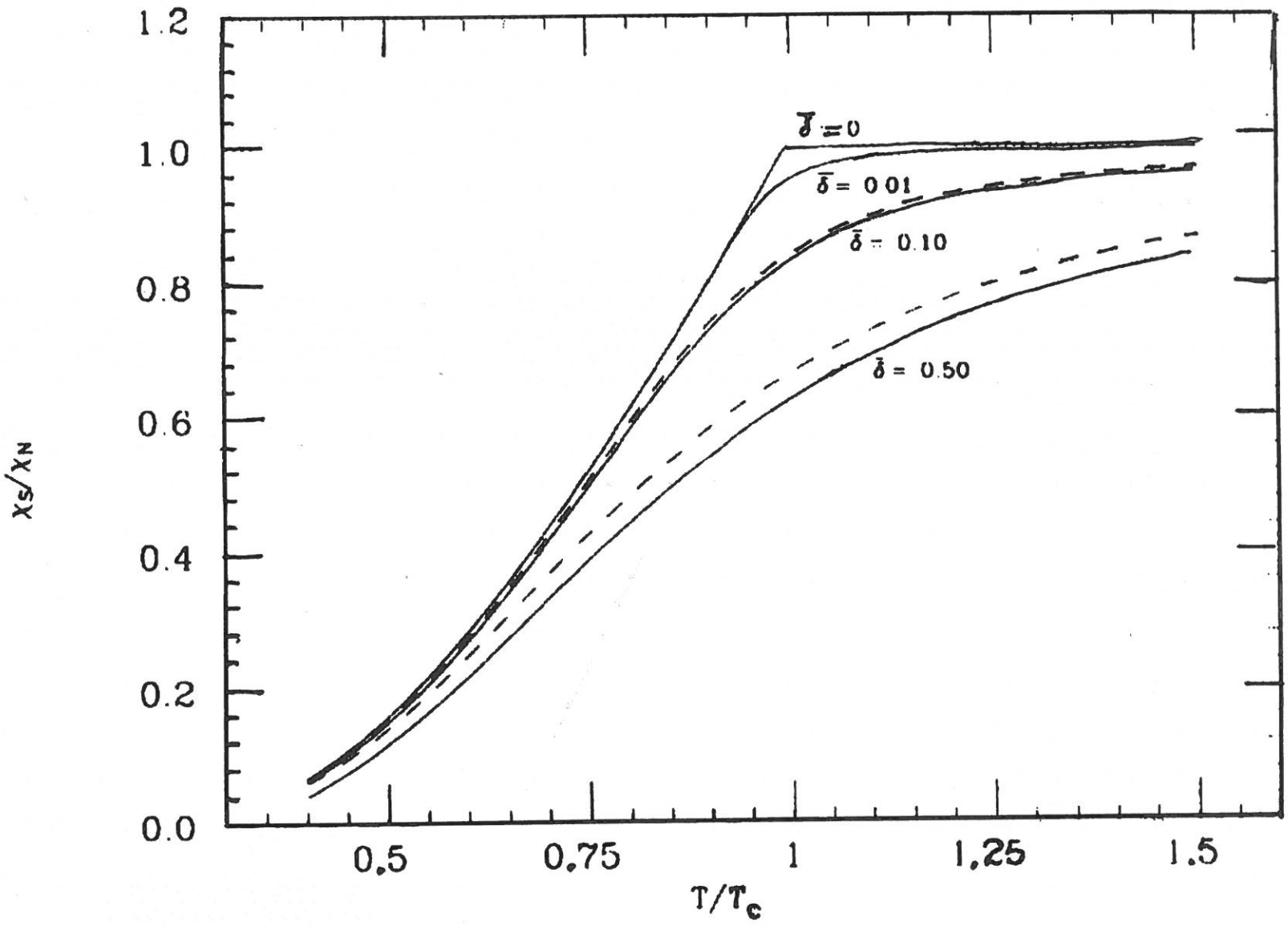
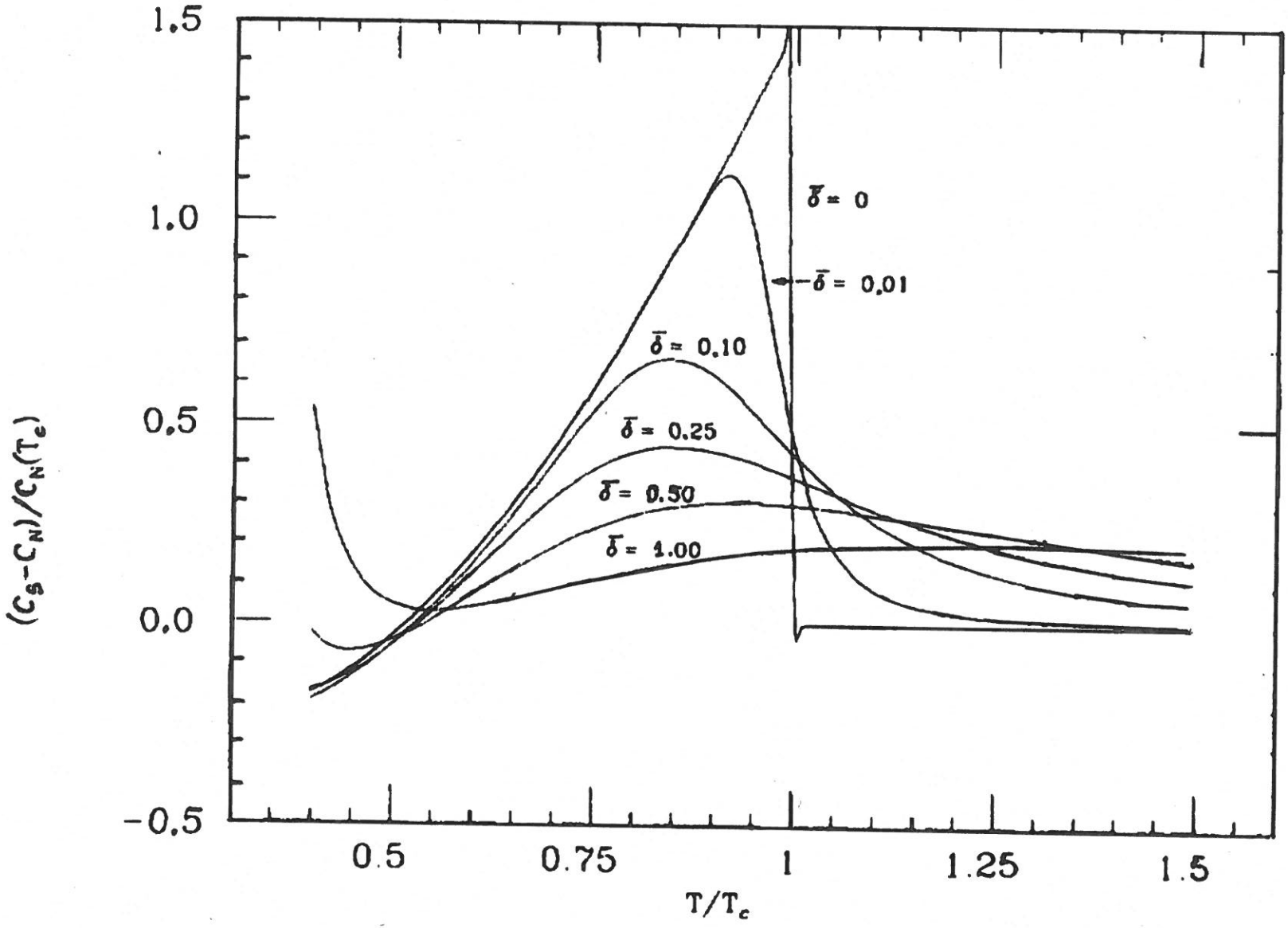
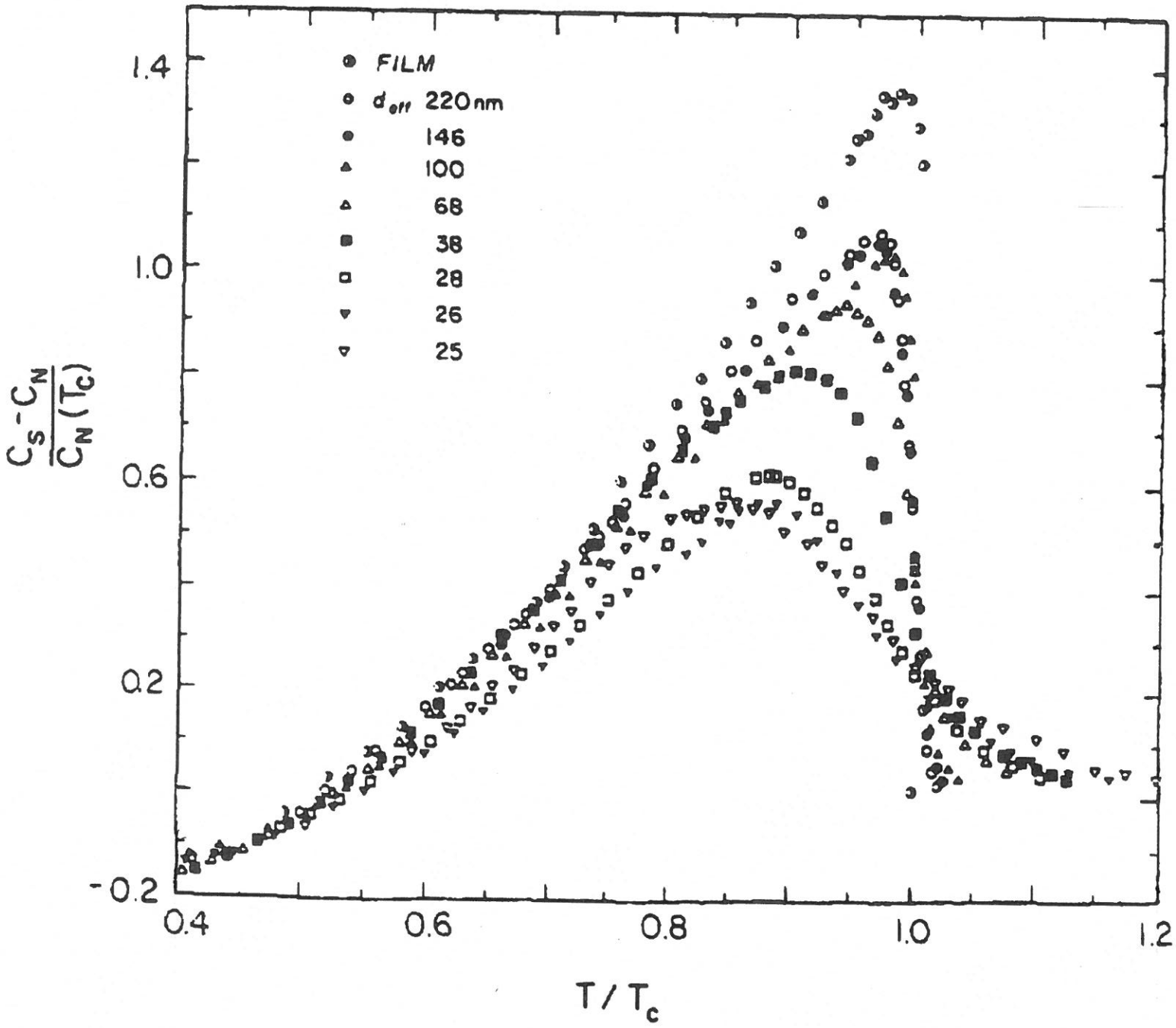


FIG. 1. Specific heat and magnetic susceptibility in the static path approximation (dashed lines) and including quadratic corrections (solid lines). The curves labeled $\bar{\delta}=0$ show the finite temperature BCS results.


1.5
1.0
0.5
0.0
-0.5
0.5
0.75
1
1.25
1.5
T/T_c
(C_S-C_N)/C_N(T_c)
δ̄ = 0
δ̄ = 0.01
δ̄ = 0.10
δ̄ = 0.25
δ̄ = 0.50
δ̄ = 1.00


FILM
d_{eff} 220nm
146
100
68
38
28
26
25
1.4
1.0
0.6
0.2
-0.2
0.4
0.6
0.8
1.0
1.2
$\frac{C_S - C_N}{C_N(T_c)}$
T / T_c