Graph-like state of matter: 13. A caution on critical exponents

M. Gordon and P. Irvine
Polymer 1979, **20**, 1450

Term (5) on page 1451 should read:

$$\frac{1}{\gamma}\ \{(1-\gamma)\phi\ln(1-\gamma)-(1-\gamma\phi)\ln(1-\gamma\phi)\} \qquad (5)$$

Equations (8):

$$\delta\phi \equiv \phi - \phi_C = \frac{1}{a_2^{1/2}}\left(\frac{T_C - T}{T_C}\right)^{1/2} - \frac{a_3}{2a_2^2}\left(\frac{T_C - T}{T_C}\right)\cdots$$
$$\equiv (\epsilon/a_2)^{1/2} - a_3\epsilon/2a_2^2\cdots \qquad (8)$$

Page 1452 Column 2, top line:

'.... analysis of the I' should read '... analysis of the Ising models'.

Formation of polymer fibrils by flow-induced crystallization

John D. Hoffman
Polymer 1979, **20**, 1071

Owing to a delay on our part, certain minor changes did not reach the editor in time to make corrections prior to publication. These corrections are given below. None change the basic thrust of the paper.

The first paragraph on page 1072 should read as follows: 'In the case of random-coil chains of equal length emanating from a plane, DiMarzio[13] has shown that the fraction of surface sites (of the same cross-sectional area as the chain itself) that can sustain such cilia under equilibrium conditions is

$$f_1 = C(1/z^{1/2}) \qquad (2)$$

where z is the number of statistical chain units in each cilium and C is a constant close to unity. (The value of C is actually 1.17 for a liquid on a cubic lattice for a polymer whose characteristic ratio is 6.7.) This expression explicitly preserves the correct liquid density in the surface boundary region for the case where cilia of equal contour length perform random-coil traverses from one plane to another. If in the model shown in *Figure 1* the number of chains emerging from the end surface is caused by multiple nucleation acts to exceed $C(1/z^{1/2})$, then the cilia (actually bridges between nuclei or crystallites) would tend to repel one another, and cumulative surface stress would occur in the bundle ends as each crystallite grew. Flory[14] has given the value $f_1 \cong 1/2$ for one special non-random coil model. Other types of treatment[13] lead to somewhat different expressions for f_1, but none gives a value closely approaching unity. These calculations uniformly indicate that it is not possible to bring anything like a random-coil cilium out from every possible surface site, and they all bear the implication that if some effect (in this case multiple nucleation) causes too high a fraction of cilia or ciliary bridges to emanate from a surface that cumulative surface stress will occur.'

Some confusion may be caused by the fact that beginning near equation (17) the symbol n_l has mistakenly been printed as n_1. The symbol l_s in equation (24) should be l_s.