

produced during the growth of the nascent polymer. In fact, when one uses heptane as solvent and a low polymerization temperature, the breakage and displacement of the catalyst crystals occur essentially in a highly viscous medium, since the polymer is not soluble under such conditions and precipitates as it is produced. This may well explain why in this case the resulting morphology can be similar to that found in shear induced crystallization.¹⁰⁻¹² However, in the latter case and for polyethylene, one is restricted to a limited number of solvents and temperature ranges, since the polymer must be put in solution prior to crystallization. In the case of polymerization with crystallization to produce nascent polyethylene, a much wider range of conditions is offered: for instance, temperatures ranging from -80 to above 140° and a variety of solvents and nonsolvents, including heterogeneous gas phase polymerization. Such a variety of conditions

may explain why extensive differences in degree of order and morphology can be found in samples produced by different authors.

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- (10) A. G. Wikjord and R. St. John Manley, to be published.
(11) A. Keller and F. M. Willmouth, to be published.
(12) B. Wunderlich, *Fortschr. Hochpolym. Forsch.*, **5**, 568 (1968).

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Page 245. The copolymer compositions given in the fourth column of Table I are incorrect. The correct values of COOH:100 CH₂ are: polymer A, 0; polymer B, 0.66; polymer C, 1.57; polymer D, 2.78; polymer E, 3.40.—T. K. KWEI AND E. P. OTOCKA

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Page 402. The copolymer compositions given in the third column of Table I are incorrect. The correct values of COO⁻/100 CH₂ are: Na-B, 0.66; Na-C, 1.57; Na-D, 2.78; Na-E, 3.40; Mg-B, 0.66; Mg-C, 1.57.—T. K. KWEI AND E. P. OTOCKA.