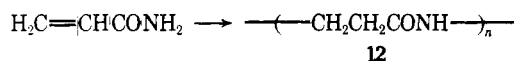


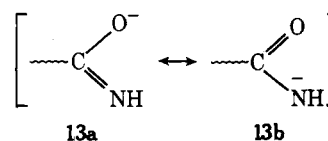
benzene, chloroform, and other typical organic solvents. The maximum molecular weight of the copolymers was 1470.

As to the scheme of the present copolymerization, a zwitterion mechanism similar to that proposed in previous studies²⁻⁶ is plausible. The course of the OZI-AM copolymerization is formulated as eq 4-6. The first step is the formation of zwitterion 9 by the addition of OZI with AM followed by a proton-transfer process. Then, two molecules of 9 afford a dimeric zwitterion 10. The propagation proceeds via the successive attack of 9 onto 10 to form a macrozwitterion 11.

The present copolymerization is interestingly compared with the homopolymerization of AM by base catalysts found first by Breslow et al.⁸ in which AM gave a polymer of the amide structure 12 via a hydrogen-transfer process.



The amide anion of 9, 10, and 11 is an ambident anion of oxygen (13a) and nitrogen (13b). It should be noted that



the regiospecific reaction took place exclusively at the oxygen anion 13a in eq 3 and 4 to give the imidate unit.

References and Notes

- (1) "Betaine" used to be employed instead of "zwitterion". Hereafter, we wish to use the terms of zwitterion and macrozwitterion according to the definition in the text in order to avoid the ambiguous terminology of "betaine".
- (2) Part V: T. Saegusa, Y. Kimura, S. Sawada, and S. Kobayashi, *Macromolecules*, **7**, 956 (1974).
- (3) T. Saegusa, S. Kobayashi, and Y. Kimura, *Macromolecules*, **7**, 139 (1974).
- (4) T. Saegusa, H. Ikeda, and H. Fujii, *Macromolecules*, **5**, 354 (1972).
- (5) T. Saegusa, S. Kobayashi, and Y. Kimura, *Macromolecules*, **7**, 1 (1974).
- (6) T. Saegusa, Y. Kimura, K. Sano, and S. Kobayashi, *Macromolecules*, **7**, 546 (1974).
- (7) S. R. Sandler, *J. Polym. Sci., Polym. Chem. Ed.*, **11**, 2373 (1973).
- (8) D. S. Breslow, G. E. Hule, and A. S. Mallach, *J. Am. Chem. Soc.*, **79**, 3760 (1957).

CORRECTIONS

"Liquid-Liquid Phase Separation in Multicomponent Polymer Systems. XI. Dilute and Concentrated Polymer Solutions in Equilibrium", by R. Koningsveld, W. H. Stockmayer, J. W. Kennedy, and L. A. Kleintjens, Volume 7, Number 1, January-February 1974, page 73.

The following should be added to the caption for Figure 3 on page 78:

The parameters used have the numerical values $\alpha = 0$, $\gamma = 0.3251$, $\beta_0 = 0.3832$, and $\beta_1 = 108.59\text{K}$, rather than those quoted under eq 24.

We thank Dr. R.-J. Roe for drawing our attention to this omission.

"Structural Investigation of Radiation-Induced Urea Canal Polymerization of 1,3-Butadiene", by Yozo Chatani and Shinichiro Kuwata, Volume 8, Number 1, January-February 1975, page 12.

On page 16 (line 4 from the bottom right-hand column), $\text{CH}_3\text{CH}=\text{CH}_2$ should read $\text{CH}_3\text{CH}=\text{CHCH}_2$.