Communications to the Editor

Correction of Statements in the Communication Entitled "New Polymerization Methodology: Synthesis of Thiophene-Based Heterocyclic Polyethers"

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In the communication entitled "New Polymerization Methodology: Synthesis of Thiophene-Based Heterocyclic Polyethers",1 incorrect statements were made regarding our work. The first incorrect statement is given verbatim: Moreover, Hergenrother 10 reported that high mass poly(arylene ether ketone)s could only be obtained with activated dichloro monomers having a 1:1 ketone to halide ratio, such as with 1,4-bis(4-chlorobenzoyl)benzene; the monoketone bis(4-chlorophenyl) ketone having a 1:2 ketone to halide ratio could not be polymerized to high molar mass even with very reactive nucleophiles such as 4,4'-isopropylidenediphenol.11 No statement was made by us that high mass poly(arylene ether ketone)s could only be obtained with activated dichloro monomers having a 1:1 ketone to halide ratio. In fact, in our ref 10 paper,2 bis (4-chlorophenyl) ketone (4-CPK) was polymerized with 9,9-bis(4-hydroxyphenyl)fluorene (9,9-HPF) to yield a polymer with an inherent viscosity of 1.02 dL/g (see Table 5 in ref 2). This important point was overlooked by DeSimone and Sheares.

In addition, our exact published statements relative to the DeSimone and Sheares misstatement is as follows: The 4-CPK/9-9-HPF polymer in Table 5 was obtained in high molecular weight form $(\eta_{inh} = 1.02 \text{ dL/g})$ whereas problems were encountered in preparing high molecular weight polymer from the reaction of 4-CPK and BPA. In the first attempt, a relatively high molecular weight 4-CPK/BPA polymer ($\eta_{inh} = 0.58 \text{ dL/g}$, see Table 3) was obtained. In five additional attempts using monomers from the same source and identical reaction conditions, only low molecular weight polymers were obtained. In our reference BPA is the abbreviation for 4.4'-isopropylidenediphenol. The DeSimone reference 11 footnote stated that our paper contained a statement that was later retracted in the same paper. This is not true. The statement pertained to that italicized in this paragraph, namely, that 4-CPK/BPA polymer with an inherent viscosity of 0.58 dL/g was prepared initially, but we were unable to prepare the same polymer in high molecular weight form in five additional attempts. This is not a retraction but simply a statement to explain our experimental results. A minor typographical error appeared in our paper. Table 3 listed the η_{inh} of 0.59 dL/g for the 4-CPK/BPA polymer whereas the text correctly cited an $\eta_{\rm inh}$ of 0.58 dL/g.

References and Notes

- DeSimone, J. M.; Sheares, V. V. Macromolecules 1992, 25, 4235.
- (2) Hergenrother, P. M.; Jensen, B. J.; Havens, S. J. Polymer 1988, 29, 358.