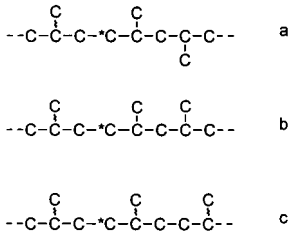
CORRECTIONS

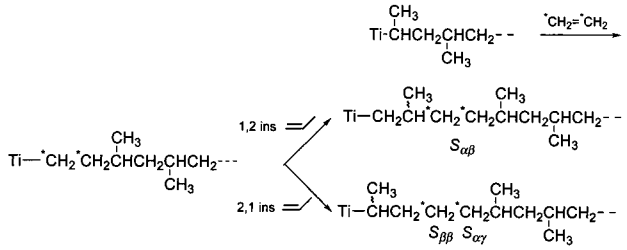
Marina Lamberti, Daniela Pappalardo, Adolfo Zambelli, and Claudio Pellecchia*: Syndiospecific Polymerization of Propene Promoted by Bis(salicylaldiminato)titanium Catalysts: Regiochemistry of Monomer Insertion and Polymerization Mechanism. Volume 35, Number 3, January 29, 2002, pp 658−663.

In the above paper, we reported the ^{13}C NMR spectrum of a copolymer of propene with a trace amount of 1-^{13}C-ethene, inadvertently inverting the assignments of the resonances diagnostic of the *m*-$S_{\alpha\beta}$ and *r*-$S_{\alpha\beta}$ enriched carbons (p 661). In fact, as reported in the literature,[1] the lower field multiplet (between 33 and 34 ppm from hexamethydisiloxane) is due to the $S_{\alpha\beta}$ carbons flanking an *r* propene diad (stereostructure **a** in Scheme 1), while the higher field multiplet (between 32 and 33 ppm) is due to the $S_{\alpha\beta}$ carbons flanking either an *m* propene diad (stereostructure **b** in Scheme 1) or, possibly, a regioirregular propene diad (stereostructure **c** in Scheme 1). Reexamination of the spectrum on the basis of the correct assignments provides additional mechanistic information, considering that (i) the fraction of the *r*-$S_{\alpha\beta}$ enriched carbons is unexpectedly low (45%) as is (ii) the fraction of *r*-$S_{\alpha\gamma}$ enriched carbons (55%), if compared to the *r* diad content inside the polypropylene blocks (98%). Since the regiochemistry of propagation seems to be essentially secondary, it is reasonable that (a) ^{13}C-enriched ethylene mostly inserts after a secondary polypropylene block (see Scheme 2) and is followed either by a primary propene insertion (generating $S_{\alpha\beta}$ enriched carbons) or by a secondary propene insertion (generating $S_{\alpha\gamma}$ and $S_{\beta\beta}$ enriched carbons) and that (b) primary propene insertion seldom results in the formation of *r* stereochemical diads (cf. point i above). The implications of the above results on the polymerization mechanism and the possible relationship between regio- and stereospecificity (as previously proposed for V catalysts[2]) will be addressed in a forthcoming paper.

Scheme 1



Scheme 2



References and Notes

(1) Zambelli, A.; Bajo, G.; Rigamonti, E. *Makromol. Chem.* **1978**, *179*, 1249.
(2) Zambelli, A.; Tosi, C. *Adv. Polym. Sci.* **1974**, *15*, 31.

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