

# The Effect of Catalyst Isomerization on Polypropylene Properties

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Two  $C_2$ -symmetric metallocene catalysts in solution were exposed to light, and the *rac-meso* conversion followed by NMR spectroscopy. Both exposed and unexposed catalyst solutions were used, in conjunction with a suitable cocatalyst, to polymerize propylene. The polymers were characterized with respect to their microstructure and fractionated according to crystallinity. The relationship between the catalyst isomerization and the polymer structure is illustrated. The effect of pre-activation of the catalyst before exposure to light was also studied and is reported on.

*Key words:* Metallocene, Isomerization, Polypropylene, Fractionation, Tacticity