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FUNCTIONAL CYCLIC POLYMERS VIA CLICK REACTION

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Cyclic topology polymers have drawn a great attention from both academia and industry because of its unique properties such as the topology and the absence of chain ends. However, in their synthesis, there are still key issues such as unreacted linear polymer precursor residue and its removal, side reaction products and their removal, low overall reaction yield, high time consumption, and limits in ring size. This study investigated the synthesis of cyclic functional polyethers from their linear precursors via azide-alkyne click reaction. Synthetic factors were identified and further optimized to achieve higher polymerization yields with minimizing side reactions. The results will be discussed while considering all factors related in the cyclization reaction.

Biography

Heesoo Kim is a Professor of Microbiology at the Dongguk University College of Medicine. Her research interests include molecular and medical microbiology, biomaterials and applications in microbiology and drug delivery.

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