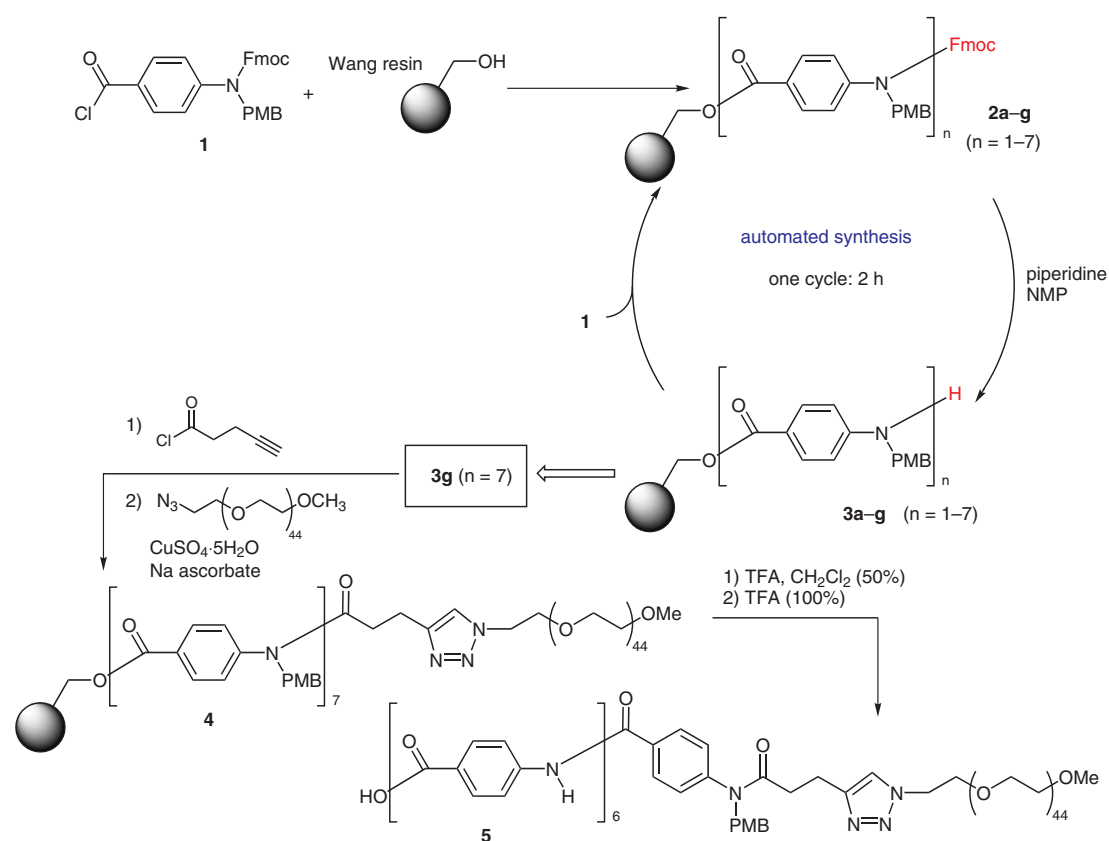


PEG-co-Oligo(*p*-benzamide)s Prepared on a Peptide Synthesizer



Significance: The first example of an automated oligo(*p*-benzamide) (OPBA) synthesis was demonstrated by use of a conventional peptide synthesizer employing a standard Fmoc-peptide synthesis protocol. Thus, an amino acid derivative **1** and Wang resin were subjected to the automatic peptide synthesizer to give a Wang resin supported OPBA heptamer **3g**. Esterification of **3g** with 4-pentynoyl chloride followed by cyclization with PEG-supported azide gave a Wang resin-PEG-supported OPBA heptamer **4**. Acidic treatment of **4** afforded a PEG-supported OPBA heptamer **5**.

Comment: The N-deprotected block co-oligomer **5** adopted a thermodynamically preferred rod-coil conformation and showed strong aggregation which was observed in chloroform, toluene and water.

TEM observation of **5** revealed rigid rod-like micelles stretching over several hundred nanometers.