

**Polymerization of functionalized diallyl quaternary ammonium salt to
poly(ampholyte-electrolyte)**

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ABSTRACT

The quaternary ammonium salt N,N-diallyl-N-(carboethoxymethyl)-N-[5-(carbomethoxy)pentyl]ammonium chloride (I) on polymn. in aq. soln. using tert-BuOOH afforded a polyelectrolyte homopolymer (II). A I-SO₂ copolymer (III) was synthesized in excellent yield .The polyelectrolytes II and III on acidic hydrolysis gave poly(ampholyte-electrolytes) which contain structural features common to both polyampholytes and conventional polyelectrolytes. The soln. properties of these polymers are discussed in detail. The poly(ampholyte-electrolytes) are shown to have considerably higher viscosity than their corresponding polyelectrolytes. .