

# Radiation-Initiated Synthesis of Tetrafluoroethylene Telomers in 1,2-Dibromotetrafluoroethane at a Constant Pressure of the Monomer in the Reactor

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**Abstract**—The kinetics of radiation-initiated telomerization of tetrafluoroethylene in a 1,2-dibromotetrafluoroethane solution at a constant concentration (pressure) of the monomer in the reactor was studied. The properties, molecular structure, and morphology of the telomers were studied by IR spectroscopy, scanning electron microscopy, and elemental and thermal gravimetric analyses. The synthesized telomers show promise for the development of fluoropolymeric nanocomposites and protective hydrophobic and antifriction coatings.

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