A new ternary mixed ligand dinuclear samarium(III) complex, \( \text{Sm}_2(\text{C}_3\text{H}_3\text{O}_2)_6(\text{phen})_2 \) (1) \((\text{C}_3\text{H}_3\text{O}_2 = \text{acrylate}; \text{phen} = 1,10\text{-phenanthroline})\), has been synthesized and characterized by microanalysis, IR and UV/vis spectra and single crystal X-ray diffraction. Compound 1 crystallizes in the triclinic space group \( \overline{1} \) with cell parameters: \( a = 9.6687(19) \), \( b = 10.690(2) \), \( c = 10.799(2) \) Å, \( \alpha = 105.50(3) \), \( \beta = 106.67(3) \), \( \gamma = 91.59(3)^\circ \), \( V = 1023.8(3) \) Å\(^3\). The Sm(III) cations are bridged by four acrylate anions into a dinuclear molecular unit. The nine-coordinate Sm(III) atoms adopt a significantly distorted monocapped anti-square-prismatic geometry. Within the crystal structure, the complex molecules are associated \( \text{via} \pi-\pi \) stacking interactions into one-dimensional supramolecular chains along the [011] direction. Compound 1 exhibits intense fluorescence in the solid state at room temperature.

**Key words:** Crystal Structure, Binuclear Samarium(III) Complex, Ternary Complex, Fluorescence Properties