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Crystal and molecular structure of iodide triphenylbutylphosphonium

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Abstract

With X-ray spectral analysis method we determined the crystal structure of triphenylbutylphosphonium iodide, which consists of a crystal of tetrahedral cations $[\text{Ph}_3\text{BuP}]^+$ and anions $[\text{I}]^-$. P atoms in the cation $[\text{Ph}_3\text{BuP}]^+$ have the usual tetrahedral coordination (CPC 106.32(12)–111.09(12) Å, P-C_{Ph} 1.796(3)–1.797(3) Å, P-C_{Bu} 1.798(2) Å).