Stannides and Intermetallic Tin Compounds – Fundamentals and Applications

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Dedicated to Professor Wolfgang Jeitschko on the occasion of his 70th birthday

Tin, tin alloys and intermetallic tin compounds play a key role in many technologies and high-tech applications. Many of these intermetallics find application in daily life such as pewterware, bronzes, solders, fusible alloys, superconductors, capsules for wine bottles or tinplate packaging. Many of the applications are directly related to distinct stannides or intermetallic tin compounds. The crystal chemistry and chemical bonding of these materials as well as their applications are briefly reviewed.

Key words: Tin, Stannides, Intermetallics