

Synthesis of Microscale Particles of Ternary Sulphides *via* an Adjusted Polyol-Route

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The chalcocuprites Roquesite (CuInS_2), Mohite (Cu_2SnS_3) and Famatinite (Cu_3SbS_4) have been synthesised from metal chlorides and thiourea in form of microscale particles *via* an adjusted polyol-route. The samples were characterised by means of SEM/EDX and XRD. The as prepared chalcocuprites were found to crystallise in metastable, cation disordered cubic structures. The particle sizes vary in the range of 0.2 to 3 micrometers. Thermal annealing transforms the samples into the thermodynamically stable polymorphs with ordered cationic substructures.

Key words: Polyol-Route, Chalcocuprite, Copper