

Influence of the P–Si–C components on the mobility of Fe–S melt at accumulation and segregation of metal

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A simulation of the migration and accumulation of sulfide phases (FeS) under gravity and mechanical deformations, with the partial fusion of a model planetary substance (olivine-picrite mixture), was carried out in a high-temperature centrifuge. The separation and motion of sulfides in the intercrystalline space is shown to be in an intimate relationship with the degree of fusion of a silicate material. The goal of this investigation was to study the influence of the oxygen fugacity, viscosity, effect of intergranular surface tension, silicate matrix deformation on metal segregation in centrifugal fields.