

Interfacial phenomena in Al-Si-Bi system

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The interfacial phenomena and the wettability play important role in the fabrication of metallic emulsions and foams.

The characterization of the interfacial properties in the Al-Si-Bi system have been studied only a few research team recently.

In our work we investigated the behaviour of the bismuth droplet under molten aluminum, in some cases using salt mixtures to deoxidize and protect the surface against oxidation. The contact angle of the bismuth on the primary silicon crystals was studied under the Al-rich matrix on the SEM images of the cross-section of the samples.