

Review of Reduced Gravity Boiling Heat Transfer: European Research

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Abstract

The first section of this paper (overview on boiling heat transfer characteristics) is directed to those who are not specialists in the field of boiling heat transfer, in order to make them aware of the fundamental physical mechanisms, the advantages and the main problems of this technique. Next, some of the basic knowledge achieved on terrestrial boiling heat transfer is outlined, along with the benefits and the problems raised from its application in space. Finally, the past and forthcoming research activities of the European teams in this field are reported, in addition to the main results achieved and a short overview on the available test facilities.