

MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM (A2)
Microgravity Experiments from Sub-Orbital to Orbital Platforms (3)

Author: Dr. R. J. Slobodrian
University, Canada, rjslobod@phy.ulaval.ca

METALLIC AGGREGATIONS IN LOW GRAVITY.

Abstract

The aggregation of metals in ground based facilities and in low gravity during parabolic flights is described. Fractal characteristics have been identified for these processes. The techniques for the production of aggregates range from ohmic heating to laser evaporation of samples, the latter being far superior for assuring high purity of the metallic vapors. Fractality of the aggregates is dominant and computer simulation programmes have been developed for the analysis of experiments. The support of the space agencies ESA and CSA is warmly acknowledged.