

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

Author: Mr. Flávio de Azevedo Corrêa Jr
Instituto de Aeronáutica e Espaço (IAE), Brazil, flaviofacj@iae.cta.br

THE MICROGRAVITY MISSIONS IN BRAZILIAN INSTITUTE OF AERONAUTICS AND SPACE.

Abstract

The main issue of this paper is to explore a few aspects of Brazilian Institute of Aeronautics and Space (Instituto de Aeronáutica e Espaço, IAE) activities regarding to the Microgravity Programme of the Brazilian Space Agency (Agência Espacial Brasileira, AEB), on sounding rockets and correlated missions. For this very purpose, we would like firstly to make an introduction about the Brazilian Microgravity Programme (BMP); secondly to give a brief overview about the history over the last past missions on sounding rockets and manned missions, exploring facilities and experiments done onboard; and, last but not least, to present to the world-wide scientific community our operational sounding rockets, also bringing public the IAE launching services available for the international community. Traditionally our sounding rockets have been used for decades to carry out studies and research on high atmosphere layers. Actually, our major national demand for sounding rocket missions comes through the BMP. Not so far away, the Institute started to provide sounding rockets and motors for the European and German microgravity launchings and the Shefex Programme. The Brazilian Microgravity Programme is managed by AEB and has its activities assisted by governmental institutions such as IAE and the National Institute for Space Research (Instituto Nacional de Pesquisas Espaciais, INPE), and by some scientific Brazilian association/institutions, such as the Brazilian Science Academy (Academia Brasileira de Ciências, ABC) and the National Council of Technological and Scientific Development (Conselho Nacional de Desenvolvimento Científico e Tecnológico, CNPq).