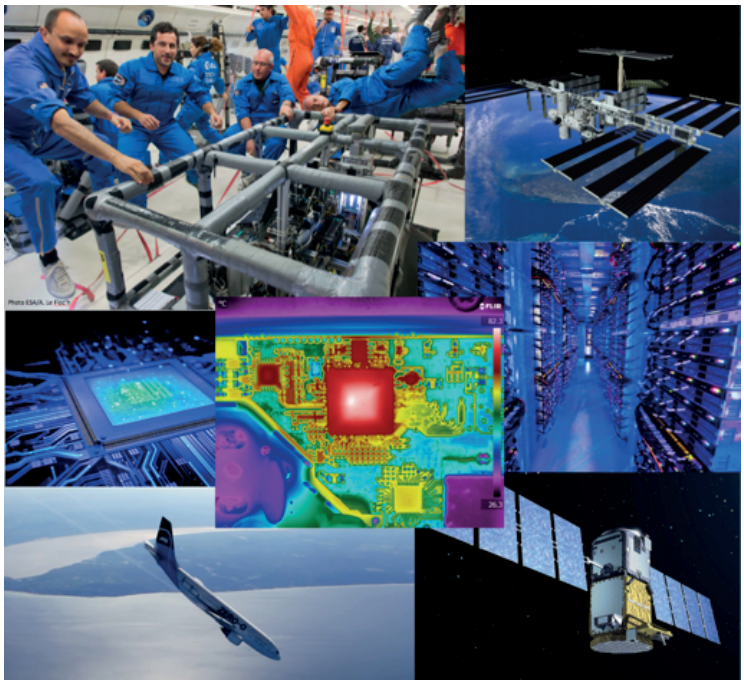
NACE CODE M72, M74

THERMAL CONTROL TECHNIQUES FOR ELECTRONICS, AVIONICS, SATELLITES, BATTERIES

Innovations and Benefits - Study and implementation of innovative thermal management systems for electronic components, avionics, satellites and batteries subject to high thermal flows. Various advanced techniques of heat exchange with phase change are proposed, active and passive, depending on the service requested. Laboratory verification and characterization of prototypes of micro heat exchangers.

Use - Development and qualification of innovative high-performance technologies for advanced thermal management in standard and extreme conditions with high thermal flow and with gravity varying from 0-g to 2-g (microgravity and hypergravity).

Applications and ongoing Activities - The Laboratory has experimental plants developed for the study of advanced heat exchange techniques (flow boiling, heat pipes). The MICROBO system is available for variable gravity tests which allows to carry out heat exchange tests on board of the ZERO-G aircraft in hyper- and micro-gravity conditions. The BOEMIA system is available for tests on innovative micro heat exchangers for electronics, avionics and electrical machines.



Characteristics:
CUSTOM The service of development of advanced thermal control techniques can be flexibly adapted to different needs and contexts

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