
----- SEARCH for existing consortium -----

<Reference n.: SPA.2010.2.2-01 Space technologies>

<Deadline: 08/12/2009>

<Programme: Space>

<Project Title: Miniaturization of two-phase thermal control technology for space application> and

<Enhancement and extension of two-phase thermal control technology for space application>

<Financial Scheme: CP - Collaborative project>

<Description:

Development/adaptation of two phase heat transfer equipment (heat pipes, single and two phase loops) to smaller scale (mini/micro level) for e.g. direct integration into electronic equipment, thermal control of small space vehicles (e.g. rovers, mini/micro S/C), temperature control of focal planes and laser heads, etc. In view of the gravity dependence of such devices, the development needs to include in orbit demonstration.

and

Further improve the performance and optimize current capillary two-phase heat transfer technology (e.g. improvement of wick structures, multi-evaporator designs, etc.), including the extension of the temperature range of two-phase heat transfer devices (e.g. CPL, LHP and conventional heat pipes) to lower (down to cryogenic) and higher temperatures, for e.g. efficient detector cooling, efficient use of radiator area, overall thermal design optimisation. Especially for CPL and LHP, aspects like accommodation/integration and in-situ assembly/filling techniques will need to be covered also. In view of the gravity dependence of such devices, the development needs to include in-orbit demonstration.

<Organisation Type: System Company in Space Engineering>

<Consortium Sought:

Existing consortium looking for coordinator and / or system company as end user

--

Dr. R. Schlitt

T: (49) 421 2020-637

F: (49) 421 2020-900

OHB Orbitale Hochtechnologie Bremen-System AG / Ein Unternehmen der OHB
Technology AG

rschlitt@ohb-system.de

Bremen

GERMANY