

SPACE EXPLORATION SYMPOSIUM (A3)
Space Exploration Overview (1)

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ATMOSPHERE AND SURFACE RESEARCH OF VENUS USING ATMOSPHERIC AND LANDING
PROBES. NEW TECHNICAL CHALLENGES**Abstract**

Currently, studies of Venus are carried out using remote methods, in particular through the European orbiter. The need for contact research methods is obvious. Only Russian landers and aerostatic probes were on the surface and in the atmosphere of the planet. Last expedition (the "Vega" project) was performed almost thirty years ago. The revision of the Russian Federal Space Program, for known reasons, led to the postponement of the implementation of the project "Venera-D". At the same time, the scientific community in international forums is much interest in long researches of Venus, including, and especially, contact methods. In this regard, it is necessary to re-examine the possibility of new technical facilities and schematic technical solutions. However, considering the complexity of the scientific and technical challenges, the limited time and financial resources, particularly relevant are the issues of international cooperation.