

## **THE EXPERIMENTAL RESEARCH OF CONTROLLABLE LOOP HEAT PIPE WITH NON-CONDENSABLE GASES**

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### **Abstract**

The paper describes the work aimed at controllable loop heat pipe (CLHP) operation study when non-condensable gases (NCGs) are injected. In this work, the effect of NCG on the operating performance of an ammonia–stainless steel CLHP was experimentally investigated. Nitrogen was selected as NCG, and the steady-state operating characteristics of the CLHP with NCG was systematically studied for different NCG inventories. The performance history of the CLHP, as well as the change of CLHP conductance, is discussed in detail.