

Development of the Test Facility for Measurements of Current-Voltage Characteristics of HTS Tapes, Cables and Magnets for SMES at JINR

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Superconducting Magnetic Energy Storage (SMES) is a magnet that is under development to improve the quality of the power system of Booster and Nuclotron of NICA magnets. The test facility for measuring current-voltage characteristics (CVC) of HTS tapes, cables and windings for SMES was developed. This test bench is based on National Instruments equipment and power supplies TDK Lambda. The commissioning test facility and the research equipment are described in this work. The results of the CVC measurement of HTS samples for SMES are presented.

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