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Development of the reactor antineutrino detection technology within the iDream project.

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The iDream (industrial Detector for reactor antineutrino monitoring) project is aimed for remote control of the operating modes of the atomic reactor on nuclear power station and to ensure a technical support of IAEA non-proliferation safeguards. The detector is a scintillator spectrometer. The sensitive volume (target) is filled with a liquid organic scintillator based on linear alkylbenzene where reactor antineutrinos will be detected via inverse beta-decay reaction. We present first results of laboratory tests after physical launch. The detector was deployed at sea level without background shielding. Number of calibrations with radioactive sources were conducted.All data was obtained by means of a slow control system which was put into operation.

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