

# Study of a DC electric discharge with a cathode loaded in the water flow

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## Abstract

© 2018 Institute of Physics Publishing. All rights reserved. A gas discharge in the air between two solid-state electrodes, one of which is in a stream of water and serves as a cathode, has been studied. Two variants are considered. In the first version, the working end of the cathode protruded from the water, and in the second version it was completely immersed in water. Electric and spectral characteristics of discharges obtained under the same conditions of electric power are presented. As the cathode, aluminum, copper, titanium and graphite rods were used. The discharge current was in the range of 13-15 A.

<http://dx.doi.org/10.1088/1742-6596/1058/1/012038>

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