

## **Changes of thermal balance in a plasma-electrolyte system according to the shape of the applied voltage**

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### **Abstract**

The work is aimed at studying the changes of the heat balance in the system of the electrode-plasma-gas / vapor-electrolyte in various forms of applied voltage. It was established that in contrast to the voltage, which is obtained after full-wave rectification, film boiling occurs by using a smoothing capacitive filter. This is because in the pulsing mode voltage value has zero value at the beginning and end of the pulse, also at that time takes place cooling of the electrode at the contact with the electrolyte. In this paper describes a heat exchange in two different modes of plasma-electrolytic treatment.

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