

Installation for studying the interaction of electric discharge plasma with the surface of solutions

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The work presents an installation for studying the interaction of electric discharge plasma with the surface of aqueous solutions. The installation implements an original system for maintaining an adjustable liquid level in a flow discharge cell. The special case when the solution level coincides with the edge of the discharge cell is most interesting for optical studies of the discharge. It is shown that in this case it is possible to obtain photographs of the plasma interaction area with the liquid surface that are not distorted by the superposition of plasma radiation reflected from this surface. The installation can be used for a wide range of studies of the interaction of electric discharge plasma with the surface of liquids, including using optical methods and emission spectroscopy methods.