

Workshop "Plasmas in Medicine"

## **Dielectric Barrier Discharge Wound Treatment: from Physics to Microbiology**

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After reviewing different types of wounds, this talk will focus on the use of dielectric barrier discharge as an antiseptic device for wounds. Recent results with animal models for antiseptic wound treatment will be described and helpful role of biological fluids will be addressed. It will be shown that effects of this wound treatment are not confined to surfaces, but can penetrate millimeters into the depth of tissues. Issues related to possible tissue damage and toxicity will be also briefly reviewed in this talk. Different modifications to conventional barrier discharge systems will be discussed that are capable of achieving effective antiseptic treatment without any thermal damage.