

IP4Plasma – Medical product innovations by implementing European IPR assets

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In the project “Industrial innovations based on EU intellectual property assets in the field of atmospheric pressure plasma technology – IP4Plasma”, atmospheric pressure plasma equipment manufacturers and end-users are working with leading experts in research and technology innovation to overcome the barriers to commercial application of a unique intellectual property right (IPR) portfolio.

The aim is to bring cutting-edge IPR-protected innovations in the field of surface treatment with cold plasmas from the laboratory scale to industrial implementation. This is done by demonstrating the suitability of the technology for existing and new industrial applications in the health sector:

- A new tuberculosis test, allowing diagnosis within minutes, at a cost as low as one euro;
- A low cost human immunodeficiency virus (HIV) test with enhanced sensitivity;
- New types of wound dressings, protecting the wound from infection, at reduced production cost

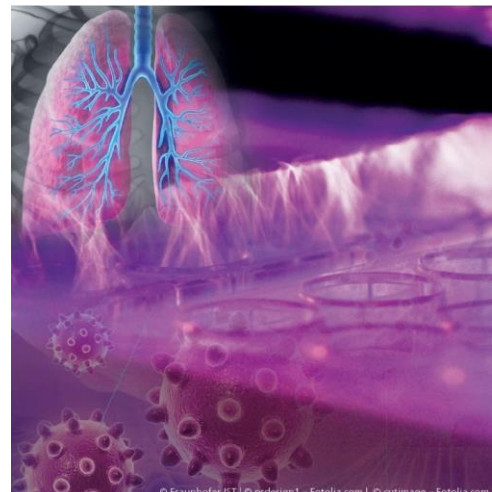


Fig.1 The glow of a "cold" (expert term: non-thermal) ambient pressure plasma during the treatment of a plastic part.

The main objective is to design a new type of plasma equipment for deposition of coatings containing complex molecules such as enzymes, on substrates with 1200 millimeter width. The equipment will be used to demonstrate the transfer of patent knowledge into industrial applications.

Three research organisations (VITO, Fraunhofer IST and JSI) and six industrial partners (Softal, Lionex, Tosama, IMA, 2B and Spinverse) are forming the consortium. The poster presents the objectives, outline, and first results of this 3-year FP7 project (2014-2016). The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 604048.