

FINISHING OF TEXTILES VIA PLASMA TREATMENT

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Abstract:

Plasma technology has been studied for many years, also for textile applications. The use of this inherently eco-friendly technique within the textile industry remains however fairly limited. Two main problems preventing a much wider take up are the throughput and the durability of the treatment. ACTECO aims at developing a new generation of plasma technologies that offer dramatically innovative functional surface properties with a lifetime equal to or approaching that of the finished product in the domains of food packaging, biomedical applications and textile.

In this presentation, the plasma treatment of textiles will be highlighted. The different types of plasma sources that can be used and their (dis)advantages will be discussed. Results regarding the plasma treatment to tailor the surface energy and to impart antibacterial functionalities will be presented. Also, the environmental benefits of using plasma treatment will be presented.

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