

Abstract Submitted  
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**Surface Modification of Nonwoven fabrics by Atmospheric Brush**

**Plasma** LUTFI OKSUZ, Suleyman Demirel University, EMRE UYGUN, FERHAT BOZDUMAN, Teknopark, Plazma Tek., Suleyman Demirel University, GOZDE YURDABAK KARACA, Department of Chemistry, Faculty of Arts and Sciences, Suleyman Demirel University, ORKUN NURI ASAN, Teknopark, Plazma Tek., Suleyman Demirel University, AYSEGUL UYGUN OKSUZ, Department of Chemistry, Faculty of Arts and Sciences, Suleyman Demirel University — Polypropylene nonwoven fabrics (PPNF) are used in disposable absorbent articles, such as diapers, feminine care products, wipes. PPNF need to be wettable by water or aqueous-based liquid. Plasma surface treatment/modification has turned out to be a well-accepted method since it offers superior surface property enhancement than other chemical methods. The cold plasma brush can most efficiently use the discharge power as well as the plasma gas for material and surface treatment. The very low power consumption of such an atmospheric argon plasma brush provides many unique advantages in practical application. The purpose of this study was to reveal the effectiveness of non-thermal atmospheric plasma brush in surface wettability and modification of two different nonwoven surfaces.

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