

# **Sio<sub>2</sub>/ Polyamide Nanocomposite Textile for Super Hydrophobic Coating By Electrospinning Technique**

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**Abstract-** Sio<sub>2</sub>/polyamide nano composites textile coating for hydrophobic surface by electrospinning technique was prepared. Cellulose ball sample with prepared textile were coated by electrospinning system. Contact angle between water and samples (glass, glass + PA (coating) & glass + PA+Sio<sub>2</sub> coating) surfaces were calculated.

The fall time through water of cellulose ball (coating & non-coating) were calculated. Results show the contact angle between the non-coating surface sample and water droplet smaller than coating surface. This contact angle increase from (26o) of glass surface to (126.6o) of (glass+PA Coating), also it increase to (128o) with adding silica nano particles to (PA coating) As well as , the fall time of coating ball with (PA) nano fibers is (6 sec) and it smaller than non-coating ball fall time (10 sec), also silica nano particles adding leads to decrease the fall time of ball to (5 sec).

**Keywords:** super hydrophobic, contact angle, fall time, nano fibers coating

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