



جامعة جازان  
JAZAN UNIVERSITY



# ***SEMINAR ANNOUNCEMENT***

**“The Superhydrophobic Coating”**

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Samples of wind turbine blade surface have been covered with a superhydrophobic coating made of silica nanoparticles embedded in commercial epoxy paint. The superhydrophobic surfaces have a water contact angle around  $152^\circ$ , a hysteresis less than  $2^\circ$  and a water drop sliding angle around  $0.5^\circ$ . This new coating is stable under UVC irradiation and water pouring. The production of this nanoscale coating film being simple and low cost, it can be considered as a suitable candidate for water protection of different outdoor structures.

Moreover the measurements of contact angle as a function of sample temperature ranging from room temperature (RT) to  $0^\circ\text{C}$  have revealed the lack of correlation between the hydrophobic and icephobic behavior of nanostructured materials.