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Superhydrophobic micro-fibers synthesized from hydrophilic PVAc polymer

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 \mathbf{I} n this study, super hydrophobic PVAc microfibers were synthesized by utilizing electrospinning process. Various solution flow rates were applied to investigate the effect of flow rate on fiber morphologies and surface wettability. The results showed that, increase in flow rate also caused an increase in

fiber diameters and water drop contact angles. Depending on fiber diameters, surface wettability was also changed; increase in diameter caused an increase in contact angle values and especially at 5 ml/h flow rates, super hydrophobic fibers surfaces were successfully synthesized. Contact angle hysteresis (CAH) values of fibers were changing due to the variation in fiber diameters and thus surface roughnesses. CAH values of PVAc fibers showed a decrease with the increase of water contact angles, and these results were in concordance with the literature values.

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