


 Cite this: *RSC Adv.*, 2016, 6, 74085

Correction: Polyacrylonitrile/*Syzygium aromaticum* hierarchical hydrophilic nanocomposite as a carrier for antibacterial drug delivery systems

Ramdayal Yadav and K. Balasubramanian*

DOI: 10.1039/c6ra90064j

www.rsc.org/advances

 Correction for 'Polyacrylonitrile/*Syzygium aromaticum* hierarchical hydrophilic nanocomposite as a carrier for antibacterial drug delivery systems' by Ramdayal Yadav *et al.*, *RSC Adv.*, 2015, 5, 3291–3298.

The authors regret their oversight in publishing an incorrect version of Fig. 1 and the corrected version is shown below:

In this context, the abstract of the manuscript should be modified as follows.

A versatile maneuverable electrospinning process was exploited to fabricate intertwined heterostructure polyacrylonitrile (PAN) nanofibers with average diameter of 141.0 nm by incorporating essential oil *Syzygium aromaticum* for antibacterial drug delivery systems. We have demonstrated the formation of seamless heterostructure of PAN/*Syzygium aromaticum* nanocomposites by incorporating 0.1% electrolyte solution, which not only achieved an inhibition zone of 1.8–2.8 cm against Gram positive and Gram negative bacteria but also exhibited 100% cell viability of NIH/3T3 cell lines. Electrospun fibers were observed to be flexible and composed of continuous, cylindrical and randomly oriented fibers. an FT-IR peak at 3398 cm⁻¹ reveals the ultra-wettability nature of the nano-composite which was confirmed by contact angle measurement. Further, the Krosmejar–Peppas model was explored to study the mechanism and kinetics of the antibacterial drug release system. The overall result suggests that electrospinning can be employed as a novel, facile route for the large scale fabrication of nanoscale PAN heterostructure hydrophilic composites for a broad range of biomedical applications.



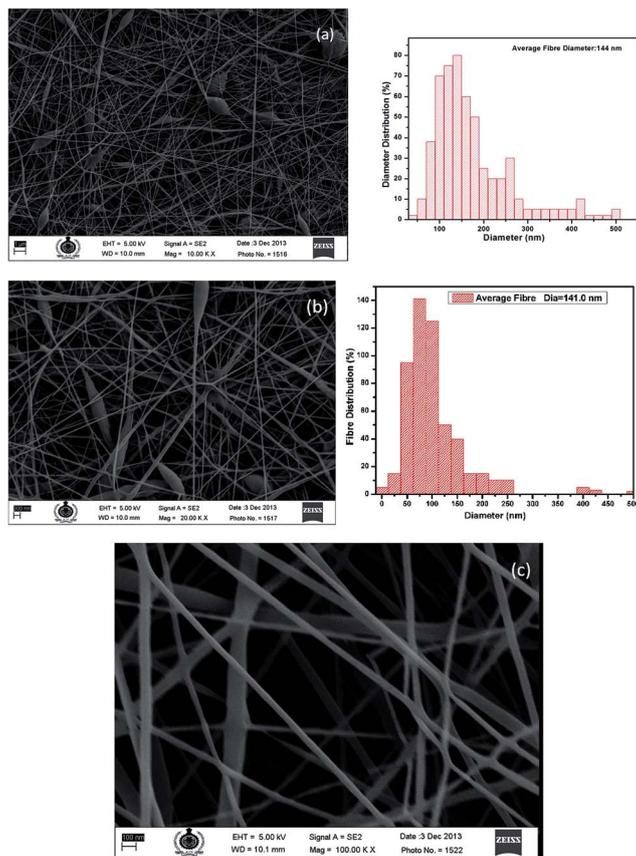


Fig. 1 SEM images of electrospun nanofibers of (a) PAN/*Syzygium aromaticum* oil nanofibers and (b) PAN/*Syzygium aromaticum* oil nanofibers with 0.1% electrolyte at 10k \times magnification; (c) 100k \times magnified fibers.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

