

## Supplementary material

### Polyaniline Modified lignocellulosic fibers from Sago Seed Shell Powder for electrochemical devices

T.V Jinitha<sup>a</sup>, K.P Safna Hussan<sup>b</sup>, N. Subair<sup>a</sup>, V. Shaniba<sup>a</sup>, Aparna K Balan<sup>a</sup>,  
E. Purushothaman<sup>a\*</sup>

a) Department of chemistry, University of Calicut, Malappuram, Kerala, India 673635

b) Department of physics, University of Calicut, Malappuram, Kerala, India 673635

E-mail address: epurushot@yahoo.com

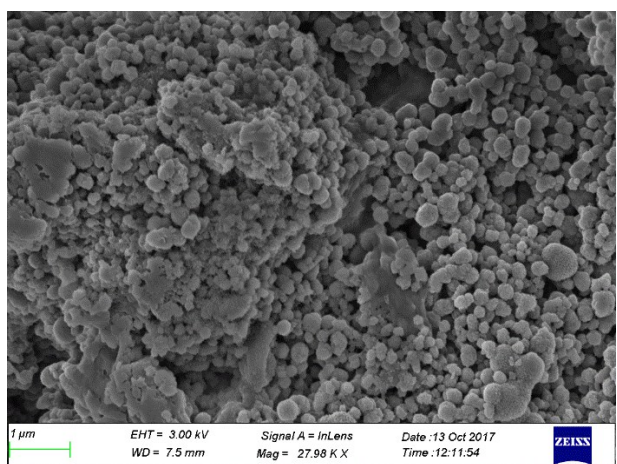
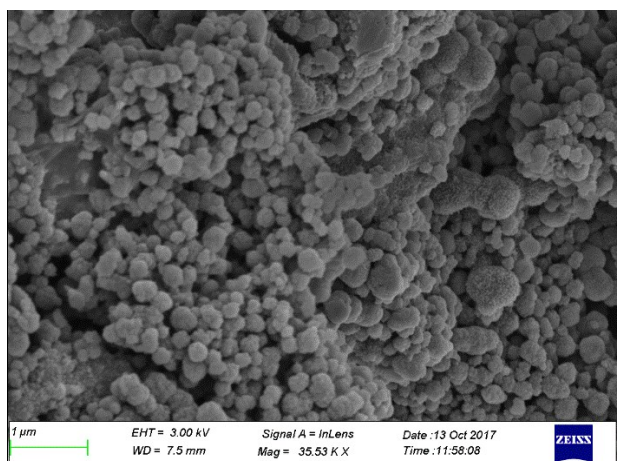
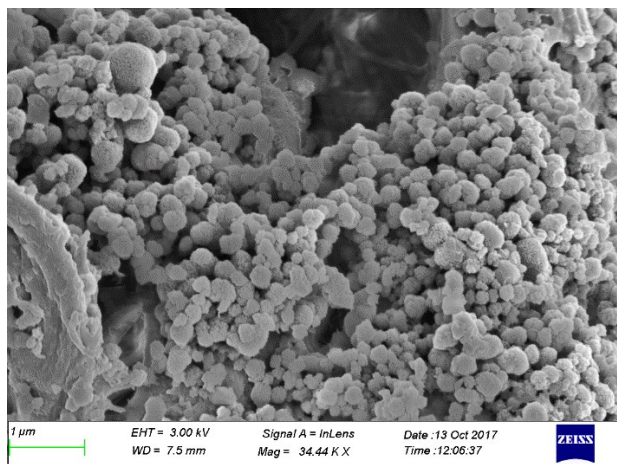
\* Corresponding author. Tel.: +919447683351; fax: +91494240026.

#### 1. SEM Image

Figure S1:

Inorder to nullify the probability of error due to electric contact from sputtering and to clarify the topological behaviour of PANI-SSP, scanning electron microscope were repeatedly used without sputtering the samples and shown in Fig S1. The presence of small spheres on the SSP even without sputtering confirms that these topological difference in SSP is solely from the presence of PANI and revealed the encapsulating nature of PANI on SSP. This unusual tendency of morphological alteration of PANI were already reported by Zun-li Mo *et. al* (Mo, Zhao, Chen, Niu, & Shi, 2009b)

WITH SPUTTERING



WITHOUT SPUTTERING

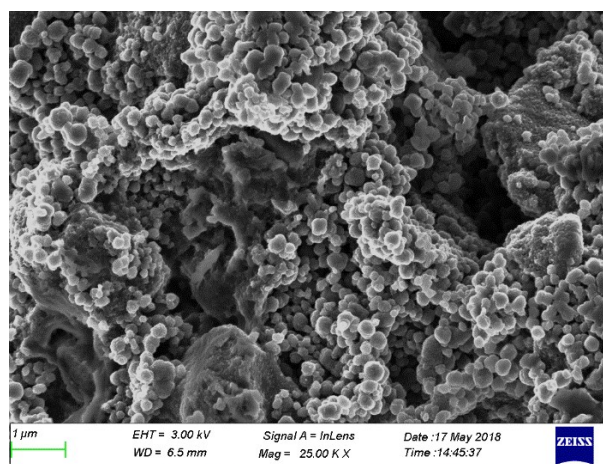
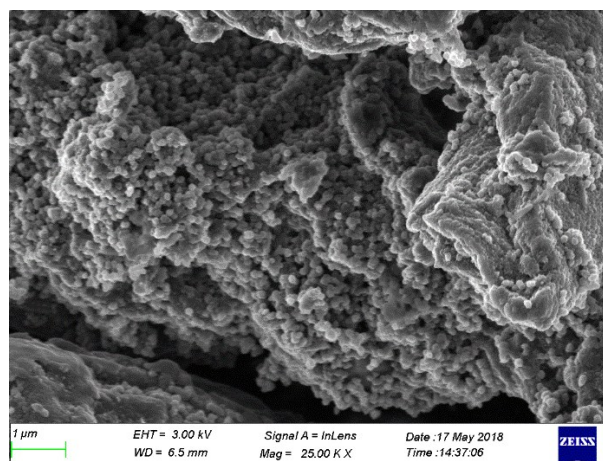
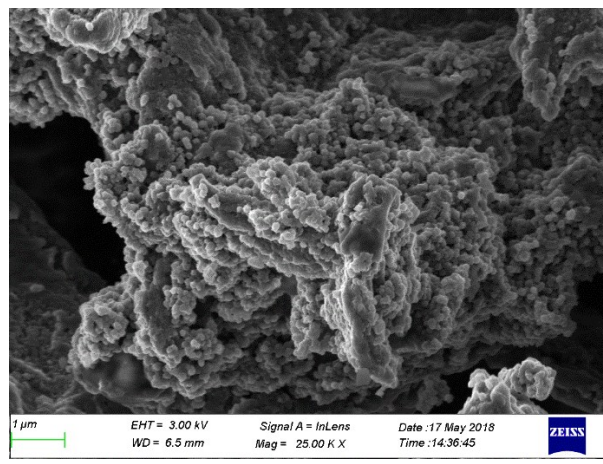


FIG. S1 SEM images of PANI-SSP with sputtering and without sputtering