

Supplementary Materials on

Effective Removal of Pb(II) Ions by Electrospun PAN/Sago Lignin-based Activated Carbon Nanofibers

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Supplementary Materials, 2 pages with 1 figure.

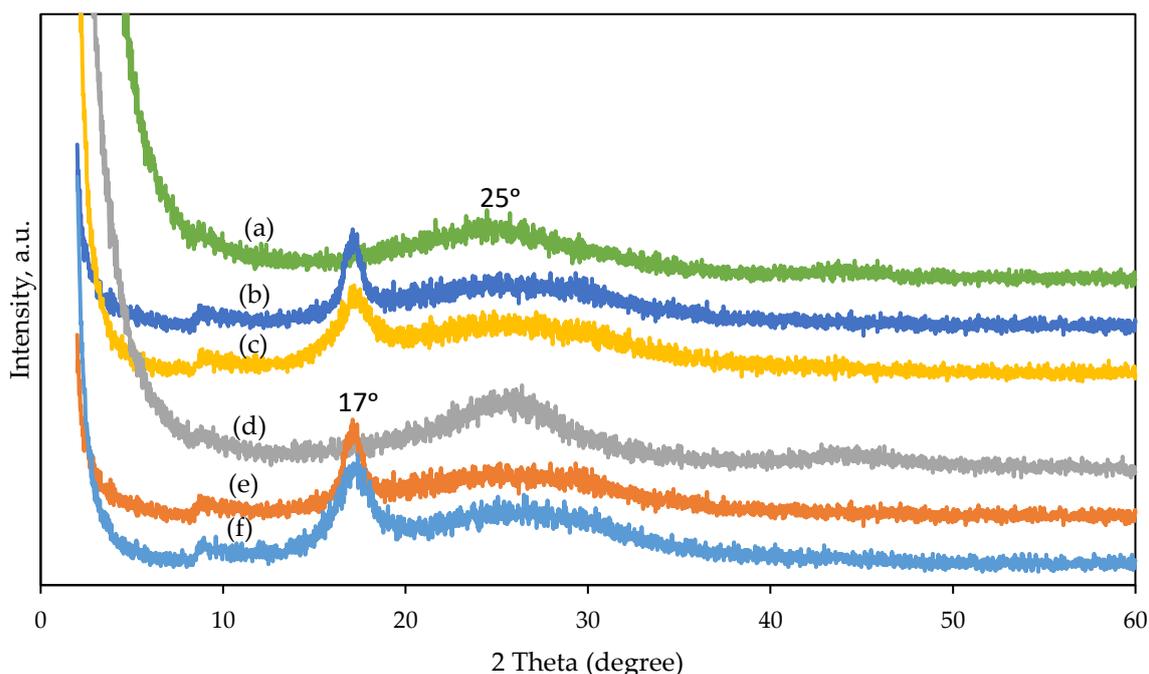


Figure S1. XRD pattern for PAN/SL (a) carbonized, (b) stabilized and (c) nanofibers, and PAN (d) carbonized, (e) stabilized and (f) nanofibers.

PAN/SL and PAN (nanofibers, after stabilization and after carbonization) were further characterized using XRD. From Figure S1, the XRD diffraction pattern of the nanofibers before and after stabilization show a strong peak at around 17° which can be ascribed to (100) crystallographic planes of PAN. However, this peak was decreased after carbonization due to the formation of ladder-like polymer structures of PAN [1]. After carbonization, a weak and broad peak was observed at around $2\theta = 25^\circ$ which attributed to the (002) planes [2,3] which indicates that the carbon is amorphous [4] and the nanofibers were fully converted into carbon nanofibers.

References

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