Title: Activated carbon with composite pore structures made from peanut shell and areca nut fibers as sustainable adsorbent material for the efficient removal of active pharmaceuticals from aqueous media

Sujata Mandal*,†,ξ, Dayana Stephen†,‡, Sreeram Kalarical Janardhanan†

[†]CLRI Center for Analysis, Testing, Evaluation and Reporting Services (CATERS), CSIR – Central Leather Research Institute, Chennai- 600020, India

[‡]Department of Chemistry, St. Joseph's College, Trichy-620002, India

[§] Present address: Advanced Materials Laboratory, CSIR – Central Leather Research Institute, Chennai- 600020, India

*Corresponding Author's Contact:

Phone +91 44 24437299; Email: sujata@clri.res.in; sujatamandal@rediffmail.com

ORCID ID: 0000-0002-0549-8851

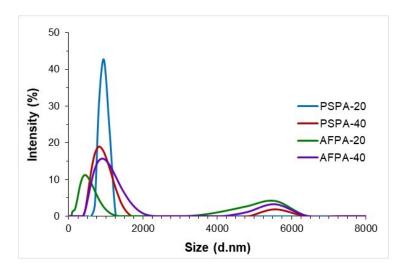


Figure S1. Particle size distribution of the activated carbon samples.

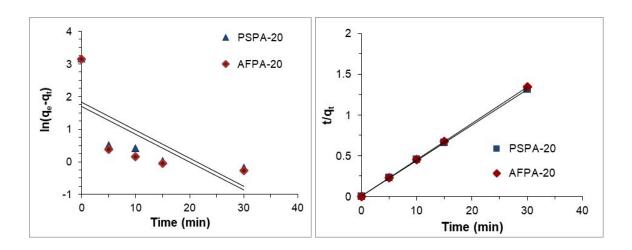


Figure S2. Plots of the Lagergen pseudo-first order and pseudo-second order models for the adsorption APAP on PSPA-20 and AFPA-20.

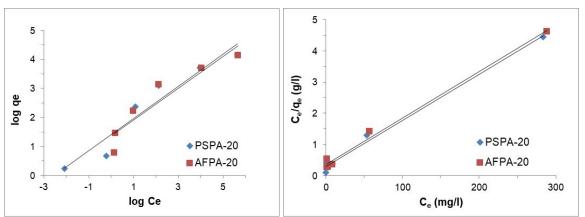


Figure S3. Plots of the Freundlich and Langmuir adsorption isotherms for the adsorption APAP on PSPA-20 and AFPA-20.