

Supporting information

**Sulfonated carbon as a new, reusable heterogeneous catalyst for
one-pot synthesis of acetone soluble cellulose acetate**

Lakhya Jyoti Konwar^[a], Päivi Mäki-Arvela^[a], Ashim Jyoti Thakur^[b], Narendra Kumar^[a] and

Jyri-Pekka Mikkola^{[a,c],*}

^a Laboratory of Industrial Chemistry and Reaction Engineering, Johan Gadolin Process
Chemistry Centre, Åbo Akademi University, FI-20500, Turku, Finland.

^b Department of Chemistry, Tezpur University, Tezpur-784028, Assam, India.

^c Technical Chemistry, Department of Chemistry, Chemical-Biological Centre, Umeå University,
SE-90187, Umeå, Sweden.

E-mail (Corresponding authors): jpmikkol@abo.fi

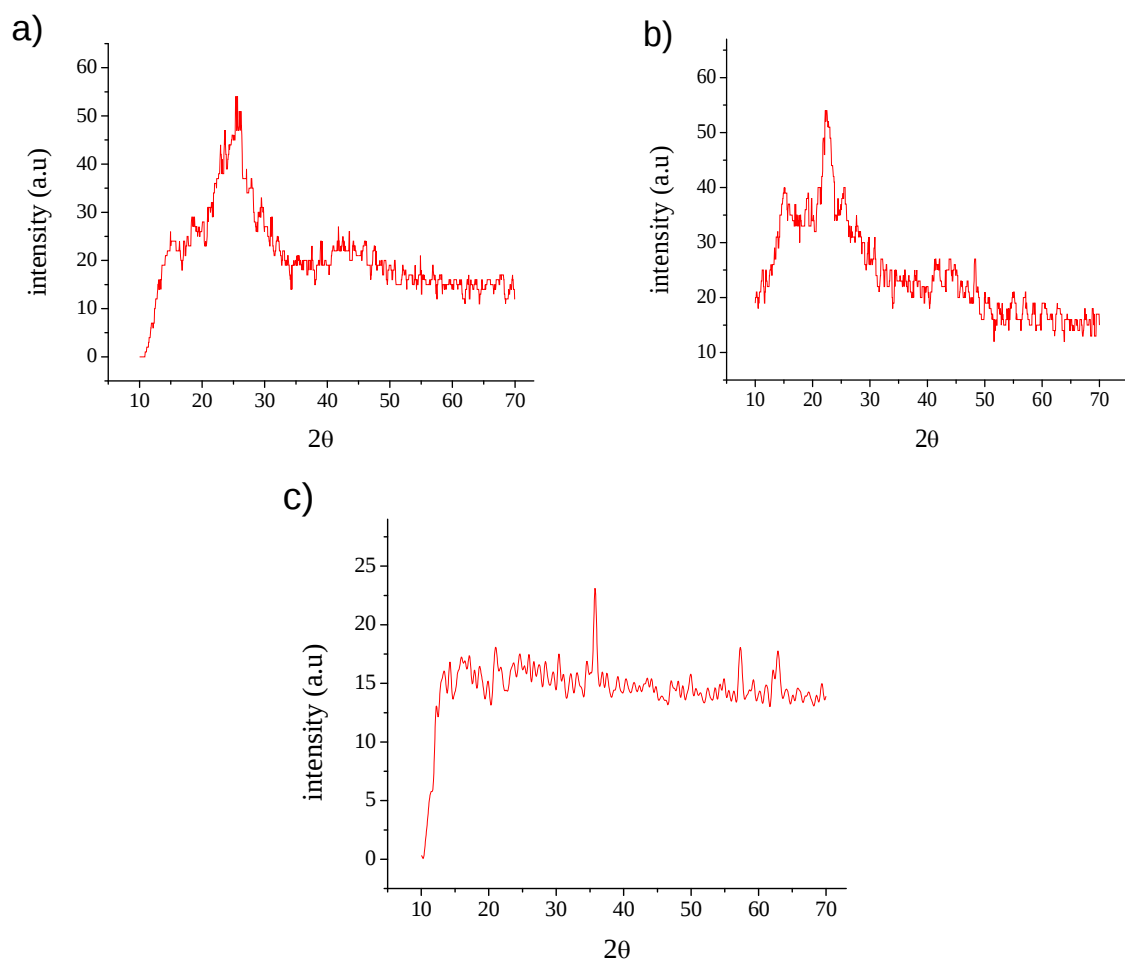


Figure S1. XRD patterns of sulfonated carbon catalysts (a) AC500S (b) CACS and (c) FeCS

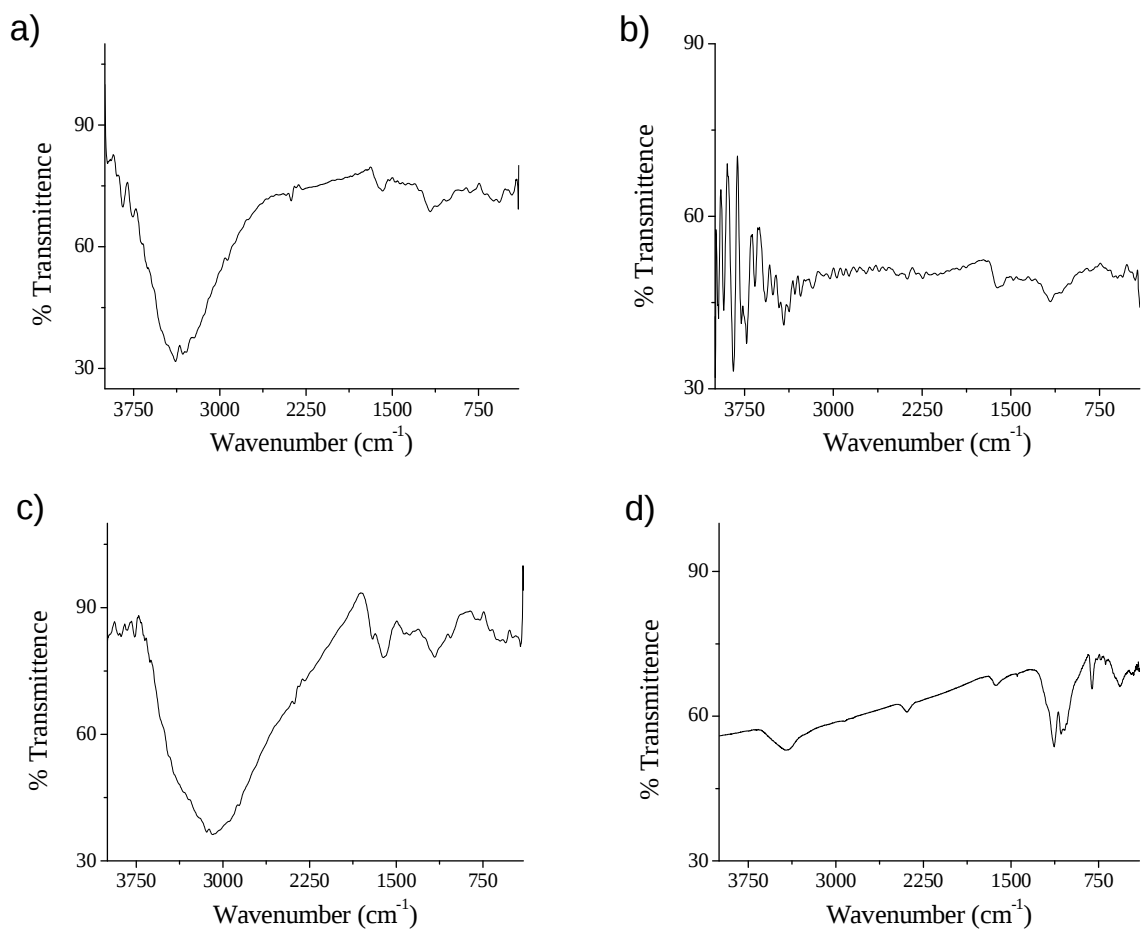


Figure S2. FT-IR patterns of sulfonated carbon catalysts (a) AC500S (b) spent AC500S (c) ACSHT and (d) FeCS

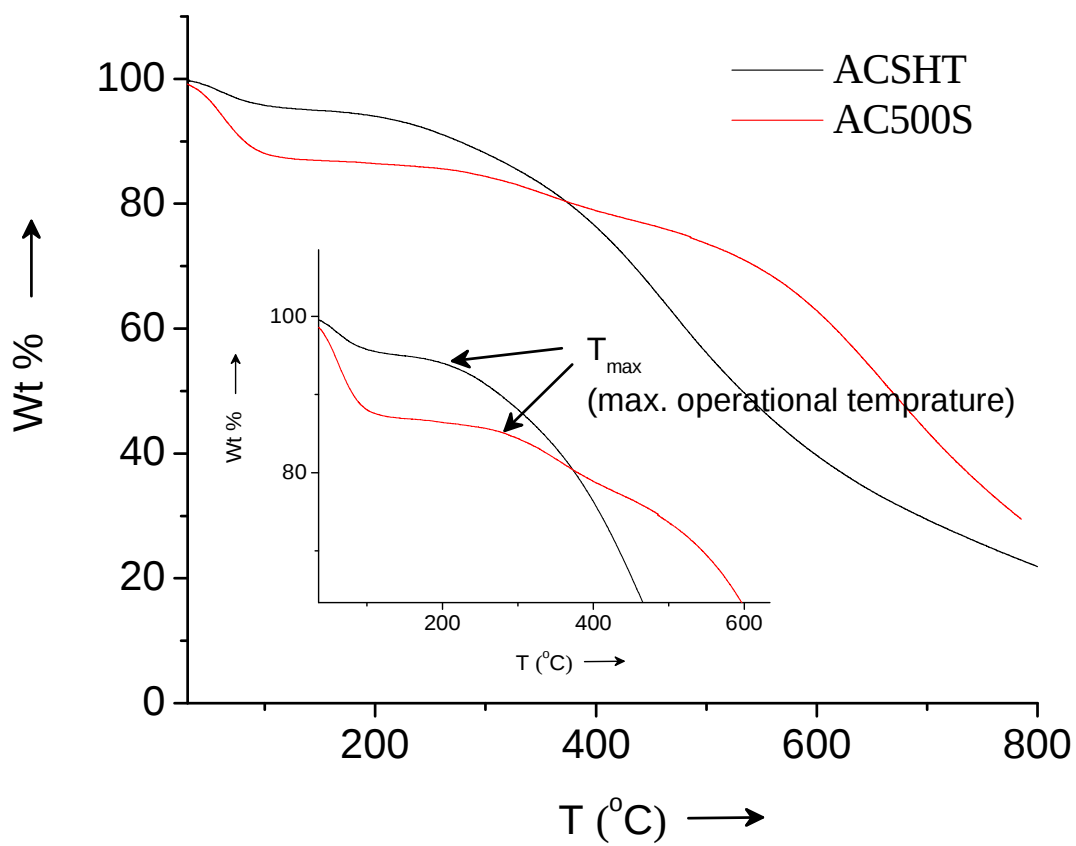


Figure S3. TGA patterns of the sulfonated carbon catalysts (a) AC500S and (b) ACSHT

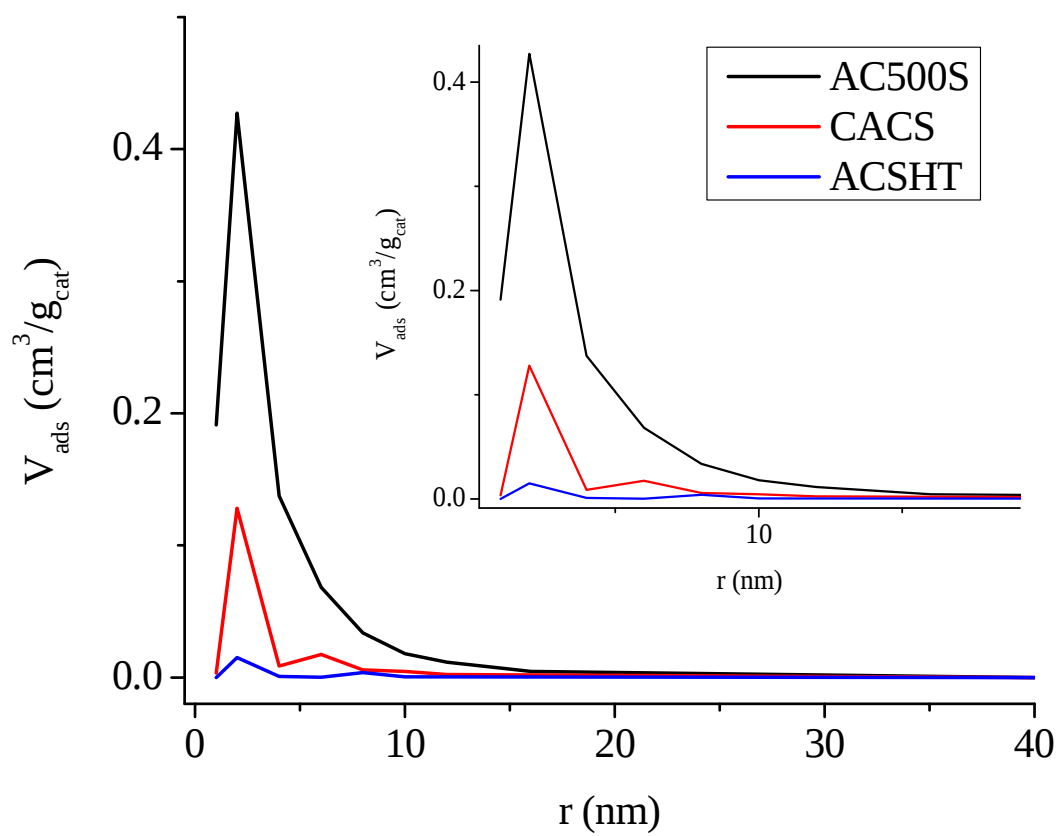


Figure S4. Pore size distribution of the sulfonated carbon catalysts (selected)