

Exploiting waste: Towards a sustainable production of biodiesel using *Musa acuminata* peel ash as a heterogeneous catalyst

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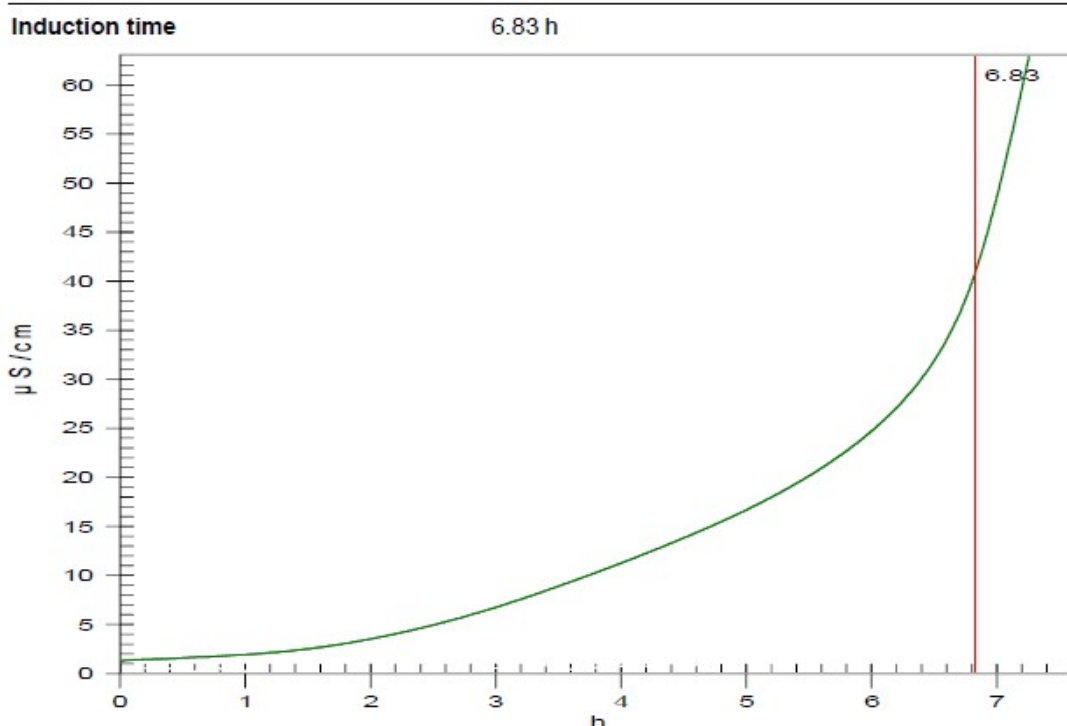


Fig. 1: Oxidation stability graph of soybean oil biodiesel.

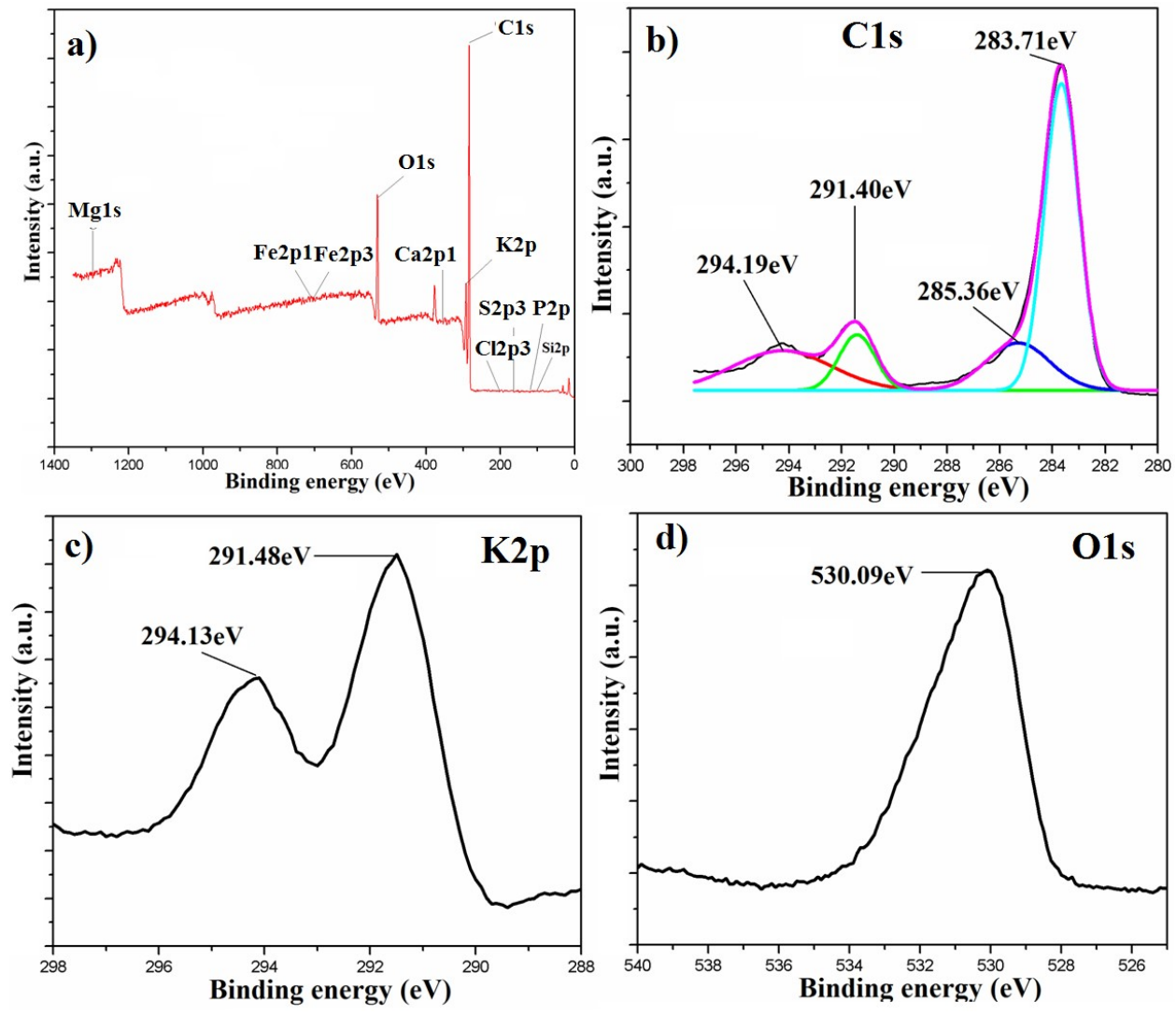


Fig 2: a) XPS survey spectrum, b) C1s, c) K2p, d) O1s spectra of *M. acuminata* ash catalyst after 4th cycle.

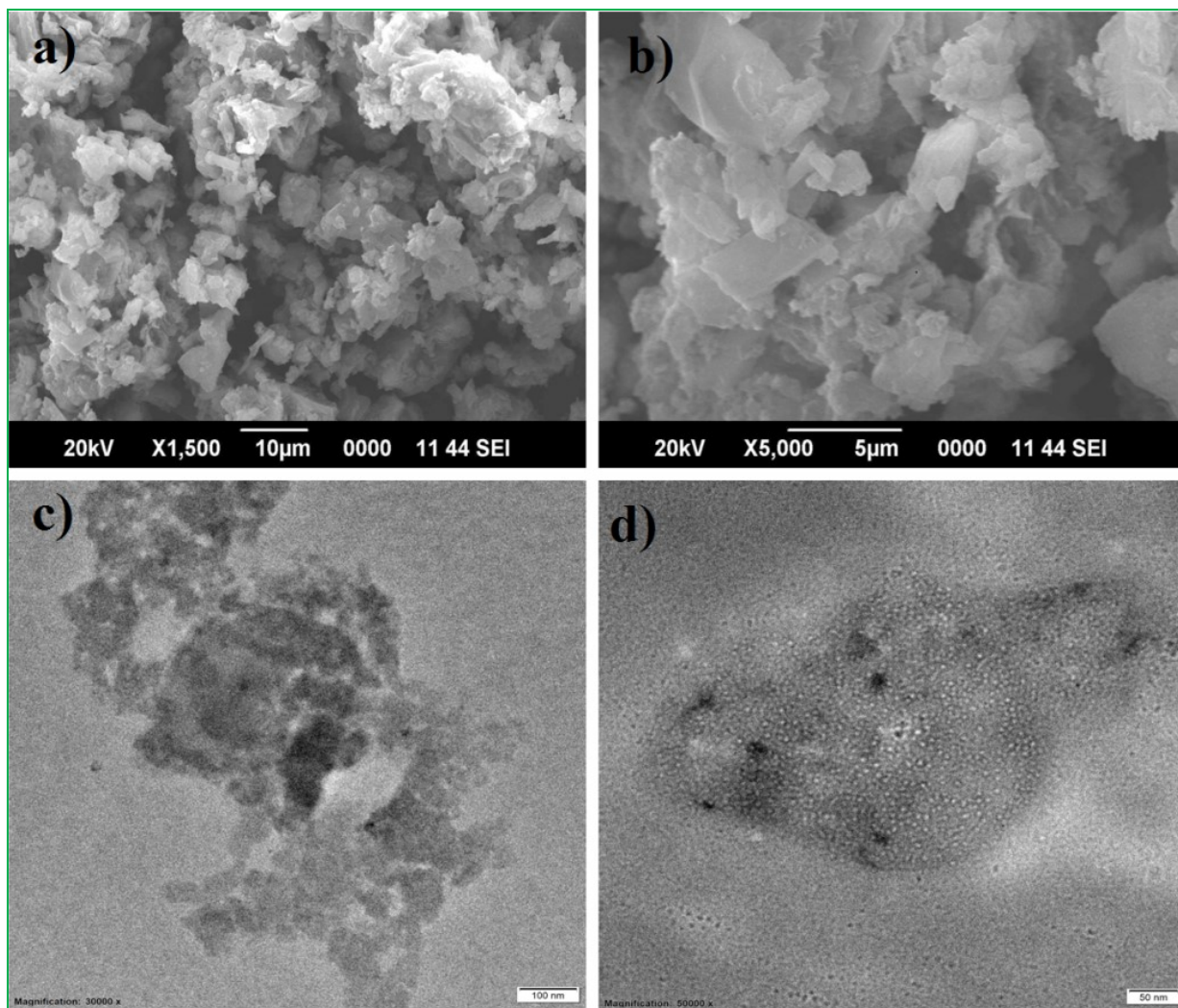


Fig 3: (a-b) SEM images, (c-d) TEM images of *M. acuminata* ash catalyst after 4th cycle.

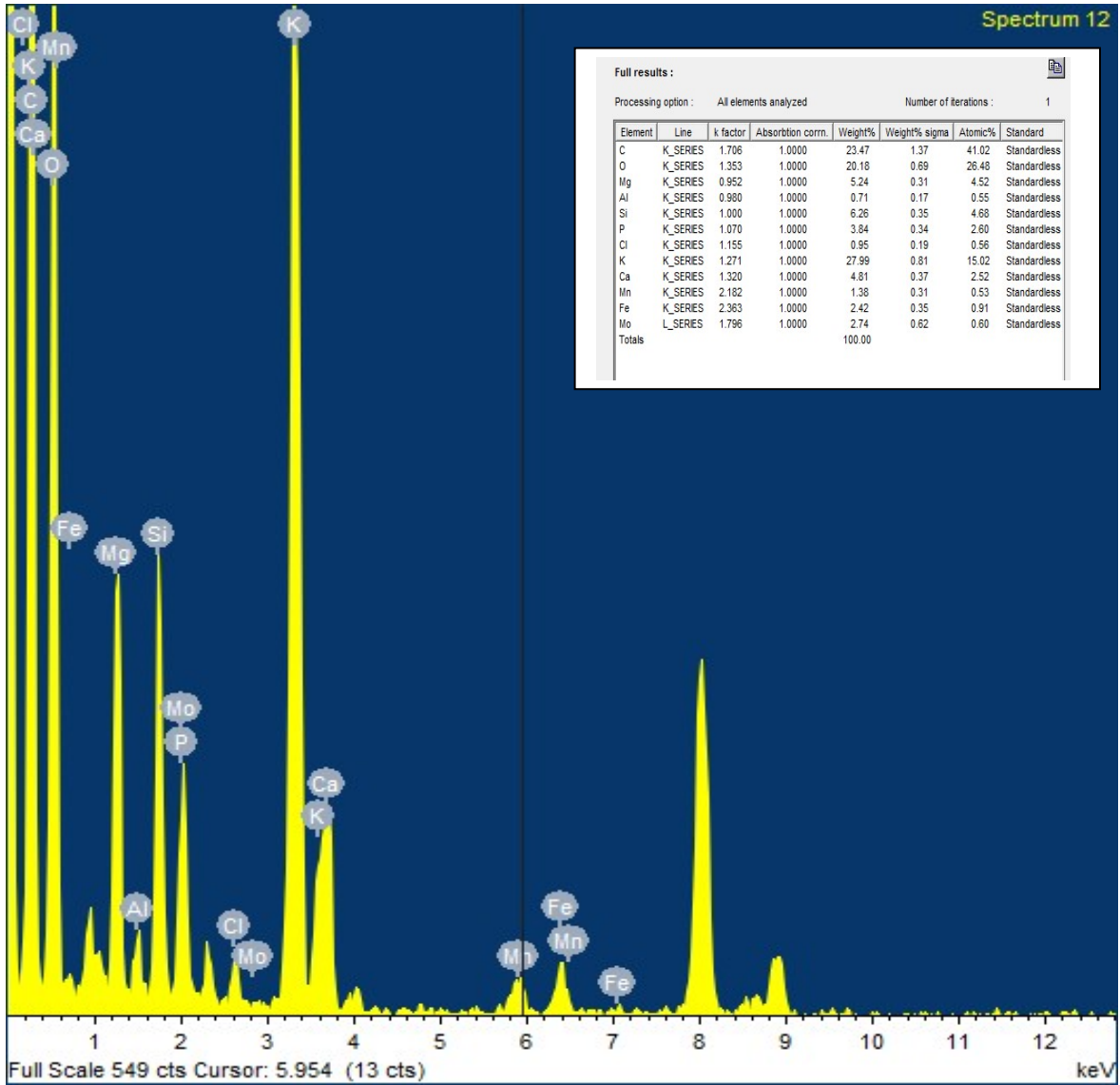


Fig 4: EDX spectrum of recovered ash catalyst after 4th cycle.

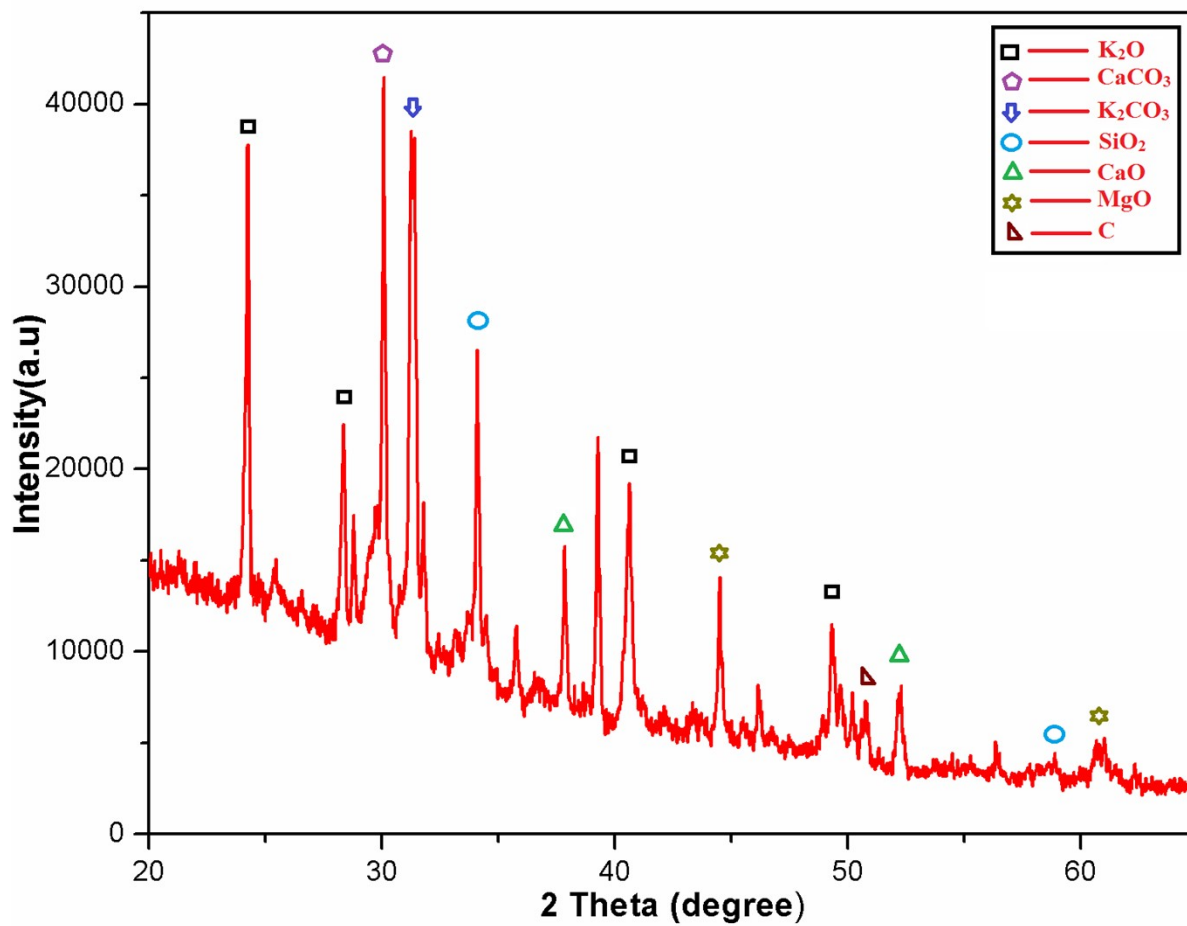


Fig 3: XRD spectrum of recovered *M. acuminata* ash catalyst after 4th cycle.