

SUPPORTING INFORMATION for Filtration and Catalytic Reaction Studies in Trickle Bed Reactors – Use of Solid Foam Guard Beds to Mitigate Fines Plugging

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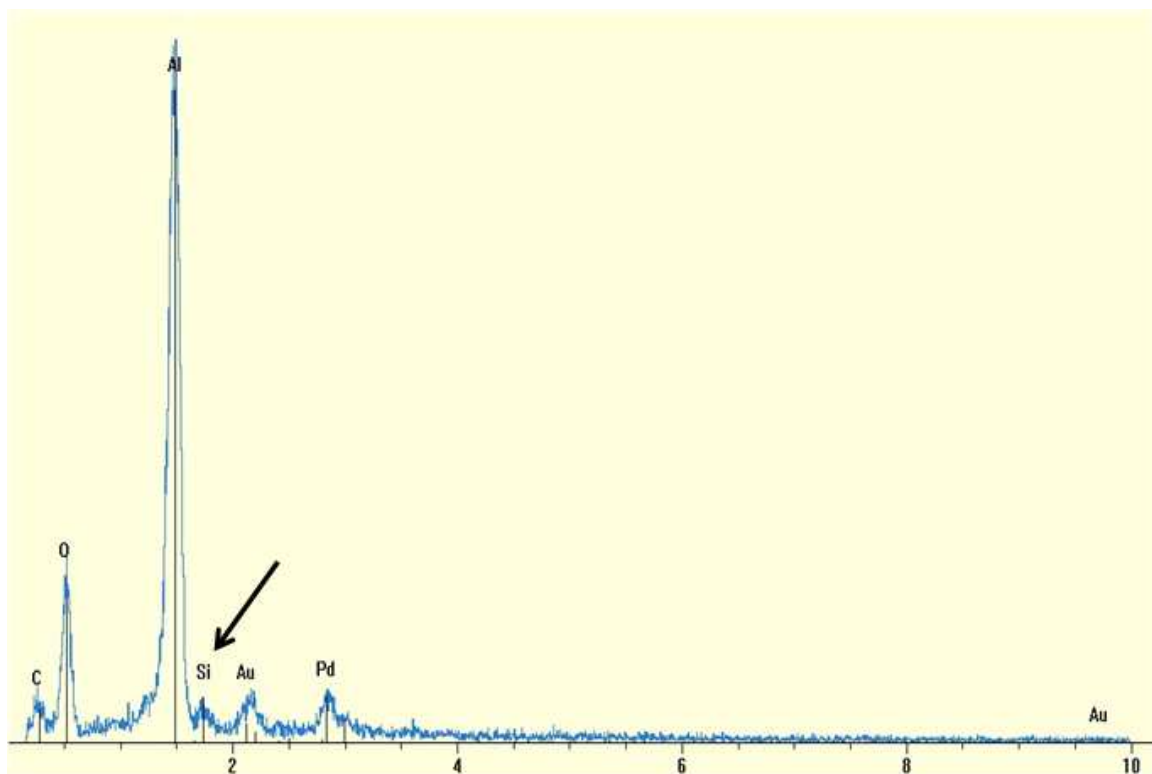


Figure SI-1 EDS analysis of catalyst after filtration experiments, shows presence of silica particles inside porous catalyst.

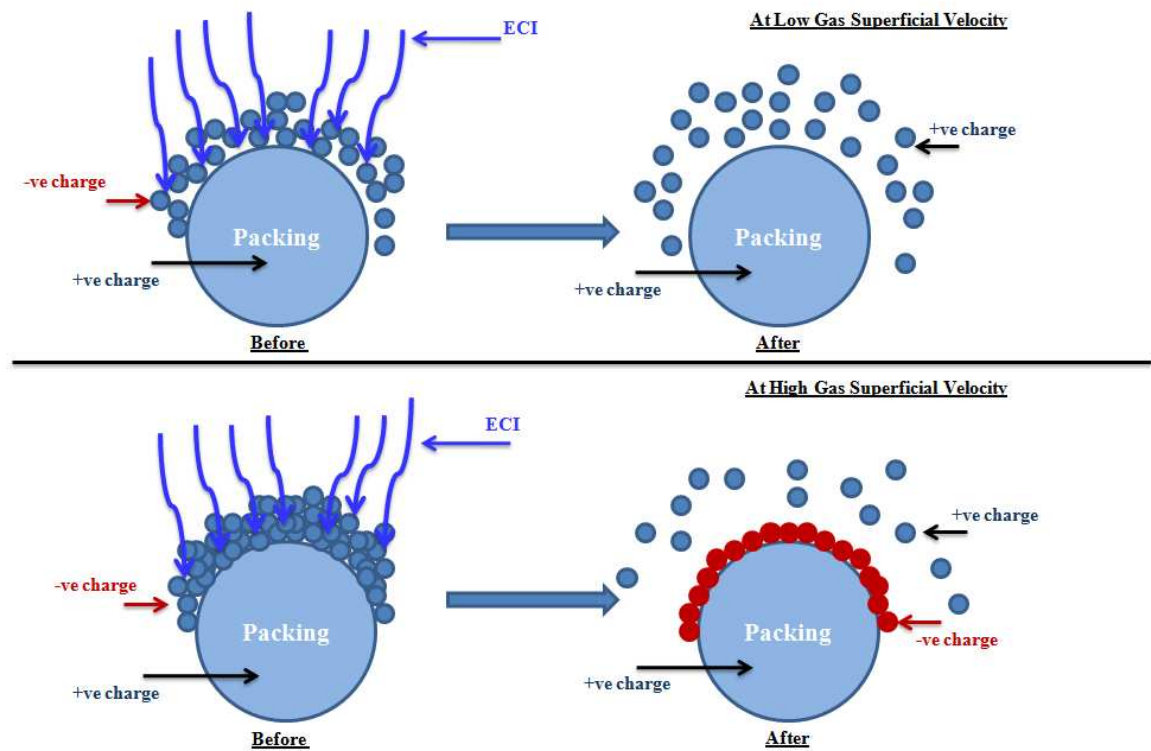


Figure SI-2. Before and after introduction of ECI during filtration at low and high superficial velocities, ECI impulsion access the entire layers prompting surface charge changes everywhere as alumina bed charges remain unaltered, repulsive forces between surfaces charged alike will prompt detachment which is more significant during filtration at low gas superficial velocity than high gas superficial velocity.