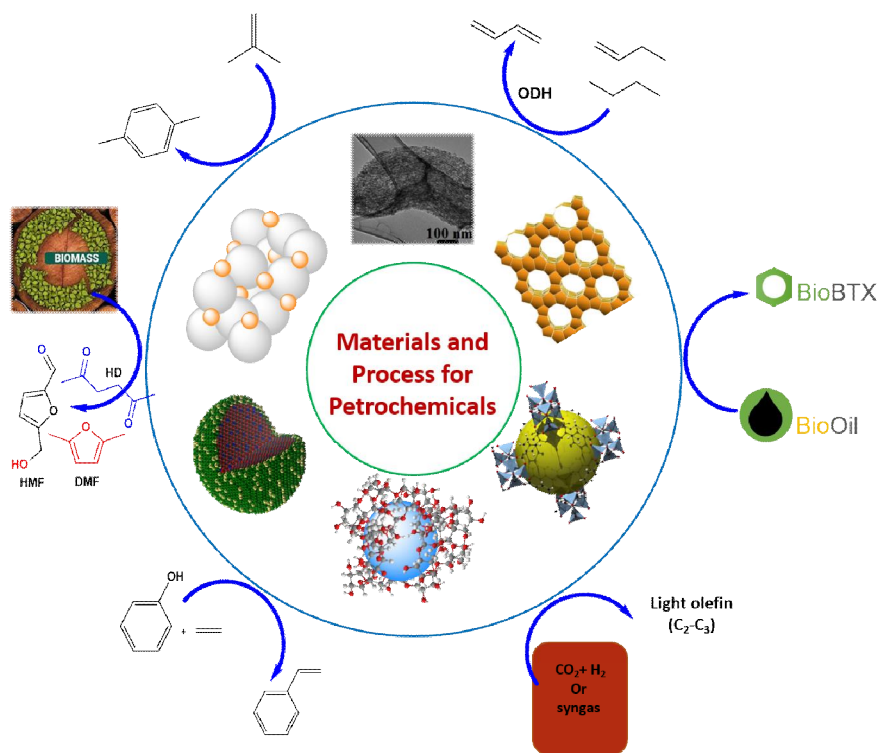


Development of Processes for Petrochemical Feedstocks



The focus of our research lies towards the development of processes for conversion of refinery streams to petrochemicals, chemicals from renewable materials etc. Research projects are aimed at addressing current issues in and tackling relevant problems associated with alternative energy, renewable chemicals, and novel process developments. Currently the area is working on the development of alternate processes for the production of petrochemical feedstocks, for example olefins from carbon monoxide, carbon dioxide, conversion of C4 stream to p-xylene, conversion of naphtha/ kerosene to styrene, carboxylic acids and chemicals from the vegetable oils. In addition we are actively engaged in the development of photocatalytic methodologies for organic transformations, for example, carboxylation of olefins using CO₂, oxidation of alcohols, benzene etc in the presence of visible light irradiation.