

The Laboratory's research activities fall into the following areas:

- Development of an eight reactor pilot scale system for evaluation of hydrocracking catalysts

- Developments of new methods for FCC catalyst deactivation

- New process reaction schemes (catalyst, reactor, operating conditions) for producing fuels from biomass derived feedstocks

- Development of effective separation scheme for the extraction of useful chemicals from bio-oil

- Construction and operation of a prototype multi-fuel processor including biofuels for hydrogen production

- Development of advanced electrode materials for PEMFCs

- New catalytic materials for reactions/processes related to hydrocarbons and biomass conversion, hydrogen production, catalytic abatement of NOx, and oxidative dehydrogenation of alkanes

- Novel synthesis routes for the preparation of advanced catalytic materials