Catalytic Cracking for the Production of Light Olefins

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As an alternative process to boost propylene, catalytic naphtha cracking process, ACOTM that can produce both of ethylene and propylene effectively from naphtha can be suggested. In catalytic cracking of naphtha, designing of hydrothermally stable ZSM-5 based catalyst is very important and critical. Stability of ZSM itself and binder system to make micro-spheroidal catalyst are two key factors. The cracking catalyst prepared with ZSM-5 synthesized with nano-sized seed and optimized sol binder revealed higher cracking activity compared with that prepared with commercial ZSM-5 and solution phosphate binder.