عنوان مقاله:

Evidences of Light Olefins Production via Catalytic Cracking of Hydrocarbons over Modified Zeolites

محل انتشار:

چهاردهمین همایش بین المللی نفت، گاز و پتروشیمی (سال: 1389)

تعداد صفحات اصل مقاله: 13

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خلاصه مقاله:

steam cracking pyrolysis of hydrocarbons has been the major source of light olefins and aromatics for more than half a century. Ethylene and propylene can also be produced by the cracking of higher hydrocarbons using zeolite as a catalyst. However the yield of olefins was reported to be lower than obtained by steam cracking because of the side reactions aromatization and ligomerization of the olefin products over the acid sites of zeolites. catalytic cracking of heavy hydrocarbons FCC family technologies, naphtha and lighter hydrocarbons such as butane has been extensively investigated over modified MFI (ZSM-5) zeolites. in the present paper a summary of the research activities on ethylene production via catalytic cracking over modified zeolites has been reported . this summary highlights important current ideas about acid -catalyzed hyrocarbon cracking that has resulted in high ethylene and propylene yields. it also specifies the influence of different factors on light olefin production.

کلمات کلیدی:

ethylene, propylene, catalytic cracking , zeolite, HZSM-5, hydrocarbons.

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