

**Catalytic conversion of waste plastics/petroleum resid mixtures into transportation fuels.**

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**Abstract**

A model plastics consisting on low- and high-d. polyethylene, polypropylene, and polystyrene was mixed with light petroleum residues and hydrogenated by the use of a Ni/Mo catalyst in a micro reactor at different temps. and pressures. It was demonstrated that the coprocessing of waste plastics and petroleum residues was a feasible process to convert these into liq. fuels. The reaction temps. and the reaction time strongly affected the conversion and the prodn. of hexane sol. material. The conversion of the waste plastics into liq. fuel depended on the kind of plastics used.