

ABSTRACT

A Y-zeolite-containing composite material made from materials comprising kaolin by in-situ crystallization said
5 composite material comprises nest-like structure. Content of Y-zeolite in the composition material is in the range of 30-85% by weight. The nest-like structure is essentially comprised of rodlike crystal, further comprises flaky crystal or blocky crystal. Y-zeolite in the composite material may be HY, REY, or
10 REHY. Said composite material is suitable to be used as catalysts for catalytic cracking of heavy oil or resid. The invention further relates to a process for preparing the composite material.