

ABSTRACT:

Since 1982 there has been much research on the Oxidative coupling of methane (OCM) process. The main obstacle for converting methane directly to more valuable products by heterogeneous catalysis is the low selectivity at high conversions; the products are more reactive than methane. The main goal of this work is to study the kinetics of OCM reaction and classifies them. We find that with considering almost all reaction steps of the other models, reaction network of Stanch et al. has the best accuracy in comparison with the other models.