

Table S1. Textural properties of different P loading catalysts.

Sample	$S_{\text{BET}}(\text{m}^2/\text{g})$	S_{micro}	S_{meso}	$V_{\text{total}}(\text{cm}^3/\text{g})$
0.5%/OCMK	1377	171	1207	1.35
1%P/OCMK	1338	165	1173	1.31
2%P/OCMK	1127	88	1039	1.13
4%P/OCMK	1054	77	977	1.07

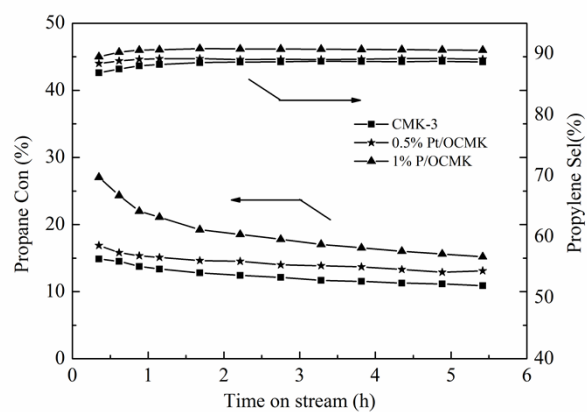


Fig. S1. Conversion and selectivity of the dehydrogenation of propane to Propylene over CMK-3, 0.5Pt/OCMK and 1%P/OCMK. (Catalyst: 0.10 g, C_3H_8/He : 1/19 mLmin⁻¹, reaction temperature: 873K)

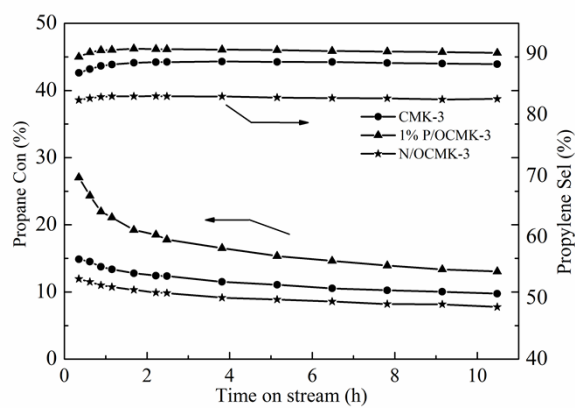


Fig. S2. Conversion and selectivity of dehydrogenation of propane to Propylene over CMK-3, 1%P/OCMK and N/OCMK. (Catalyst: 0.10 g, C₃H₈/He: 1/19 mLmin⁻¹, reaction temperature: 873K)