catalysts

Supplementary Materials: Performance Enhanced SAPO-34 Catalyst for Methanol to Olefins: Template Synthesis using a CO_2-based Polyurea

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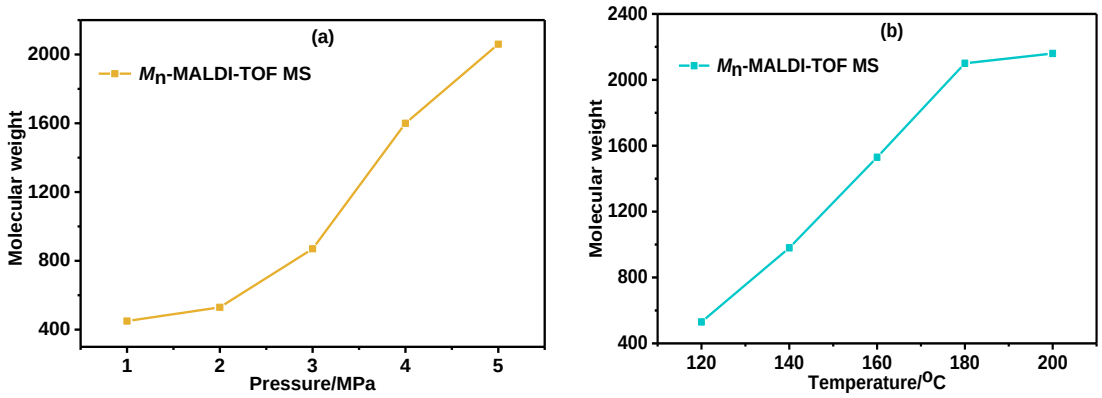

Figure S1. Molecular weight (Mn) of PUa with the change of Pressure (**a**) and Temperature (**b**).

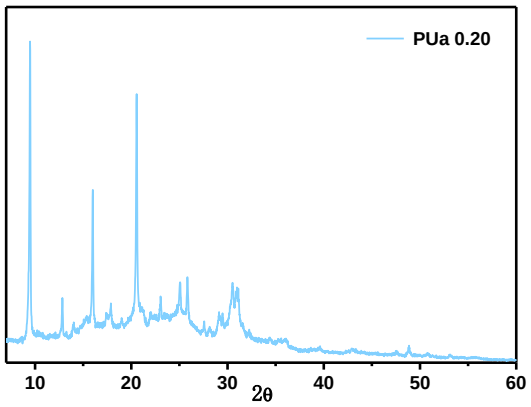

Figure S2. XRD patterns of SAPO-34 sample synthesized with a PUa/Al_2O_3 ratio of 0.20.

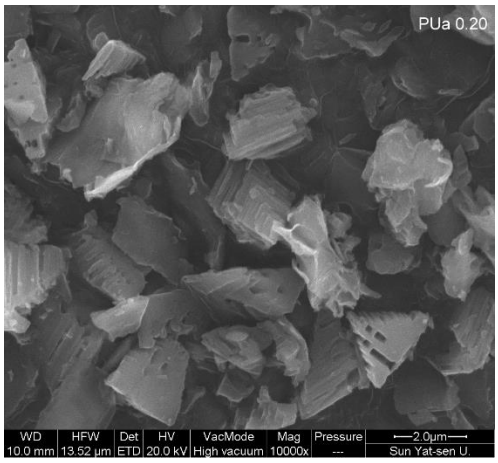

Figure S3. SEM images of SAPO-34 sample synthesized with a PUa/Al_2O_3 ratio of 0.20.

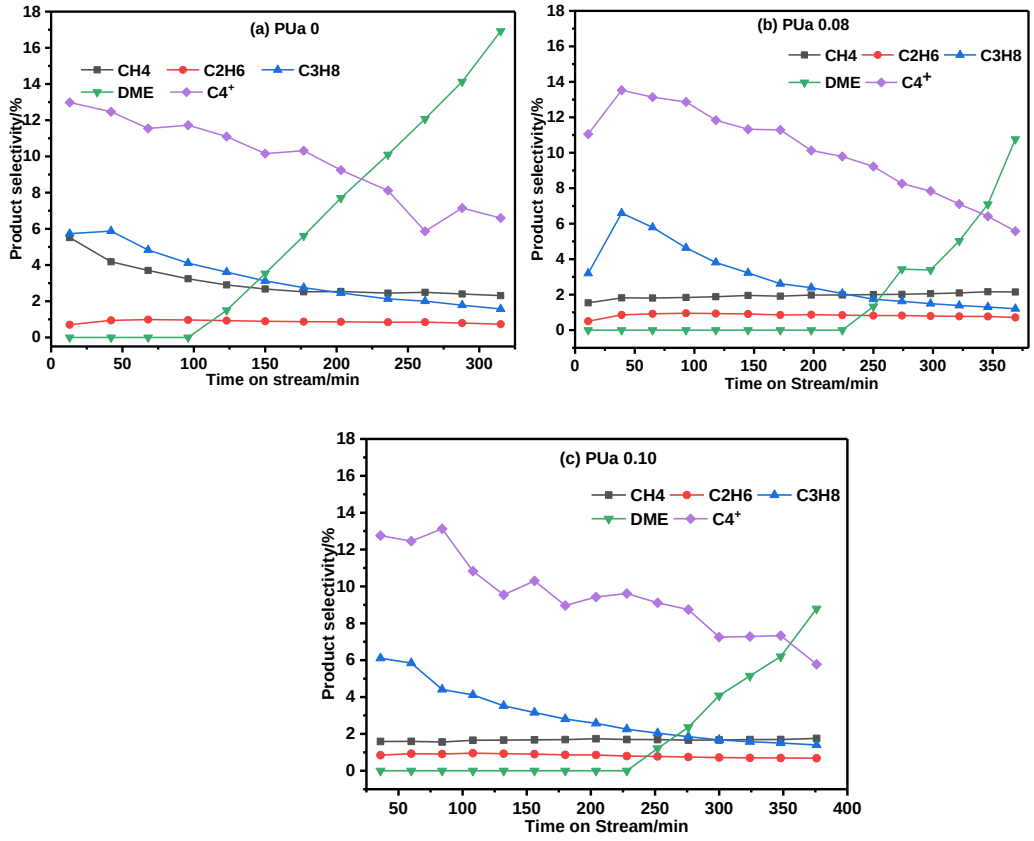

Figure S4. Product (except for ethylene and propylene) selectivity of methanol conversion reaction for different SAPO-34 catalyst, (**a**) PUa_0, (**b**) $PUa_{0.08}$, (**c**) $PUa_{0.10}$.

Table S1. The variation of coke formation in methanol conversion over different SAPO-34 catalysts.

Sample name	TOS	Coke (min)	R_{coke} (%, g/gcat)	P_{coke} (g/gMeOH)
PUa_0	320	24.0	0.375	0.015
$PUa_{0.08}$	370	18.5	0.250	0.010
$PUa_{0.10}$	375	16.6	0.225	0.009

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