Supporting Information

Modified mesoporous graphitic carbon nitride: A novel high-performance heterogeneous base catalyst for transesterification reaction

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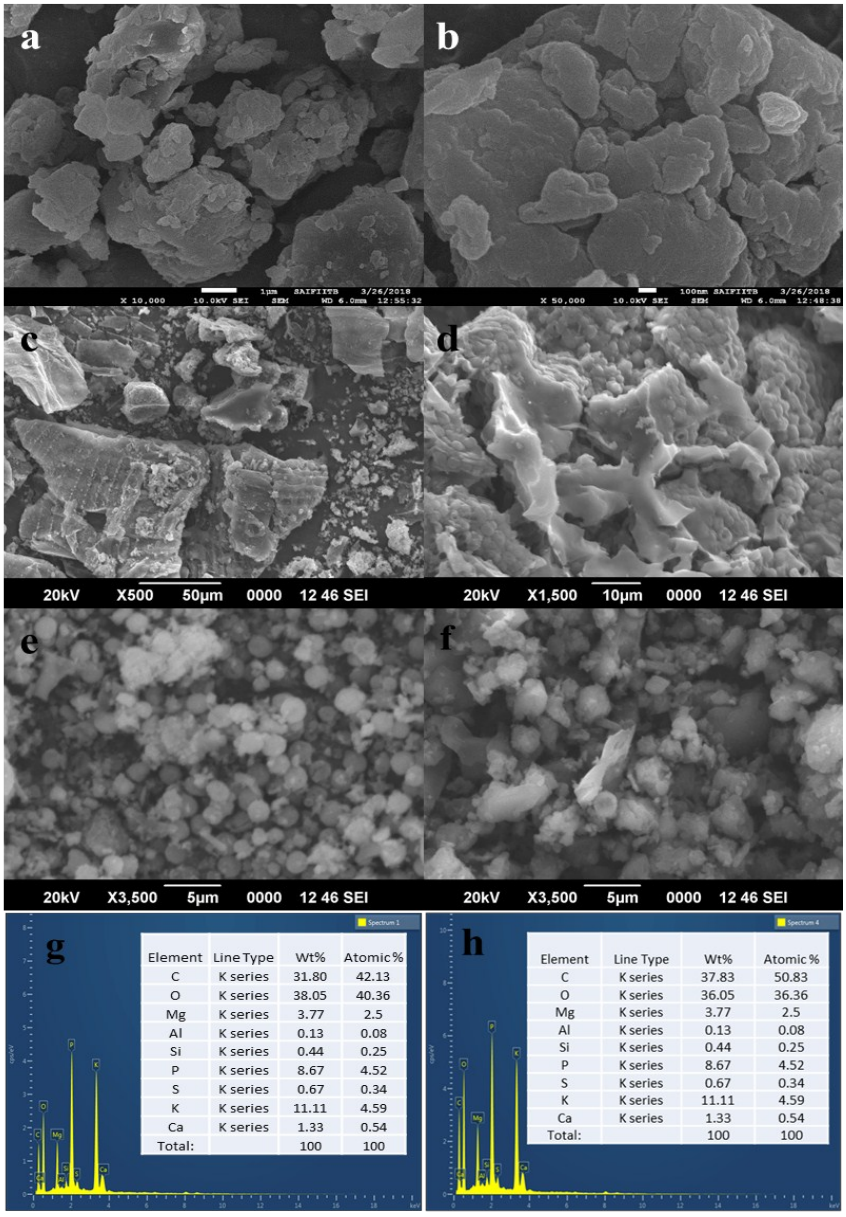

Element	Line Type	Wt%	Atomic %
C	K series	31.80	42.13
O	K series	38.05	40.36
Mg	K series	3.77	2.5
Al	K series	0.13	0.08
Si	K series	0.44	0.25
P	K series	8.67	4.52
S	K series	0.67	0.34
K	K series	11.11	4.59
Ca	K series	1.33	0.54
Total:		100	100

Element	Line Type	Wt%	Atomic %
C	K series	37.83	50.83
O	K series	36.05	36.36
Mg	K series	3.77	2.5
Al	K series	0.13	0.08
Si	K series	0.44	0.25
P	K series	8.67	4.52
S	K series	0.67	0.34
K	K series	11.11	4.59
Ca	K series	1.33	0.54
Total:		100	100

Figure S1: SEM micrographs of (a), (b) g-C_3N_4, (c), (d) OBA and (e), (f) TBA. EDAX of patterns of (g) OBA and (h) TBA.

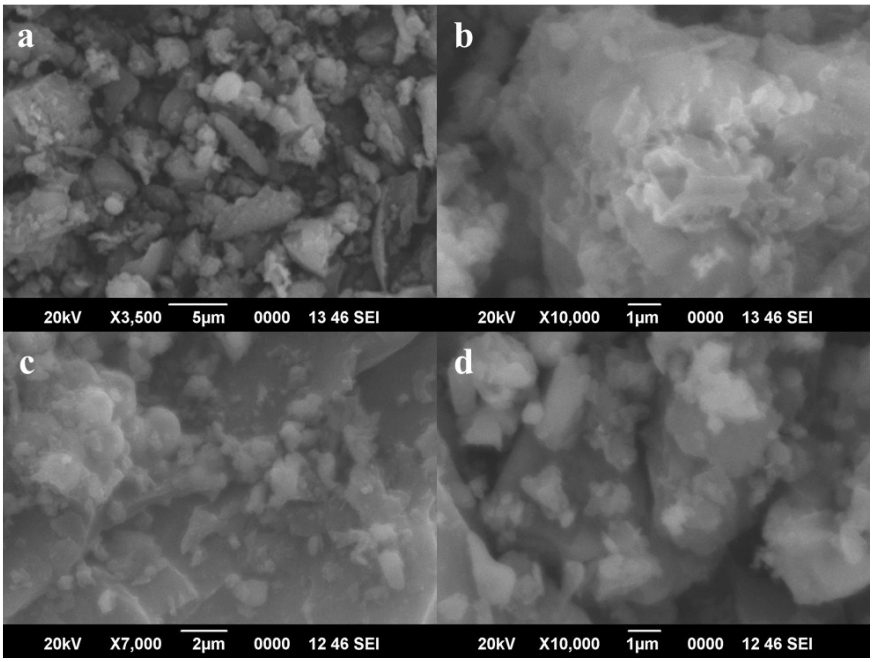

Figure S2. SEM micrographs of (a), (b) OBA-40 and (c), (d) TBA-40.

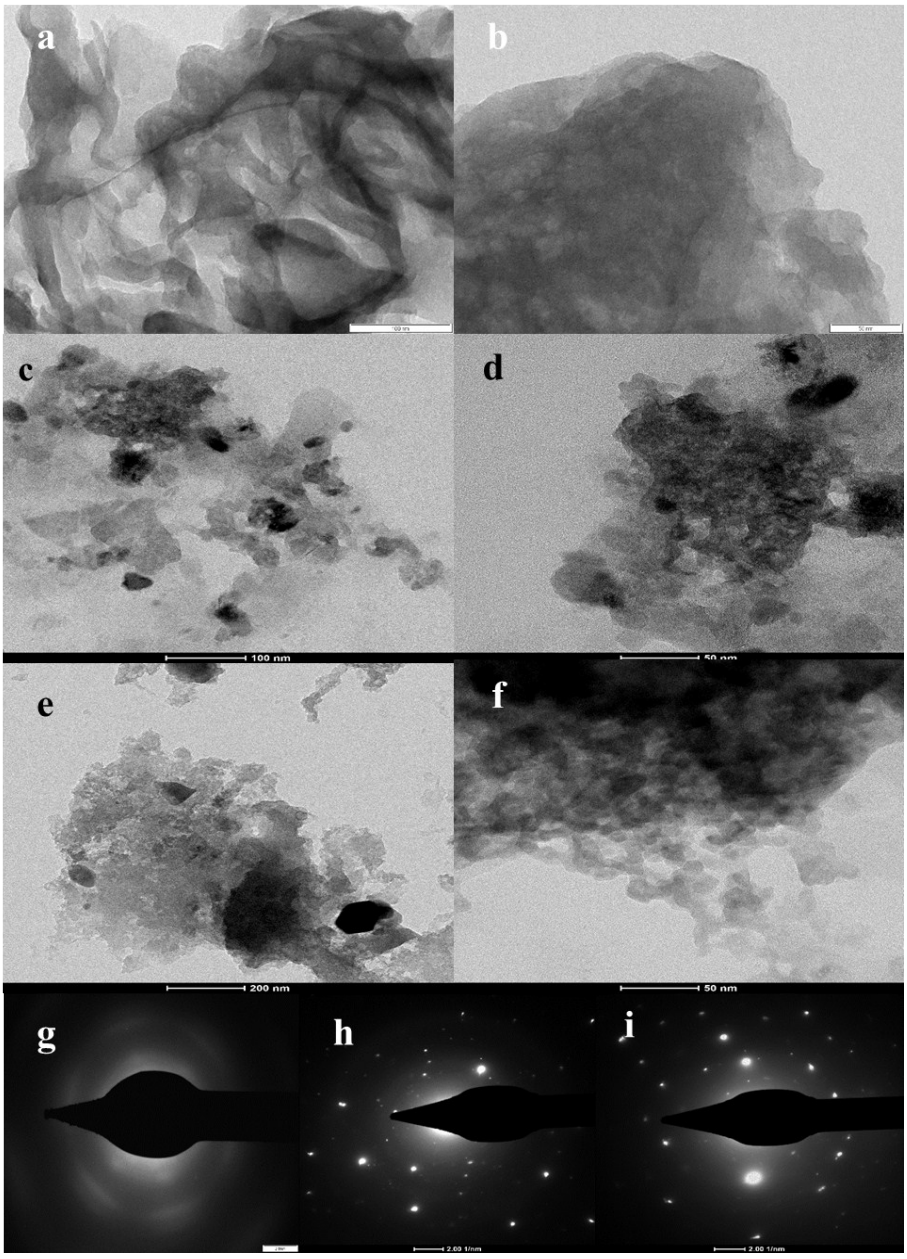

Figure S3: TEM micrographs of (a), (b) g-C_3N_4, (c), (d) OBA and (e), (f) TBA. ED of patterns of (g) g-C_3N_4, (h) OBA and (i) TBA.

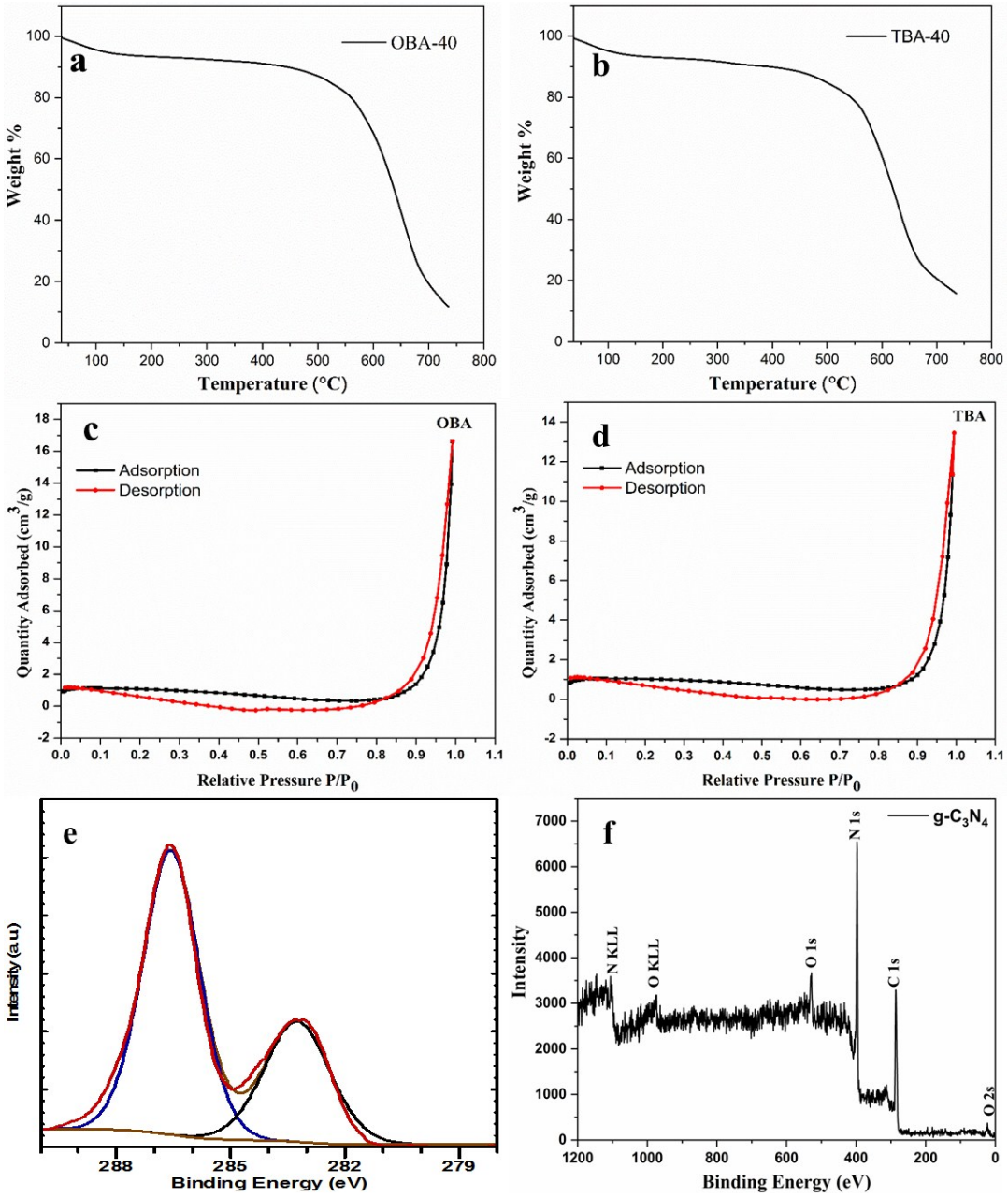

Figure S4: TGA of (a) OBA-40 and (b) TBA-40. N_2 adsorption-desorption isotherms for (c) OBA, (d) TBA. HR-XPS spectra of (e) C1s in g-C_3N_4, (f) full scan XPS of g-C_3N_4

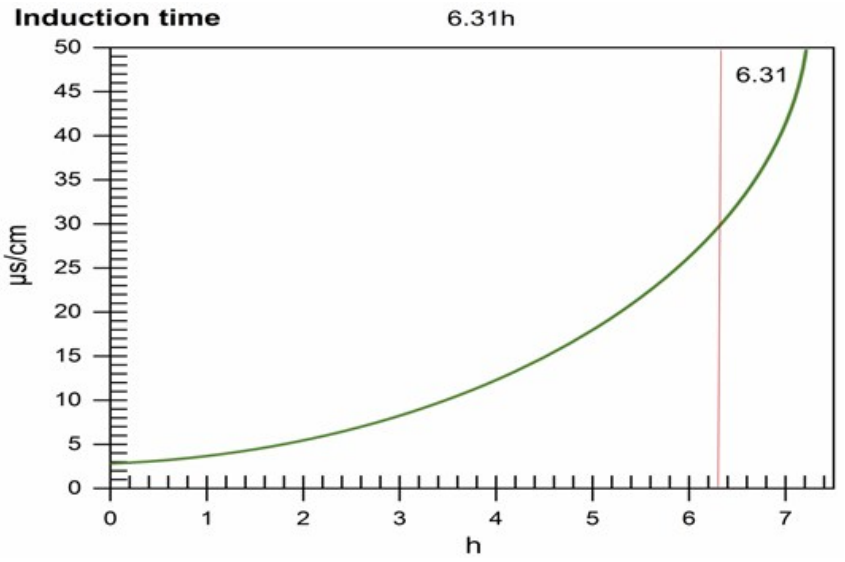

Figure S5: Oxidation stability of synthesized biodiesel

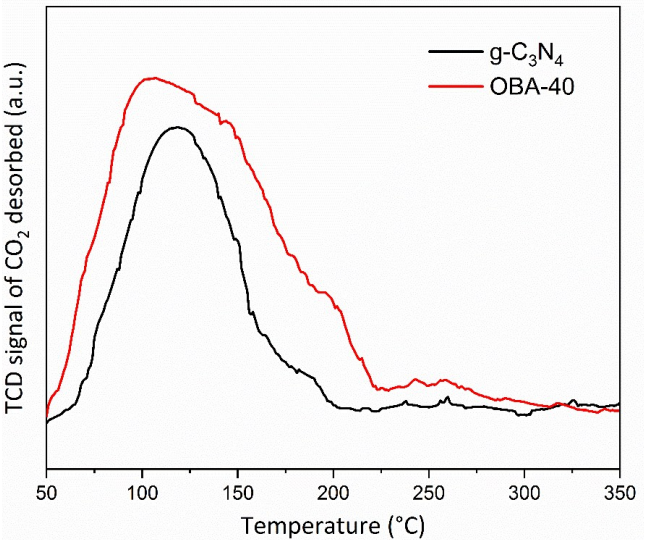

Figure S6: CO_2-TPD profiles for g-C_3N_4 and OBA-40

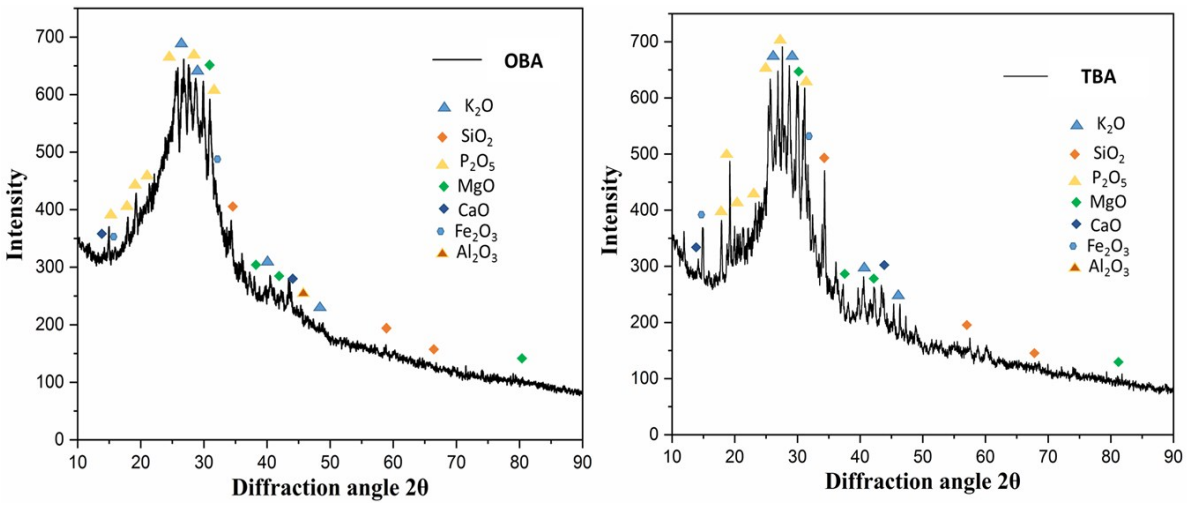

Figure S7: Powder XRD patterns of OBA and TBA with distinguished peaks for the metal oxides