

**Biodiesel production from waste cooking oil using p-toluene sulfonic acids doped polyaniline
as catalyst**

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Table S1 The effect of reaction time on the yield of fatty acid methylesters

Reaction time /h	2.0	2.5	3.0	3.5	4.0
Yield/%	91.3	95.1	96.4	96.5	96.4

Reaction conditions: reaction temperature (70°C), catalyst dosage (4.0%), methanol/WCO molar ratio (7:1).

Table S2 The effect of Methanol/WCO molar ratio on the yield of fatty acid methylesters

Methanol/WCO molar ratio	5:1	7:1	10:1	20:1	50:1
Yield/%	87.5	96.4	97.1	96.9	96.8

Reaction conditions: reaction temperature (70°C), catalyst dosage (4.0%), reaction time (3.0 h).

Table S3 The effect of catalyst dosage on the yield of fatty acid methylesters

Catalyst dosage /%	2.0	3.0	4.0	5.0	6.0
Yield/%	88.3	93.3	97.1	96.8	96.9

Reaction conditions: reaction temperature (70°C), methanol/WCO molar ratio (10:1), reaction time (3.0 h).