Supporting information

High-efficiency catalytic performance over mesoporous Ni/Beta zeolite for synthesis of quinoline from glycerol and aniline

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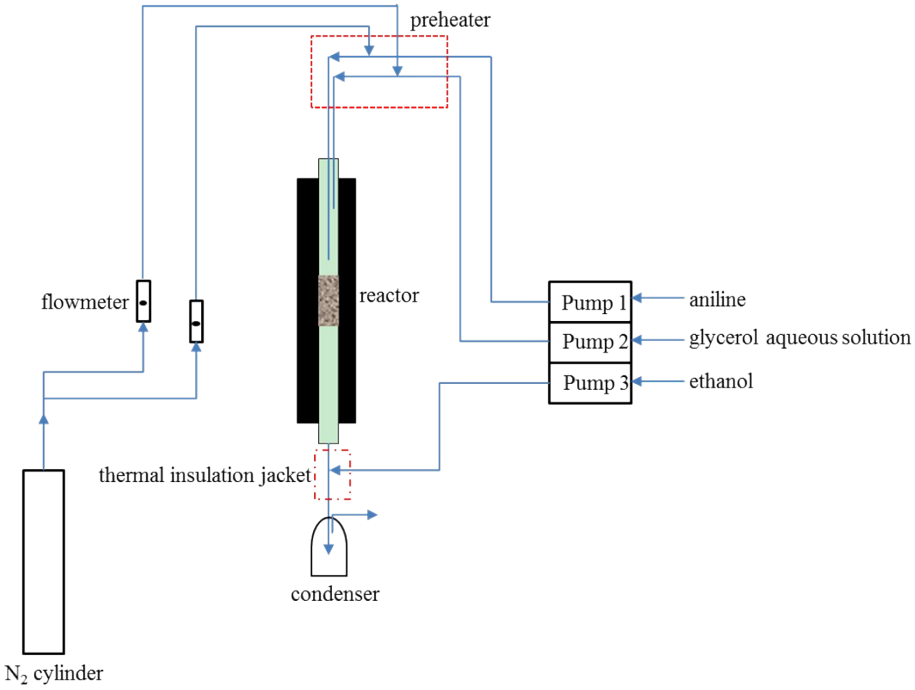

Figure S1. Schematic diagram for the homemade reaction equipment employed in the synthesis of quinoline form aniline and glycerol.

Table S1. The productivity of quinoline in terms of weight time yield.

catalyst	Aniline Conversion (%)	Quinoline Yield [a](%)	quinoline productivity [b] ($g \cdot g^{-1} \cdot h^{-1}$)
Hβ	93.3	50.6	0.09
Ni/Hβ	95.0	61.2	0.11
Hβ-At	97.1	55.6	0.10
Ni/Hβ-At	96.0	71.4	0.13

[a] mole yield of quinoline.

[b] weight of quinoline produced per gram of catalyst per hour.

Reaction condition: catalyst weight = 1.0 g; LHSV(aniline) = 0.13 h^{-1}, reaction temperature = 470 °C; molar ratio of aniline/glycerol = 1/4; concentration of glycerol = 20 wt %; TOS = 2 h.