Electronic Supplementary Material (ESI) for Reaction Chemistry & Engineering.

Electronic Supplementary Information

Magnetically Agitated Continuous Flow Tube Reactors with Aspartate Ammonia-Lyase Immobilized on Magnetic Nanoparticles

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Table S1 ζ-Potential of the aspartate ammonia-lyase (AAL) and the MNP carriers without and with AAL[a]

Sample	ζ-Potential (mV)
native AAL	-25.5±2.4
GDE-MNP	-24.2±1.0
AAL-MNP	-15.1±0.2

a Measurement conditions: l-aspartate (0.125 mg mL-1), or the corresponding MNPs (0.25 mg mL-1) in Tris buffer (50 mM, pH= 8.8), 25 °C.

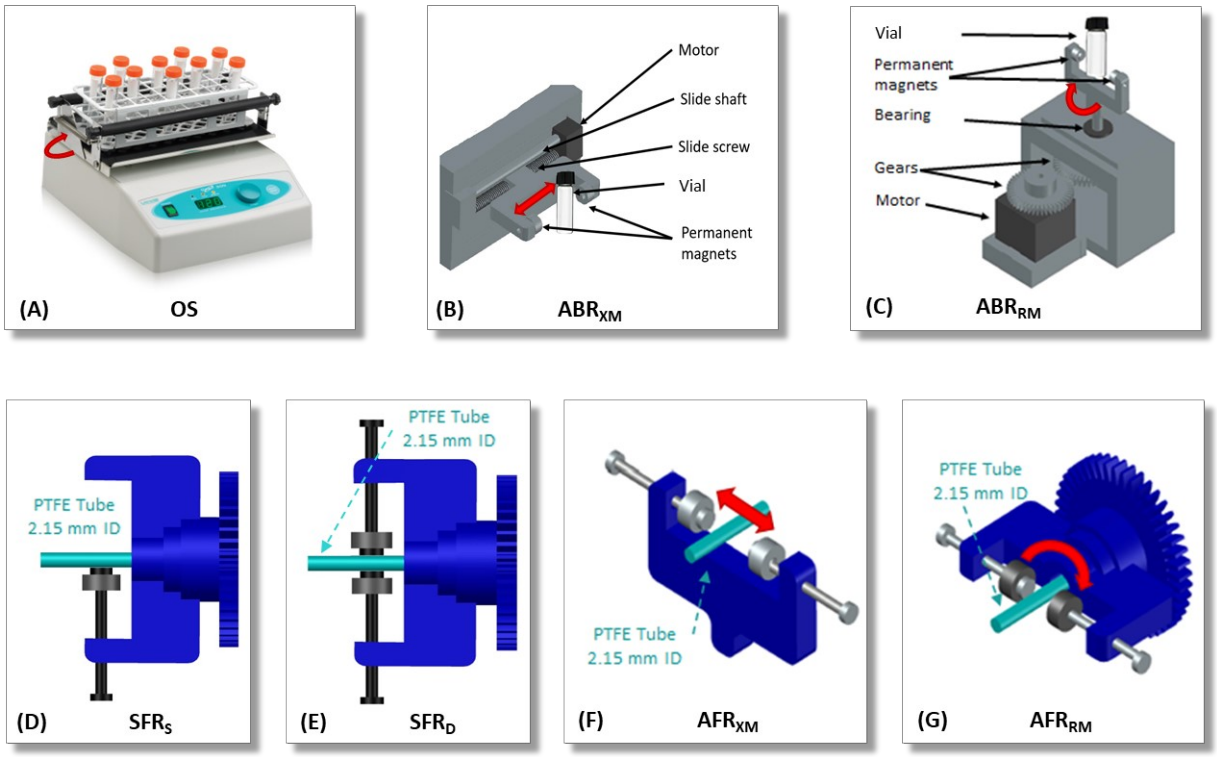

Figure S1. Modes of the reactors for the MNPs-AAL-catalysed biotransformations

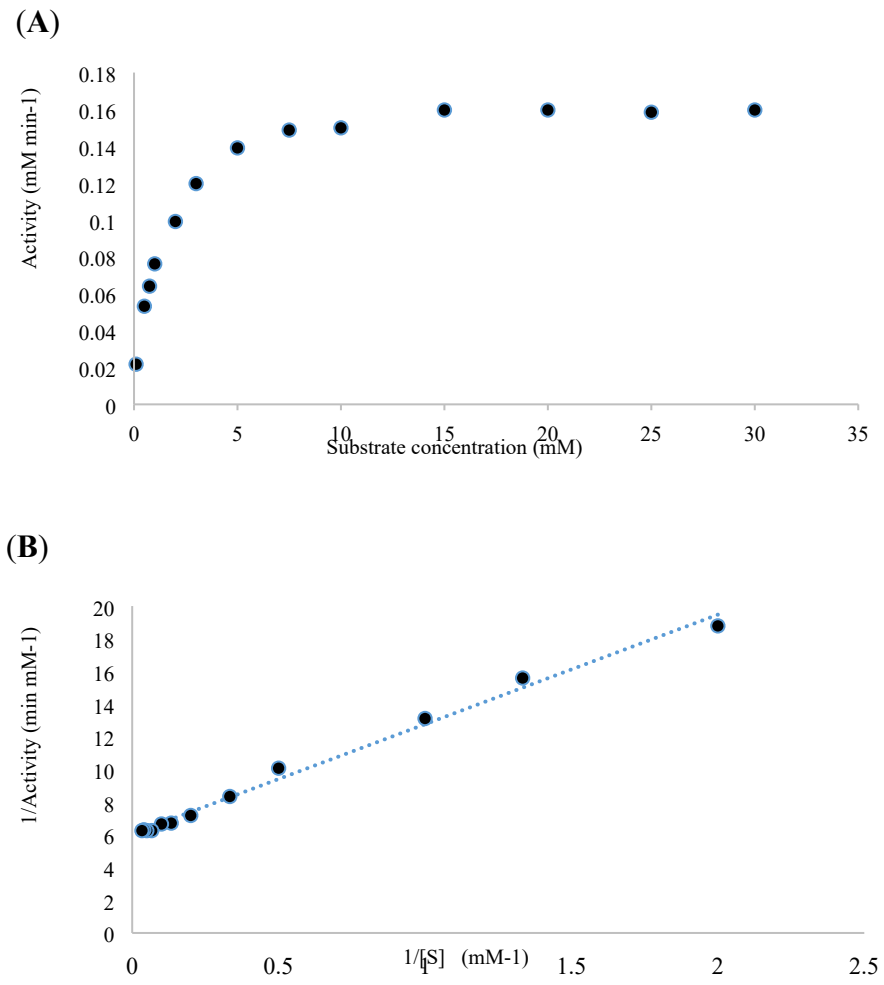

Figure S2. The (A) Michaelis-Menten curve and the (B) Lineweaver-Burk linearization for determining the apparent kinetic parameters of the aspartate ammonia-lyase immobilized on magnetic nanoparticles (AAL-MNP) in rotationally agitated flow reactor (AFR_{RM})