

Electronic Supplementary Information (ESI) for:

Role of microorganism growth phase in the accumulation and characteristics of biomacromolecules (BMM) in a membrane bioreactor

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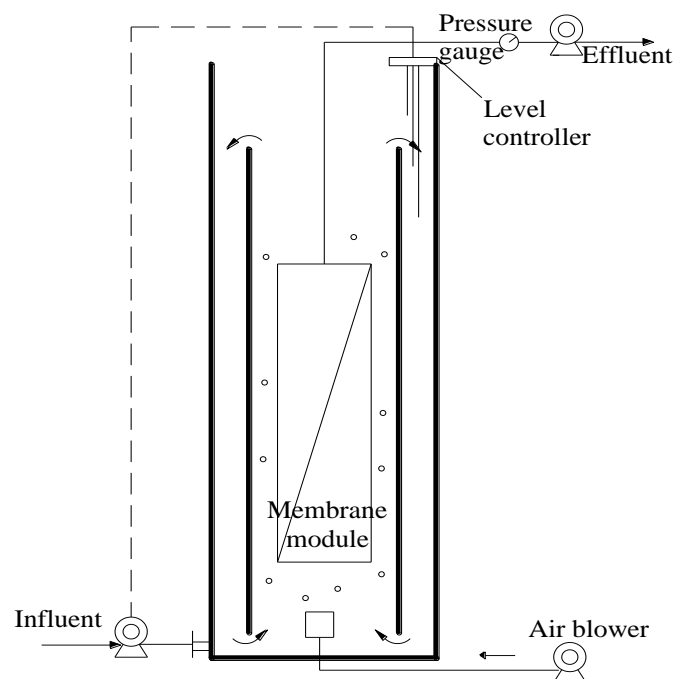


FIGURE S1. Diagram of the lab-scale MBR

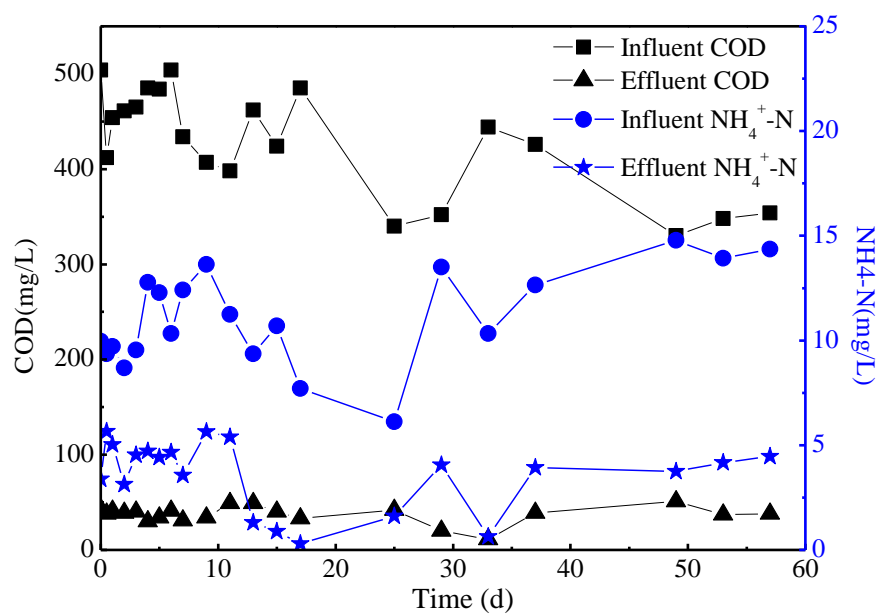


FIGURE S2. COD and $\text{NH}_4^+\text{-N}$ removal of the MBR

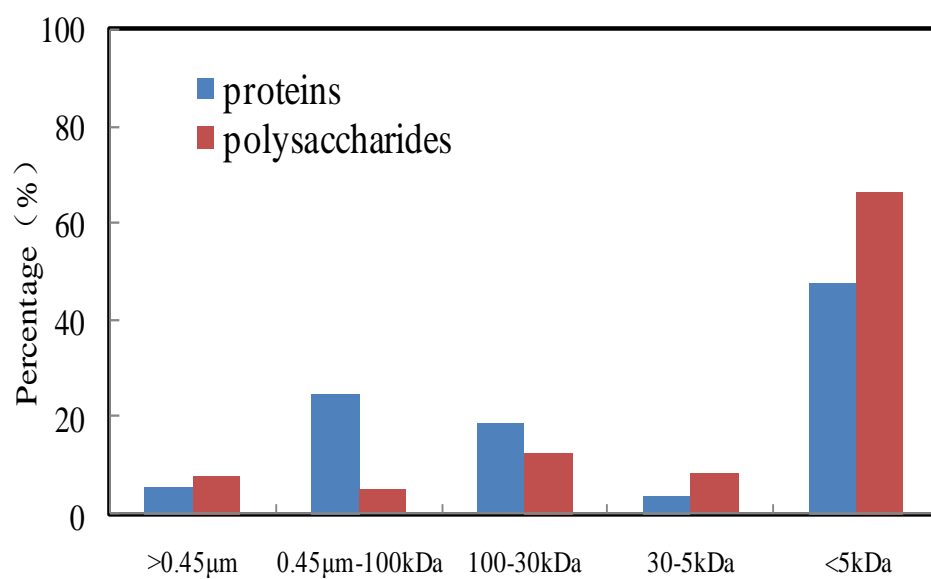


FIGURE S3 Molecular weight distribution of feedwater

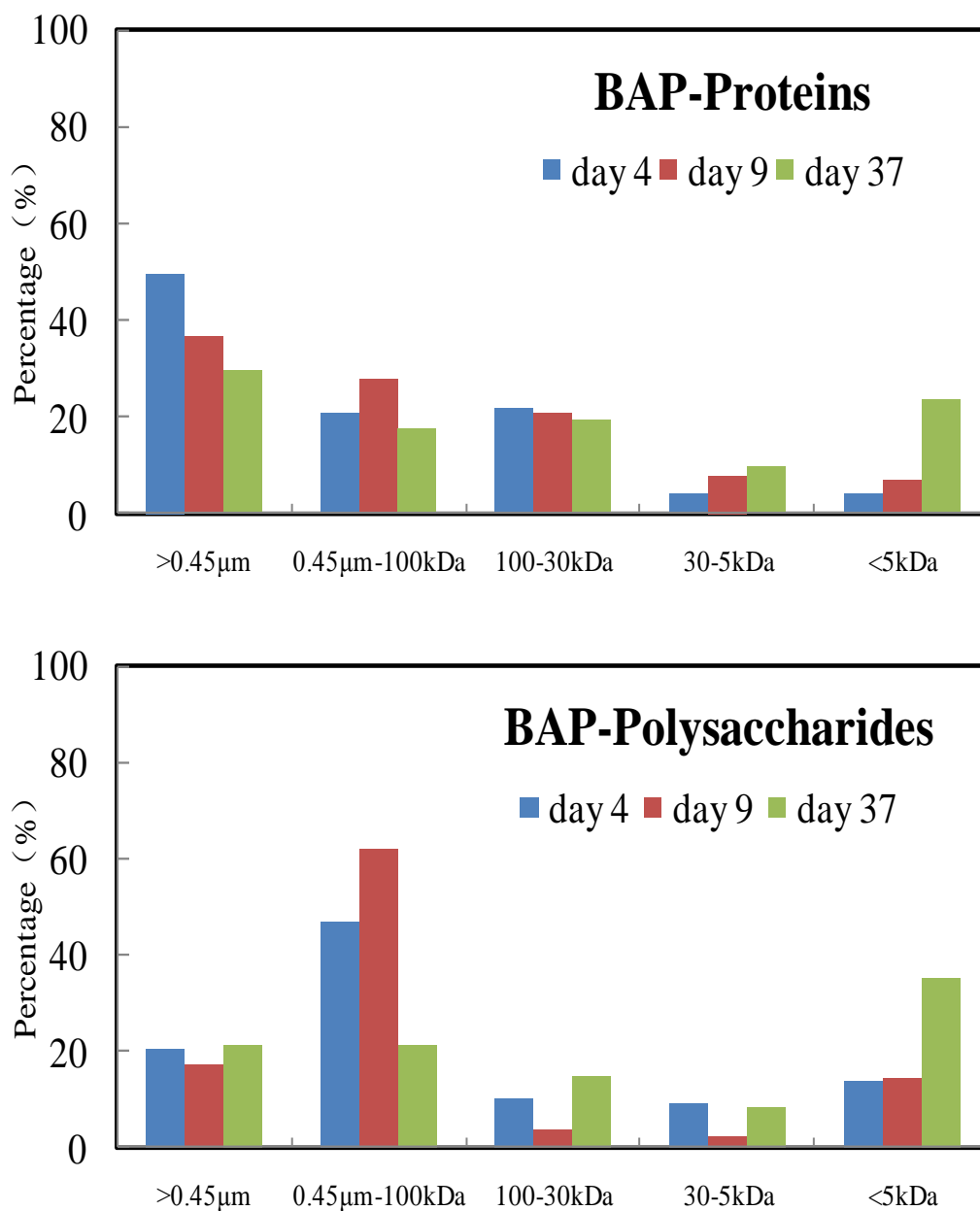


FIGURE S4. Molecular weight distribution of BAP on day 4, 9 and 37

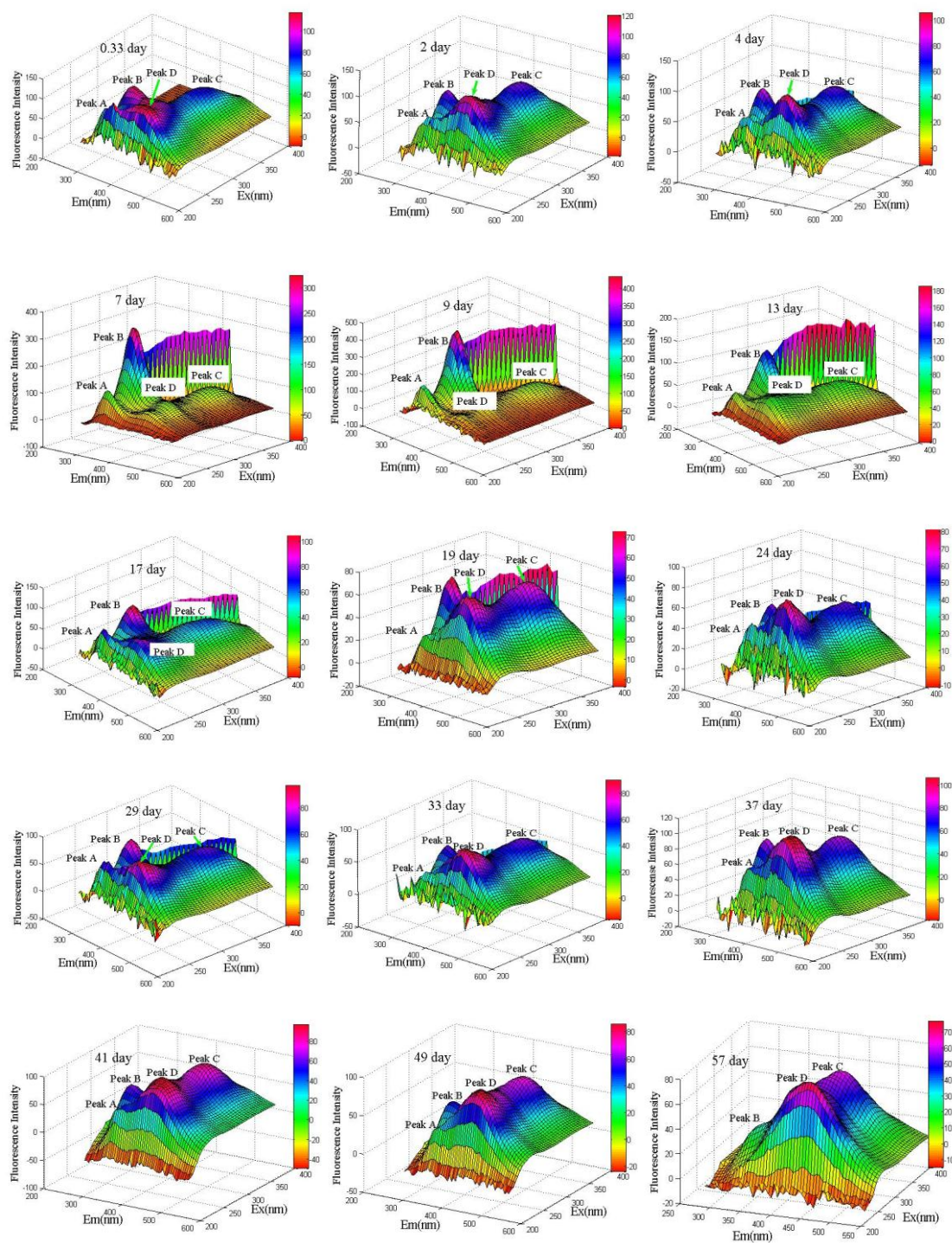


FIGURE S5. EEM spectra of SMP samples over the MBR operation

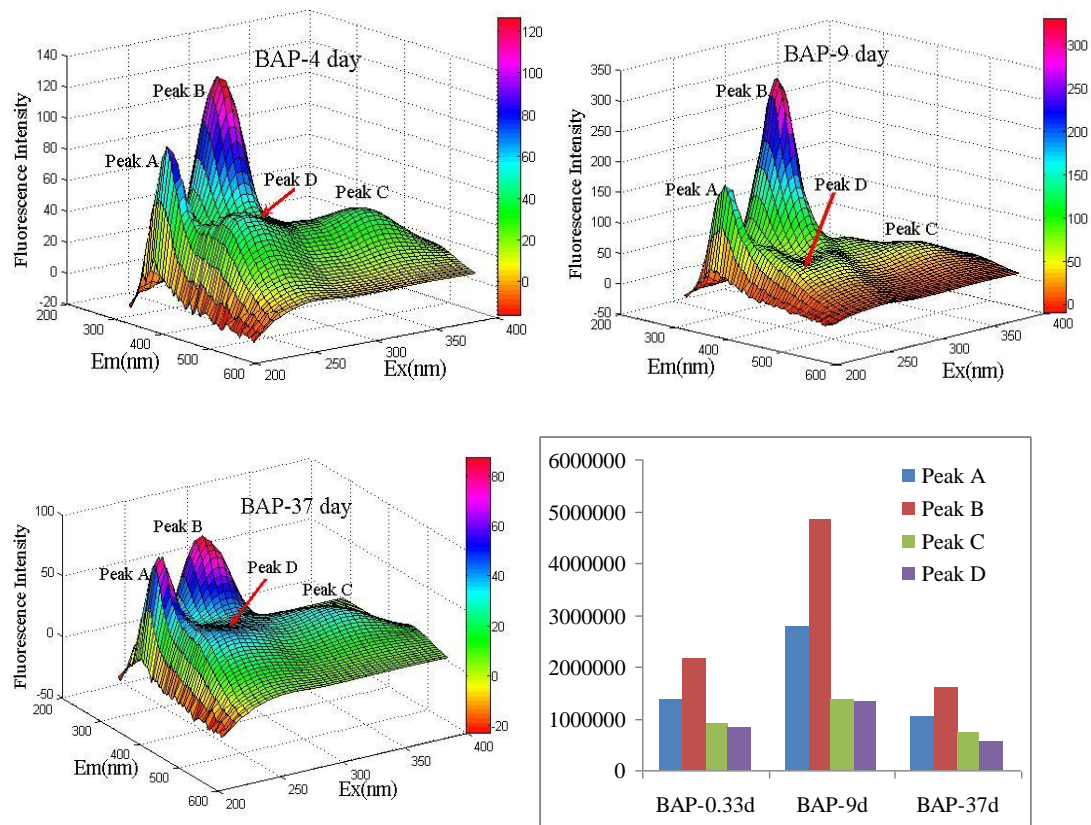


FIGURE S6. EEM data of the BAP on day 4, 9 and 37

TABLE S1. Compositions of synthetic wastewater

Ingredient	mg/L	Trace elements	mg/L
Na-acetate	35	FeSO ₄ .7H ₂ O	2.50
KH ₂ PO ₄	23	ZnCl ₂	0.06
K ₂ HPO ₄	21	MnCl ₂ .4H ₂ O	0.06
NH ₄ Cl	40	NaMoO ₄ .2H ₂ O	0.19
Starch	162	CoCl ₂ .6H ₂ O	0.13
Milk powder	200	NiCl ₂ .6H ₂ O	0.04
Sucrose	141	CuSO ₄	0.06
Urea	50	CaCl ₂	0.44
Peptone	32	H ₃ BO ₃	0.06
Yeast extract	77	MgCl ₂	0.19
Beef extract	80		
NaHCO ₃	30		