separations

MDPI

Supplementary materials

A novel and green method for turning food waste into environment-friendly organic deicing salts: the enhanced VFAs production through AnMBR

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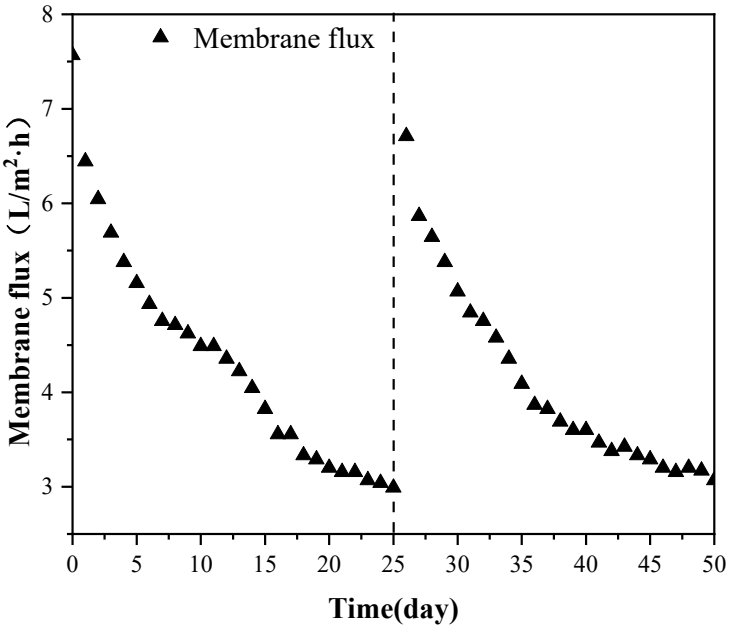


Figure S1 Variation of the membrane flux.

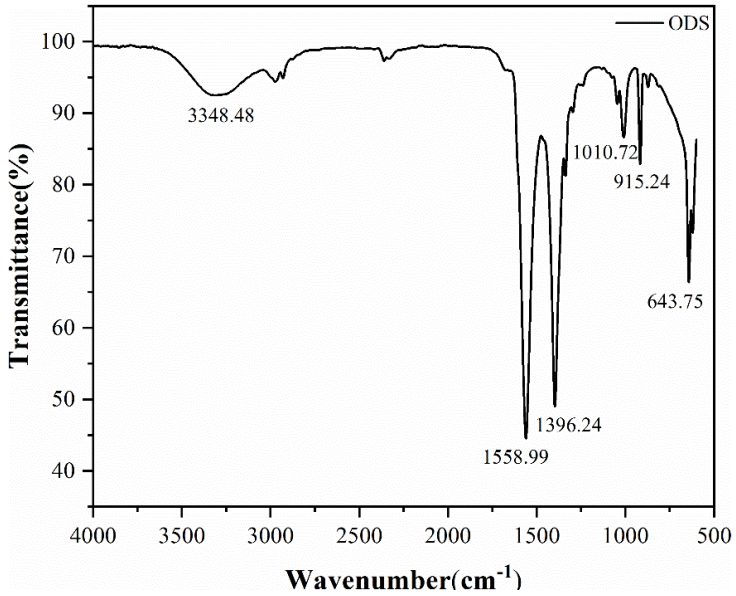


Figure S2 Infrared spectrogram of product.

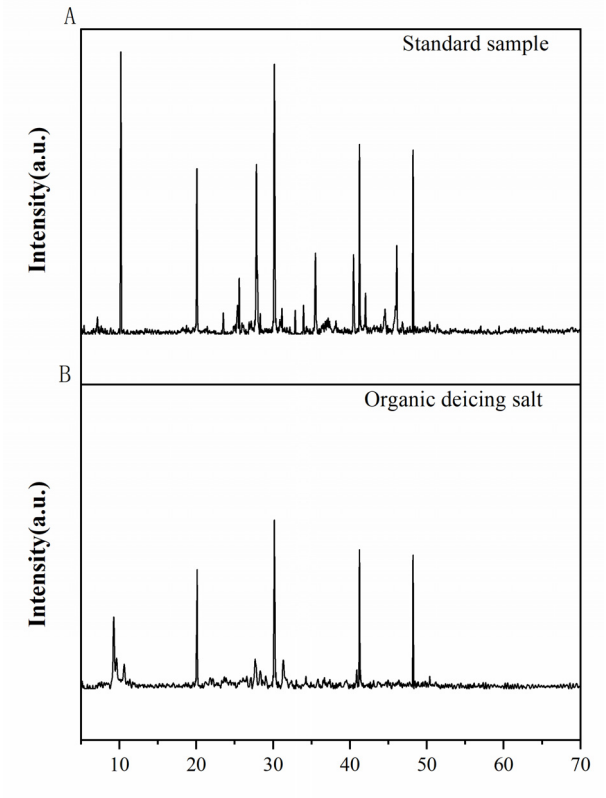


Figure S3 XRD spectrogram of product.

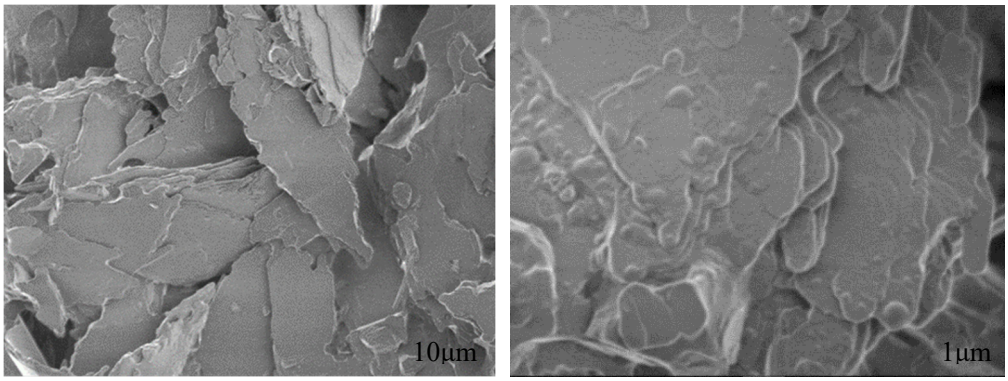


Figure S4 SEM images of product.

Table S1 The one-way analysis of variance for protease activity under stage I and II.

Source	SS	df	MS	F	P-value	F crit
Between Groups	15.0682	1	15.0682	182.3808	1.02E-05	5.9873
Within Groups	0.4957	6	0.0826			
Total	15.5639	7				

Table S2 The one-way analysis of variance for α-GLC activity under stage I and II.

Source	SS	df	MS	F	P-value	F crit
Between Groups	0.0245	1	0.0245	77.76	2.1E-05	5.3176
Within Groups	0.0025	8	0.0003			
Total	0.0271	9				

Table S3 The one-way analysis of variance for ACK activity under stage I and II.

Source	SS	df	MS	F	P-value	F crit
Between Groups	3520.5320	1	3520.5320	138.0621	2.52E-05	5.3176
Within Groups	204.0503	8	25.5063			
Total	3724.5820	9				

Table S4 Ingredients in organic deicing salts.

Composition	PA	PP	PB	Protein	Polysaccharide	NH_4^+-N	PO_4^{3-}	Others
Wt (%)	71.81	8.44	15.05	1.38	0.46	1.02	0.14	1.70

Note: PA, Potassium acetate; PP, Potassium propionate; PB, Potassium butyrate