

Supplementary Document

Effect of the temperature of biomixing on the pH/temperature sensitive controlled drug release of a Chitooligosaccharide based hydrogel

Table S1: P-values for each set of conditions between 4°(D) and N(D).

Temperature	pH	Drug Release amount (%)		p-value ($\alpha=0.05$)
		N(D)	4(D)	
37°C	1.2	36.87±2.188	61.60±4.4313	0.062
	6.8	21.633±1.570	98.313±1.3825	0.000
30°C	1.2	42.95±0.912	21.475±1.83	0.002
	6.8	26.82±0.33	12.65±0.70	0.001

Table S2: MIC and MBC values of the drug loaded COS-CMC-PEGDA hydrogel along with the drug only against *K. pneumonia* (ATCC 13883).

Bacterial isolates	Material	MIC (mg/ mL)	MBC (mg/ mL)
<i>K. pneumonia</i> (ATCC 13883)	N (D)	5	5
	4 (D)	2.5	2.5
	Vancomycin	2.5	2.5

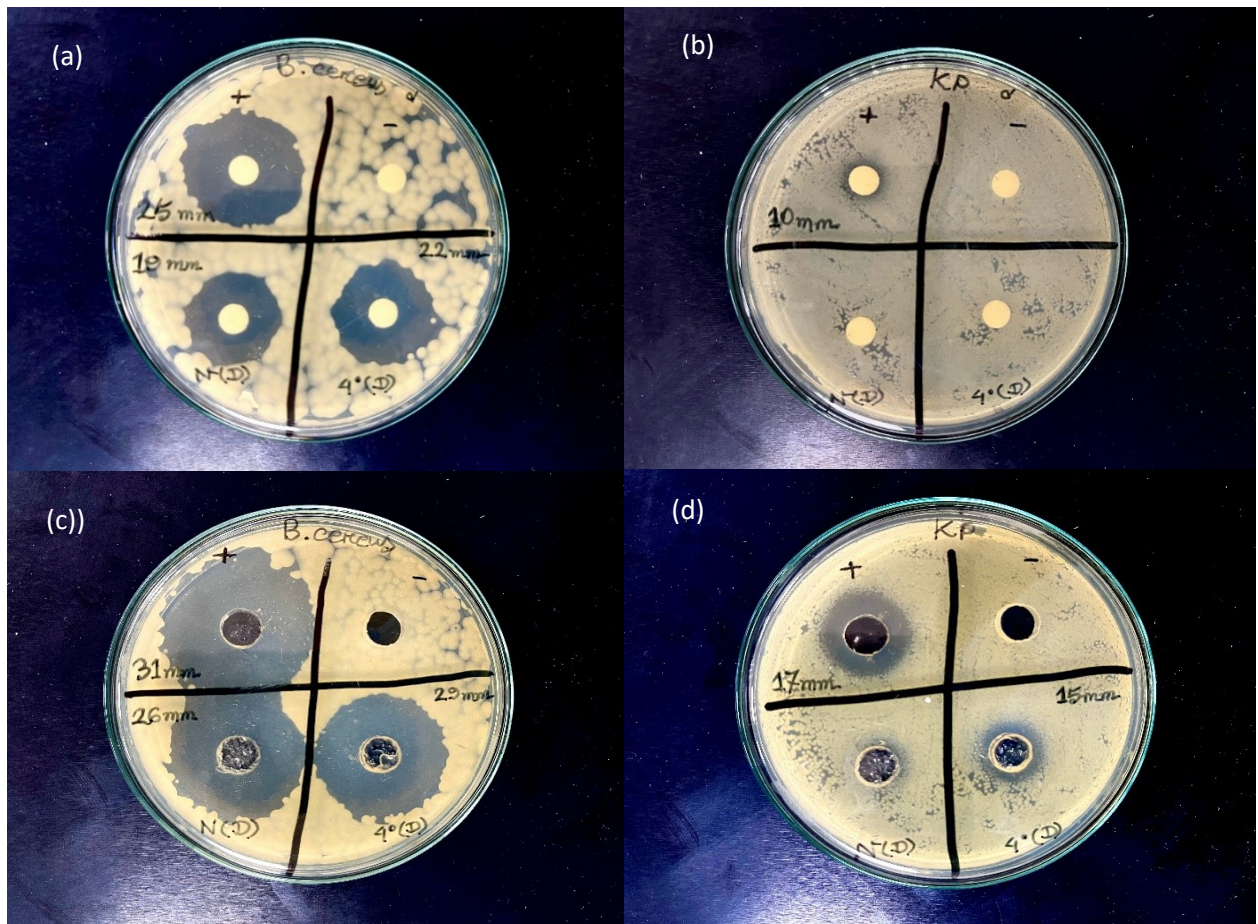


Fig. S1: Disc diffusion test against (a) *B. cereus*; (b) *K. pneumonia* and Well diffusion test against (c) *B. cereus* (d) *K. pneumonia*. Clear area around the discs indicates the zone of inhibitions and the diameters were measured in mm. PBS solution was used as a negative control, while vancomycin hydrochloride was used as a positive control. The diameter of the disc was 6 mm each.

