Supporting Information

Methionine Based Carbon Monoxide Releasing Polymer for the Prevention of Biofilm Formation

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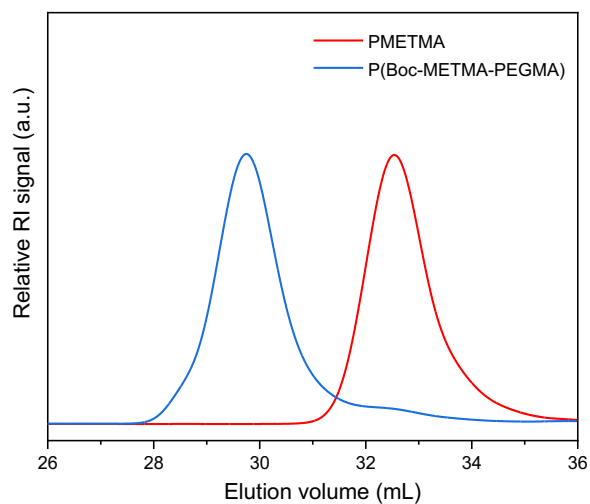
Table of Contents

Figure S1. SEC RI traces of PMETMA and P(METMA-*b*-PEGMA).

Table S1. Molecular weight and dispersity of PMETMA and P(METMA-*b*-PEGMA) polymers.

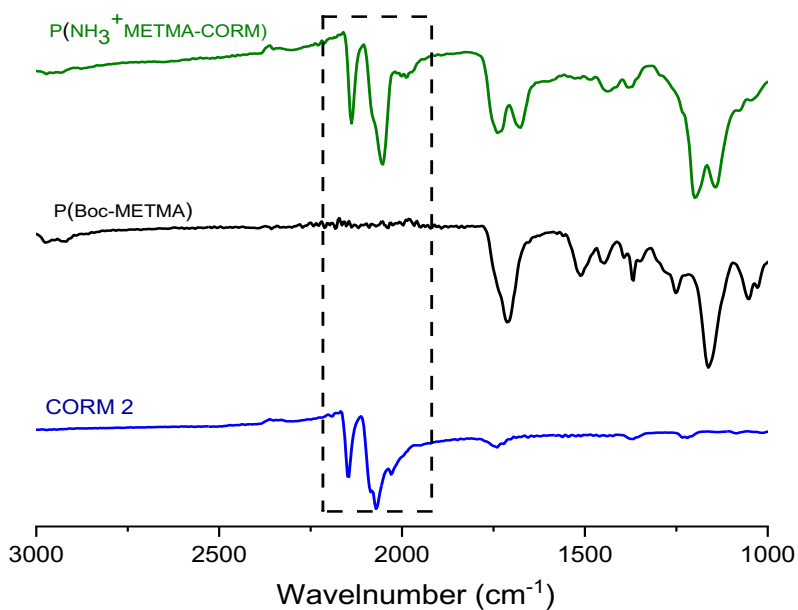| Polymer	$M_{n,NMR}$ (g/mol)	$M_{n,theo}$ (g/mol)	$M_{n,SEC}$ (g/mol)	Đ
PMETMA	5200	4500	4900	1.12
P(METMA-*b*-PEGMA)	30500	29200	21700	1.22

Figure S2. FT-IR of different polymer and there corresponding Ru complexes.

Table S2. Solubility data.

Polymer	Diethyl ether	Hexane	Acetone	MeOH	DMSO	Water	PBS Buffer (pH-7.4)
CORM 2	-	-	+	+	+	-	-
P(Boc-METMA)	+	-	+	+	+	-	-
P(Boc-MEMTA-CORM)	-	-	+	+	+	-	-
P(NH$_3^+$METMA)	-	-	+	+	+	+	+
P(NH$_3^+$METMA-CORM)	-	-	+	+	+	-	-
P(Boc-METMA-*b*-PEGMA)	-	-	+	+	+	+	+
P(NH$_3^+$METMA-*b*-PEGMA-CORM)	-	-	+	+	+	+	+

Soluble (+) ; Insoluble (-).

Table S3. Ru content of CO-releasing polymers determined by ICP-OES.

Polymer	Theoretical Ru content (%)	Experimental Ru content (%)
P(NH$_3^+$METMA-CORM)	13	7
P(NH$_3^+$METMA-*b*-PEGMA-CORM)	8	6.6

Theoretical values calculated by the following equation: % Ru$_{theo}$ = [DP_n METMA × MWRu] / M_n.

Table S4. Summary of inhibition of bacterial growth and biofilm formation.

Entry	Planktonic Biomass (OD$_{595}$)	Planktonic Inhibition (%)	Biofilm Biomass (OD$_{595}$)	Biofilm Inhibition (%)
Control	1.00 ± 0.08	-	1.00 ± 0.03	-
P(NH$_3^+$-METMA)	0.92 ± 0.02	8	0.90 ± 0.04	10
P(NH$_3^+$-METMA-*b*-PEGMA)	0.85 ± 0.06	15	0.83 ± 0.05	17
P(NH$_3^+$-METMA-*b*-PEGMA-CORM) #1	0.26 ± 0.08	74	0.31 ± 0.06	69
P(NH$_3^+$-METMA-*b*-PEGMA-CORM) #2	0.07 ± 0.05	93	0.13 ± 0.04	87