

Electronic Supplementary Materials for

Nanocomposite of eugenol/polysiloxane/graphene oxide as an efficient anticorrosion and anti-biofouling additive for marine epoxy coatings

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1 Results of EIS Analysis

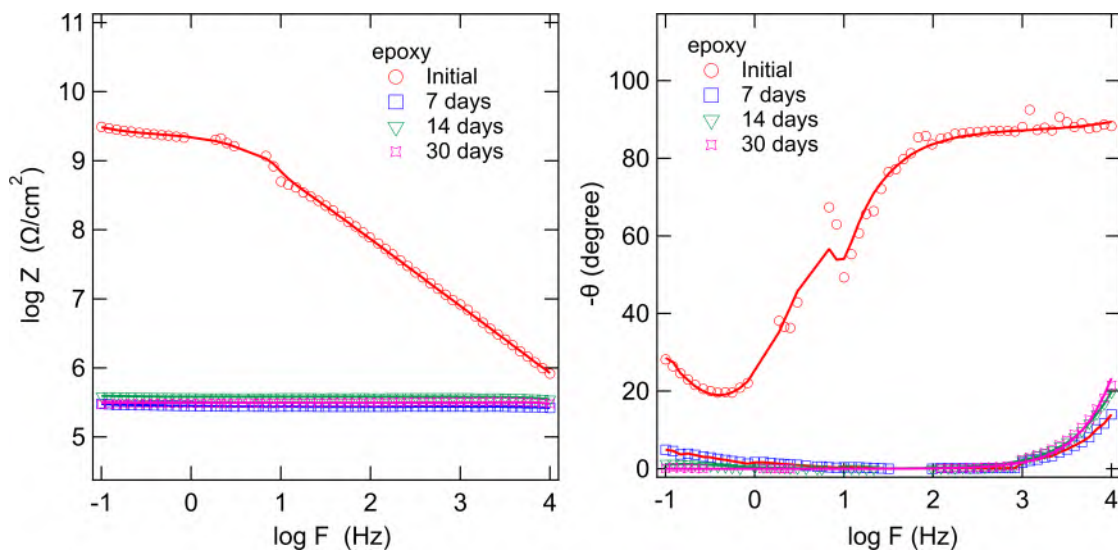


Figure S-1: Bode plots measured for an epoxy coating after immersion in seawater for various time periods.

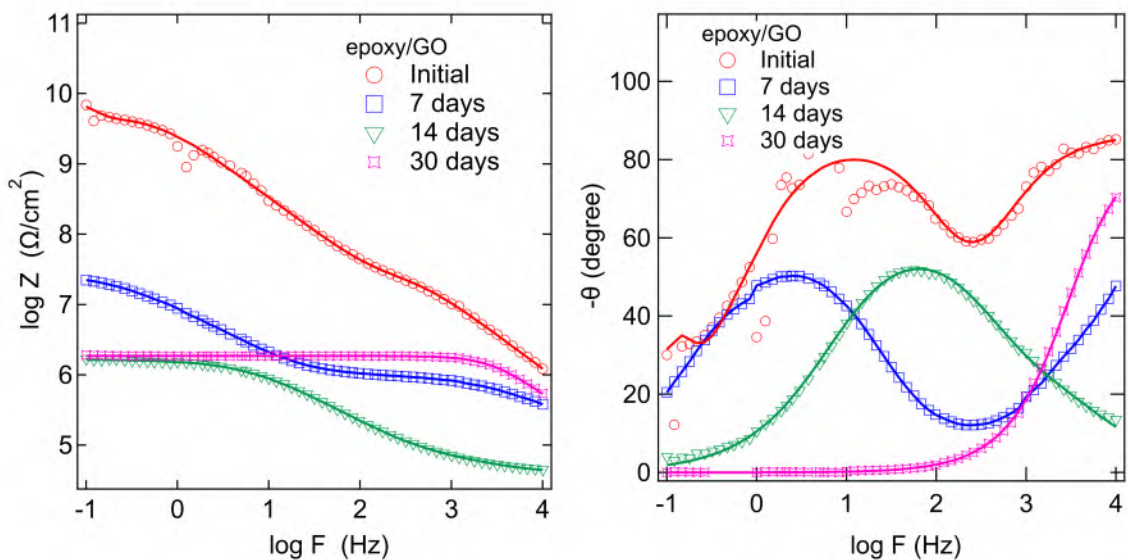


Figure S-2: Bode plots were measured for an epoxy coating modified with **GO** (0.01 wt%) after immersion in seawater for various time periods.

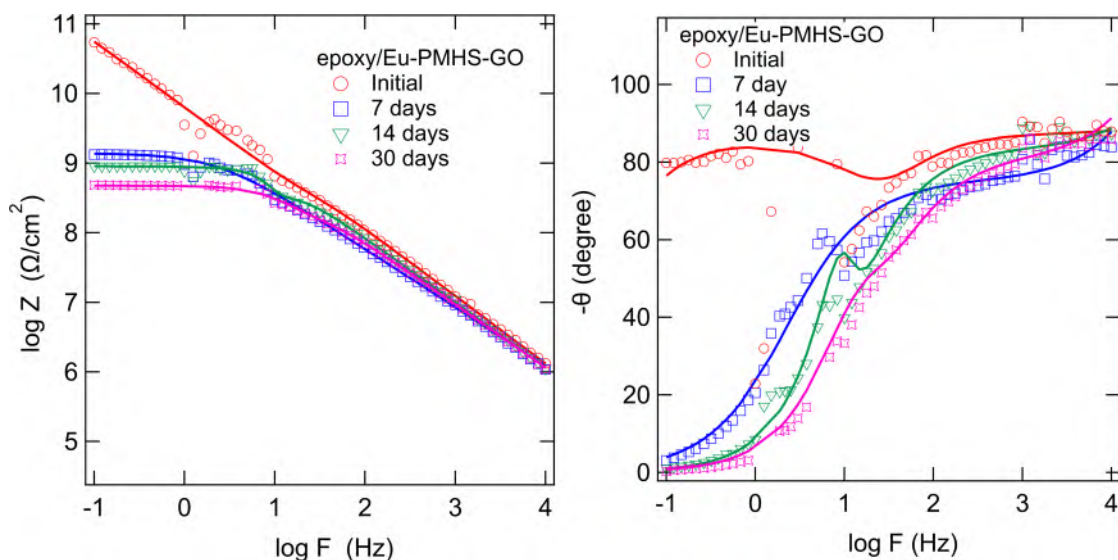


Figure S-3: Bode plots were measured for an epoxy coating modified with **Eu-PMHS-GO** (0.001 wt%) after immersion in seawater for various time periods.

2 Results of Anti-algal and Anti-bacterial Adhesion Tests

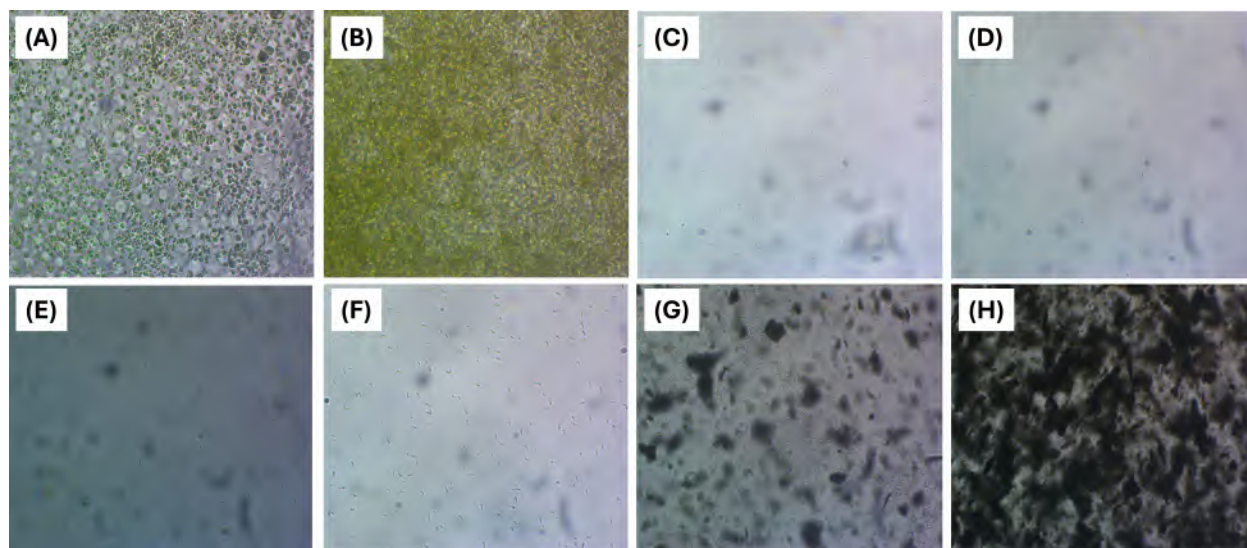


Figure S-4: Photographic images of coating surfaces after incubated in a *P. tricornutum* culture for one week. (A) epoxy, (B) epoxy + **GO** (0.01 wt%), (C) epoxy + **Eu-PMHS-GO** (0.001 wt%), (D) epoxy + **Eu-PMHS-GO** (0.005 wt%), (E) epoxy + **Eu-PMHS-GO** (0.01 wt%), (F) epoxy + **Eu-PMHS-GO** (0.05 wt%), (G) epoxy + **Eu-PMHS-GO** (0.1 wt%), and (H) epoxy + **Eu-PMHS-GO** (0.5 wt%).

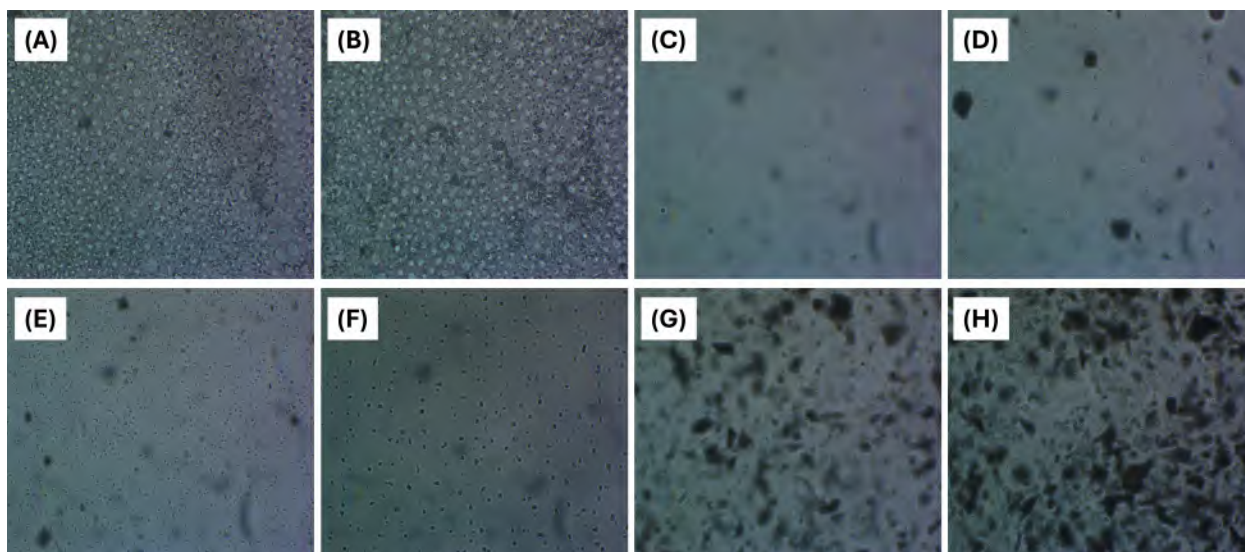


Figure S-5: Photographic images of coating surfaces after incubated in a *B. Subtilis* culture for one week. (A) epoxy, (B) epoxy + **GO** (0.01 wt%), (C) epoxy + **Eu-PMHS-GO** (0.001 wt%), (D) epoxy + **Eu-PMHS-GO** (0.005 wt%), (E) epoxy + **Eu-PMHS-GO** (0.01 wt%), (F) epoxy + **Eu-PMHS-GO** (0.05 wt%), (G) epoxy + **Eu-PMHS-GO** (0.1 wt%), and (H) epoxy + **Eu-PMHS-GO** (0.5 wt%).

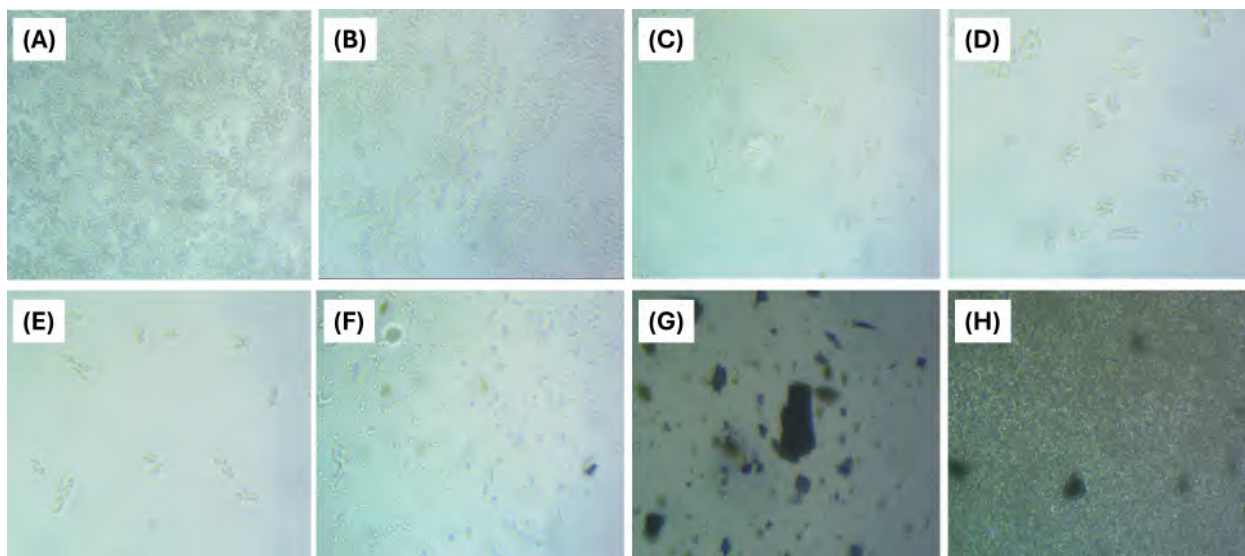


Figure S-6: Photographic images of coating surfaces after incubated in a *Synechococcus sp.* culture for one week. (A) epoxy, (B) epoxy + **GO** (0.01 wt%), (C) epoxy + **Eu-PMHS-GO** (0.001 wt%), (D) epoxy + **Eu-PMHS-GO** (0.005 wt%), (E) epoxy + **Eu-PMHS-GO** (0.01 wt%), (F) epoxy + **Eu-PMHS-GO** (0.05 wt%), (G) epoxy + **Eu-PMHS-GO** (0.1 wt%), and (H) epoxy + **Eu-PMHS-GO** (0.5 wt%).