

Supporting Information

Microorganism-Based Assemblies of Luminescent Conjugated Polyelectrolytes

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Experimental

Materials and Measurements: The microorganism *A. niger* 3.0808 was procured from the China General Microbiological Culture Collection Center. Cationic water-soluble PMNT was prepared according to the procedure in the literature.¹ The fluorescence spectroscopy was obtained from a Hitachi F-4500 fluorometer with a Xeron-lamp excitation source. The excitation wavelength is 425 nm. The distribution of PMNT and *A. niger* was visualized by fluorescence microscope (Olympus 1X71) and the type of light filter is D455/70nm exciter, 500nm beamsplitter, and D525/30nm emitter. The morphologies of the PMNT on *A. niger* were observed on a JEOL JSM 4800F field-emission scanning electron microscope, at an accelerating voltage of 15 kV.

Coating of PMNT on fungi: A spore stock suspension was obtained by growing the fungus on a modified Martin agar medium slant (sterilization at 121 °C for 20 min) at 26°C for 4-5 days.² The conidia were harvested from the surface by adding sterile Millipore water and scraping the surface with a sterile spatula. The final spore concentration was adjusted to about 3×10^5 spores by dilution using modified Martin broth medium containing 10 $\mu\text{mol/L}$

PMNT. The spore solution was loaded into a hermetical and ventilative case at 26°C. The growth of spore sampling was observed under the fluorescence contrast microscope at 0h, 4h, 8h, 16h, 20h and 24h.

References

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2. Bapat, P. M.; Kundu, S.; Wangikar, P. P. *Biotechnol. Prog.* **2003**, 19, 1683-1688.