

## SUPPLEMENTARY MATERIAL

### SCIENTIA IRANICA

**Controlled removal of toxic harmful algal bloom species, *Alexandrium minutum* using rice husk ash silica/chitosan film reinforced with (3-glycidyloxypropyl)triethoxysilane and glycerol**

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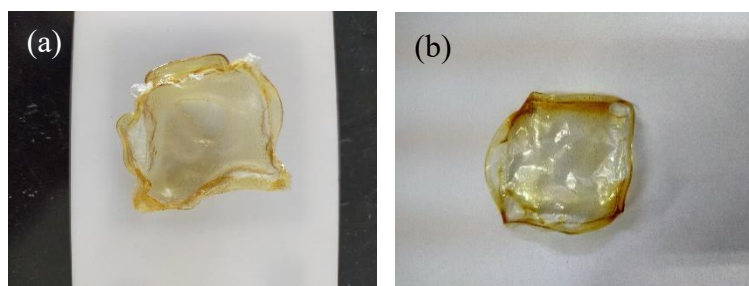
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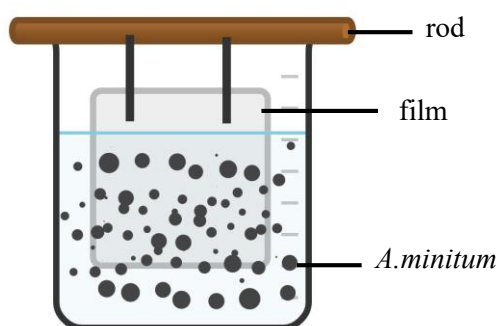
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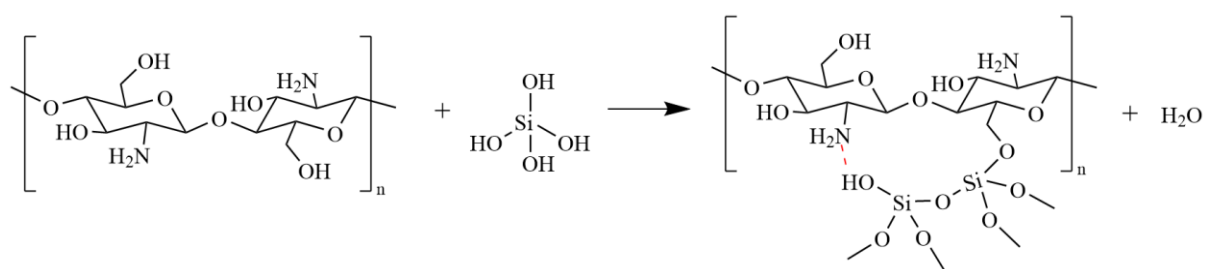
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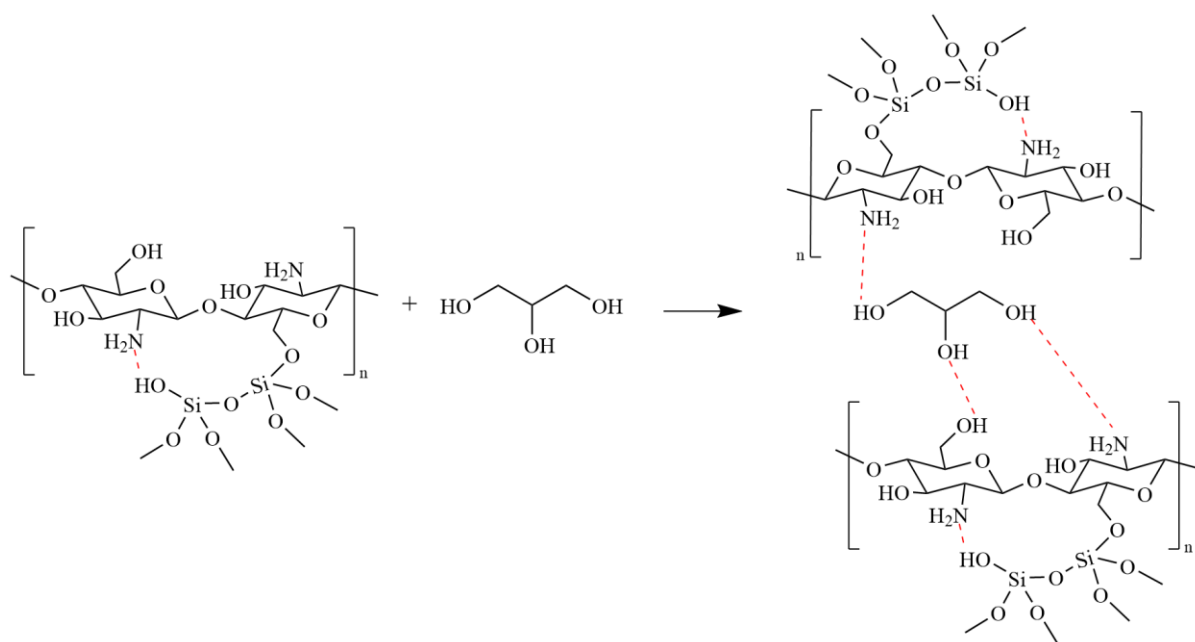
**Fig. S1** The digital images of films. (a) CH/SiO<sub>2</sub>/GPTEOS. and (b) CH/SiO<sub>2</sub>/Gly.



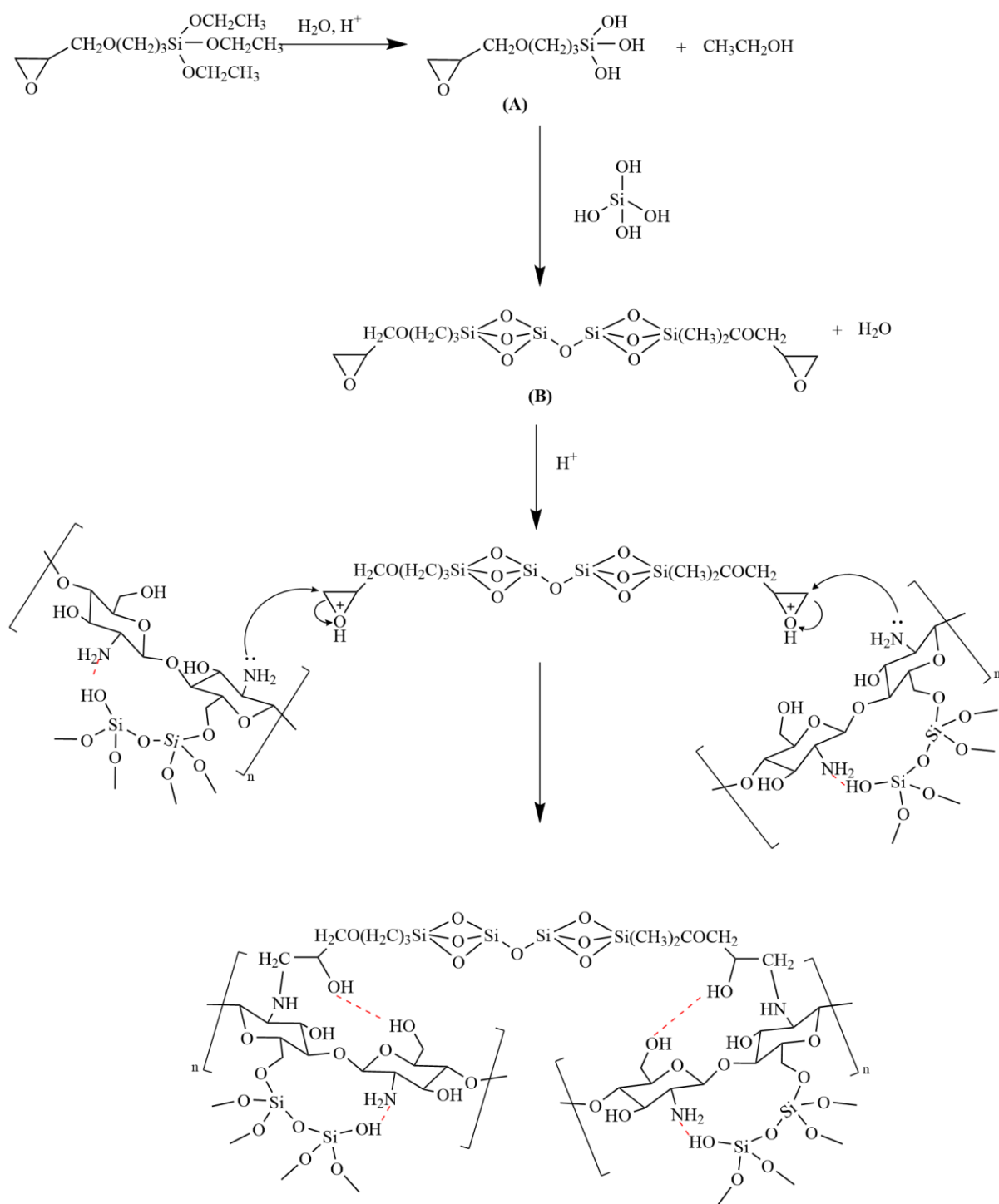
**Fig. S2** Schematic diagram indicating the setup for mitigation studies.



**Fig. S3** Chemical crosslinking between silanol groups of silica with the chitosan hydroxyl groups to form chitosan/silica composite.



**Fig. S4** The schematic representation showing the physical crosslinking between the chitosan/silica composite and the glycerol to form CHT/SiO<sub>2</sub>/Gly.



**Fig. S5** An illustration of the reaction pathway leading to the formation of the CHT/SiO<sub>2</sub>/GPTEOS biocomposite material.