Declaration

I, Pritiranjan Mondal, hereby declare that I am the sole author of this thesis titled "Multifunctional hydrogels with injectable, self-healing, and shape-morphing capabilities for biomedical applications" and that the research work reported here for Sun Pharma Science Foundation research fellowship has been carried out by me at the Department of Materials Engineering, Indian Institute of Science, Bangalore, India, under the supervision of Prof. Kaushik Chatterjee. It has not been submitted elsewhere for the award of any fellowship.

August 2024

Indian Institute of Science, Bangalore

Pritiranjan Mondal

Pritiranjan Mondal

Declaration

I, Pritiranjan Mondal, hereby declare that the reported work was conceived by Pritiranjan

Mondal and Prof Kaushik Chatterjee. Pritiranjan performed all the experiments and analyzed

the data. Arkodip Mandal contributed to 3D and 4D printing. Pritiranjan prepared the first draft

of the manuscript. All authors have edited the manuscript. Prof Kaushik Chatterjee is the senior

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