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## Functionalized Poly(lactic acid) based Nano-fabric for Anti-Viral Application

## Doli Hazarika<sup>1</sup>, Naba Kumar Kalita<sup>1</sup>, Amit Kumar<sup>1</sup> and Vimal Katiyar<sup>\*1</sup>

<sup>1</sup>Chemical Engineering Department, Indian Institute of Technology Guwahati, Assam-781039, India

\*Corresponding author's e-mail: vkatiyar@iitg.ac.in



## **Supplementary Information**

**Figure S1:** EDX image of fabricated PZ15S<sub>1</sub>, With distribution of elements C,O,N,Zn elements and its mapping.



Figure S2: Water contact angles of the test samples



Figure S3: Receding water contact angle of the tested samples



Figure S4: Linear plot representing contact angle hysteresis plot of the advancing contact angles of the test samples



**Figure S5:** Water contact angle images after 5 min-24 hours of dipping treatment. This indicates reusability of the facemasks prepared.



**Figure S6:** Calculated contact angle before and after dipping treatment for 5 min-24 hours. The measured contact angles represent hydrophobicity of the prepared facemasks.



Figure S7: A comparative visual images (smart phone camera) of bacterial colony formation for the prepared ZL and SNC against *E.coli*.