

**Photoluminescence Biosensor for the Detection of *N*-Acyl Homoserine Lactone using
Cysteamine functionalized ZnO Nanoparticles for the Early Diagnosis of Urinary Tract Infection**

Sahana Vasudevan^a, Parthasarathy Srinivasan^b, John Bosco Balaguru Rayappan^{b*}
and Adline Princy Solomon^{a*}

Table S1 Components of Artificial Urine Media¹

S.No.	Component	Quantity (g/L)
1.	Peptone	1
2.	Yeast Extract	0.005
3.	Lactic Acid	0.1
4.	Citric Acid	0.4
5.	Sodium Bicarbonate	2.1
6.	Urea	10
7.	Uric Acid	0.07
8.	Creatinine	0.8
9.	Calcium Chloride.2H ₂ O	0.37
10.	Sodium chloride	5.2
11.	Iron II sulphate.7H ₂ O	0.0012
12.	Magnesium Sulphate.7H ₂ O	0.49
13.	Sodium Sulphate.10H ₂ O	1.6
14.	Potassium-Di-hydrogen Phosphate	0.95
15.	Di-potassium hydrogen phosphate	1.2
16.	Ammonium Chloride	1.3

Fig. S1:

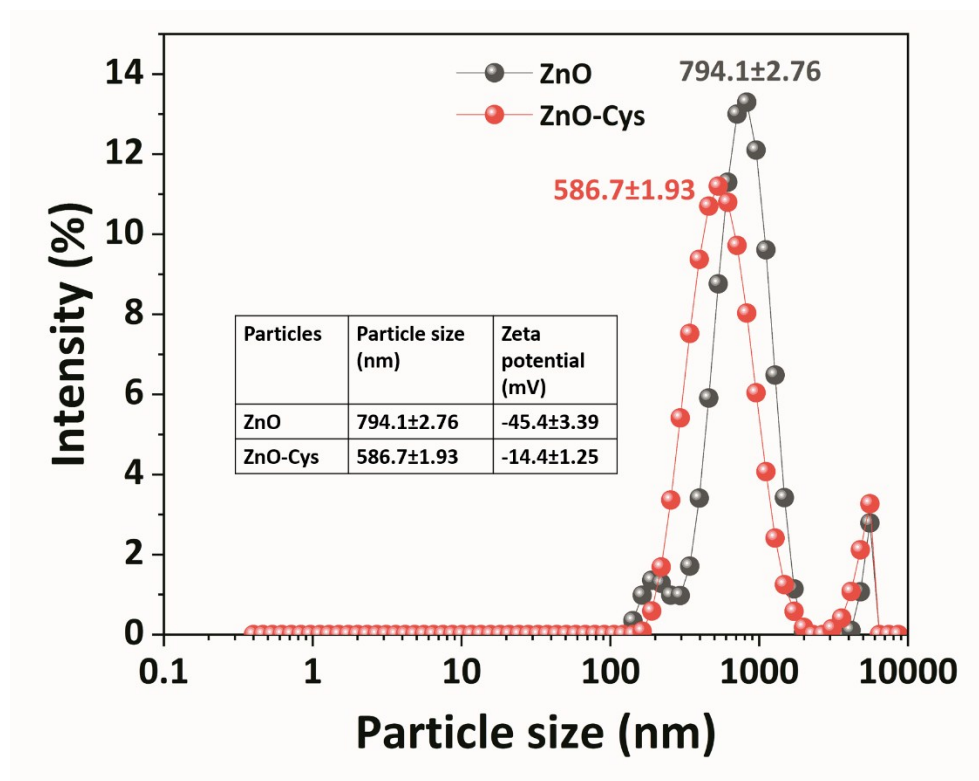


Fig. S1. The particle size of the ZnO and ZnO-Cys system measured from zeta-sizer.

Fig. S2:

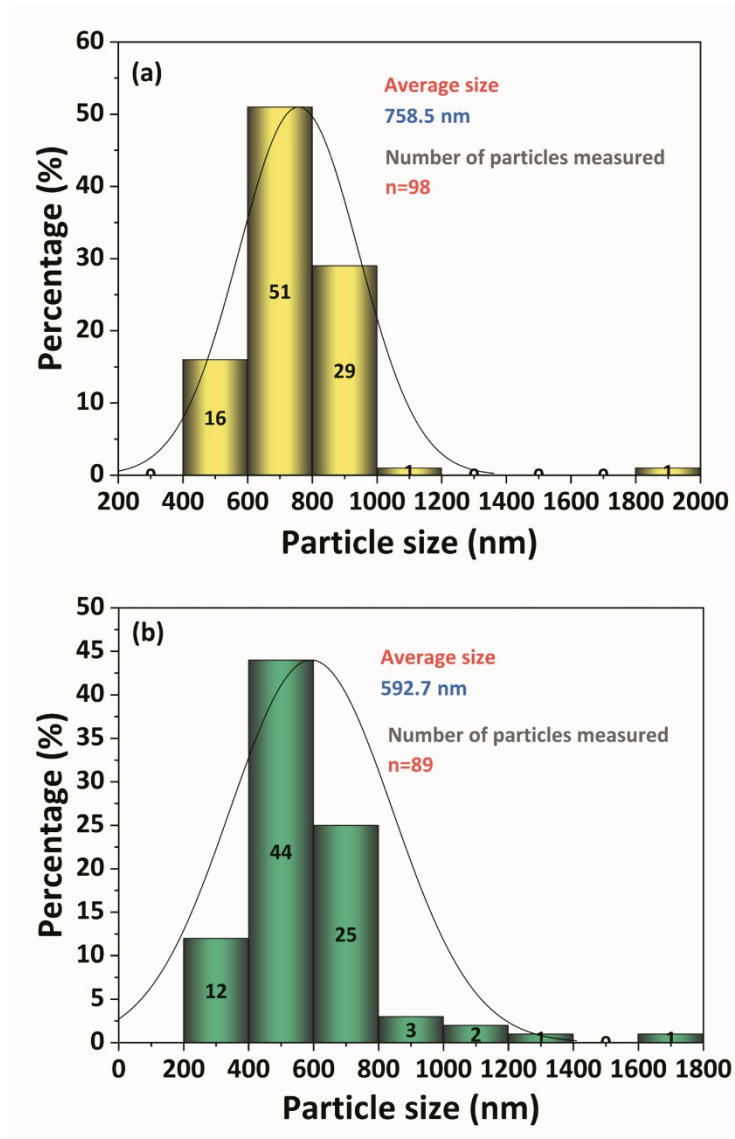


Fig. S2. Histogram plot representing the particle size of the (a) ZnO and (b) ZnO-Cys system measured from SEM images using ImageJ software .

References:

- 1 T. Brooks and C. W. Keevil, *Lett. Appl. Microbiol.*, 1997, **24**, 203–206.