Supplementary Information

Solvent Hydrophobicity induced Complex Coacervation of dsDNA and *in situ* formed Zein nanoparticles

Pankaj Kumar Pandey¹, Priyanka Kaushik², Kamla Rawat^{2,3*}, V. K. Aswal⁴, and H. B. Bohidar^{1,2*}

¹School of Physical Sciences, Jawaharlal Nehru University, New Delhi 110067, India

² Special Center for Nanosciences, Jawaharlal Nehru University, New Delhi 110067, India

³Inter University Accelerator Centre, New Delhi 110067, India

⁴State Physics Division, Bhabha Atomic Research Centre, Mumbai 400085, India

*Corresponding authors email: <u>bohi0700@mail.jnu.ac.in</u>, <u>kamla.jnu@gmail.com</u>

Fig. S1. Variation of solution turbidity (100-%T) has shown for different ethanol concentrations. DNA concentration was fixed at 0.01% (w/v). The inset photographs depict no growth in turbidity as ethanol concentration (v/v) was increased.

Fig. S2. FTIR spectra of DNa, Zein and DNA-Zein complex coacervate.



Fig. S3. Melting temperature T_{melt} of coacervates shown for different Zein concentrations.