Corrigendum (as per the pre bid meeting inputs received from the supplier and accepted by bidder) Ref - Tender No. N/FS/D/2020/74/05 Dated: 03 .06.2021 PARTICLE SIZE & ZETA POTENTIAL MEASURING SYTEM

Parameters to be measured: Particle Size, zeta potential, molecular mass of Colloidal suspensions, emulsions & dispersions.

Temperature control range: 0°C to 90°C

Temperature control range: 4°C to 90°C or better Revised

Condensation control: Purge using dry air

Laser Source:

Red laser 630nm – 660 nm; He-Ne gas Laser/Semiconductor laser with power 10mW or higher. Laser with lower than 10 mW power is not acceptable

PARTICLE SIZE MEASURING RANGE

Measurement angles: Fixed three angles - Back angle 165° or higher, system should have provision to vary the position of scattering volume within Cell/Cuvette to minimize multiple scattering effect. Additionally should offer Forward angle 13° -15° and side angle 90°

ZETA POTENTIAL MEASUREMENT SPECIFICATIONS

Measuring Principle: Electrophoretic Light Scattering Zeta Potential Range: +/- 500 mV or better Sensitivity: 1 mg/mL (lysozyme / protein) or better Maximum sample conductivity: 200 mS/cm or better Zeta Potential Size range: 5 nm – 100 μm or better Maximum sample concentration: 40 % w/v or better Cuvette Type: Reusable

STANDARD SUPPLY WITH INSTRUMENT

For particle size:

- 100 Nos of disposable type and 01 Nos of Glass Cuvettes
- Standard 1 No 220 nm NIST traceable standard

For Zeta Potential:

- 10 Nos of Re -usable type or 50 Nos of Disposable cuvettes for Aqueous base samples Cuvettes should be compatible with high concentration samples up to 40% w/v,
- Standard 1 No Zeta potential reference material

Condensation control: Purge using dry air/inert shall be preferred

Laser Source:

Red laser 630nm - 780 nm; He-Ne gas Laser/Semiconductor laser with power 3mW or higher.

PARTICLE SIZE MEASURING RANGE

Measurement angles: Preference is Fixed three angles Back angle 165° or higher, Additionally should offer Forward angle $13^{\circ}-15^{\circ}$ and side angle 90 $^{\circ}$ (system should have provision to vary the position of scattering volume within Cell/Cuvette to minimize multiple scattering effect)

However, devices claiming equivalent or better method with high accuracy and precision for wide range of concentrations and applications sought may also be considered meeting specifications. In this case deviation of angles/technology / methodology bid must accompany evidence and/or scientific justification in support.

ZETA POTENTIAL MEASUREMENT SPECIFICATIONS

Measuring Principle: Electrophoretic Light Scattering Zeta Potential Range: +/- 200 mV or broader Sensitivity: 1 mg/mL (lysozyme / protein) or better Maximum sample conductivity: 10 mS/cm or better Zeta Potential Size range: 10 nm – 20 μm or broader Maximum sample concentration: 40 % w/v or better Cuvette Type: Reusable

STANDARD SUPPLY WITH INSTRUMENT

For particle size:

- 100 Nos of disposable type and 01 Nos of Glass Cuvettes
- Standard 1 No 220 nm NIST traceable standard or better

For Zeta Potential:

- 10 Nos of Re -usable type with 50 Nos of Disposable cuvettes for Aqueous base samples Cuvettes should be compatible with high concentration samples up to 40% w/v,
- Standard 1 No Zeta potential reference material

Reusable non-stick sampling cells of material like Teflon or similar performance, 3 nos, would also be acceptable with suitable no (above 10) of Disposable cuvettes

2m201/1/206/2021 Stephen Steph