

ZETA POTENTIAL

Photo of Instrument:



Instrument Name	Zeta potential
Instrument Model & Serial No.	surPASS 3, 84261892
Instrument Make	ANTON PAAR
Category of Instrument	Analytical instruments
Description of Instrument	Zeta potential is a key parameter in colloidal and surface science, representing the electro kinetic potential of particles in a liquid. It is crucial for understanding the stability and behaviour of colloidal dispersions.
Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)	<p>1) Measurement Technique:</p> <ul style="list-style-type: none"> Zeta potential analyzers typically use laser Doppler velocimetry to measure the electrophoretic mobility of charged particles in a liquid medium. <p>2) Light Source:</p> <ul style="list-style-type: none"> The equipment includes a laser light source, commonly a laser diode, to illuminate the particles in the sample. <p>3) Temperature Control:</p> <ul style="list-style-type: none"> Zeta potential analyzers come with a temperature control system to maintain a

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	<p>constant and controlled temperature during measurements. Temperature can significantly impact zeta potential values.</p> <p>4) Measurement Cells or Cuvettes:</p> <ul style="list-style-type: none"> Zeta potential measurement cells or cuvettes are designed to hold the sample during analysis. These cells are constructed from materials that are compatible with the sample and the measurement technique.
Application of Instrument (Limited to Major 4 or 5)	<ul style="list-style-type: none"> Colloidal Stability Assessment Biomedical Research Quality Control Water Treatment
Type of Sample Required for Analysis/Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions	Zeta potential analysis typically requires a Solid sample containing dispersed particles or colloids.
Types of Analysis/Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions	Laser Doppler velocimetry.
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Technical Staff Name / Email / Contact	Muhammed Munaver Muhammedmunaver@nitc.ac.in / 04952285484
Location of Instrument	Instrumentation Lab
Other Details	

User Charges:

S.NO.	Type of Analysis/Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National Labs	Industry

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1	Laser Doppler velocimetry.		500	1000	1000	2000
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Slot Booking and Payment Work Flow:

- Discuss the slot availability with the technical staff in the instrumentation lab of chemical engineering department.
- Collect the request form.
- Payment should be at the accounts section of the institute.
- Get the request form signed from the faculty in charge.
- Submit the request form and samples in the instrumentation lab.