

Specifications of Equipments to be purchased under sanctioned grant of CURIE core grant, ref no DST/CURIE-02/2023/IISU

S. No.	Equipment	Specification details
	Zetasizer Analyzer	Measurement of size (~1nm to 10µm), molecular weight and zeta potential (size range 4-100 µm) of particles and molecules, Size and molecular weight measurement at 90°, User friendly application software (if possible with non-invasive back scatter and multi angle dynamic light scattering), PC and other accessories
	AAS	Bench top design, solid-state detector technology, polychromator based optical system, monitor all gas pressures stabilized with mass flow control, totally automated and appropriate shut down control system, detector system with full frame image capture capability, graphite furnace/flame analysis (or possible to upgrade to manual/automatic switching), supports samples with high concentrations and/ or in organic solvents, user friendly software, multiple hollow cathode lamps (5 or more), autosampler, measurement in ppb or less, PC and other accessories
	Multimode reader	UV-Vis absorbance, Fluorescence intensity, Luminescence, Fluorescence polarization, Time-resolved fluorescence, monochromator, 200-900 nm, orbital, path length correction, O ₂ /CO ₂ concentration range, Take 3MVP, user friendly software, accessories
	HPLC	Quaternary solvent delivery system, UV detector, manual/automatic injector, D2 lamp, Variable wavelength detector with 80 Hz or more data collection rate. Linearity at least up to 2.5 AU with correlation coefficients higher than 99.99%, Chromatography software, PC and other accessories
	Texture analyzer	Table top, adjustable control panel, high-precision load cell that guarantees accuracy to within ±0.5% of the indicated value (high-precision type) over a wide range from 1/500 to 1/1 of the rated capacity, 3 or more tester models, 10 or more types of load cells, capacity 500 N to 5 kN, test speed range 0.001 to 1000 or more mm/min, stroke 900 mm or above, return speed 1500 mm/min or above, capable of detecting food texture, interchangeable load cells, pharmaceutical and medical devices such as polymers, fabric etc. suitable software and accessories