ANNEXURE-I

Revised technical specifications

Si.No	Description of item	Detailed specifications	Quantity	Vendor compliance	Remarks
1	Diode LASER	532 nm diode pumped solid state laser (DPSS) with power supply. LASER should be single frequency, single longitudinal mode (SLM), and TEM00. Power supply to be provided. Make: M/s Technos instruments, India /Airix Corp., Tokyo, Japan. Max Power: 100 mW Power variation: manual and software controlled Cable & other accessories required for integration with our existing STR300 Raman system to be provided.	1	Essential	
2	Optical fiber	2m optical fiber to be provided.	1	Essential	
3	Fiber coupler	Fiber coupler which connects laser head to optical fiber to be provided.	1	Essential	
4	Rejection filters	532 nm laser line rejection filter set (Edge filter and Beam splitter filter).	1 set	Essential	
5	Raman range	Raman shift measurable range: 100cm^{-1} to 4000 cm^{-1}		Essential	
6	Photoluminescence measurement	Vendor should show Photoluminescence spectroscopy (PL) measurement with existing STR300 Raman system after 532 nm laser installation.		Essential	

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7	Installation & commissioning	Vendor responsible for installation, commissioning & integration 532 nm SLM DPSS laser with our existing STR300 Raman system at CMTI. Vendor should sort out all the integration related issues and should take care of hardware and software compatibility.		Essential	
8	Training	Training on operation, programming, and PL measurement to be given for two operators for 2 days at CMTI, at free of cost.		Essential	
9	Performance warranty	Comprehensive warranty for a period of 12 months or 2000 hours which comes early		Essential	
10	Delivery	3 months		Essential	
11	Acceptance test & criteria	✓ Supply, performance and demonstration as per above specifications to be shown at CMTI. ✓ Laser wavelength and maximum power testing certificate should be provided. ✓ Raman measurement with 532 nm laser should be demonstrated at CMTI with standard sample & additional samples. ✓ Laser power variation should be shown at CMTI during installation time.		Essential	

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