SECTION-C

Tender no. IPR/TN/PUR/ET/20-21/17 dated 25-02-2021

TECHNICAL SPECIFICATIONS / COMPLIANCE STATEMENT OF LaBr3 (Ce) SCINTILLATION BASED DETECTOR SYSTEM WITH ACCESSORIES

IPR Specification for $LaBr_3$ (Ce) Scintillation based detector system				**Vender comment**
1	**Crystal**	$LaBr_3$ (Ce) (lanthanum bromide detector cerium doped)		
2	**Crystal Size**	1.5 inch X 1.5 inch		
3	**Energy Resolution**	Less than 4 % energy resolution @662keV of Cs-137		
4	**Coincidence Resolving time**	600p Sec or less		
5	**Detector should be light tight and having metal seal.**			
6	**Energy range**	0.1MeV to ~15MeV		
7	**PMT size**	More than 8 stage		
	PMT Base			
1	**PMT base Should contain**			
		HV power supply	Compatible to the PMT	
		Preamplifier		
		Multi-channel Analyser		
		ADC	12 bit or better	
		Connections	Standard 14 pin PMT sockets.	
		USB and Ethernet ports for communication		
		External trigger	TTL pulse	
2	**Acquisition Modes**	PHA mode (must)		
3	**Incoming Count rate (base)**	200K cps or better		
4	**Accessories**			
		~3 meter cable Ethernet for communication		
		Related software: Basic spectroscopy software (Compatible to windows 10)		
		Software Development Kit		
5	**Power**	Operate with 220V , 50Hz supply		
6	**The documents to be submitted with the item**			
	Product Manual			
	Operation Manuals			
7	**Factory Test reports for IPR approval before dispatch of the item**			
	Calibration certificate for energy Resolution (Establish energy Resolution Less than 4 % at 662keV of Cs-137)			
8	**Installation at IPR (by the Vender)**			
		Installation of LaBr system at IPR (by the Vender)		
		Establish energy Resolution Less than 4 % @ 662keV Cs-137 (by the Vender). Cs-137 source will be provided by IPR.		

SECTION-C

Tender no. IPR/TN/PUR/ET/20-21/17 dated 25-02-2021

9	**Acceptance criterion**	Energy Resolution Less than 4 % at 662keV of Cs-137	

AUTHORIZED SIGNATOPRY
OFFICIAL SEAL & DATE