

**Calibration Charges: D6.02c, FIB Lab (w.e.f. 01.04.2021)**

**FESEM imaging, EDS, FIB milling, Dimensional artefacts, Stent testing and characterization**

Sl. No.	Parameter	Item Type / Group	Item Name	Alias Name	Range	No. of Points for Calibration/ imaging /milling/ deposition	*Present Charges per Item Rs.	*Present Additional Charges Rs.	Description for Additional Charges	Remarks, if any
1	Testing charges for High resolution FESEM imaging per sample	FESEM imaging	Nanomaterials/ thin films / powders / wafers /substrates/ pellets/stents /textile fibers		Mag. 12x-1000kx	Three magnifications, 4 images/ mag	5222/-			Minimum sample acceptable is restricted to 2 for one time testing
2	Testing Charges for high resolution FESEM & EDS per sample	FESEM imaging & EDS	Nanomaterials/ thin films / powders / wafers /substrates/ pellets/stents /textile fibers		Mag. 50x-1000kx	Three magnifications, 3 images and 3 EDS spectrographs/ mag	7573/-			Minimum sample acceptable is restricted to 2 for one time testing
3	Charges for FESEM calibration Standard fabricated by electron beam lithography (EBL) per standard (BND 2009-P) SemCali Array	Reference Material	Dimensional artifact/ Calibration reference material for SEM and AFM		Chip (SiO2/Si) size 10x10 mm or less, pattern size 1.5x1.5 mm area	Low reso square patterns of 100 um, and 10 um. High reso line patterns of 300nm and 200nm	27347/-			Validity 2 years
4	Charges for Optical microscope calibration Standard fabricated by electron beam lithography (EBL) per sample (BND 2007-P (OptoMicroRuler))	Reference Material	Dimensional artifact/ Calibration reference material for optical microscope		Chip (SiO2/Si) size 10x10 mm or less, pattern size 1.5x1.5 mm area	Low reso square patterns of 100 um, and 10 um. High reso patterns of 2um squares and 400nm lines	12943/-			Validity 2 years
5	Charges for Optical microscope calibration Standard fabricated by electron beam lithography (EBL) per standard )(BND 2008-P (TransMicroRuler))	Reference Material	Dimensional artifact/ Calibration reference material for optical microscope (transmission mode)		Chip (ITO glass) size 10x10 mm or less, pattern size 1.5x1.5 mm area	Low reso square patterns of 100 um, and 10 um. High reso patterns of 2um squares	12943/-			Validity 2 years
6	Charges for Nanopattern Fabrication using FIB Milling (per hour)	FIB milling	FIB milling for device fabrication/ckt modifications/ pattern writing		Low mag 100 um x 100 um area, high mag single pixel line/ dot milling down to 40nm	Pattern milling as per request. Max milling time is 1 hr	16778/-			1 hr includes milling and pattern optimization procedure
7	Charges for FIB - GIS assisted Tungsten (W) deposition Nano Contacts (per hour)	FIB deposition	W deposition		Low mag deposition 50 um x 50 um area, high mag deposition 500 nm x 20 um line	deposition (sequentially) as per request. Max deposition time is 1 hr	26395/-			1 hr includes deposition and parameter optimization
8	Charges for FIB - GIS assisted Platinum (Pt) deposition Nano Contacts (per hour)	FIB deposition	Pt deposition		Low mag deposition 50 um x 50 um area, high mag deposition 500 nm x 20 um line	deposition (sequentially) as per request. Max deposition time is 1 hr	23895/-			1 hr includes deposition and parameter optimization
9	Testing Charges for stent per hour	FESEM imaging and metal coating	Drug coating integrity and thickness determination test		Mag. 12x-1000kx	Three magnifications, 4 images/ mag, for expanded and non expanded stents	15060/-			1 hr time for FESEM imaging/stent