



BIRAC

# BioNEST

INCUBATION CENTRE

*BioStartup Evolution Enabled*

Catalysed By



PSG College  
of Technology

The PSG-STEP: BioNEST Bioincubation Centre housed at PSG College of Technology with the support from Biotechnology Industry Research Assistance Council [BIRAC], Government of India under Bioincubators Nurturing Entrepreneurship for Scaling Technologies [BioNEST] Scheme. The core objective of the Centre is to nurture and accelerate cutting edge biotechnological product innovations by offering wide range of support to innovators and startups working at the intersection of bioscience and technology.

## THRUST AREAS

**ENVIRONMENTAL BIOTECH | FOOD BIOTECH | AGRICULTURAL BIOTECH | INDUSTRIAL BIOTECH |  
MEDTECH / HEALTHCARE**

### GEL DOCUMENTATION SYSTEM

*Vilber Lourmat Fusion Solo 6S EDGE Auto V0.70*

For Chemiluminescence, Visible fluorescence imaging, multiplexing Western blot, UV fluorescence based DNA, RNA imaging & colorimetric protein gel imaging.

- Software for molecular weight calculation, band distance, colony counting, etc.
- High Sensitivity Reading Technology for noise reduction
- Super Bright Technology for viewing faint bands
- App studio with library of imaging protocols



### SONICATOR

*VIBRA CELL VCX 500*

#### Process volume:

250  $\mu$ L to 1000 mL

#### Applications:

Cell lysing, Sample preparation,  
Homogenization, ChIP assay,  
Emulsification, Disaggregation and  
Deagglomeration



### BIOREACTOR

*Scigenics Bioferm LS in situ  
Sterilizable Bioreactor of 10L capacity*



### ROTARY EVAPORATOR

*HEI - VAP ADVANTAGE ML/G3*

**Speed:** 10 - 280 rpm

**Flask lift mechanism:** Motorised & Hand lift

**Cooling surface:** 1200 cm<sup>2</sup>

**Heating bath temperature range:** 20 to 210° C

**Evaporating & receiving flasks volume:** upto 3 L



## SPECTROPHOTOMETER HITACHI UH5300



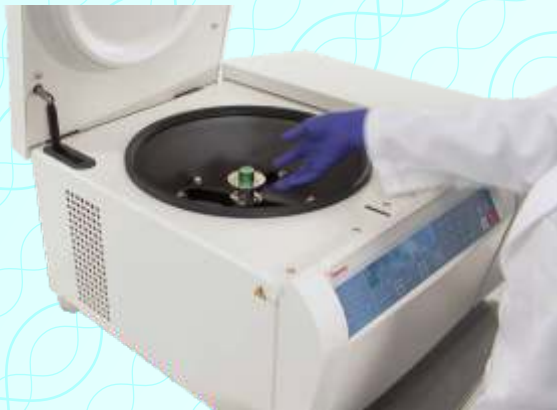
**Optical system:** Double beam monochromator  
**Light source:** Xenon Flash Lamp  
**Detector:** Silicon Photodiode  
**Cell holder:** Automatic 6 cell turret  
**Wavelength range:** 190 to 1100 nm  
**Spectral bandwidth:** 1 nm  
**Straylight:** less than 1%  
**Scan speed:** upto 6000 nm/min  
**Noise level:** 0.0001 Abs

## MICROVOLUME SPECTROPHOTOMETER DENOVIK DS 11

**Minimum sample Size:** 0.5 µl  
**Light Source:** Pulsed Xenon Flash Lamp  
**Detector Type:** 2048 element CCD  
**Wavelength Range:** 190 - 840 nm  
**Detection Limit:** 0.04 mg/mL protein, 0.75 ng/ µl ds DNA  
**Measurement Time:** 2 seconds



## REFRIGERATED CENTRIFUGE THERMO SORVALL LEGEND XTR



**Temperature Range:** -10 to 40 ° C  
**Capacity:** 4 litres  
**Rotors:** Fixed angle & Swinging bucket  
Auto lock rotors with click seal biocontainment lids  
**Swinging Bucket Rotor:**  
Maximum RCF: 4, 816 x g | Maximum RPM: 4,700  
**Fixed Angle Rotor:**  
Maximum RPM: 15, 200 | Maximum RCF: 25, 090 x g

## REFRIGERATED INCUBATOR ORBITEK CINC 165

**Temperature range:** 5° to 60 ° C  
**Temperature Accuracy:** ± 0.1 ° C @ 37° C



## REFRIGERATED INCUBATOR SHAKER

### ORBITEK LE BT- A

**Temperature range:** 5 ° to 80 ° C

**Temperature accuracy:**  $\pm 0.1^{\circ}\text{C}$  @ 37° C

**Speed:** 25 to 400 RPM

**Flask holding capacity:** Can hold from 10 mL tubes to 2L flasks

**Additional features:** Photosynthetic light bank UV C light for disinfection Stationary tray for incubating Petri plates



## UPCOMING SPECIALIZED LABORATORIES

- Molecular Biology Lab
- Bio Process Lab
- Analytical Instrumentation Lab
- Animal Tissue Culture Facility

## OUR SERVICES

### INCUBATION SUPPORT

- Private cubicles, Open innovation lab/Co working space
- Dedicated labs for Biotech Processes
- Testing facility
- Equipment facilities can be accessed by Bio entrepreneurs in the region

### TECH / BIZ SUPPORT

Mentoring | Legal and IPR Services | Networking Events | Training Programmes | Investor & Industry Connects  
Facilitate participation in nationwide events to showcase incubate products & solutions

### FUNDING SUPPORT

**NIDHI-PRAYAS:** NIDHI Promoting and Accelerating Young and Aspiring Innovators and Startups Grant support upto Rs 10 lakhs to develop an idea into Prototype

**NIDHI-EIR:** NIDHI Entrepreneur – in – Residence Fellowship support upto Rs 30, 000 per month for a period of one year to young biotech aspirants for idea validation

**SEED FUND:** Financial support upto Rs 25 lakhs as loan for commercially viable Biotech startups.

**BIRAC SUPPORT:** Assistance to the startups/innovators for financial support under BIRAC schemes

### ECOSYSTEM SUPPORT

Access to labs & mentoring support from technical experts of

- PSG College of Technology
- PSG Institute of Medical Science & Research
- PSG College of Pharmacy
- PSG Institute of Advanced Studies
- PSG College of Arts & Science

For Enquiry & Details Contact:

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