

## *ELECTRONIC SYSTEM AREA\_System Information*

1 <b>SYSTEM ID:</b> ESA-1 GCMS (AEG) <b>NAME OF EQUIPMENT:</b> GCMS <b>DIVISION/ GROUP NAME:</b> ESA/AEG <b>YEAR OF INSTALLATION:</b> 2009 <b>EQUIPMENT MANUFACTURER:</b> Thermo Fisher Scientific,81 Wyman Street, Waltham, MA USA 02451 <b>EQUIPMENT INCHARGE:</b> V. Sai Krishna K. K. Pandey <b>PROCESS CAPABILITIES:</b> FID, ECD detectors for organic and inorganic solid, liquid samples
2 <b>SYSTEM ID:</b> ESA-2 Spectrophotometer <b>NAME OF EQUIPMENT:</b> Spectrophotometer <b>DIVISION/ GROUP NAME:</b> ESA/DSG <b>YEAR OF INSTALLATION:</b> 2010 <b>EQUIPMENT MANUFACTURER:</b> Simadzu UV-3600 <b>EQUIPMENT INCHARGE:</b> Navjot Kumar NIL <b>PROCESS CAPABILITIES:</b> Spectral measurement for liquid samples
3 <b>SYSTEM ID:</b> ESA-3 Gas Chromatography <b>NAME OF EQUIPMENT:</b> Gas chromatography <b>DIVISION/ GROUP NAME:</b> ESA/DSG <b>YEAR OF INSTALLATION:</b> sep. 2008 <b>EQUIPMENT MANUFACTURER:</b> Electronic sensor technology <b>EQUIPMENT INCHARGE:</b> Santosh Kumar NIL <b>PROCESS CAPABILITIES:</b> Characterization of gas samples
4 <b>SYSTEM ID:</b> ESA-4 Lactolyser MIRA <b>NAME OF EQUIPMENT:</b> Lactolyser MIRA <b>DIVISION/ GROUP NAME:</b> ESA/DSG <b>YEAR OF INSTALLATION:</b> 2015 <b>EQUIPMENT MANUFACTURER :</b> Lacto tronics B.V <b>EQUIPMENT INCHARGE:</b> Dr. PC Panchariya Kailash Chander <b>PROCESS CAPABILITIES:</b> measurement of fat, snf, protein and lactose in milk
5 <b>SYSTEM ID:</b> ESA-5 SEM <b>NAME OF EQUIPMENT:</b> Scanning Electron Microscope <b>DIVISION/ GROUP NAME:</b> ESA/DSG <b>YEAR OF INSTALLATION :</b> Installation: September 2010 <b>EQUIPMENT MANUFACTURER:</b> JEOL <b>EQUIPMENT INCHARGE:</b> Himanshu Dutt Sharma None <b>PROCESS CAPABILITIES:</b> Measurement Characterization of Micro/Nano featuresin 2D and 3D; Micro/nano Assembly and Manipulation

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**SYSTEM ID:** ESA-6 Gas Mixer  
**NAME OF EQUIPMENT :**Multi gas mixer  
**DIVISION/ GROUP NAME:** ESA/DSG  
**YEAR OF INSTALLATION:** March 2009  
**EQUIPMENT MANUFACTURER:** Environics INC  
**EQUIPMENT INCHARGE:** Dr. Ajay Agarwal  
Not known  
**PROCESS CAPABILITIES:**  
Can mix different gases at given composition

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**SYSTEM ID:** ESA-7 Mircomachining  
**NAME OF EQUIPMENT:**femtosecond Laser Micromachining System  
**DIVISION/ GROUP NAME:** ESA/DSG  
**YEAR OF INSTALLATION:** Installation : December 2011  
**EQUIPMENT MANUFACTURER:**Clark-MXR Inc USA  
**EQUIPMENT INCHARGE:** Himanshu Dutt Sharma  
None  
**PROCESS CAPABILITIES:**  
Multi material Micro manufacturing capabilities

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**SYSTEM ID:** ESA-8 Micro Manipulator  
**NAME OF EQUIPMENT:** Micro/Nano Manipulation and Assembly Robots  
**DIVISION/ GROUP NAME:** ESA/DSG  
**YEAR OF INSTALLATION:** Purchase 2008; Installation September 2009  
**EQUIPMENT MANUFACTURER:** Kleindiek, Germany  
**EQUIPMENT INCHARGE:** Himanshu Dutt Sharma  
None  
**PROCESS CAPABILITIES:**  
Micro object Manipulation and Micro Assembly