

# **Progress Report**

For Requests and Inquiries please visit

https://sbasse.lums.edu.pk/instrument-cell

Email: <u>instrument@lums.edu.pk</u>

### Instrument Cell Overview

# REPAIR & DIAGNOSTICS OF SCIENTIFIC EQUIPMENT

**THE INSTRUMENT CELL** at the Syed Babar Ali School of Science and Engineering is now accepting requests from the Academia and the industry

#### THE INSTRUMENT CELL OFFERS:

- · Sophisticated Repairs
- Brisk Operations
- · Empower Your Research
- Unlock Your Instrument En Route to Discovery

To get in touch with our team of experts, feel free to contact us at instrument@lums.edu.pk

Contact: (042) 35608000 | Ext: 8360 | Ext: 3752

For online request submissions, log on to https://sbasse.lums.edu.pk/instrument-cell



### Expertise

#### Mechanical

- Vacuum, pneumatics, and hydraulics
- Design
  - Drawing using CAD software
  - Modelling using 3D CAD design software
- Hands-on:
  - Manufacturing using machine tools such as lathe machines (manual and CNC), milling (manual and CNC), 3D printing, and power tools.
- Measurement
  - IOT, sensing, signal conditioning

#### Electronics

- PCB designing
- PCB manufacturing (routing)
- Analog Circuit Design

#### Electrical

- Troubleshooting and repair
- Computer
  - SW development
- · Calibration and testing









# Internal Repair

• Time Duration April 21st, 2021 – June 30th, 2023.

Description	Chemistry	Biology	The Central Lab	Electrical Engineering	Office of Research	GA & S Security	SBASSE Dean's Office	Total
Requests	95	114	28	2	1	1	4	245
Closed Requests	83	101	26	2	1	1	4	218
Serviced	77	93	26	2	1	1	4	204
Unserviceable	6	8	-	-	-	-	-	14
Open	9	12	1	-	-	-	-	22
Information incomplete	3	1	1	-	-	-	-	5
Discrete Articles	177	138	28	2	1	1	4	351

## Internal- Key Performance Metrics

Total Requests = 245

Closed Requests = 218

Total Articles Received = 404

Total Revenue = Rs. 2,702,150

### External Cleints (outside LUMS) Summary

Time Duration
 January 25<sup>th</sup>, 2022 – June 30<sup>th</sup>, 2023.

<b>Total Requests</b>	32				
Discrete articles	57				
Closed requests	15				
Unserviceable requests	3				
Open requests	17				
Equipment shipment awaited	2				
Total Revenue	Rs. 1,024,030				

### Some organizations engaged

Anwar Khawaja Industries Pvt. Ltd.

Bulleh Shah
Packaging
(Private) Limited.

Tti Testing Laboratories. Tri-Pack Films Limited.

Fast National University, Peshawar, Pakistan.

Candid Pharmaceuticals.

COMSATS
University
Islamabad,
Lahore campus.

Fazl e Rasheed and Co.

Pak National Engineering.

GIK Institute of Engineering Sciences and Technology.

UET, Lahore.

GCU Lahore.





Direct Reading Haze Mater





IAM (Image Analysis Module)



CAMERA MODULE





GRETAG D200-II DESIOMETER



X rite Densiometer



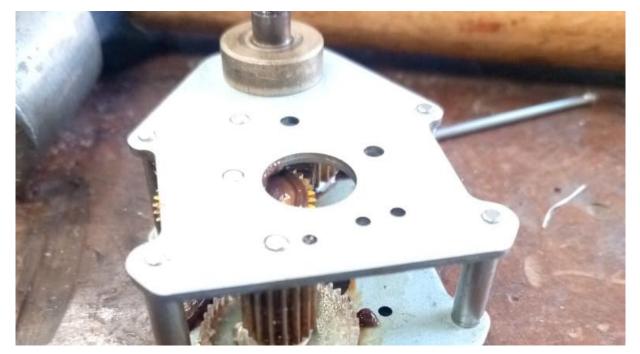


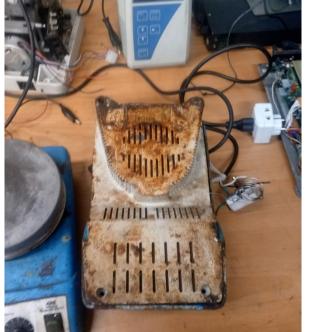
L&W BENDTSEN TESTER



Water nozzles

**CRUSH TESTER** 



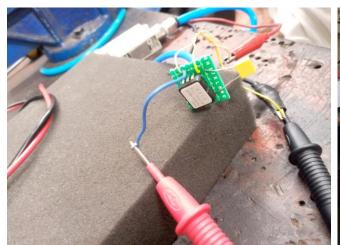


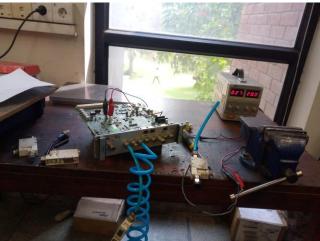


















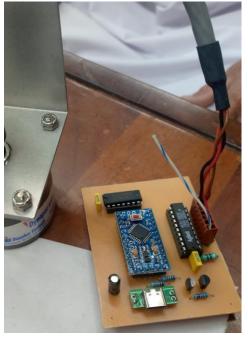






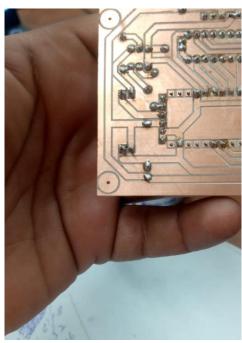
# Analog Circuit Design











# Technical Training



PHYSLAB

Syed Babar Ali

**PERIOD: JULY 2023** 

HONORARIUM: RS. 15,000 COMMITMENT: FULL TIME Ayesha Khurram



Syed Asad Asif

