



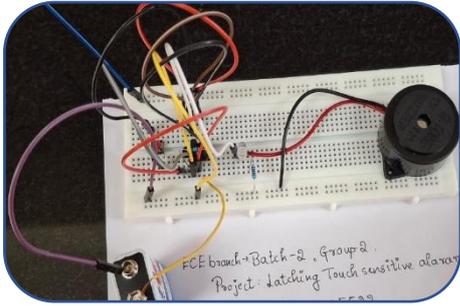
**JSS Academy of Technical Education, Bengaluru**  
**Department of Physics**

**Skill Lab Report (September 2024-January 2025)**

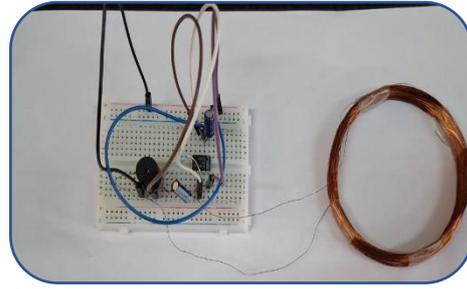
The Department of Physics successfully conducted a **Skill Lab** for the **odd-semester students of the 2024-25 Academic Year**. Students from multiple branches, including **Electronics and Communication (A, B, and C), Electronics and Instrumentation (EIE), Civil, Mechanical, and Robotics Engineering**, actively participated in the event. A total of **22 innovative projects** were developed under the guidance of faculty members from the Physics Department. The projects covered a wide range of fields, including **IoT, communication, smart technology, optics, energy storage, and astrophysics**. The titles of the projects are listed below:

Sl.No.	Title	Branch	Faculty
1	Latching Touch Sensitive Alarm	EC "C"	Dr. Nityanand Choudhary
2	Construction of low power metal detector using IC555 LCR circuit		
3	Solar powered charger		
4	Electric Bell		
5	Smart Dustbin	EC "B"	Dr. Prasanna Kumar S
6	Smart glasses for enhanced mobility of the visually impaired		
7	Sky guard- Intelligent fall protection for high rise buildings		
8	Glowing the LED bulb using inductive transfer method		
9	Sustainable floating house	Civil	Dr. Shashidhar R
10			
11	Temperature based fan speed control and		

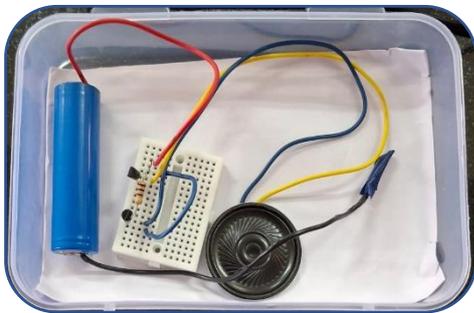
	monitoring with arduino	EC "A"	Dr. Abhilasha Singh
12	Turbidity meter using arduino		
13	Maze solving car using arduino		
14	Production of electricity using waste		
15	Flood level alarm system for households	RA	Dr. Sushma KC
16	Online fire detection and alert system		
17	Eddy current jumping disk model	ME	
18	IOT based garbage monitoring system		
19	FM tuner using ESP32	EIE	Mr. Mohanakumara LB
20	Line follower robot		
21	The Smart Agricultural Monitoring System		
22	RFID based smart traffic light control system		



Latching Touch Sensitive Alarm



Construction of low power metal detector using IC555



Electric Bell

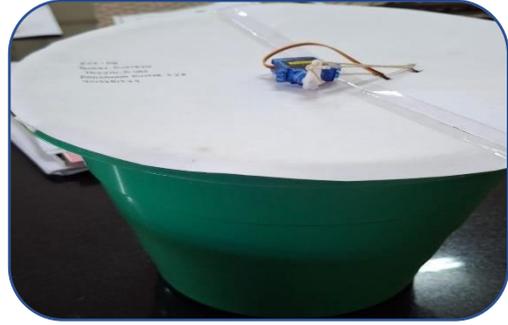


Solar powered charger

Faculty in Charge: Dr. Nityanand Choudhary



Sky guard-Intelligent fall protection for high rise buildings



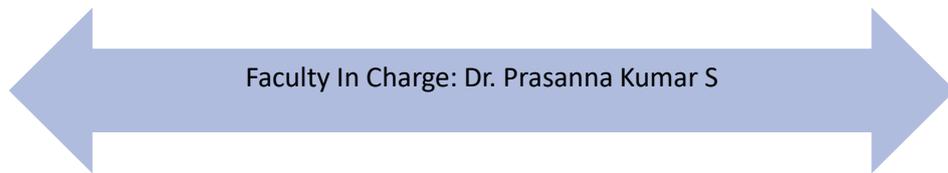
Smart Dustbin



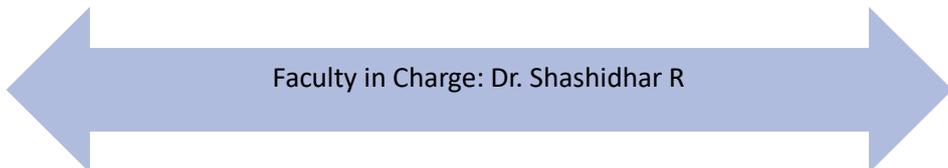
Smart glasses for enhanced mobility of the visually impaired

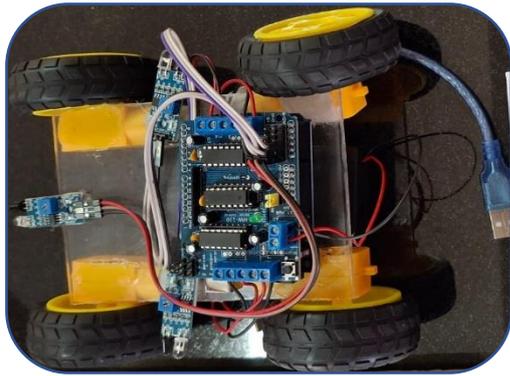


Glowing the LED bulb using inductive transfer method

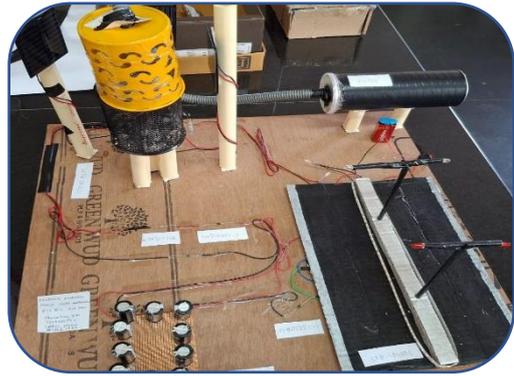


Sustainable floating house

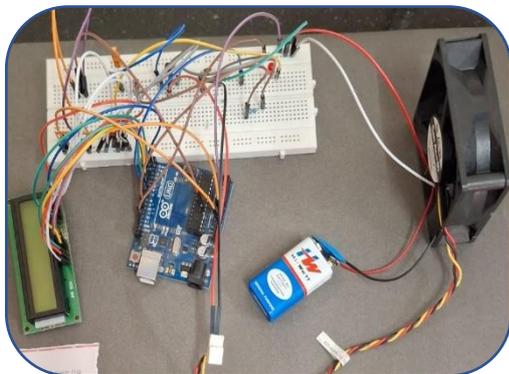




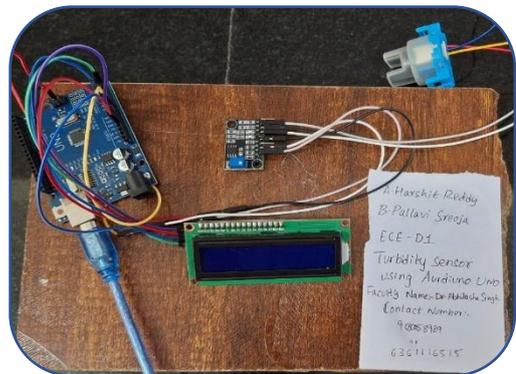
Maze solving car using arduino



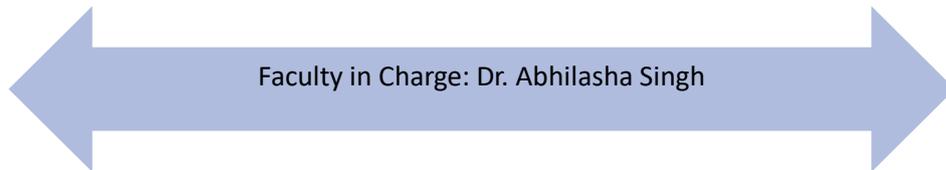
Production of electricity using waste



Temperature based fan speed control and monitoring with Arduino



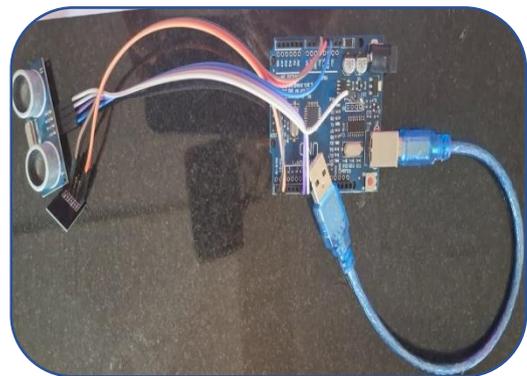
Turbidity meter using Arduino



Faculty in Charge: Dr. Abhilasha Singh



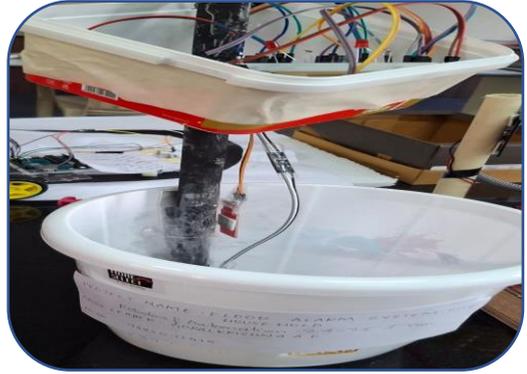
Eddy current jumping disk model



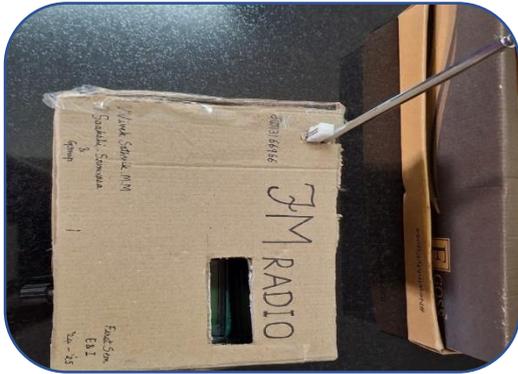
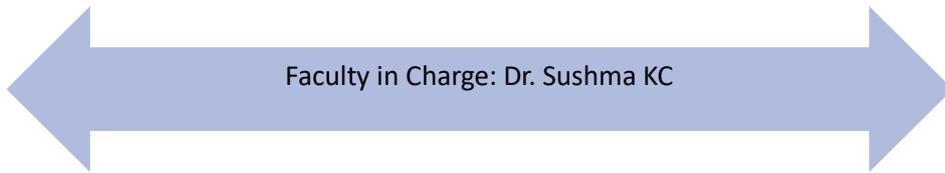
IOT based garbage monitoring system



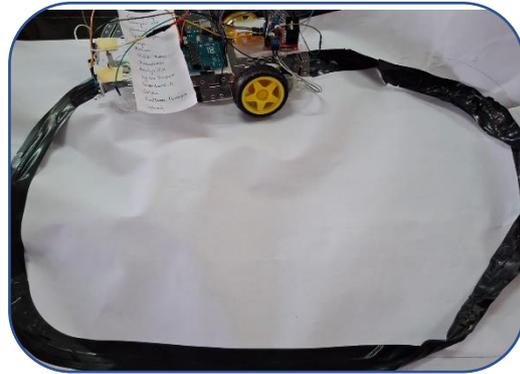
Online fire detection and alert system



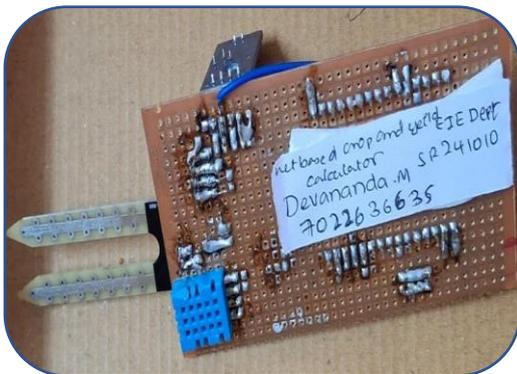
Flood level alarm system for households



FM tuner using ESP32



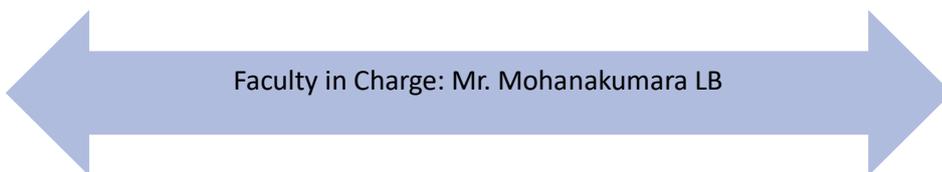
Line follower robot



The Smart Agricultural Monitoring System



RFID based smart traffic light control system





Skill Lab Incharge  
Dr. Abhilasha Singh

HOD Physics  
Dr. Shashidhar R