

Department of Instrumentation

Activities 2023-2024

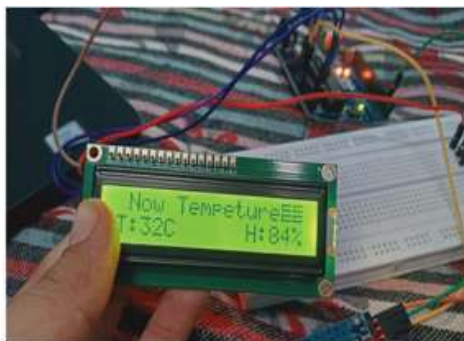
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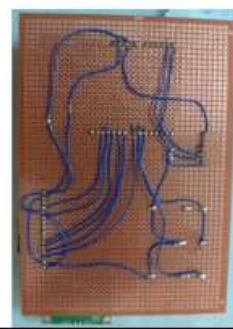
1. **Summer Internship:** The department organizes in-house summer internships for 2nd and 3rd year college students during the summer holidays in June and July. The broad areas for the summer internship were: Analytical Instrumentation and Nanoscience, Artificial Intelligence and Machine Learning, IoT and its application, and semiconductor devices and application.

- **Resource Person:** Dr. Daya Bhardwaj (Associate Professor, SRCASW, DU), Dr. Sneha Kabra (Associate Professor, SRCASW, DU), Dr. Himani Dua (Assistant Professor, SRCASW, DU), Dr. Neha Garg (Assistant Professor, SRCASW, DU), Ms. Reshma Sinha (Assistant Professor, SRCASW, DU) and Dr. Sunil Kumar (Assistant Professor, SRCASW, DU).

- **Number of Participants:** 12



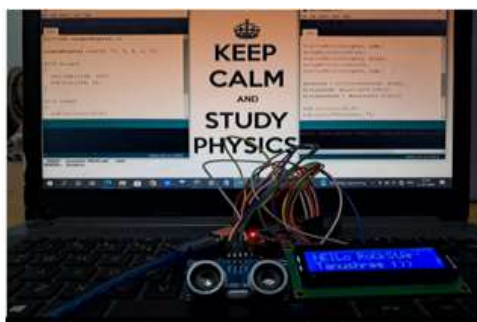
Temperature and Humidity Measurement using Arduino



Heart Rate and Oxygen Saturation Monitoring System



Smart Plant Watering System using Arduino



Distance Measurement using Ultrasonic sensor and Arduino

2. **Activities under Region-10 EA Project:** The department organized various activities under the 2023 Region-10 EA Project on the theme “Sensitising Community to Climate Resilience through Flash Mobs by Undergraduate Students” in collaboration with PRAVRIDHI-The Eco Club of college. The list of diverse activities comprises (i) Tree

Plantation Drive on Van Mahotsav (ii) Poster Making Competition on the theme Sensitising Local Community to Climate Resilience (iii) Doodle Art Competition on the theme of Climate Change (iv) Inter-College Debate Competition on the theme Technological Solutions: Solving Climate Problems or Creating New Challenges? (v) Talk on Air Pollution and Climate Change (vi) Flash Mob on Climate Resilience held from 31st, July 2023 to 29, August 2023 in Physical and Virtual mode.

- **Resource Person (Talk):** Dr. Antinder Pal Singh (Assistant Professor, Department of Environmental Studies, DU)
- **Number of Participants:** 375



Tree Plantation Drive on Van Mahotsav



Poster Making Competition



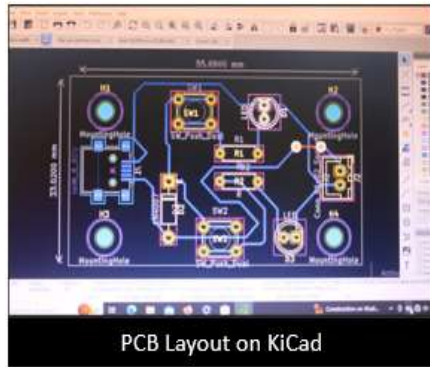
Flashmob on Climate Resilience



Talk on Air Pollution and Climate Change

3. **Teacher's Day Celebration:** Department students celebrated Teacher's Day on 5th, September 2023. The Teachers' Day celebration successfully honored the dedication of educators.
4. **Workshop on PCB Designing and Fabrication:** The Department organized a workshop on "PCB Designing and Fabrication" from 4th-6th, October 2023. The workshop provided students with a comprehensive introduction to designing and creating printed circuit boards (PCBs) from scratch. The workshop combined theoretical knowledge with hands-on experience, focusing on schematic design using KiCad and the physical fabrication of PCBs using copper-clad boards.

- **Resource Person:** Mr. Arun Kumar (Director, SINCGRID Pvt. Ltd)
- **Number of Participants:**70



PCB Layout on KiCad



PCB Fabrication : Soldering



PCB Fabrication: Drilling



PCB Fabrication Workshop: Valedictory Session

5. **Freshers Party:** Department students organized a fresher's party to welcome their juniors on 13th, October 2023. It provided a platform for students to make friends, share experiences, and have fun.



Freshers Party on 13, October 2023

6. **Vyakhyaan:** Organized Vyakhyaan an alumni interaction series on “**Future Prospects and Career Guidance in the field of Instrumentation and Electronics**” on 25th, October 2023.

- **Resource Person:** Ms. Gauri (Assistant General Manager, Corporate Quality Assurance Micro Labs Limited, Bangalore), Ms. Aparna (Senior Research Scientist, Sun Pharmaceutical Industries Ltd.) and Ms. Himani (Technical Writer, Synopsys INC)
- **Number of Participants:**46



7. **Industrial visit:** Organized an industrial visit to “**Dabur**” on 1st, November 2023. Dabur is one of India's leading consumer goods companies focusing on health care, personal care, and food products.

- **Number of Participants:**30



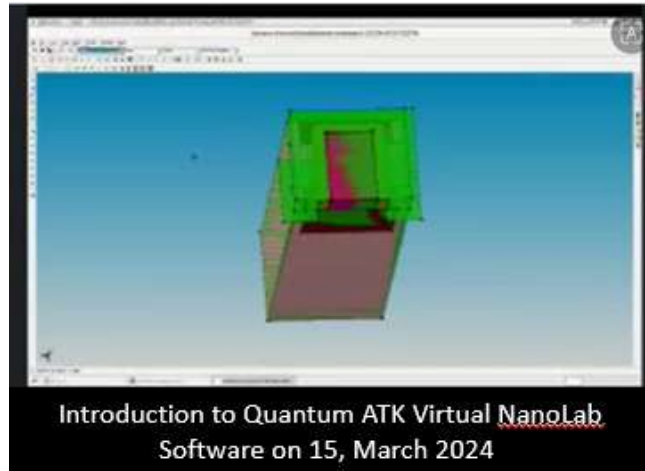
8. **Technical Fest:** Organized TECHNEXUS 23', an annual Technical Fest from 6th -7th, November 2023. The fest unfolded with a myriad of engaging events designed to challenge and inspire technical enthusiasts.

- **Resource Person (Talk):** Dr. Kalpana Bansal (Associate Professor, Department of Radiodiagnosis, G.B. Pant Hospital, New Delhi)
- **Number of Participants:** 100



9. Invited Talk: Organized an Invited Talk (Online Mode) on “Introduction to Quantum ATK Virtual NanoLab Software (Synopsys® - Quantumwise® Inc)” on 15, March 2024.

- **Resource Person (Talk):** Mr. Deepak Upadhyay (Application Engineer, Integrated Microsystems, Gurugram, Haryana, India)
- **Number of Participants:**24



10. Farewell Party: Department students organized a farewell party for their seniors on 29th April 2024. The Farewell Party was a memorable event that successfully celebrated the achievements of the graduating class. It provided a platform for reflection, gratitude, and connection as students prepare to embark on new journeys.

