



Activity Report
Hands-on Workshop on Optics and Modern Physics Experiments

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|-----|---|---|--|
| 1. | Academic year | : | 2023-2024 |
| 2. | Program driven by | : | Self-Driven Activity |
| 3. | Quarter | : | Quarter III |
| 4. | Program/Activity Name | : | Hands-on Workshop on Optics and Modern Physics Experiments |
| 5. | Program type | : | Level-2: Workshop |
| 6. | Program Theme | : | Innovation & Design Thinking |
| 7. | Duration of the activity (in hrs) | : | 16 |
| 8. | Start Date | : | 12-04-2024 |
| 9. | End Date | : | 14-04-2024 |
| 10. | Number of Student Participants (Minimum 50 Students) | : | 59 |
| 11. | Number of Faculty Participants | : | 5 |
| 12. | Number of External Participants, If any | : | 2 |
| 13. | Expenditure Amount, If any | : | na |
| 14. | Remark | : | -- |
| 15. | Mode of Session Delivery | : | Offline |
| 16. | Objective (100 letters) | : | To impart practical exposure to the students on innovative optics technologies |
| 17. | Benefit in terms of Learning/Skill/ Knowledge obtained (150 letters) | : | The participants were able to deepen their theoretical understanding and practical skills about optics concepts |
| 18. | Video URL (EU YouTube channel) | : | |
| 19. | Photographs (only 2) (max size 2 MB) | : | Uploaded on IIC portal |
| 20. | Overall report of the activity (PDF, max 2MB) | : | Uploaded on IIC portal |
| 21. | Promotion in Social Media Linkedin: https://www.linkedin.com/posts/eternal-university-baru-sahib-sirmour_exposure-innovative-physicsworkshop-activity-7184489360443031552-DAWg?utm_source=share&utm_medium=member_desktop | | |

**Hands-on Workshop
on Optics & Modern
Physics Experiments**
(12-14, April 2024)

Organized by
Department of Physics,
ACBS, Eternal University, Baru Sahib
in Association with
Laboratory Instrument Corporation (Estd. 1961), Ambala Cantt.

RESOURCE PERSONS

| | | | | | |
|--|--|--|---|------------------|-----------------|
| | | | | | |
| (Dr. Puneet Negi) Assistant Professor & Head | (Dr. Poonam Kumari) Assistant Professor | (Ms. Gagandeep Kaur) Teaching Associate | Mr. Vishal L Jolly | Mr. Naresh Jolly | Mr. Vikas Jolly |
| (DEPARTMENT OF PHYSICS) ETERNAL UNIVERSITY BARU SAHIB | | | (LABORATORY INSTRUMENT CO: ESTD. 1961) AMBALA CANTT. | | |

FIND MORE INFO : ☎ +91 8210258484 ✉ admissions@eternaluniversity.edu.in

Brief report

Department of Physics, Akal College of Basic Sciences, Eternal University, Baru Sahib in association with Laboratory Instrument Co. (Estd. 1961), Ambala has organized a Hands-on Workshop on "Optics and Modern Physics Experiments" during April 12-14, 2024.

The following techniques were demonstrated to the participants:

- Frank-Hertz Experiment: First Experimental verification of the existence of discrete energy states in atoms
- Milliken's Oil Drop Experiment: Experimental determination of the quantum nature of charge
- Optical Fibre: Measurement of Numerical Aperture and attenuation of optical fibre
- Diffraction Grating: Separate light of different wavelengths with high resolution
- Hall Effect: An important tool to characterize the materials especially semiconductors
- Michelson Interferometer: Evidence for the wave nature of light/Allow precise measurements of distances, wavelengths etc.

The workshop was designed to offer practical exposure to the students through hands-on experiments for exploring cutting edge innovative and breakthrough technologies along with nourishing the fundamental concepts in modern physics and optics. The participants were able to deepen their theoretical understanding and practical skills about optics concepts.



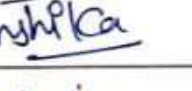
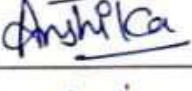
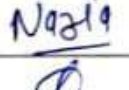
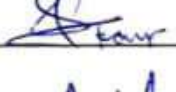
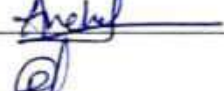

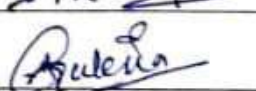





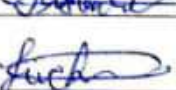







| S.No. | Name | Designation/ Regn No. | Department/College | Signature |
|-------|-----------------|------------------------------|----------------------------|----------------|
| 19 | Shilpa Sharma | ^{NAB} BS21PMB001 | Microbiology/ACBS | Shilpa |
| 20 | Ambika Chauhan | BS21PAY001 | Botany /ACBS | Achauran |
| 21 | Shilppreet Kaur | BS21PMB002 | Microbiology/ACBS | Shaur |
| 22 | Rubal | BS21PAY003 | Botany /ACBS | Rubal |
| 23 | Khushi | BS21BEC003 | Bsc (Hons) Eco | Khushi |
| 24 | Daman | BS21BEC001 | Bsc (Hons) Eco | Daman |
| 25 | Anishka Sharma | BS22BAG003 | BSc. (Hons) Agriculture | Anishka |
| 26 | Yaru | BS23BBA008 | BBA | Yaru |
| 27 | Muskan Khosla | BS23BPSY015 | BSC Psychology | Muskan |
| 28 | Ajmeel Kaur | BS23BPSY001 | B-Sc Psychology | Ajmeel |
| 29 | Ritesh Verma | BS19PAE001 | PhD Economics | Ritesh |
| 30 | Jasleen Kaur | BS23PEC001 | PhD Economics | Jasleen |
| 31 | Roheela Fatheem | PhD/PCHE002 | PhD Chemistry | Roheela |
| 32 | Soni | BS22MCH004 M.Sc. Chem | M.Sc. Chem. | Soni |
| 33 | Shweta Kuman | BS22MCH003 | " | Shweta |
| 34 | Ridhima Thakur | BS23NBMO02 | MBA (Business Analytics) | Ridhima |
| 35 | Komaljeet Kaur | BS22BCSO12 | Btech CSE | Komaljeet Kaur |
| 36 | Gurpreet Kaur | BS22BCSO09 | B Tech CSE | Gurpreet Kaur |
| 37 | Rishika | BS21BAG008 | B.Sc. Agri | Rishika |
| 38 | Eliza | 005 | " | Eliza |
| 39 | Adheera Chauhan | BS23BCM001 | B. Com | Adheera |

Hands-on Workshop on Optics and Modern Physics Experiments (12-14 April, 2024)

ATTENDANCE SHEET

| S.No. | Name | Designation/ Regn No. | Department/College | Signature |
|-------|-----------------|--------------------------|-------------------------------|---|
| 1 | Ashima Sharma | BS22BNM001 | Akal College of Basic Science |  |
| 2 | Ayushi Khimla | BS22BNM002 | Akal college basic science |  |
| 3 | Rajni Kathuria | BS23BNM002 | Akal College Basic science |  |
| 4 | Anshika Thakur | BS23BNM001 | Akal College Basic science |  |
| 5 | Nazia | BS23BNM003 | Akal College Basic science |  |
| 6 | Suryakant Panu | BS23BNM004 | Akal college of Basic science |  |
| 7 | Anchal Thakur | BS23MPHY001 | Akal College of " |  |
| 8 | Pritya | BS23MPHY002 | Akal College of basic science |  |
| 9 | Mahak Parmar | BS21BNM002 | ACBS |  |
| 10 | Akshita Guleria | BS21BNM004 | Akal college of basic science |  |
| 11 | Tanish | Non Medical | AABS |  |
| 12 | Vanshraj | " | AABS |  |
| 13 | Bhawan | " | AABS |  |
| 14 | Ajaniqbal | " | AABS |  |
| 15 | Kushal | " | " |  |
| 16 | Tashankaj | " | " |  |
| 17 | Lucky | " | " |  |
| 18 | Navyot | Commerce | " |  |

| S.No. | Name | Designation/ Regn No. | Department/College | Signature |
|-------|------------------|--------------------------|-------------------------|-------------------|
| 40 | Tanisha Ghoshan | BS22BGM004 | B.Com(Hon.) | <i>Tanisha</i> |
| 41 | Kritika Thakur | BS21BPSY014 | BSc Psychology | <i>Kritika</i> |
| 42 | Pratibha Sharma | BS21BPSV008 | B.Sc(Hons) Psychology | <i>Pratibha</i> |
| 43 | Jyoti Sharma | BS21BNM001 | B.Sc.(N.M) | <i>Jyoti</i> |
| 44 | Divyanshi Pandit | BS21BME006 | B.Sc.(Medical) | <i>Divyanshi</i> |
| 45 | Amandeep Kaur | BS21BCM001 | B.com | <i>Amandeep</i> |
| 46 | Ankita | BS21BPSY002 | Bsc Psych | <i>Ankita</i> |
| 47 | Divya Sabharwal | BS21BPSY003 | Bsc Psych | <i>Divya</i> |
| 48 | Jaspreet Kaur | BS21BBA018 | BBA | <i>Jaspreet</i> |
| 49 | Komalpreet | BS21BPSY006 | Bsc Psych | <i>Komalpreet</i> |
| 50 | Deepika | BS23BCS006 | BTech (CSF) | <i>Deepika</i> |
| 51 | Pidhi | BS23BCS015 | BTech (CSF) | <i>Pidhi</i> |
| 52 | Niharika | BS23BCS016 | " | <i>Niharika</i> |
| 53 | Aarushi | BS23BCS001 | BTech CSF | <i>Aarushi</i> |
| 54 | Parnet Kaur | BS23BME001 | Bs. Med | <i>Parnet</i> |
| 55 | Deepali Sharma | BS22BME002 | Bsc Med. | <i>Deepali</i> |
| 56 | Mansi Kaur | BS22BME001 | B.Sc. Bioc | <i>Mansi</i> |
| 57 | Shiksha | BS21BA4009 | B.Sc(Hons.) Agriculture | <i>Shiksha</i> |
| 58 | Deepika | BS23BA007 | B.A. (Humanities) | <i>Deepika</i> |
| 59 | Apodhva | BS23BA006 | B.A. (Humanities) | <i>Apodhva</i> |
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