

Invited Talks, Workshops & Departmental Activities

Under DBT STAR STATUS

Session 2022-23

Department of Physics

Kanya Maha Vidyalaya, Jalandhar

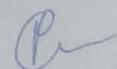
(An Autonomous & Heritage Institution)

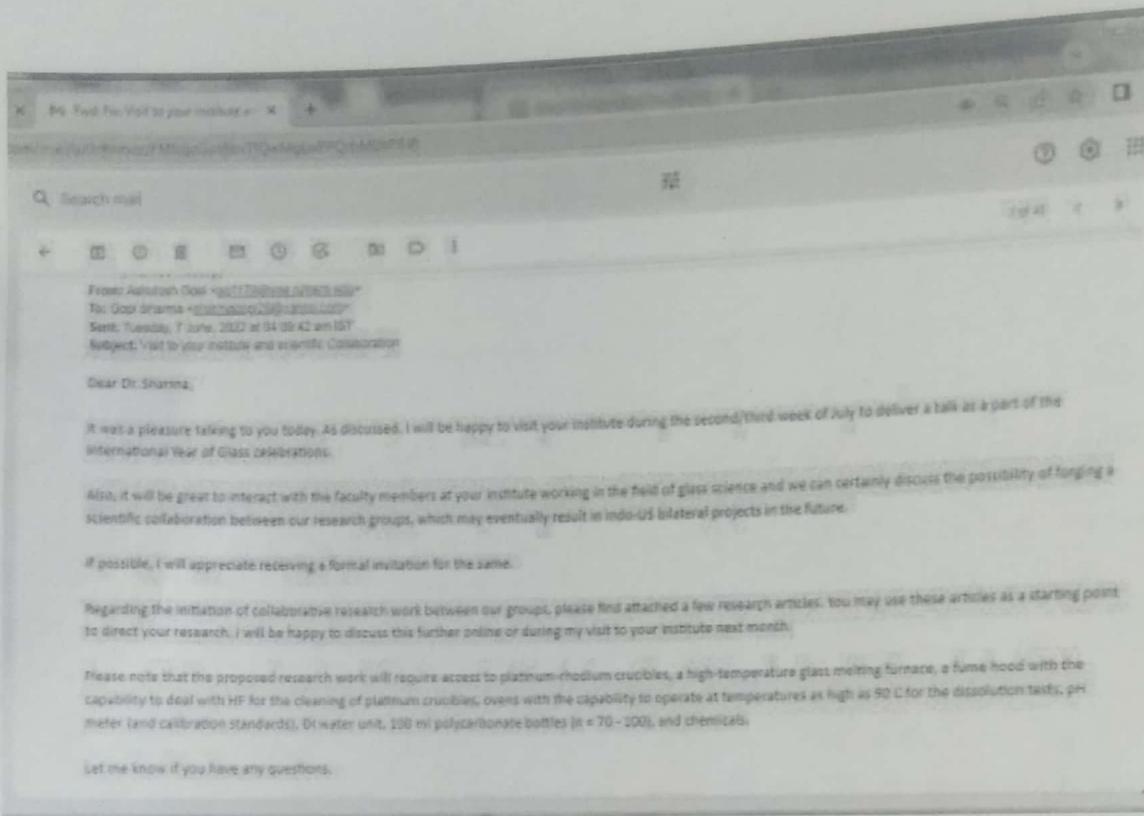
2. International Workshop on glass preparation in lieu of celebrations of Glass year 2023

https://www.instagram.com/p/CsX-P-wubFP/?utm_source=ig_web_copy_link&igshid=MmJIY2I4NDBkZg==

1. **Date of program:** 23/7/2022
2. **Title/Theme of the Program:** International Workshop on glass preparation in lieu of celebrations of Glass year 2023
3. **Program for the benefit of:** To introduce glass preparation techniques to the students.
4. **Objective:** Motivate students to pursue research in Physics and Material Science
5. **Total no. of participants:** 36 (including 6 faculty members)
6. **Venue of the program:** Physics lab, Kanya Maha Vidyalaya

Discovering and developing newer and better ways for women empowerment and evolving a better society is a routine effort at KMV- The Heritage Institution. P.G. Department of Physics organized a workshop on glass preparation by Dr. Ashutosh Goel. Dr Goel is Associate Professor in the Department of Materials Science and Engineering, Rutgers, The State University of New Jersey and is actively working in the field of glasses. During the workshop Dr. Goel explained the students about the principles of glass melting and finally glass formation. He explained the students about the eutectic and phase diagrams followed by glass forming as well as crystalline region. He also prepared glass samples with the students. Dr. Gopi Sharma of Physics department, Kanya Maha Vidyalaya has been in collaboration with Dr. Goel since 2009 and are currently working on the radioactive waste disposal by turning nuclear waste into glasses. During his visit, he also interacted with the M.Sc. Physics students. He explained to them about different research opportunities and encouraged them to do research in the field of Material Science. Principal Prof. (Dr.) Atima Sharma Dwivedi greeted him and applauded P.G. Department of Physics for organizing such meaningful workshop cum interactions.





Attendance cum feedback form

International workshop on glass preparation in lieu of celebrations of 'glass year 2023'

Dated: July 23, 2022

Name of Student	Class	Roll no.	Feedback	Signature
Nandita Pathania	MSc Physics Sem-3	225126	Good	Nandita
Gragandeep Kaur	M.Sc. Physics Sem-3	225127	Very informative Talk.	Gragan
Anshuman Saluja	MSc Phy Sem-3	225128	Good	Anshuman
Vibhuti	MSc Phy Sem-3	225129	Very Good	Vibh
Anchal	MSc Phy Sem-3	225130	Nice talk	Anchal
Vinda	MSc Phy Sem-3	225131	Good	Vinda
Vishali	MSc Phy Sem-3	225132	Very Good	Vishali

13. Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI-21)

https://www.instagram.com/p/CsiV8Qhugrl/?utm_source=ig_web_copy_link&igshid=MmJiY2I4NDBkZg==

1. **Date of program:** 19 September to 25 September 2022
2. **Title/Theme of the Program:** "Learning the Technology and Applications of DST Sponsored Advanced Instruments".
3. **Program for the benefit of:** Teachers to gain knowledge about the in-depth analysis of the characterization techniques using high-end analytical instruments
4. **Objective:** To enable the participants to understand the principles, applications, and hands-on experience on sophisticated analytical instrument
4. **Total no. of participants:** 2
5. **Venue of the program:** NIT Jalandhar

Two teachers of PG Department of Physics of Kanya Maha Vidyalaya Jalandhar Dr. Neetu Verma and Dr. Surbhi had attended a one week Training Program on R&D Equipments under the scheme 'Synergistic Training program Utilizing the Scientific and Technological Infrastructure' (STUTI) from 19-25 september 2022. The theme of the program was "Learning the Technology and Applications of DST Sponsored Advanced Instruments". This Training program was organized by NIT Jalandhar, Punjab in association with NIT Warangal, Telangana. The STUTI-21 program was sponsored by DST, Govt. of India and intended to build human resource and its knowledge capacity through open access S&T Infrastructure across the country. As a complement to the various schemes of DST funding for expansion of R&D Infrastructure at academic institutions, STUTI scheme envisioned a hands-on training program and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access of S&T facilities.

The objectives of the program was to enable the participants to understand the principles, applications, and hands-on experience on sophisticated analytical instruments; to gain knowledge about the in-depth analysis of the characterization techniques using high-end analytical instruments; to interact with eminent professors/ scientists/ industrial research personnel and discuss real-time research and make collaborations; to encourage the participants to utilize the facilities and enhance the research temper and to create a research-friendly atmosphere by letting

the creative minds of the country exchange ideas and share their knowledge among their fellow participants.

On the first day (19 sept, 2022), the program was started with Inaugural session by the eminent Chief Guest, Prof B. K. Kanaujia, Director NIT Jalndhar, Punjab. He welcomed all the dignitaries present there and motivated the students by paving a path in nation building After that, the theory session was started by Dr. Vickramjeet Singh on instrumentation of Drop shape Analyzer for two hours followed by next theory session by Dr. Vimal Bhardwaj for fluorescence spectroscopy.

On 20 Sept, in the first half, we had two theory sessions on 100 kN/250 kN Close Loop Servo-controlled Actuator System by Prof S P Singh and on Rapid Chloride Permeability Tester by Dr Kanish Kapoor & Dr Navdeep Singh. After that we had a Hands-on Training Fluorimeter.

On 21 sept, in the first half, we had two theory sessions for experimental Rig by Dr. Rajeev Kukreja followed by MTS Servo Hydraulic 250 kN Fatigue Testing System by Dr. Raman Bedi. In the Second Half we had Hands-on Training 100 kN/250 kN Close Loop Servo-controlled Actuator System.

On 22 Sept, in the first half, we had two theory sessions on PXRD by Dr Uma Shanker followed by SEM by Dr. Raman Bedi. In the Second Half we had Hands-on Training on Experimental RIG by Dr Rajeev Kukreja in RAC LAB, Dept of Mech Engg.

On 23 sept we had one theory session on GC (Gas Chromatography) by Prof. N. C. Kothiyal followed by hands-on training on GC instruments. In the second half of the session, we had two theory sessions on AAS (Atomic Absorption Spectroscopy) followed by a Nal Gamma spectrometer by Dr. Rohit Mehra.

On Sept 24, we had three hands-on training on PXRD, AAS followed by NAL Gamma spectrometer.

On Sept 25, we had hands-on training on SEM and in the second half of the session we had a valedictory and feedback session. Dr. Rakesh Kumar and Dr. Sadhika Khullar compiled a brief overview of all the sessions and thanked all the Heads of the Departments and their faculty members for their support in delivering the lectures and conducting laboratory sessions. After that



certificates were distributed to the participants followed by taking their valuable feedback. A last, Sri D. Ravi Kumar, Technical officer and Program Coordinator, NIT Warangal thanked all Co- Coordinators and NIT Jalandhar for their support and motivation to conduct STUTI-21.

Hands on training on various instruments enhanced my research experience and practical knowledge which would greatly help in future research work. Principal Prof. (Dr.) Atima Sharma Dwivedi always guided and motivated teachers to extend their knowledge by attending such courses and to think beyond the limits for their own as well as institute growth.



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