

# Kamla Nehru Mahavidyalaya, Nagpur

## Department of Physics

### Academic Tour to Pune (2017-18)



Academic visit to Centre of Materials for Electronics Technology (CMET) and National Chemical Laboratory (NCL), Pune

**Objective:** To get the exposure regarding the recent scientific development, various scientific activities and the instrumentation facilities available at National Laboratories.

**Beneficiaries:** 47 Students and 5 faculties

**Observations:** During visit to NCL, team visited laboratories such as Carbon nano technology lab, X- Ray Diffraction unit and electron spectroscopy for chemical analysis (ESCA) Spectrometer. At CMET, team gets exposure on making of Li-ion Batteries, low-temperature cofired ceramic (LTCC) glass formation unit and information on patented projects.

**Outcome Report:**

- Students got aware of the facilities available at CMET and NCL, Pune.
- Few of the students shown interest in making career at NCL and CMET in future.
- B. Sc. Students are inspired to take admission in M.Sc. Physics at Savitribai Fule Pune University, Pune by appearing to the forthcoming common entrance examination of university.

#### Brief Report

The Department of Physics has organized study tour to visit **National Chemical Laboratory (NCL), Pune** and **Centre of Materials for Electronics Technology (CMET), Pune** during 15<sup>th</sup> to 20<sup>th</sup> Jan 2018. The total beneficiaries are **47 students** from M.Sc.I, M.Sc.II, B.Sc. final year and **5 faculties**. Student visited to NCL and CMET on 17<sup>th</sup> Jan 2018. The visit to Lonavala and Khandala was made on 18<sup>th</sup> Jan 2018. Students also visited Panchgani, Mahabaleshwar and Pratap Garh Fort on 19<sup>th</sup> Jan 2018 to undergo through various adventure activities. The study tour ends on 20<sup>th</sup> Jan 2018.

## Expert Talk (2017-18)

**Objective:** To provide career counselling and guidance for various fellowships available for higher studies.

**Number of Beneficiaries:** 80 Students

**Outcome:** Students became aware about fellowships for higher studies.

### Brief Report

Department of Physics has organized expert talk of Dr. Hemlata Sharma on 17<sup>th</sup> Feb 2018 on “Career Counselling, Career Options and available fellowships for Ph.D.”. She has explained the funding for research fellow such as INSPIRE fellowship, Women’s Scheme A and B fellowship from different agencies such as UGC, DBT, DST and GOI. She recently visited Newcastle upon tyle University, UK under Newton Bhabha Ph.D. placement programme for 6 Months. About 80 students of B.Sc final and M.Sc and all physics teachers attended the programme.

## TEACHER’S DAY



On 5<sup>th</sup> sep. 2017 the students of M. Sc. 1<sup>st</sup> and 2<sup>nd</sup> year from physics dept. celebrated teacher’s day in a unique way. On this day, we gratefully remember the great educationist Dr. Sarvapalli Radhakrishnan.

The program started at 11:00 a.m. in the department of physics, where the respected teachers were welcome by the students.. The program was conducted by M.Sc. student Nitin Doye, Pranali Dhoble and Akash Ingale. Students delivered the speech on this occasion.

The motivational speeches were given by all respected teachers. The program ends with vote of thanks followed by high tea.

## Extension Activity (2017-18)

Use of Solar Energy: Today's Need and Importance of Rain Water Harvesting



Students of Physics Department delivered demonstrations and enlighten people about “Use of Solar Energy: Today’s Need” and “Importance of Rain Water Harvesting”

### Brief Report

**Objective:** To create awareness among people regarding non conventional energy sources.

**No of Beneficiaries: 34 Families**

**Outcome:** People showed interest in installing solar water heater and understood the importance of conservation of rain water.

Department of Physics has organized extension activity on 3<sup>rd</sup> Feb 2017. There are 3 teachers and 44 Students of B.Sc.I, M.Sc.I and M.Sc.II participated in the activity. They visited around 34 houses and demonstrated and enlightened people about “**Use of Solar Energy: Today’s Need**” and “**Importance of Rain Water Harvesting**”. Since our college firmly believe and knows the importance of Green source of energy. It’s our small contribution towards the social welfare of society. The activity took place at Awadhut Nagar, Manewada Road, Nagpur. Students as well as teachers actively participated in this event. People of Awadhut Nagar are satisfied and glad to receive the information about the benefits of solar energy and rain water harvesting to them and the environment. This event enhanced the confidence of students as they interacted with the people. Being part of this event it generated the sense of responsibility towards the environmental and social issue among student.

# Twinning Program (2017-18)

## **1. Introduction**

Department of Physics, Kamla Nehru Mahavidyalaya creating excellent opportunity for the students and faculties of Chemistry and Electronics department to learn about the PL and TL characterisation under the name of interdepartmental activity. A live demonstration of the machine was given. The characterization machine is very well known in the field of science and technology.

## **2. Objectives**

The objectives of the interdepartmental activity are,

1. To give information on the working principle of machine.
2. How to calibrate and prepare sample for the analysis.
3. How to analyse the information obtained by PL and TL characterisation.

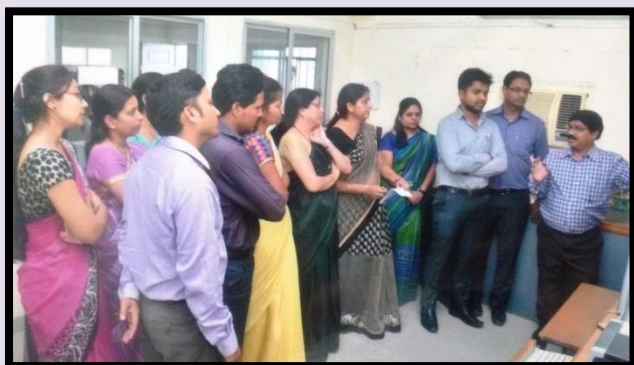
With these above objectives in mind the activity is very useful for the researchers.

## **3. Beneficiaries**

27 Students and 10 Faculties

## **4. Expected Outcome**

- a. After attending this workshop students are able to analyse the data obtained from that PL and TL machine.
- b. It is very useful for their future research work.



Dr. S. P. Puppalwar demonstrating PL Characterization