

Janata Shikshan Sanstha's
Kisan Veer Mahavidyalaya, Wai (Satara)
Department of Chemistry
M.Sc. I and II Study Tour
2023-24

REPORT

Date : 28th February 2024

Places Visited : Wai -Swami Narayan Temple - *IISER- C-MET- -Savitribai Phule Pune University- Balaji-Datta Temple (Narayanpur)-Wai.*

Aim of Tour : The main aim of our study tour was to visit national level science and knowledge-based research organizations like IISER and C-MET and to collect informative knowledge about recent trends in research, introduce the students with instruments used at research level and industry level. Also to visit nearby temples.

Visit to Swami Narayan Temple : The students first visited the Swami Narayan temple which comes at the beginning of the Journey.

Visit to IISER : The students then visited the IISER, there was National Science Day celebration. students saw the projects brought to the science fair.

Visit to C-MET : The students next visited C-MET, instrumental operator show demo of industrial instruments like XRD, FDM, FT-IR, HPLC, SEM, GC, UV-VIS Spectrophotometer and explained application of plasma laboratories.

XRD -In materials research, the scientist has many analytical questions related to the chemical composition and crystalline constitution of materials. X-ray diffraction (XRD) is the only laboratory technique that non-destructively and accurately obtains information about chemical composition, crystal structure, crystal orientation, crystallite size, lattice strain, preferred orientation and layer thickness. Materials researchers therefore use XRD to analyze a wide range of materials, from powders to solids, thin films and nanomaterials.

FDM -Fused Deposition Modeling (FDM) systems and related technologies are the most accessible and widely used form of 3D printing. FDM machines build parts layer-by-layer from the bottom up by heating and extruding thermoplastic filament. The production-grade thermoplastic material used is suitable for detailed functional prototypes, durable manufacturing tools & low-volume manufacturing parts.

FT-IR -Fourier Transform Infrared Spectroscopy, also known as FTIR Analysis or FTIR Spectroscopy, is an analytical technique used to identify organic, polymeric, and, in some cases, inorganic materials. The FTIR analysis method uses infrared light to scan test samples and observe chemical properties.

HPLC -High-performance liquid chromatography (HPLC), formerly referred to as high-pressure liquid chromatography, is a technique in analytical chemistry used to separate, identify, and quantify specific

components in mixtures. The mixtures can originate from food, chemicals, pharmaceuticals, which have been dissolved into liquid solutions.

SEM –A scanning electron microscope is a type of electron microscope that produces images of a sample by scanning the surface with a focused beam of electrons. The electrons interact with atoms in the sample, producing various signals that contain information about the surface topography and composition of the sample. The electron beam is scanned in a raster scan pattern, and the position of the beam is combined with the intensity of the detected signal to produce an image.

GC –Gas chromatography is the process of separating compounds in a mixture by injecting a gaseous or liquid sample into a mobile phase, typically called the carrier gas, and passing the gas through a stationary phase. The mobile phase is usually an inert gas or an unreactive gas such as helium, argon, nitrogen or hydrogen. The stationary phase can be solid or liquid.

UV- VIS Spectrophotometer –A UV-VIS spectrophotometer is an analytical instrument that measures the amount of ultraviolet (UV) and visible light that is absorbed by a sample. It is a widely used technique in chemistry, biochemistry, and other fields, to identify and quantify compounds in a variety of samples.

Visit to Pune University :The students visited chemistry laboratories in the Savitribai Phule University. They interacted with university students. The teachers briefed our students about the instruments they used common facility centre (Research Centre) like UV-VIS spectrometer, UV chamber, GCMS, LCMC, NMR spectrometer, SEM.

Visit to Balaji Temple and Shree Datta Temple :While returning home, students visited the Balaji temple and Shree Datta temple in Narayanpur.

Overall the Study Tour was successful and will be beneficial to our students of M.Sc. I and M.Sc. II. Total 25 students in which 08 males and 17 females along with 5 staff members had participated in the study tour.



A handwritten signature in blue ink, appearing to be "Arav" or similar, written over a horizontal line.

Head

Department of Chemistry

रसायनशास्त्र विभाग,
किसन वीर महाविद्यालय, वाई,
दि. २९.०१.२०२४

सूचना :-

बी. एस्सी. भाग - ३ व एम.एस्सी. भाग १ व २ मधील सर्व विद्यार्थ्यांना कळविण्यात येते की, नॅशनल केमिकल लॅबोरेटरी, पुणे येथे औद्योगिक भेट आयोजित केली आहे. तरी सदर भेटीसाठी प्रत्येकी रु. ५००/- कु. पुजा जायगुडे यांचेकडे दि. ०१ फेब्रुवारी २०२४ अखेर जमा करावेत.



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विभाग प्रमुख,
रसायनशास्त्र विभाग

Department of Chemistry
Kisan Veer Mahavidyalaya, Wai
Date: 26/02/2024

To,
The Principal
Kisan Veer Mahavidyalaya, Wai.

Respected Sir,

The department of chemistry going to organise visit to NCL, IISER and C-MET on Wednesday, 28th February 2024. Total 5 faculty and 25 students are participating for the same. Please grant the permission for the same.

The names of the students and faculty are as follows :

STUDENT NAME

1. BHOSALE TRUPTI KRISHNAT
2. PISAL SNEHAL RAJENDRA
3. SHINDE KAJAL RAJENDRA
4. BHOSALE PRATIKSHA PRADIP
5. TARATE VAISHNAVI ANIL
6. KHANDE SIDDHI SANJAY
7. PISAL KETAN KISHOR
8. SHELAR SWAPNALI SUBHASH
9. CHAVAN GANESH JAYWANT
10. SALUNKHE ASHUTOSH SATISH
11. GHADAGE YASHASHRI PRAMOD
12. MULIK GANESH KIRAN
13. RAJE SHUBHAM RAJENDRA
14. KACHARE RAHUL SUBHASH
15. SURYAWANSHI PRIYANKA CHINCHOLPPA
16. VAIRAT PRIYANKA ANANDA
17. JAMDADDE SNEHAL SANJAY
18. BAGAL AISHWARYA SOMESHWAR
19. KAMBLE MAYURI MEGHNATH
20. DABHADE SHARVARI MILIND
21. THORAVE PRIYANKA DINESH
22. SHINDE SAURABH MOHAN
23. PISAL SUSHMA AJIT
24. KOCHALE PRITI DAGADU
25. JAGTAP PRAJAKTA PRAVIN

FACULTY NAME

1. PROF. (DR.) D. N. ZAMBARE
2. MRS. D. S. PATIL
3. MR. A. A. DHANAWADE
4. MISS. R. R. KAMBLE
5. MISS. N. S. SURVE



Derub

Head
Department of Chemistry

Allowed
Bawant
27/02/2024

**JANATA SHIKSHAN SANSTHA'S
KISAN VEER MAHAVIDYALAYA, WAI
DEPARTMENT OF CHEMISTRY
STUDY TOUR (NCL, IISER, C-MET) M.Sc. I & II**

Attendance

Date: 28.02.2024

Sr. No.	Roll No.	Name of Participant	Gender	Signature
1	27	Jagtap Prajakt Pravin	F	<i>Prajakt</i>
2	18	Pisal Sushma Ajit	F	<i>S.A.Pisal</i>
3	28	Khande Siddhi Sanjay	F	<i>Khande</i>
4	27	Pisal Snehal Rajendra	F	<i>Pisal</i>
5	25	Tarate Vaishnavi Anil	F	<i>Tarate</i>
6	26	Tamdate Snehal Sanjay	F	<i>Tamdate</i>
7	31	Surywanshi Priyanka C	F	<i>Priyanka</i>
8	33	Shelar Swapnali S	F	<i>Shelar</i>
9	07	Bhosale pratiksha pradip	F	<i>Bhosale</i>
10	02	Dabhade Sharvan M	F	<i>Dabhade</i>
11	05	Bagal Aishwarya S	F	<i>Bagal</i>
12	04	Kamble Mayuri M	F	<i>Kamble</i>
13	06	Bhosale Trupti K	F	<i>Bhosale</i>
14	08	Vaireat Poojanka P	F	<i>Vaireat</i>
15	03	Chavan Ganesh J.	M	<i>Ganesh</i>
16	23	Ghinde Kajal R	F	<i>K.R.Ghinde</i>
17	24	Ghadge Yashraj P	F	<i>Ghadge</i>
18	12	Satunkhe Ashutosh S.	M	<i>Satunkhe</i>
19	13	Raje Shubham R.	M	<i>S.R.Raje</i>
20	14	Murlik Ganesh K.	M	<i>Murlik</i>
21	28	Shinde Souvik M.	M	<i>Shinde</i>
22	18	Pisal Ketan D.	M	<i>Pisal</i>
23	20	Wagh Agamya S.	M	<i>Wagh</i>
24	17	Kachare Rahul S	M	<i>Kachare</i>
25	11	Kochale Priti	F	<i>Kochale</i>
26				
27		Male - 08		
28		Female - 17		
29		Faculty - 05		

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