

Activity Report
Academic Year 2019-20



| | |
|---|--|
| Name of the activity | Guest Lecture |
| Name of the Place | G. M. Vedak College of Science, Tala Raigad |
| Date | 22/11/2019 |
| Organizing Dept/Committee | Department of Chemistry |
| Name of the Coordinator of the activity and Members | Dr. Sachn V. Bangale |
| Name of Guest/Resource Persons | Dr. Vilar R. Jadhavar Assistant Professor, K.E.S. Anandibai Pradhan Science College, Nagothane- 402125. |
| Activity for Class/Group | M.Sc. Organic Chemistry Students |
| Objective for Conducting the Activity | To understand the basic idea about the instruments used in analytical chemistry. |
| No. of Participants | Students: 44 Teachers: 04 |
| Outcome of the Programme /Activity | Students can learn about the instrumentation in analytical chemistry. |
| External Agency Associated (If any) | NA |
| Proof Attached | |
| <ol style="list-style-type: none"> 1. Report 2. Invitation Letter 3. Notice 4. Photos | |

| | | | |
|---------------------------|------------------------|------------------|-----------|
| | | | |
| In-charge of the activity | Head of the Department | IQAC Coordinator | Principal |

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 Shri. G. M. Vedak Pratishthan's G.M. Vedak College of Science, Tala-Raigad, Pin-402 111. Shri. G. M. Vedak Pratishthan's G.M. Vedak College of Science, Tala-Raigad, Pin-402 111. Shri. G. M. Vedak Pratishthan's G.M. Vedak College of Science, Tala-Raigad, Pin-402 111.

Shri. Gopinath Mahadev Vedak Pratishthan's
G. M. Vedak College of Science Tal Raigad.

Department of Chemistry
Academic Year 2018-19

Title: Guest Lecture in the Subject of Analytical Chemistry

Date 22/11/2019

Time 11.00 am

Vane: Seminar Hall

Class: M.Sc.

Introduction:

The Department of Chemistry recently hosted a guest lecture by Dr. Vilas R Jadhavar, an esteemed expert in Analytical Chemistry. The lecture aimed to delve into cutting-edge research and advancements within the realm of chemistry, providing students and faculty with valuable insights into emerging trends and methodologies.

Lecture Content:

1] Overview of Analytical Instruments:

- Introduction to analytical chemistry and the importance of instrumentation.
- Classification of analytical instruments based on their operational principles (e.g., spectroscopic, chromatographic, electrochemical, and thermal analysis instruments).

2] Spectroscopic Techniques:

- UV-Visible Spectroscopy: Principles, instrumentation, and applications in determining the concentration of substances.
- Infrared Spectroscopy (IR): Fundamentals, types of IR instruments (e.g., FTIR), and its use in identifying functional groups in organic compounds.
- Nuclear Magnetic Resonance (NMR) Spectroscopy: Basics of NMR, interpretation of spectra, and applications in structural elucidation of organic compounds.

3] Chromatographic Techniques:

- Gas Chromatography (GC): Principles, types of detectors (e.g., FID, TCD), and its applications in the separation of volatile compounds.
- High-Performance Liquid Chromatography (HPLC): Overview of HPLC systems, types of columns, and applications in pharmaceuticals and biochemistry.

4] Electrochemical Techniques:

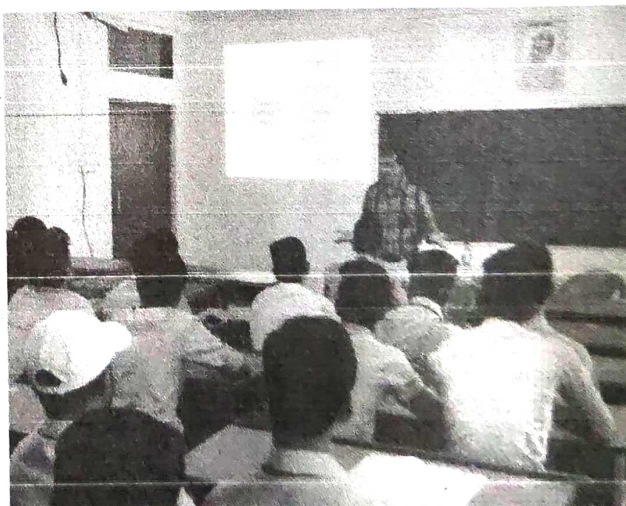
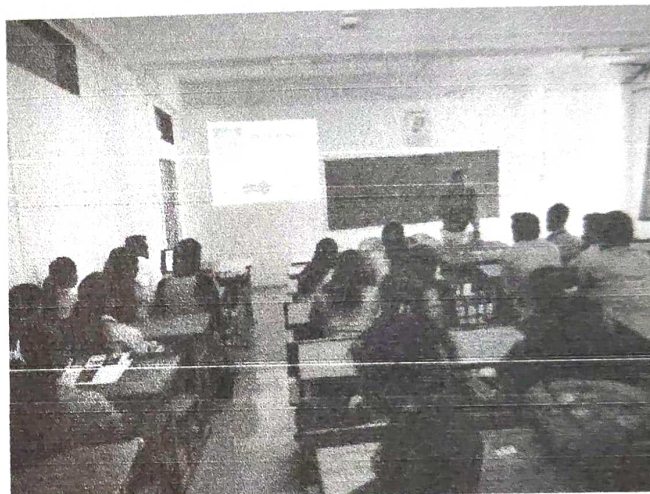
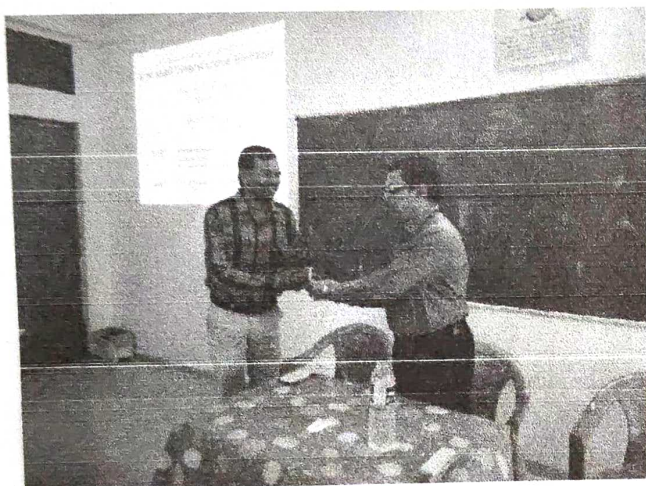
- Potentiometry: Principles and applications of ion-selective electrodes.
- Voltammetry: Types (e.g., cyclic voltammetry), instrumentation, and its use in trace analysis.




Conclusion:


In conclusion, Dr. Vilas R Jadhavar guest lecture was a resounding success, offering invaluable insights into the forefront of chemistry research and practice. The session not only expanded attendees' knowledge base but also inspired further exploration and inquiry into the discussed topics. The Department of Chemistry extends its gratitude to Dr. Vilas R Jadhavar for their enlightening contribution to our academic community.

Photographs




M.Sc.
Coordinator


Head
Department Chemistry
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Principal
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Date: 22/11/2019

Notice

All the students of M.Sc. organic chemistry are hereby informed that there is guest lecture organize by the department on the topic "**Guest Lecture in the Subject of Analytical Chemistry**" 22/11/2019 at 11 am., all the students are requested to remain present for the same.

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Date 18/11/2019

To,
Dr. Vilas R. Jadhavar
Assistant Professor,
K.E.S. Anandibai Pradhan Science College,
Nagothane- 402125.


Dear Sir,

I take immense pleasure in inviting you to delivered a lecture on the topic
"Guest Lecture in the Subject of Analytical Chemistry" 22/11/2019 at 11 am.
Your expertise and insights would greatly benefit our M.Sc. part-1 students, and
we sincerely hope you can join us. Please consider this letter as a humble
invitation.

Hoping for similar co-operation in future.

Thanking You,




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G.M. Vedak College of Science, Tala - Raigad

Class - M.Sc. (Part-I), Academic Year - 2019-20

Guest Lecture

Topic Name - Guest Lect in the sublt
of Analytical chemistry

Date - 24/11/2019



Sr. No.

Student Name

Sign

1.

Ambroskam Poetik Kedae

Ambroskam

2.

Bandemkar Ayesha Farooque

Ayesha

3.

Bhoir Ketan Govind

Khoir..

4.

Dabiz Umariz zulfikar

Dabiz

5.

Dalvi Akshita Chandankant

Dalvi

6.

Deshmukh Pradkumn Prakash

Deshmukh

7.

Gaiwad Mkhil Ramesh

Mkhil

8.

Khadekar manali subam

manali

9.

Khadekar mayur mangesh

Khadekar

10.

Khade sunil mahadev

Khade

11.

Kushwab Jay Kedan

Kushwab

12.

more Anishay yashwant

Anore.

13.

Pattankar Shubham Deadeop

Shubham

14.

Patil Swapnil Bajirao

Bajirao

15.

Pokale Pranav Gorakhanath

Pranav

16.

Rahatwilkar Heena mohiddin

Heena

17.

Salun Akshay ANANT

Salun

19.

Siddique Ehsanul Abdul haque

Siddique

20.

Solkar Ayesha M. TAKIR

Ayesha

21.

Thakur Anirishh Jai Thakuram

Thakur

22.

Thakur Roshan Raghunath

Thakur

23.

Tuave Suraj maruti

Tuave

24.



Topic Name - Guest lecture of Inorganic
Sulphur Anhydride chemistry

Date - 22/11/2019

| Sr. No. | Student Name | Sign |
|---------|-------------------------------|------------------|
| 1] | bhagat pooja Avinash | <u>Pooja.</u> |
| 2] | chitalkar Vaibhavi balchandra | <u>Vaibhavi</u> |
| 3] | Divekar Rahul Nathuram | <u>Rahul</u> |
| 4] | Geetha Mohan | <u>Geetha</u> |
| 5] | Jadhav Namita namdev | <u>Namita</u> |
| 6] | Kadam Dhanashri Dipak | <u>Dhanashri</u> |
| 7] | Kadam Praanya Dyaneshwar | <u>P. Kadam</u> |
| 8] | Madgunkaki Veena mahadev | <u>Veena</u> |
| 9] | more Abhishek Ashok | <u>A. more</u> |
| 10] | more Poolesh Nathuram | <u>Poolesh.</u> |
| 11] | Mundhe Mukta Lenvi | <u>Mukta</u> |
| 12] | Nadkar Rakesh balasam | <u>Rakesh.</u> |
| 13] | Nadkar Yogesh balasam | <u>Yogesh</u> |
| 14] | Nakti Nirmala Ramchandray | <u>Nirmala</u> |
| 15] | Patil mayur Hirachandra | <u>Patil</u> |
| 16] | Rajpurkar Vijay Vidyadhar | <u>Vijay</u> |
| 17] | Sing Ashish Bhudev | <u>Ashish</u> |
| 18] | Talgaonkar Nikhil Nandkumar | <u>Nuraghele</u> |
| 19] | Waghmare Sahil Naresb | <u>Sahil</u> |
| 20] | Waje Keshav Katan | <u>Katan.</u> |



**Activity Report
Academic Year 2018-19**

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|--|---|
| Name of the activity | Guest Lecture |
| Name of the Place | G. M. Vedak College of Science, Tala Raigad |
| Date | 28/11/2019 |
| Organizing Dept/Committee | Department of Chemistry |
| Name of the Coordinator of the activity and Members | Dr. Sachn V. Bangale |
| Name of Guest/Resource Persons | Dr. Harichandra A. Parbat Assistant Professor, Wilson College, Chowpatty, Mumbai. |
| Activity for Class/Group | M.Sc. Part I Physical Chemistry Students |
| Objective for Conducting the Activity | To understand the Basic Concepts in Physical chemistry. |
| No. of Participants | Students: 20 Teachers: 04 |
| Outcome of the Programme /Activity | Students can learn about the Molecular spectroscopy and Fundamental of Quantum Chemistry. |
| External Agency Associated (If any) | NA |
| Proof Attached | |
| <ol style="list-style-type: none"> 1. Report 2. Invitation Letter. 3. Notice 4. Photos | |

| | | | |
|---------------------------|------------------------|------------------|-----------|
| | | | |
| In-charge of the activity | Head of the Department | IQAC Coordinator | Principal |

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COORDINATOR, IQAC
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RO/No. GMVC/ 190 /2019-20

Date: 27/11/2019

To,

Dr. Harichandra A. Parbat

Assistant professor

Wilson College, Chowpatty,

Mumbai

Respected sir,

It is a matter of utmost delight for the undersigned to express our gratitude for heaving accepted our invitation and worked as a visiting faculty for engaging M. Sc. Part- I, Semester- I Physical Chemistry lectures in our college on 28th November, 2019.

Hoping for similar co-operation in future.

Thanking you,



PRINCIPAL

Dr. Vijay M. Sarode

M.Sc (Stats.), C.P.S., Ph.D. (Stats.), D.Litt. (Hon.)

Shri. Gopinath Mahadev Vedak Pratishthan's
G. M. Vedak College of Science Tal Raigad.



Department of Chemistry
Academic Year 2018-19

Guest Lecturer Report: Guest Lecturer in the subject Physical Chemistry

Date: 28/11/2019

Time: 11.00 am

Vane: Seminar Hall

Class: M.Sc. Part I

Lecturer: Dr. Harichandra A. Parbat,
Assistant Professor, Wilson College, Chowpatty, Mumbai.

Location: Department of Chemistry, G. M. Vedak College of Science Tala, Raigad.

Introduction

This report summarizes the key aspects of the recent guest lectures delivered in the subject of Physical Chemistry. The lectures aimed to enhance students' understanding of advanced topics and current research trends in the field.

Lecturer Profile

Dr. Harichandra A. Parbat, a renowned Physical Chemist with over 15 years of research and teaching experience, delivered the lectures. **Dr. Harichandra A. Parbat** holds a Ph.D. in Physical Chemistry and has published extensively in peer-reviewed journals.

Lecture Topics

The guest lectures covered the following topics:

- **Thermodynamics:** Detailed discussions on the laws of thermodynamics, Gibbs free energy, and phase equilibria.
- **Quantum Chemistry:** Introduction to quantum mechanics, atomic and molecular orbitals, and their applications in chemical bonding.
- **Spectroscopy:** Fundamentals of spectroscopy, including UV-Vis, IR, NMR, and their uses in identifying molecular structures.
- **Statistical Mechanics:** Basics of statistical mechanics, distribution functions, and their relevance to thermodynamic properties.

Student Engagement

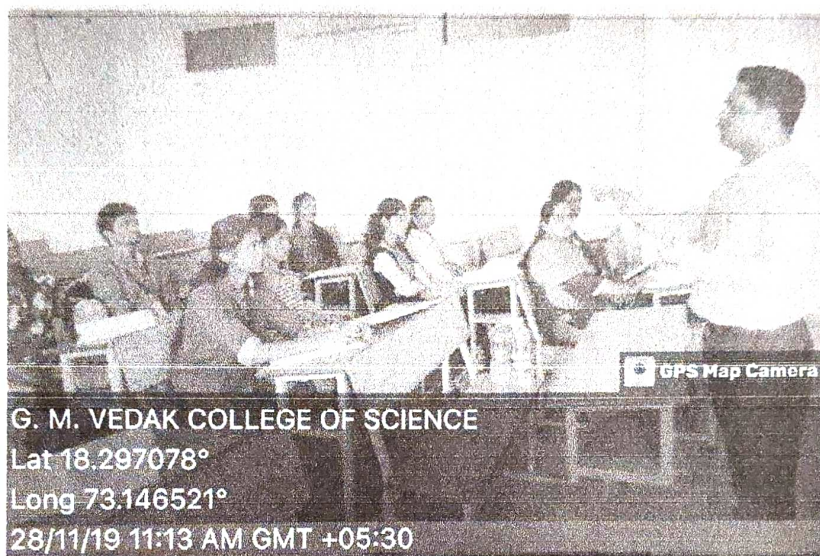
Dr. Harichandra A. Parbat employed various strategies to engage students:

- **Interactive Discussions:** Encouraged questions and facilitated discussions to deepen understanding.
- **Case Studies:** Presented real-world applications and case studies to illustrate complex concepts.

Benefits

The guest lectures offered several benefits:

- **Enhanced Understanding:** Students gained deeper insights into complex topics through expert explanations.
- **Exposure to Research:** Dr. Harichandra A. Parbat shared her research experiences, inspiring students to explore research opportunities.
- **Networking:** Students had the opportunity to connect with a leading expert in Physical Chemistry, potentially aiding their future academic and career endeavors.



M.Sc.
Coordinator

Head
Department Chemistry

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Date: 23/11/2019

Notice

All the students of M.Sc. organic chemistry are hereby informed that there is guest lecture organize by the department on the topic "**Guest Lecture in the Subject of Physical Chemistry**" 28/11/2019 at 11.00 am., all the students are requested to remain present for the same.



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Guest Lecture

Class - M.Sc. (Org. Chem) - I

Academic Year - 2018-19

Subject Name - physical chemistry

Topic Name - "Guest Lecture in the subject of physical chemistry"

Date - 28/11/2019

Sr. No.

Student Name

Sign

| | | |
|-----|---------------------------------|-----------|
| 1. | Bhagat Pooja Avinash | Pooja. |
| 2. | (Chitalkar Vaibhavi Bhulchandra | Vaibhavi |
| 3] | Divekar Rahul Nandkumar | Rahul. |
| 4] | Geetha Mohan | Geetha |
| 5] | Jadhav Namita Nambur | Namita. |
| 6] | Kadam Dhunushei Dipak | Dhunushei |
| 7] | Kadam Pradnya Dyaneshwar | Pradnya. |
| 8] | Madgunki Veena Mahadev | Veena |
| 9] | Mose Abhishek Ashok | Abhishek |
| 10] | Mose Paresh Pandurang | Paresh |
| 11] | Mundhe Mayura Sunil | Mayura |
| 12] | Nadkar Rakesh Balaram | Rakesh |
| 13] | Nadkar Yogesh Balaram | Yogesh |
| 14] | Nakti Nizamula Ramchandra | Nizamula |
| 15] | Patil Mayur Kirochand | Patil... |
| 16] | Rajpurkar Vijay Vidyadhar | Vijay |
| 17] | Sing Ashish Bhudev | Ashish |
| 18] | Wagle Nikhil Nandkumar | Nikhil |
| 19] | Waghmare Sahil Naresh | Waghmare |
| 20] | Waje Ketan Keshav | Ketan. |