

Dr. Ambedkar College Deekshabhoomi, Nagpur

Department Of Biochemistry and Biotechnology

Organizing a Ten days workshop

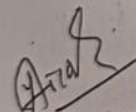
On

Research Methodology and Scientific Writing

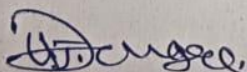
Date	Time	Resource Person	Topics
4/10/2024	12.30 pm -1.00	Workshop Inauguration and well come address by principal Dr. B. A. Mehere	
4/10/2024	1.00 -3.00 pm	Prof. Pradip Hirapure	What is Research?, its types and Research Process
5/10/2024	1.00-3.00 pm	Prof. Rita Lakkakul	Literature review process and its importance
6/10/2024	11.00-1.00 (online)	Prof. Suresh Suryvanshi	Research Design and Methods
7/10/2024	8.30 -10.30 am (online)	Prof. Utpal Dongre	Data Processing and Analysis strategies
8/10/2024	11.00-1.00 pm	Prof. Bharat Kharat	Reporting and writing scientific Reports
9/10/2024	11.00-1.00 pm	P rof. Deovrat Begde	Intellectual Property
10/10/2024	11.00-12.00 am	Prof. Swati chimurkar	Measures of Central Tendency
10/10/2024	12.00- 1.00 pm	Prof. Pallavi Pantawane	Measures of Dispersion
11/10/2024	11.00-12.00pm	Prof. Nikita Mohod	Sampling Methods

Inauguration Ceremony: on 4 October 2024 , Time: 12.30 to 1.00 pm in Room No. 1

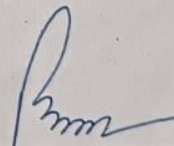
Note: This workshop is compulsory for all students of M.Sc. Sem I & III of Biochemistry and Biotechnology subjects


Prof. Pradip Hirapure

Co-ordinator


Dr. Utpal Dongre

Head of the Department


Dr. Mrs. B. A. Mehere

Principal

The Department of Biochemistry and Biotechnology at Dr. Ambedkar College Deekshabhoomi, Nagpur, successfully organized a ten-day workshop titled "*Research Methodology and Scientific Writing*" from 4th to 11th October 2024. This initiative was aimed at enhancing the understanding of core research concepts and scientific communication skills among M.Sc. (Sem I & III) students. The workshop served as an essential academic platform to help students build competence in conducting scientific research and reporting their findings effectively.

The workshop began on 4th October 2024 with an inaugural session led by the Principal, Dr. B. A. Mehere. She delivered a welcome address highlighting the growing importance of research and scientific integrity in the current academic and industrial landscape. She also emphasized the need for young researchers to be equipped with the right tools and knowledge to contribute meaningfully to the scientific community. The first technical session was conducted by Prof. Pradip Hirapure, who introduced the participants to the fundamental concept of research. He elaborated on the types of research, including basic, applied, qualitative, and quantitative, and walked students through the step-by-step research process. His engaging talk set a strong foundation for the rest of the workshop.

On the second day, 5th October 2024, Prof. Rita Lakkakul presented a session on the *Literature Review Process and Its Importance*. She emphasized that a thorough literature review is essential for identifying research gaps, refining research questions, and building a theoretical framework. She introduced students to various scientific databases and demonstrated how to evaluate sources critically and ethically manage references using tools like Mendeley and Zotero. Her session encouraged students to adopt a more analytical and evidence-based approach to their scientific explorations.

The third day of the workshop, 6th October 2024, featured a session by Prof. Suresh Suryavanshi on *Research Design and Methods*. He discussed various types of research designs such as experimental, descriptive, and correlational studies. Prof. Suryavanshi stressed the importance of aligning research design with research objectives and hypotheses. He also explained the importance of reliability, validity, and ethical considerations in research methods, which helped students understand how to formulate a scientifically sound and methodologically robust study.

On the fourth day, 7th October 2024, Prof. Utpal Dongre conducted an online session on *Data Processing and Analysis Strategies*. His session introduced students to the basics of data management, including data entry, coding, and tabulation. He explained how descriptive and inferential statistics can be applied to analyze research findings and interpret results meaningfully. Prof. Dongre also demonstrated the use of statistical software such as SPSS and Excel, offering hands-on guidance to enhance students' analytical skills.

On 8th October 2024, Prof. Bharat Kharat took a comprehensive session on *Reporting and Writing Scientific Reports*. He explained the structure and format of a scientific report, including essential components such as the abstract, introduction, materials and methods, results, discussion, and references. He emphasized the need for clarity, logical flow, and accuracy while drafting scientific manuscripts. His insights on avoiding plagiarism and

ensuring transparency in data presentation were particularly useful for students planning to publish their research.

The sixth day, 9th October 2024, featured a lecture on *Intellectual Property* by Prof. Deovrat Begde. He provided a detailed overview of Intellectual Property Rights (IPR), discussing patents, copyrights, trademarks, and trade secrets. Prof. Begde explained the importance of protecting one's innovative work and outlined the procedures and criteria for patent filing. He also shared real-life examples to illustrate how intellectual property can be leveraged in academia and industry alike, which broadened students' understanding of research ownership and legal safeguarding.

On 10th October 2024, two back-to-back sessions focused on statistical concepts. In the first session, Prof. Swati Chimurkar explained *Measures of Central Tendency*, including mean, median, and mode. Using real-life datasets, she demonstrated how these measures provide a summary of research data and facilitate interpretation. In the second session, Prof. Pallavi Pantawane discussed *Measures of Dispersion*, such as range, variance, standard deviation, and coefficient of variation. She explained how these tools help assess the variability in a dataset and aid in comparing different experimental groups. These sessions provided students with essential statistical tools for analyzing and interpreting their research data effectively.

The final day of the workshop, 11th October 2024, concluded with a session by Prof. Nikita Mohod on *Sampling Methods*. She discussed both probability sampling techniques—such as simple random, stratified, and systematic sampling—and non-probability techniques like convenience and purposive sampling. Prof. Mohod stressed the importance of selecting an appropriate sampling method to ensure the reliability and generalizability of research results. She also highlighted the common pitfalls in sampling and ways to overcome them.

Overall, the ten-day workshop on *Research Methodology and Scientific Writing* proved to be a comprehensive and enriching experience for all participants. The topics covered were methodically organized to reflect the logical progression of a research project, from its conceptualization to the communication of results. The workshop not only enhanced students' understanding of research fundamentals but also empowered them with practical tools for scientific writing, data analysis, and intellectual property management.

The contribution of the resource persons, who are experts in their respective fields, added immense value to the sessions. Their lectures were not only informative but also interactive, encouraging student engagement and critical thinking. Students appreciated the clarity and depth with which complex topics were explained, making the sessions both accessible and impactful.

Special thanks are due to Principal Dr. B. A. Mehere for her encouragement and support. The successful organization of this workshop was made possible by the leadership of Dr. Utpal Dongre, Head of the Department, and Prof. Pradip Hirapure, the workshop coordinator. Their meticulous planning and execution ensured that the workshop was both educational and enjoyable. The dedication of faculty and active participation by students contributed significantly to the overall success of this academic endeavor.

The workshop concluded with a renewed sense of enthusiasm among students to approach their research work with greater confidence and competence. It served as a stepping stone for many to pursue scientific inquiry with rigor, ethics, and clarity.



Inauguration of workshop



Head of the Département Dr. Utpal Dongre remark



Welcome address by Prof. Pradip Hirapure



Principal Dr. B.A. Mehre addressing participants



Participants in workshop

Dr. Ambedkar College , Deekhabhoomi ,Nagpur
Department of Biochemistry and Biotechnology
Workshop on Research methodology & Scientific Writing
(4/10/24 to 11/10/24)
Feedback form

Name of participant: Vidhi Nandeswar

Section 1: Participant Details

1. Your current status:

- ☐ Undergraduate Student
- ☒ Postgraduate Student
- ☐ Research Scholar
- ☐ Faculty
- ☐ Other

2. Your subject area:

- ☒ Life Sciences
- ☐ Physical Sciences
- ☐ Social Sciences
- ☐ Engineering
- ☐ Humanities
- ☐ Other

3. Have you attended a similar workshop before?

- ☐ Yes
- ☐ No

◆ Section 2: Workshop Content

4. The content covered in the workshop was:

- ☒ Very relevant and useful
- ☐ Relevant
- ☐ Somewhat useful
- ☐ Not useful

5. The session on Research Methodology improved my understanding:

- ☒ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

6. The session on Scientific Writing was:

- ☒ Very clear and informative
- ☐ Clear
- ☐ Average
- ☐ Confusing

7. The examples and case studies used during the workshop were:

- ☒ Very helpful
- ☐ Helpful
- ☐ Not much helpful
- ☐ Not at all helpful

8. The learning materials provided (slides, handouts, etc.) were:

- ☒ Excellent
- ☐ Good
- ☐ Satisfactory
- ☐ Poor

◆ Section 3: Workshop Delivery and Organization

9. The resource persons/speakers were:

- ☒ Very knowledgeable and engaging
- ☐ Knowledgeable
- ☐ Average
- ☐ Not effective

10. The sessions were well-structured and organized:

- ☒ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree

Dr. Ambedkar College , Deekhabhoomi ,Nagpur
Department of Biochemistry and Biotechnology
Workshop on Research methodology & Scientific Writing
(4/10/24 to 11/10/24)

Feedback form

Name of participant: Shreyashee Lachye

Section 1: Participant Details

1. Your current status:

- ☐ Undergraduate Student
- ☒ Postgraduate Student
- ☐ Research Scholar
- ☐ Faculty
- ☐ Other

2. Your subject area:

- ☒ Life Sciences
- ☐ Physical Sciences
- ☐ Social Sciences
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Dr. Ambedkar College , Deekhabhoomi ,Nagpur
Department of Biochemistry and Biotechnology
Workshop on Research methodology & Scientific Writing
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Feedback form

Name of participant: Hardik Chaudhary

Section 1: Participant Details

1. Your current status:

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- ☒ Postgraduate Student
- ☐ Research Scholar
- ☐ Faculty
- ☐ Other

2. Your subject area:

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