Minutes of Meeting for BOS Chemistry Department held on 06th March 2026

Day: Friday Date: 06/03/2026 Time: 11:15 am

Google meet link: https://meet.google.com/upv-pkrd-zda

The agenda and details of the meeting are as follows.

1. Welcome and introduction of all the esteemed BOS members.
2. To review and approve the structure of the first year of the undergraduate course in Chemistry.
3. To approve the structure of the fourth year (Honours) in Chemistry
4. To discuss methodologies for innovative teaching and evaluation techniques.
5. Any other matter with the permission of the chair.

An Online Meeting for the BOS for the Chemistry Department was held on **Friday**
Date: 06/03/2026 Time: 11:15 am

The HOD chaired the meeting, Prof. Dr. Ritika Makhijani.

It was attended by

1. The entire full-time Chemistry faculty at VESASC
   Prof. (Mrs.) Ritika Makhijani: Chairperson (HOD), Professor
   Prof. (Mrs.) Pooja Jagasia (Organic Chemistry), Professor.
   Dr. Dinesh Navale (Organic Chemistry), Assistant Professor.
   Dr. Prasanna Ranade (Organic Chemistry), Assistant Professor
   Ms. Shradha Warang (Physical Chemistry), Assistant Professor
   Mr. Manoj Yadav (General Chemistry), Assistant Professor
2. External Subject Expert Member: Prof. (Dr Raju Maruti Patil Professor Department of Chemistry, The Institute of Science, Dr. Homi Bhabha State University, 15, Madam Cama Road, Fort, Mumbai - 400032
3. External Subject Expert Member: Dr. Yogita Shinde, Assistant Professor. Kishinchand Chellaram College, HSNC University, Churchgate, 400 020
4. University Nominee: Prof. (Dr.) Harichandra Parbat Head, Department of Chemistry, Wilson College (Autonomous), Chowpatty, Mumbai-400 007
5. Subject Expert (R&D/ Industry): Mr. Vaibhav Rasam, General Manager Supply Chain, Loreal India
6. Alumnus: Dr. Ajay Gopinath Research Scientist at Mettler Toledo Pvt Ltd Mumbai Metropolitan Region.

Following points were discussed:

1. Welcome and Introduction of all the BOS members.

The Head, Prof. Dr. Ritika Makhijani, welcomed all BOS members.

2. To review and approve the structure of the first year of the undergraduate chemistry course.

The structure of the FYB.Sc. chemistry Semester II syllabus was discussed with the Board of Studies (BOS) members in the details. .
As per NEP structure in the first year BSc sem II for major chemistry, there will be two theory

papers of 2 credits each & one practical paper of 2 credits. The syllabus of chemistry theory papers for Sem II were discussed in detail. Paper I will comprise physical & Inorganic chemistry whereas paper II will comprise of Organic & Inorganic Chemistry & paper III will comprise of chemistry Practical based on Paper 1 & Paper 2. The contents of the syllabus were discussed with respect to the earlier syllabus. The entire NEP syllabus was designed in a manner where the different subjects focused on fundamental basics as well as on the applications in chemistry. Practical syllabus which is of 2 credits comprise of Physical, Inorganic & organic practical. Some suggestions were given with respect to practicals & they were incorporated. Minor Chemistry paper Sem II and VSc syllabus were also reviewed by BOS members. The syllabus was discussed in detail and the changes were approved unanimously by BOS members.

3. To approve the structure of the fourth year (Honors) in Chemistry as per NEP guidelines.

The structure of the B.Sc. Chemistry (Honors) Semester VIII syllabus, aligned with that of the M.Sc. Chemistry Semester II syllabus, was discussed and approved by the Board of Studies (BOS) members.

The Board reviewed the Semester-II structure of the First-Year Undergraduate and BSc (Honours) Chemistry course. The proposed course framework, including the distribution of theory and practical components, credit structure, and alignment with the current curriculum guidelines, was discussed.

As per the NEP structure, in the fourth year of B.Sc. (Honors) Chemistry, Semester VIII for the Major will include two theory papers of 4 credits each, along with two practical papers, one carrying 4 credits and the other 2 credits. The syllabus for the Semester VIII chemistry theory papers was discussed in detail. Paper I, titled “Physical and Inorganic Chemistry II”, will cover topics from both Physical and Inorganic Chemistry. Paper II, titled “Organic and Analytical Chemistry II”, will include topics from Organic and Analytical Chemistry. In addition, a Major Elective Paper titled “Advanced concepts in chemistry II” theory paper of 2 credits will be offered, which will focus on Organic and Analytical Chemistry topics.

Regarding the practical component, Paper III will consist of practicals based on Paper I and Paper II, covering Physical, Inorganic, and Analytical Chemistry II. Paper IV will include practicals based on Paper II, specifically focusing on Organic Chemistry II. The overall practical syllabus carries a total of 8 credits. Out of these, 4 credits are assigned to Paper III (Physical, Inorganic, and Analytical practicals), 2 credits to Paper IV (Organic practicals), and the remaining 2 credits to Major Elective practicals.

The BSc Honors Chemistry syllabus content is aligned with the MSc Chemistry Part-I syllabus that was discussed earlier in the previous BOS meeting. On-Job Training (OJT) will be included as a component of B.Sc. (Honors) Chemistry Semester VIII. On job training will bridge the gap between classroom learning and practical application. It is a practical approach to acquiring new competencies and skills needed for a job in a real, or working, environment.

The entire syllabus was discussed thoroughly, and all proposed changes were approved unanimously by the BOS members.

4. To discuss methodologies for innovative teaching and evaluation techniques.

The Head, Prof. Dr. Ritika Makhijani informed all the members that faculty adopted various innovative teaching methods to improve the teaching standards. These innovative teaching methodologies aimed at enhancing student engagement and learning outcomes.

Various innovative teaching methods such as **Crosswords in Chemistry** and **Chem Quiz** were used to enhance student engagement and conceptual understanding. Remedial lectures were conducted for FY, SY, and TY students requiring additional academic support (ATKT).

Preliminary examinations were organized for FYBSc and TYBSc students, and last year's question papers were discussed with SYBSc students to familiarize them with the examination pattern.

All BOS members appreciated the efforts of the chemistry teachers, expressing that it would benefit students and stakeholders in the future. The entire syllabus for F.Y.B.Sc. Chemistry and B.Sc. Chemistry (Honours) as per NEP was unanimously approved by the BOS members.

5. Any other matter, with the permission of the chair, follows

a) CO Mapping and Syllabus Review

The Prof. Dr. Ritika Makhijani informed all the members that the college is going for the Course Outcomes (COs)- PO mapping.
In order to do mapping, COs should be revised to be more specific and comprehensive, and that additional COs may be incorporated where required. All the board members unanimously allowed to review and update their Course Outcomes accordingly.

b) Guidelines for BSc Honours and PG diploma under NEP

The Head, Prof. Dr. Ritika Makhijani informed all the members that faculty about the guidelines for BSc Honours and PG diploma under NEP

- Under NEP 2020, a student after clearing the UG Chemistry Program with 120 to 132 credits is eligible to take admission in Level 6 provided the college has an approved PG program.
- **In Level 6 a student has following options:**
    1. Complete 4th Year Undergraduate Program i.e. UG (Honours) degree with 160 to 176 credits along with a 4-credit internship, which is part of the program.
    2. Exit after First Year PG by taking PG Diploma after completing 4 credits Skill Enhancement Course.
    3. Complete PG of 2 years and attain PG Degree. (MSc)

    GUIDELINES FOR UG HONOURS DEGREE WITH RESEARCH
- A student having 120 to 132 credits and CGPA of 7.5 and above can take admission in Level 6 in UG (Honours) Degree with Research. The student will attain UG (CHEMISRT) (Honours by Research) Degree with 160 to 176 credits inclusive of 12-credit research project or dissertation

in the major subject, provided the college has an approved Ph.D. centre with a minimum of 2 approved research guides. The student who acquires **UG honours degree with Research** is also eligible to take direct admission in the Ph.D. program after completion of the mandatory Ph.D. entrance examination as per the guidelines of the University of Mumbai.

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c) University guidelines: The department will do the changes in the evaluation standards as well as the in the NEP structure as per the guidelines and the instructions received from the university from time to time..

The meeting was adjourned after expressing thanks to the chair.