

**MINUTES OF THE FIRST BoS MEETING IN CHEMISTRY
DEPARTMENT OF CHEMISTRY
PARVATIBAI CHOWGULE COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)**

Date: 10th January 2015

Time: 10.30 a.m.

Venue: Conference Room

The Board of Studies meeting in Chemistry was convened vide notice dated 24/12/2014. The meeting was chaired by the BoS Chairman, Dr. G. K. Naik. The following BoS members attended the same.

1. Dr. G. K. Naik - Chairman
2. Dr. J. B. Fernandes - Vice-Chancellor Nominee
3. Dr. J. S. Budkuley - Academic Council Nominee
4. Dr. A. K. Srivastava - Academic Council Nominee
5. Dr. Shirishbhai Patel - Industry Representative
6. Dr. S. P. Kamat - Expert
7. Shri N. G. Rivonkar - Member
8. Dr. Sachin B. Kakodkar - Member
9. Mrs. Manjita R. Porob - Member
10. Mrs. Padmini C. Panjekar - Member
11. Dr. Lactina R Gonsalves - Member Secretary
12. Dr. Rohan K. Kunkalekar - Member
13. Shri Sandesh T. Bugde - Member
14. Miss Deepa D. Rane - Member

The Chairman welcomed all the members of Board of Studies and presented the Agenda and the business. The business was transacted as per the Agenda.

AGENDA

1. To approve the list of Core and Elective Courses for Undergraduate program in Chemistry
2. To approve the syllabi of Semester I and Semester II for the academic year 2015 - 2016
3. Recommendation for the panel of examiners to the Academic Council.

Subsequent to this, discussion on the first point of the Agenda was taken up.

PROCEEDINGS:

AGENDA ITEM 1.

To approve the list of Core and Elective Courses for Undergraduate Program in Chemistry.

DISCUSSIONS

1.1 Dr. A. K. Srivastava asked the Chairman to throw some light on the Course Structure under the choice based credit system. The Chairman explained the Core and Elective Courses for Semester I and Semester II for Major and Minor combinations.

1.2 Dr. J. S. Budkuley suggested some changes in the courses for Minor combinations. According to him, all three combinations i.e. Physical Chemistry, Inorganic Chemistry and Organic Chemistry must be offered at F.Y.B.Sc. for Semester I and Semester II. In this regard, he suggested the shifting of Semester III Course, General Organic and Inorganic Chemistry to Semester II; and Semester II Course, Basic Concepts in Physical and Inorganic Chemistry to be shifted to Semester III.

1.3 The BoS strongly recommended this change suggested by Dr. J. S. Budkuley. Dr. S. P. Kamat was of the opinion that, it is incorrect to call the Courses as 'Papers' and suggested to use the word 'Course' in future. Further, he suggested to introduce smaller courses rather than big ones. He also felt that the courses should be given attractive titles so that the students will opt for them as they may seem more appealing.

1.4 The suggestions made by the members of BoS regarding 1.3 were implemented.

1.5 Dr. A. K. Srivastava agreed to Dr. S. P. Kamat and said that those who search online find courses with attractive names more appealing. Therefore, Semester II onwards, the course titles should be made attractive. However, Dr. J. S. Budkuley pointed out that it may not be possible to make the titles of Core courses attractive since they are fundamental Chemistry courses but it is possible for the Elective Courses.

1.6 Dr. S. Patel and Dr. A. K. Srivastava pointed out that the Core courses did not include Analytical Chemistry and from an industrial perspective the F.Y.B.Sc. course structure would appear to be lacking. Dr. A. K. Srivastava then suggested to include Analytical Chemistry in any one of the courses at Semester I or Semester II.

1.7 The BoS members agreed with the suggestion, where in Dr. J. S. Budkuley mentioned to give equal weightage to all four branches of Chemistry; Analytical Chemistry, Inorganic Chemistry, Organic Chemistry and Physical Chemistry. Subsequently, the Semester II courses were re-titled as under:

Concepts in Physical and Analytical Chemistry

Concepts in Organic and Inorganic Chemistry

In order to implement these changes, it was suggested to delete certain topics from Physical Chemistry, Inorganic Chemistry and Organic Chemistry sections. Along with this, some topics have to be included under the Analytical Chemistry section.

1.8 Dr. S. P. Kamat was of the opinion that the practical component should be given separate titles and the experiments in practicals should relate to the theory course taught at the semester. The laboratory courses and theory courses should have different titles and codes. Dr. J. B. Fernandes and Dr. A. K. Srivastava also agreed with Dr. S. P. Kamat for having separate

laboratory courses. Dr. J. S. Budkuley then explained the difficulty in adopting the suggested pattern that it will not conform to the uniform pattern of all science departments of the college. Dr. J. B. Fernandes suggested incorporating the course codes along with the semester, titles and credits on the main page.

1.9 There was more discussion among the BoS members on the issue of having separate laboratory courses with separate titles and codes. The BoS felt that it is unfortunate that the Chemistry department has to fall in line with other branches. Since Chemistry has more complexities it should be given preference for setting the course structure. The BoS proposes to have separate laboratory courses with separate titles and codes.

1.10 Dr. J. B. Fernandes was of the opinion that it is absolutely not necessary to include the names of Faculty in the syllabi. The BoS members agreed on this and informed that the faculty names should not be included in the syllabi at least for the core courses.

1.11 Dr. J. B. Fernandes also pointed out that 'Core' and 'Compulsory' implies the same meaning and suggested to use the word either 'core' or 'compulsory' while giving course codes. Similarly, the word 'optional' or 'elective' is to be used. Dr. J. S. Budkuley and Dr. S. P. Kamat agreed upon the above and informed that the word 'core elective' is contradictory. However, the Chairman clarified to the BoS that the course codes have been given to each department by the college. Dr. J. B. Fernandes suggested the changes in the titles of the Core Elective Courses. He was also of the opinion that all Elective Courses need not have the practical component.

1.12 Dr. J. S. Budkuley suggested to include four full courses on laboratory practicals and instructed to replace instead any four courses from the current list of electives. Three electives have been removed from the list on agreement with the BoS members. The BoS has decided to include one laboratory course in each semester and at the end of the electives a foot note should be made saying that from Semester III to Semester VI the candidates will be required to opt compulsorily at least one laboratory course from the core electives. The BoS has also decided that the afore mentioned laboratory course will have four modules out of which any two can be selected by the candidate. Each module is dedicated to the respective elective course in each semester. The candidates are required to take any two modules corresponding to the elective course opted by them. The BoS has decided to restructure the Electives for Minor and Minor combinations. Hence it has been deferred.

AGENDA ITEM 2.

To approve the Syllabi of Semester I and Semester II for the Academic Year 2015 - 2016

DISCUSSIONS

2.1 Dr. J. B. Fernandes suggested that the course codes should be in simplified form. He also made some changes in one of the objectives on course CHE-I-C1. In this course CHE-I-C1 the BoS felt a chapter on mathematical concepts should be included in the Physical Chemistry section. To accommodate the mathematical concepts certain changes were done by reducing the number of lectures of other topics as well as course content. Dr. J. S. Budkuley has made some corrections and also asked to incorporate some changes in the Physical Chemistry section for

the course CHE-I-C1. Dr. J. B. Fernandes was also of the opinion that, simultaneously model question course and blue print should be prepared.

2.2 Dr. J. B. Fernandes, suggested that the text books used must be the ones which have to be mastered by the candidate. The following books have been accepted by the BoS as text books.

Physical Chemistry: Atkins, P. W., Paula, J. Atkins' Physical Chemistry, International Student Edition.

Organic Chemistry: Morrison, R. T., Boyd, R. N. and Bhattacharjee, S. K. Organic Chemistry, Pearson India.

Inorganic Chemistry: 1) Lee, J. D. Concise Inorganic Chemistry, ELBS Publications.

2) Atkins P., et. al. Shriver and Atkins' Inorganic Chemistry, Oxford University Press

Analytical Chemistry: Skoog, D. A., West, D.M. and Holler, F. J. Analytical Chemistry: An Introduction, Saunders College Publishing.

If any other books are used, they may be included under additional reading material.

2.3 The BoS has included a 4th chapter in the Physical Chemistry section, course CHE-I-C1 "Mathematical preparation for Chemists". Dr. S. P. Kamat suggested reducing the number of lectures for the topic on IUPAC nomenclature in Organic Chemistry section, in the course CHE-I.C-2. He also requested to rearrange the content in the Organic Chemistry section and have proposed certain changes in the practical component which have been incorporated in the syllabus.

2.4 Dr. Srivastava suggested introducing certain topics and practicals from the book, authored by Skoog 'Introduction to Analytical Chemistry' in the Analytical Chemistry section of the course CHE-II.C-3. The existing Physical Chemistry section has been reduced by seven lectures so as to give equal weightage to all sections. So also in the course CHE-II.C-4 the Organic Chemistry section has to be reduced by seven lectures and the Inorganic Chemistry has to be increased by seven lectures. Dr. J. S. Budkuley suggested the shifting of Inorganic gravimetric experiments to Semester II in order to make room for Analytical Chemistry experiments. Dr. S. P. Kamat advised to include experiments related to theory component.

3. AGENDA 2

Recommend the panel of examiners to the Academic Council.

DISCUSSIONS

3.1 Shri N.G. Rivonkar suggested the following names to the BoS as Organic Chemistry examiners:

1. Dr. B. L. Malik
2. Dr. Joydeep Bhattacharya
3. Mrs. Kathleen Pinto.

The BoS members were of the opinion that the criteria for selecting the master panel should be made known first. The general opinion was that, one of the criteria for selection of examiners

will be, experience in teaching that particular course for at least five years. The external BoS members have advised to make a list of the examiners and discuss this in the next BoS meeting.

3.2 Since the BoS did not have any clear guidelines in recommending the master panel whether internal or external examiners have to be selected or not, decision on this issue has been deferred. Dr. S. P. Kamat and Dr. A. K. Srivastava, recommended that panel of examiners should be 100 % internal for F.Y.B.Sc. and S.Y.B.Sc. In view of this, Agenda 3 was inconclusive.

3.3 The BoS recommends continuous evaluation of the practical components.

4. ANY OTHER BUSINESS

Dr. J. B. Fernandes requested the chairman, Dr. G. K. Naik to bring any issue on which he requires the opinion of the BoS. The chairman asked the faculty members for the same. No issues were raised by any faculty member. However, the BoS felt it is necessary to make some provision for inviting speakers from the industry/academia in order to update some upcoming areas so as to make the subject attractive and interesting for the students. Some budget allocation should be done for this purpose.

Having no other issue, the meeting concluded at 04.10 p.m. with chairman, Dr. G. K. Naik, thanking all the BoS members for attending the meeting.

Dated: January 14th, 2015

Dr. G. K. Naik
Chairman, BoS
Chemistry