

MINUTES OF MEETING OF THE 1ST BOARD OF STUDIES OF THE CENTRE
FOR APPLIED CHEMISTRY, CENTRAL UNIVERSITY OF JHARKHAND HELD
ON 17TH JANUARY 2015

A meeting of the 1st Board of Studies was held on 17th January 2015 at Central University of Jharkhand at 12:30 p.m. Following members were present:

Professor Ratan Kumar Dey – Convener and Chairperson (ex-officio)
Professor A. K. Mishra IIT Chennai
Professor Bhisma Patel IIT Guwahati
Professor Arunabha Dutta – CAC
Dr. J. N. Nayak – C.o.E.
Professor SarangMedhekar – Head CAP
Dr. Pradip KumarParida – Coordinator CAM
Dr. Manoj Kumar Singh – Head CEVS
Dr. ArnabSankar Bhattacharyya – CNT
Dr. Arun Kumar Padhy – CAC
Dr. Raj Bahadur Singh – CAC
Dr.Soumen Dey – CAC
Mr. Simon WatreSangma – CAC

The following deliberations have been made and appropriate decisions have been taken wherever required as described below:

- 1) Professor R. K. Dey, Convener and Chairperson Board of Studies graciously welcomed all members to the 1st Meeting of the Board of Studies by reading the message from Honourable Vice Chancellor, Professor A. N. Misra stating his immense pleasure to know about the Board of Studies meeting, and his warm wishes towards positive and fruitful interactions.
- 2) The Chairperson provided a decorous introduction to the esteemed guests (external expert members), and acknowledging them for their cooperation and support. Introduction of all members and invitees and their contribution to the development of the Centre by academic interactions, suggestions were graciously acknowledged by the Chairperson.
- 3) Appraisal of the Ordinance of the University was made by Professor R. K. Dey, emphasizing that the Board of Studies, which was constituted as per the Ordinance (OA – 7) would stay in term for 3 years and function as per it guidelines.
- 4) a) Dr. Soumen Dey presented the undergraduate syllabus (from 1st – 6th Semester) to the Board. The highlights of the discussion were –
 - i) The English for Communication course in the 2nd semester should preferably be taught in the 1st semester itself in order to aid students from non English medium background to be able to cope up with the course work and the Environmental Studies to be taught in the 2nd

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semester instead. However, it was pointed out that given the present constraint this matter would be considered for future proposal.

ii) The 2nd semester course of Principles of Chemistry – II, should also include basics of Laws of Thermodynamics.

ii) The need for Organic Chemistry course for Life Science (for 3rd semester students) was clarified, keeping in view the requirement for understanding the fundamentals of organic chemistry to assist in the understanding of biochemical processes.

iii) The name of the 3rd semester course of Mathematics for Chemistry was suitably altered to Mathematics for Chemists. It was also pointed out that the topic of Green's function and Laplacian operators may be omitted from the undergraduate syllabus in order to make the course more relatable to the core subject.

iv) It was emphasized that in order to encourage the students to attend the non credit seminar courses, attendance must be recorded.

v) The courses in the 5th semester should preferably be completely floating without any compulsory courses/core courses of the centre. Additionally, it was stated that as per the choice based credit system, a number of courses must be made available across all semesters instead of being confined to the 5th semester. The elective courses must be divided as per the time slots available so that there is no clash in timings. It may be ensured that the electives should be such that it does not contain core or essential part of the subject.

vi) The Chemistry in Everyday Life Course was highlighted as an innovative course due to its immediate relevance to daily life.

vii) It was suggested that the Integrated M. Sc. Course should discourage Lateral Entry as well as exit of students after 6th semester.

viii) JAM and NET syllabus must be used as the reference for designing the course content and in fact the committee appreciated the effort taken up by the Centre in this regard.

ix) Concept of symmetry may be introduced in organic as well as inorganic course. Basic ideas on absolute entropy as well as 3rd law of thermodynamics may also be provided at the undergraduate level.

b) Dr. A. K. Padhy presented the postgraduate syllabus (from 7th – 10th Semester). The major points of discussion were –

i) Looking into the course content of 7th semester paper Organic Photochemistry and Organic Reactions Types, it has been suggested that the title may be changed to "Advanced Organic Chemistry". The Coordination Mechanism and Magnetism may be changed to the title "Coordination Chemistry–II".

ii) Applied Electrochemistry Course in the 8th semester should preferably be a compulsory course instead of elective due to its immense importance.

iii) The course entitled Modern Techniques of Analytical Chemistry may be reorganised based on categories such as Data Analysis, Optical Spectroscopy/ICP/AAS, Electro Analytical Techniques, Chromatographic Techniques, Thermal Analysis (TGA/DTA/DSC), X ray techniques and Microscopic techniques.

iii) The title of 9th semester course Industrial Reactions and Rearrangements can be renamed as "Reagents and Reactions of Industrial Importance", and that of Nanomaterials – Synthesis, Characterisation & Properties be renamed as "Nanomaterials".

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iv) 10th semester is to be reserved exclusively for research oriented Project work. The Advanced Quantum Chemistry, Photochemistry and Non-Equilibrium Thermodynamics may be incorporated in the 9th semester and made compulsory on account of its significance in NET/GATE examinations.

v) The experiments involving noxious fumes or toxic substances must be avoided in the practical classes. Green methods are to be adopted and the suggestion is graciously accepted for immediate implementation.

vi) The list of books mentioned must also contain details about the edition and publishers. 1 or 2 text books and 5 to 6 reference books must be enlisted separately. The text books may preferably be low priced Indian editions.

5) Dr. R. B. Singh presented the syllabus for Ph. D. Coursework. The salient features of the discussion were –

i) The courses in the Ph. D. curriculum should be such that it would reflect the area of expertise of each faculty member, so that the research scholars can benefit from it.

ii) The research scholars may be permitted to opt for course work from the advanced courses in the 9th semester, provided they have not studied a similar course earlier.

iii) Recent books in the subject may be referred for Research Methodology Course. Also certain websites can be included which can provide these resources.

iv) The course Reaction and reagents in Organic synthesis is to be elaborated further, so that 20 classes can be assigned for reagents and 20 for reactions.

v) More electives are to be floated depending on the need of the students and availability of faculty members.

vi) The committee approves the ongoing 2013 – 14 and 2014-15 course structure, syllabi and its content.

6) All syllabus for the ongoing 2010-15, 2011-16, 2012-17, 2013-18 and 2014-19 courses and its content was approved post facto by the all members.

7) The Doctoral Committee for the Ph. D. students was approved by all members. It was however pointed out that the topic of research is to be generic while the title of the thesis should be stated 6 months before submission and the approval to be made through appropriate channels, since the title is subject to change during the course of research.

8) The committee recommends and approves the list of Ph.D. students and their supervisors for students enrolled in the year 2013-14. The inclusion of Dr.S.K.Swain, Sr.Scientist, BIT, Mesra, as co-supervisor of Ms.SimpiBhawna Patel (PH.D. admission 2013-14) as per the clause OA-9 of the ordinance was discussed with reference to the experience and subject specialization and research contribution in the topic concerned and the committee recommends hence approves the same.

8) It has been unanimously decided that faculty members from Institutes of National Importance such as IIT and NIT be considered and included as examiners for question paper setting, answer script evaluation, Ph.D. Examiner, etc.

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9) The committee highly appreciate the efforts undertaken by the Centre for Applied Chemistry in designing the course curriculum and the efforts of faculty members towards all-together development of academics in the Centre.

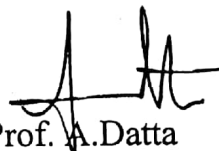
9) The meeting ended with vote of thanks proposed by Dr. A. K. Padhy.



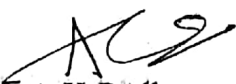
Prof. Ashok K Mishra




Prof. Bhisma K Patel



Prof. A. Datta



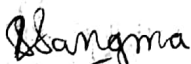
Dr. A.K. Padhy



Dr. Soumen Dey



Dr. Raj Bahadur Singh



Mr. Simon W Sangma



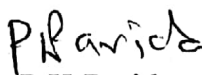
Prof. S. Medhekar



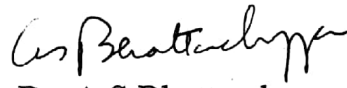
Dr. Manoj Kumar



Dr. J.N. Nayak



Dr. P.K. Parida



Dr. A.S. Bhattacharyya



Prof. R.K. Dey

Convenor & Chairperson, BOS