# External Peer Team Review Report for Performance under Autonomous Status of Bombay College of Pharmacy

Academic year: 1st July 2019 - 30th June 2020

Date of Online Review meeting: August 20, 2021

Name of Institute: Bombay College of Pharmacy

### **Committee for Peer Team Review**

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Year of Establishment of Institute: 1957

Type of Institute: Government Aided Institute

Name of the affiliating University: University of Mumbai

# **Objectives of Peer Team Review:**

A. To review the performance of Bombay College of Pharmacy under Autonomous status in 2019-2020

## I. General Information

- A. The letters of conferment of autonomy by UGC and University of Mumbai were received on 29th April and 12th June 2019, respectively.
- B. As per the UGC guidelines 2018 for the autonomous colleges, the following committees were constituted to ensure proper management of academic, financial, and general administrative affairs.
  - a. Statutory bodies: Governing body, Academic Council, Board of Studies (BoS) for Undergraduate (UG) program, BoS for Postgraduate (PG) program and Finance Committee, Internal Quality Assurance Cell (IQAC)
  - Non-statutory committees: Planning and Evaluation Committee, Admission Committee, Grievance Redressal committee, Examination Committee, Library Committee, Student welfare Committee, Sexual Harassment / Internal Complaints Committee, Extracurricular activities Committee and Academic Audit Committee
  - c. College committees Antidiscrimination Cell or SC/ST committee, Anti-ragging committee and Anti-ragging squad, Institution Innovation Cell, Placement, Industrial Training & visits and Career guidance cell, General administration, documentation and publicity committee, Purchase, Maintenance and Infrastructure committee, Alumni, Equipment committee, NAAC committee, Research Advisory Committee (RAC) for all departments
- C. IQAC, BoS, Academic Council, Finance Committee and Governing body conduct meetings as per the regulations of UGC and the proceedings are documented as minutes of meeting. The reports are uploaded on the website regularly.
- D. Application to Pharmacy Council of India (PCI) and AICTE for increase in intake of B.Pharm from 60 to 100 seats and Extended Extension of Approval from AICTE was approved. AICTE F.No: Western/1-7006405441/2020/EOA, dated 30/04/2020 PCI decision for increase in intake from 60 to 100 upto the period 2023-2024 was made in the 109th Central Council meeting held on 08th and 9th April 2020. An application was sent to AICTE for extended Extension of Approval (EOA) and the same has been granted for a period of 6 years till the end of academic year 2025-2026 AICTE F.No: Western/1-7006405441/2020/EOA, dated 30/06/2020
- E. The modified organizational chart or organogram was prepared for the institute after autonomy
- F. Registration of IPA-MSB and thereby its constituent entities including Bombay College of Pharmacy, as Scientific and Industrial Research Organization (SIRO) for the period of 28/06/2019 to 31/03/2022 (F.No: 11/804/2019-TU-V, dated 23rd July 2019) and surrendering SIRO certificate of Research Society of Bombay College of Pharmacy.

# II. Programs information

# A. Programs:

S.	Level (UG /	Name of the Program with	Sanctioned	Actual Strength
No.	PG/ Ph.D.)	Specialization	Strength of	of students
			students	enrolled
1	UG	Bachelor of Pharmacy (B.Pharm)	60	60 + 3 (EWS)
2.	PG	Master of Pharmacy (M.Pharm)	54	57
		a. Pharmaceutics	15	15+1 (EWS)
		b. Pharmaceutical Chemistry	10	10+1 (EWS)
		c. Pharmacology	10	10+1 (EWS)
		d. Pharmacognosy	04	03
		e. Pharmaceutical Analysis	15	15+1 (EWS)
3.	Ph.D (Tech)	Pharmaceutics		#
		Pharmaceutical Chemistry	35	
		Pharmacology	(16 vacant seats)	
		Pharmacognosy		

<sup>#</sup> Applications were invited for Ph.D programme 2019-2020, however the interviews could not be conducted due to pandemic. The applications received were considered for Ph.D admission programme 2020-2021 EWS - Economically Weaker Section

## B. Syllabus:

- a. 1st year B. Pharm: As prescribed by Pharmacy Council of India (PCI) with modification within the framework of PCI syllabus and approved by BoS (UG) and subsequently in academic council for the benefit of students with respect to employability / entrepreneurship / skill development.
- b. 2nd, 3rd, and 4th year B. Pharm: As recommended by Academic Council of Bombay College of Pharmacy which is in line with University of Mumbai Choice based credit system (CBCS) syllabus
- c. M. Pharm: As recommended by Academic Council of Bombay College of Pharmacy which is in line with University of Mumbai Choice based credit system (CBCS) syllabus
- d. Ph.D. (Tech): As prescribed by University of Mumbai
- C. Revision of Syllabus: The modifications in the curriculum are suggested by the departmental faculty, industry experts, stakeholders, and alumni. The proposed curriculum is then presented to the Board of Studies (UG and PG) followed by the Academic Council. Recommendations of the Academic Council are accepted by the Governing body.

- D. Curriculum: The institute has a coherent and versatile plan for curriculum delivery which focuses on critical and creative thinking, ethical behavior, and developing proficient pharmacy professionals.
  - a. Conduct of regular Tutorials, Quiz and Practice exams
  - b. Conduct of extra lectures for better and deeper understanding of contents
  - c. Use of Smart classroom and online tools (e.g. Microsoft Teams, Forms, Videos) for effective content delivery
- E. Students' Feedback on Curriculum and Teaching Learning-Evaluation Processes: The students' feedback is collected for all courses taught by faculty at the end of each semester. A questionnaire is designed to assess the teaching learning process based on various parameters and sent to all students through google forms. The anonymous feedback is collected for all subjects (Course outcomes) and for faculty performance. The feedback received from the students is then reviewed by the respective HODs and constructive feedback is provided to the faculty.
- F. Timetable and Academic Calendar: The Timetable for all the programs is prepared by the academic committee with inputs from all departments before the beginning of each semester and is adhered to meticulously. The Academic Calendar is prepared jointly by the academic committee and the examination committee. The curricular and extracurricular activities in the year 2019-2020 were planned considering the academic calendar.

# III. Admission

- A. The admission for all programs is conducted on Merit basis at Bombay College of Pharmacy.
- B. Admission to UG and PG course is conducted by Directorate of Technical Education (DTE)
- C. All the details related to admissions including eligibility criteria, fee structure, guidelines, notices, SOP for admission procedure required documents, and merit lists are displayed on college notice board and Website.
- D. Any vacancy after DTE rounds is filled in the Institutional rounds on the basis of DTE merit rank.

## IV. Faculty

- A. Number of full-time permanent faculty: 17
- B. Number of contractual / Adhoc faculty: 14
- C. Number of visiting faculty: 17
- D. Faculty: Student ratio: 1:12 (Total students = 366, UG 258 + PG 108)
- E. Professional development:
  - a. Attending National and International conferences, seminars, and workshops

- b. Attending and organizing Faculty Development Programs (FDP)
- c. Memberships of Professional bodies
- d. Collaborations with Industry and academia
- e. Organization of guest lectures at the institute
- F. Continuing education:
  - a. Attending Online Courses / MOOCs / Swayam / AICTE Internshala courses/NITTTR/Coursera
  - b. Pursuing higher studies e.g., registration for M. Pharm, MS, Ph.D.

#### V. Institutional Facilities

- A. Classroom with Smartboard facility and well-equipped laboratories for undergraduate and postgraduate training and research
- B. Equipment and Instruments: The infrastructure is continuously upgraded in the college and three new instruments are purchased in this academic year
  - a. Protein Detection System (DST-SERB): Rs 2,07,199
  - b. HPLC Photodiode Array Detector Model (DST-SERB): Rs. 7,68,053
  - c. UV Spectrophotometer (IPA-MSB): Rs.4,51,500

Western Regional Instrumentation Centre (WRIC) helps for repair and maintenance of the instruments and equipment under Annual Maintenance Contract (AMC)

- C. Library resources: 8016 Title, 11445 Volumes, 37 National and International published Journals, Subscriptions of DELNET and INFLIBNET journals (more than 7000), 23 Bentham e-journals (AICTE e-ShodhSindhu subscription)
- D. Computer center: Yes
- E. Information Communication Technology (ICT) tools:
  - a. Number of Computer systems connected by LAN: 70
  - b. Number of systems connected by WAN: 25
  - c. Major software packages available: Legal system software, Legal Application software, Windows 10, Microsoft Office 2016 suite, Tally ERP 9, Turnitin software for checking plagiarism
  - d. Desktops, Laptops, Scanners, Printers, Television, Projectors
  - e. The ICT tools were used extensively by the faculty for teaching-learning and evaluation during COVID-19 pandemic.
- F. Internet connectivity: 50 mbps leased line, WIFI enabled campus
- G. Green Initiatives: Some of the green initiatives adopted at the institute are
  - a. Solar Power project: Installation of 140 kW solar power panels on terrace of college building generates an average of 15399 units per month (70% requirement of electricity), Saving of approx. Rs. 1.6 lakhs every month in electricity bill

- b. Reduction in power consumption: Use of LED lights, Air-conditioners with motion sensors, mechanically operated Gymnasium equipments
- c. Reduction in water usage and bill: Use of automated wash taps and water wells.
- d. Reduction in food wastage: Selected dish on selected days
- e. Compost and biomass generation: Development of sustainable and decentralized Waste Management System in the campus in collaboration with RUR GreenLife Pvt. Ltd
- f. Reduction in solvent effluent from Laboratories
- g. Adoption of appropriate methods for disposal of lab biowaste
- h. Participation in Green Army initiative of the State Government of Maharashtra by planting 75 tree saplings per annum in and out of the campus
- i. "Go paperless, Be Digital" Initiative for some operations using ERP Portal
- H. Enterprise Resource Planning (ERP) system:
  - a. Cloud based web application: www.ems.bcp.edu.in
  - b. Education Management System (EMS) for Admission, Academics (Course, Timetable & Attendance), Examinations, and Results
- I. Website: www.bcp.edu.in
- J. Games and Sports: Indoor Games like Chess, Carrom, Foosball, Pool table, Table Tennis; Playground with facilities for outdoor games like Football, Throwball, Volleyball and Cricket
- K. Safety measures: CCTV surveillance of campus, placement of Fire extinguishers and other safety measures on campus
- L. Barrier free environment for differently abled students: Provision of ramp, lift and facility in washrooms

## VI. Examinations

- A. The Examination Committee with Controller of examination (COE) is constituted to facilitate the conduct of examinations in the institute.
- B. Periodic tests and Semester examinations are conducted as per the rules and regulations recommended by Academic Council of Bombay College of Pharmacy which are in line with norms specified by University of Mumbai (2nd, 3rd & 4th year B. Pharm and M. Pharm) and Pharmacy Council of India (F. Y. B. Pharm)
- C. Two sets of question papers are prepared by paper setters and one paper is randomly selected by the committee. The examination is conducted as per the set procedures listed in SOP.
- D. Barcoding of answer sheets to maintain anonymity of the candidate.
- E. The gazettes are prepared digitally, and the result is declared after review by the panel of external members.

#### VII. Research activities

- A. Government grants: 03 (DBT, AICTE RPS, Lady Tata and University of Mumbai), Total amount sanctioned = Rs.56.19 Lakhs (F.Y. 2019-2020)
- B. Industrial projects and consultancy: 41 projects with net revenue generation of Rs. 44.55 lakhs
- C. Amrut Mody Research Fund (AMRF) projects: Corpus fund to recognize, support and encourage research and development activities in the institute - 10 projects (ongoing), Total Fellowships paid: Rs.16.96 lakhs
- D. Additional teachers recognized as PG research guide: 06 (2019) (Total research guides for M. Pharm: 14, Ph.D.: 08)
- E. Publications: 19 publications (Calendar year 2019)
- F. Patents filed: 01
- G. Books and Book Chapters: 02 (Calendar year 2019)
- H. Presentations: 38 (Oral and Poster presentations)
- I. MOUs: 05 (Duquesne University, Pennsylvania USA- 17/09/2019; Microtracers, USA 11/10/2019; Novartis HealthCare Pvt. Ltd, Hyderabad--03/06/2019; Sotax India Pvt. Ltd; Mumbai-31/05/2019 and SMBT College of Pharmacy, Nasik-06/07/2019)

#### VIII. Institutional Activities

- A. National Facility of Research & Training (NFRT): Development of completely operational facility, Conduct of 3 training programs for Industry and Academia
- B. Establishment of Institution's Innovation Council (IIC) in October 2019, Constitution of IIC Student committee, Conduct of 61 different activities in four quarters of 2019-2020
- C. Organization of 33 Guest lectures, Seminars and Training programs, 4 Alumni Connect and 1 Chai pe Charcha sessions at the institute
- D. Some of the activities of Internal committees
  - a. IQAC:
    - Framing of syllabus and rules for B. Pharm and M. Pharm programs after autonomy, uploading of syllabus and rules on the website
    - Initiation of process to avail expertise from Industry as visiting faculty to teach
      electives offered by college and provision to attend lectures of electives other
      than selected subjects of interest without examinations.
    - Provision for final year Sem VIII project work contingency of Rs 2000/- per student
    - Initiation of documentation process for requisition of chemicals, apparatus, miscellaneous item required for UG practicals in Research Record book maintained by HoD

- Initiation of process for maintenance and monitoring of Research Progress
   Book for all research students
- Solicitation of external examination committee members (One member recommended by University of Mumbai, Director, Board of Examination and Evaluation and one member from an autonomous technical institute; present members, Dr. Vinod Patil, Director, Board of Examination and Evaluation, University of Mumbai and Dr. M. M. Murudi, Principal In-charge, S. P. College of Engineering (Autonomous), Mumbai) review result gazettes before declaration of results.
- Revision of online Students' feedback form
- IQAC committee contributed significantly for skill development activities and training for successful hiring
- b. Placement, Industrial Training & visits, and Career guidance cell: Organization of Pre-placement talks by companies, Recruitment of students as per placement policy, Organization of Industrial visits, Facilitation for online Internships due to Covid pandemic (Industry, AICTE Internshala and other internships)
- c. Grievance redressal committee: The online system (Microsoft Form) for reporting grievances is available on the college website. In addition, a register is available in the Superintendent's office for entering grievances by staff and students. The institutional grievance redressal committee investigates, reviews, and resolves the grievances as per the policy and procedures set in line with government notifications and UGC regulations.
- d. Student welfare Committee: Provision of Scholarship by IPA-MSB under Students Mutual Aid Fund (SMAF) and facilitating access to scholarships available under government & non-government schemes, Book bank fund
- E. Measures taken during COVID pandemic on campus: Conduct of awareness programs to explain importance of sanitization, social distancing and wearing masks on campus, Strict monitoring of body temperature, pulse rate and oxygen saturation, Maintenance of records, availability of hand sanitizer.
- F. Academic Activities conducted during COVID pandemic: Conduct of 67 quiz, 36 Assignments, 14 theory examinations, 19 practical examinations using online platforms, sharing of numerous links for study material and videos with students, Use of Microsoft Forms, Streams, Teams, SharePoint, Outlook, OneDrive, and other online tools for teaching-learning process

#### IX. Students' Activities and Achievements

- A. B. Pharm students with GPAT qualification: 14
- B. Number of Ph.D. awarded: 05 students
- C. Poster and Oral presentations, Avishkar and Anveshan awards 15
- D. Participation in Hackathons and innovations competitions, Intra and Intercollegiate extracurricular activities
- E. Participation in IPA Students' Forum Maharashtra State Branch (IPA-SF-MSB) activities
- F. Members of editorial board of Echo-BCP and Credence
- G. Extracurricular and CSR activities: Organization of 38 co-curricular & extracurricular activities and 12 College Social Responsibility (CSR) activities with Students council
- H. Certificate of Appreciation to BCP for securing 3rd position for conduction and completion of Public Health Office Protocol 2019-2020 by IPA-MSB Students' forum
- I. BCP ISPOR Students' chapter: Promotion of field of Health economics and Outcome Research by organization of seminars and webinars, releasing BCP-ISPOR-SC Newsletters
- J. Student mentoring system: The subject teachers of the class are mentors of the same class
- K. Alumni led skill development activities for UG students at the campus in collaboration with TCS

#### X. Awards and Achievements

- A. A special Jury mention award for 'Excellence in enabling Research Environment 'at the 6th FICCI Higher Education Excellence Awards 2019
- B. 'Education Leadership Award' at National Education Awards 2019, organized by ABP News
- C. National Institute Ranking Framework (NIRF) 2019 24th rank
- D. AICTE CII (Industry Linked Pharmacy Institute) 2019-2020: Ranking in Platinum category
- E. Distinguished Professor Award to Prof. Mala Menon by National Science and Technology Management Information System, a division of Department of Science and Technology 2019
- F. 'Best Professor in Pharmaceutics' to Dr. Ujwala Shinde at the 27th Business school Affair and Dewang Mehta National Education Awards, 2019
- G. Prof. Krishnapriya Mohanraj awarded 101 Fabulous Global Healthcare Leader Award at World Health and Wellness Congress and Awards presented by ET NOW on February 14<sup>th</sup> 2020.

# XI. Initiatives taken / implemented / continued during the academic year

- A. Mentoring of students by faculty
- B. Class mentors for all programs
- C. Monthly Information System (MIS) for collection of faculty data along with proofs
- D. Organization of Student Orientation Program and Induction program for first year B. Pharm and M. Pharm students
- E. AICTE Universal Human Values (UHV) Initiative: 04 faculty members have completed 3 day and % days UHV programme and 01 faculty has completed 05-day Programme
- F. Maintenance of Academic diary for faculty
- G. Maintenance of Research Record Book for research projects
- H. Preparation of Policies and guidelines for ERP, Online examination for UG, PG programs
- I. AICTE Ek Bharat Shreshtha Bharat activity: "Aaj Ka Vakya" in Indian languages (Compilation of 100 sentences in 21 different languages)
- J. Four and half rating (4.5 stars) by Ministry of Education, Government of India to IIC established at Bombay College of Pharmacy
- K. Sharing of college news, achievement and information on social media: LinkedIn, Instagram, Facebook and Twitter

## XII. Strengths and Weakness

# A. Strengths:

- a. Faculty members possess either a doctoral degree or are pursuing Ph.D. degree
- b. Excellence in undergraduate teaching
- c. Excellent industry-academia linkages and collaboration
- d. State-of-the-art infrastructure for research
- e. Proactive industry mentors for each subject specialization

#### B. Weaknesses:

- a. Recruitment of faculty and non- teaching staff members subject to DTE sanctions and permissions which are unduly delayed.
- b. Inadequate resources for maintenance of equipment and AMC
- c. ERP system in optimization stage
- d. Inadequate administrative support to meet the autonomy requirements

## XIII. Recommended actions

- o IQAC committee can be expanded by adding alumni entrepreneurs and current senior students of UG, PG and PhD.
- Sophisticated Instrument Training session for UG students using available facilities can be explored.
- o Strong connect of student with Placement cell can be made.

Date: 20<sup>th</sup> August, 2021

Place: Mumbai

Dr. Munira Momin

Principal and Professor of Pharmaceutics SVKM's Dr. Bhanuben Nanavati College of Pharmacy Vileparle (West), Mumbai Dr. Tejal Shah Mehta

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