

Deptt. of Medicinal Chemistry
Institute of Medical Sciences
Banaras Hindu University

MC/12-13/282

dated: 7/11/12

The Dean
Faculty of Ayurveda
IMS, B.H.U.

Subject: Submission of Self-Study Report (SSR) for
NAAC-reg.

Dear Sir,

I am submitting herewith the required information for the above subject, duly filled in the prescribed proforma. The informations are hand written as the department is not provided with any office staff. I am deeply sorry for the inconvenience caused to you due to this.

with regards

Sincerely yours

Mahendra Sahai

HEAD
Dept. of Medicinal Chemistry
Institute of Medical Sciences
B.H.U., Varanasi-5

NAAC File

by

Evaluative Report of the Department.

1. Name of the Department: Medicinal Chemistry
2. Year of establishment: 1963
3. Is the Department part of a School/
Faculty of the University: A part of Faculty of Ayurveda,
of Banaras Hindu University
4. Names of Programmes/Courses offered (UG,
PG, M. Phil., Ph. D., Integrated Masters; Integrated Ph.D. etc): Ph.D. and participate
in UG & PG Teaching of Ayurveda Students.
5. Interdisciplinary courses and departments involved,
Some faculty of the department participate
in teaching to Home Science students and
Students of Human Genetics & Molecular
Biology
6. Courses in collaborations with other
Universities, industries, foreign institutions etc. Nil.
7. Details of programmes/courses discontinued, if any, with reasons: Nil.
8. Annual / Semester / Choice Based Credit System: Not applicable
9. Participation of department in the courses
offered by other departments: our faculty participate in
teaching programme of Home
Science and.
10. Number of teaching posts sanctioned and filled

| | Sanctioned | Filled |
|----------------------|------------|--------|
| Professor. | one | one. |
| Associate Professors | Two | Two |
| Asst. Professors | Three | Two. |

11. Faculty profile with name, qualification, designation and specialisation

| Name | Qualification | Designation | Specialisation | No. of Years of experience | No. of Ph. D. students guided in last 4 years. |
|---------------------|---------------|-----------------|------------------|----------------------------------|---|
| Prof. Y.B. Tripathi | M.Sc., Ph.D. | Prof. | Biochemistry | 28 yrs | |
| Prof. M. Sahai | M.Sc., Ph.D. | Prof. | Org. Chemistry | 28 yrs | |
| Prof. V.P. Singh | M.Sc., Ph.D. | Prof. | Analytical Chem. | 28 yrs | |
| Dr. T.D. Singh | M.Sc., Ph.D. | Associate Prof. | Biochemistry | 7 yrs | |
| Dr/(MS) A. Agrawal | M.Sc., Ph.D. | Associate Prof. | Org. Chemistry | 5 yrs | |

12. List of senior Visiting fellows, faculty, adjunct faculty, emeritus professors : Nil.
13. Percentage of classes taken by temporary faculty
 - programme-wise information : Nil; No temporary faculty
14. Programme-wise student teacher ratio : 11:5 (Ph.D. programme)
15. Number of academic support staff (technical) and administrative staff :

| | Sanctioned | Filled |
|--|------------|--------|
| A. Technical staff. | | |
| 1. STA. | Two | one. |
| 2. T.A. | Two | Nil. |
| 3. Sr. Lab. Asst. | Two | Nil |
| 4. Jr. Lab. Asst. | Two | one |
| 5. Lab. Attendant* | Two | Nil. |
| B. Administrative staff | Two | Nil. |
| * On lab attendant is filled on contractual basis only | | |

16. Research thrust area recognised by funding agencies:
 "Ayurvedic drug standardisation"

17. Number of faculty with ongoing projects from
 (a) National funding agencies :

| S.N. | Name of Project | Agency | Amount |
|--|---|-----------------------------|--------------------|
| 1. | Development of New Herbal.....Nephropathy | CSIR, New Delhi | Rs. 10,98,000 = 00 |
| 2. | Investigation of of action. | BRNS, Dept of Atomic Energy | Rs. 25,38,750 = 00 |
| 3. | Design, synthesis - - - - - Antifungal compounds. | U.G.C., N. Delhi | Rs 7,21,000 = 00 |
| Three projects as P.I. | | Total Grants | Rs. 43,57,750 = 00 |
| 4. | Study of anticestodal <i>Malldus philippinensis</i> | DBT, New Delhi | Rs 24,84,000 = 00 |
| 5. | Implication of By Baccosidi A. | DST, New Delhi | Rs 8,78,000 = 00 |
| Two projects as Co-PI | | Total grants | Rs. 33,62,000 = 00 |
| Grand total of grant received as PI & As co PI = | | | Rs. 77,19,750 = 00 |

18. Inter-institutional collaborative projects and grant received

- a) All India collaboration — Nil.
- b) International — Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR etc.

Nil.

20. Research facility/centre with

- state recognition
- National recognition
- International recognition

21. Special research laboratories sponsored by/created by Industry or corporate bodies : Nil.

22. Publications :

* Number of papers published in peer reviewed Journals

National : 22

International : 50

* Monographs Nil

* Chapter in Books 7

* Edited Books 2

* Books with ISBN with details of publishers

* Number listed in International data base

* Citation Index - range/average.

* SNIP

* SJR

* Impact Factor - range/average average.

* h-index

23. Details of patents and income generated 2, Nil

24. Area of consultancy and income generated : Nil

25. Faculty selected nationally/internationally to visit other laboratory in India and abroad.

i. Dr Alka Agrawal selected for award of INSA national Fellowship to visit I.I.Sc. Bangalore (2012).

26. Faculty serving in

- | | |
|-----------------------------|------|
| a) National committees | Nil |
| b) International committees | Nil |
| c) Editorial Boards | Nil |
| d) Any other | Nil. |

27. Faculty recharging strategies N.A.

28. Student Projects

- Percentage of students who have done in-house projects including interdepartmental projects. Nil.
- Percentage of students doing projects in collaboration with other Universities/Industry/Institute Nil.

29. Awards/recognitions received at the national and International level by

- Faculty Nil.
- Doctoral/Post doctoral Fellows Nil.
- Students Mrs. Rayana is recipient of UGC Rajiv Gandhi Fellowship.

30. Seminars/conferences/workshops organised and the source of funding (national/international) with details of outstanding participants, if any

4. (four) with national funding.

31. Code of ethics for research followed by the departments: yes.

32. Students profile coursewise:

| Name of course | Applications received | Selected | | Pass percentage | |
|----------------|-----------------------|----------|--------|-----------------|--------|
| | | Male | Female | Male | Female |
| N.A. | N.A. | | | | |

33. Diversity of students:

| Name of course | % of students from the same university | % of students from other university within the state | % of students from universities outside the state | % of students from other countries |
|----------------|--|--|---|------------------------------------|
| Ph.D | 20% | 60% | 10% | 10% |

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise

NET Nil
 SET Nil
 GATE - 4 all general category
 Rajaw Gandhi Fellowship 1 (SE)

35. Students progression.

PQ

36. Diversity of staff.

| Percentage of faculty who are graduates | |
|---|-----|
| of the same university | 60% |
| from the university within state | 40% |

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period
Nil

38. Present details of infrastructural facility with regard to

a) Library: About 58 books are available in departmental library

b) Internet facility for staff and students: All the faculty have an access to internet facility.

c) Total number of classrooms: One

d) Class rooms with ICT facility: Nil

e) Students' laboratory: One

f) Research laboratories: Five.

39. List of doctoral students:

a) from host university — 02

b) from other university — 08

40. Number of post graduate students getting financial assistance from the university. N.A.

41. Was any need assessment exercise undertaken before the development of new programmes? No need.

42. Does the department obtain feedback from.

a) No

b) No

c) Not required

43. List of distinguished alumni of the department.

See Annexure II

44. Give details of student enrichment programmes (special lectures/workshops/seminars) involving external experts.

45. List of teaching methods adopted by the faculty for different programmes. Not applicable

46. How does the department ensure that programme objectives are constantly met and learning outcome are monitored. Not required.

47. Highlight the participation of students and faculty in extension activities.

No such activity.

48. Give details of "beyond syllabus scholarly activities" of the department. Nil.

49. State whether the programme/department is accredited/graded by other agencies? ~~if~~ Not yet.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied. Nil

51. Future plans of the department. See Annexure III

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

1. Dr. Sunil Kumar Chakopadyay
Scientist. F.
C. I. M.A.P.
Lucknow
2. Dr. Rakesh Maurya
Scientist G.
Head, Medicinal & Process
Chemistry Division
C. D. R. I., Lucknow
3. Dr. Sandeep Kumar
Raman Research Lab.
Bangalore.
4. Professor S. C. Sinha.
Scripps Research Institute
La Jolla, California
U.S.A.
5. Dr. Sumita Sengupta
Associate Professor
M.M.U., B. H. U.
Varanasi
6. Dr. Jagdish Singh.
Associate Professor
S. G. R. P.G. College
Dobhi
Jaunpur.
7. Dr. Dinesh Kumar Yadav.
Lecturer in Chemistry
University of Udaipur
Udaipur
Rajasthan
8. Prof. A. Sajeli Begum
Associate Professor
BITS, Hyderabad
Hyderabad.
9. Dr. V. K. Dubey
Incharge R & D.
Dabour India Ltd.
New Delhi
10. Dr. K. N. Singh.
Associate Professor
S. G. R. P.G. College
Dabhi, Jaunpur

51. Future plans of the department.

Departmental members have planned to work on some additional preparations used in Ayurvedic system of medicine. For example, single ayurvedic herbal preparations and some metallic preparations. The work will be carried out in the direction of their standardisation. The ^{chemical} strategy/emphasis will be to establish a ² finger point of these drugs and find out the active principle present in the herbal drug.

Strengths:

- I. Potential of finding active principle of any single herbal preparation.
- II. Potential of determination of seasonal variation of herbal drug, in relation to their chemical constituents present therein.
- III. Standardisation of mineral drugs used in Ayurvedic system of medication.
- IV. Potential of determination of adulterant in herbal and mineral, raw materials by chemical methods.
- V. Potential to train ayurvedacharyas to find out the genuineness of ayurvedic raw materials.

Weakness:

- I. Non availability of funds / financial support of the purpose.
- II. Non-availability of equipments for the purpose.
- III. Department has no sufficient technical personnel to assist the members of faculty
- IV. There is no office staff.

opportunities :

It is a vast open opportunity for the department of medicinal chemistry to find out the methods of standardisation of Ayurvedic preparation used as therapeutic agent. This includes herbal and mineral preparations both. Not enough work in this direction has yet been done.

Challenges :

It is a challenge for the ayurvedic physicians to get a standard drug/ayurvedic preparation throughout the year with consistency in their efficacy. This can only be done provided a genuine, authentic raw material is made available to the pharmacy. This can only be solved probably with the help of medicinal chemistry dept where the experts are available.