

NAAC

**FOR QUALITY AND EXCELLENCE
IN HIGHER EDUCATION**



MATS UNIVERSITY

**MATS SCHOOL OF
LIFE SCIENCE
AND SCIENCE**

Evaluative Report of the Department

- Name of the Department :
MATS SCHOOL OF LIFE SCIENCE AND SCIENCE
- Year of establishment :
2008
- Is the Department part of a School/Faculty of the university?
YES.
- Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters)

Degree/Diploma	Name of the Programme
Under Graduate	B. Sc. (Biotechnology)
	B.Sc. (Microbiology)
	Integrated (B.Sc. + M.Sc.) Biotechnology
	Integrated (B.Sc. + M.Sc.) Microbiology
Post Graduate	M. Sc. (Biotechnology)
	M.Sc. (Microbiology)
	M.Sc. (Bioinformatics)
	M.Sc. (Biochemistry)
	M.Sc. (Chemistry)
M.Phil.	Master of Philosophy in Biotechnology, Microbiology, Biochemistry & Chemistry
Ph.D.	Doctor of Philosophy in Bioscience, Biotechnology, Microbiology, Biochemistry & Chemistry

- Interdisciplinary programmes and departments involved :**NO**
- Courses in collaboration with other universities, industries, foreign institutions, etc. :**NO**
- Details of programmes discontinued, if any, with reasons :**NIL**
- Examination System: Semester/Trimester/Choice Based Credit System
SEMESTER BASED
- Participation of the department in the courses offered by other departments

SN	DEPARTMENT	COURSE SEMESTER	SUBJECT NAME
1.	Hindi	B.A.-HINDI, Sem. II	Environmental Studies
2.	English	B.A. -ENGLISH Hons with Mass Com. Sem. IV	
3.	Information Technology	BCA Sem. I & II B. Sc. (CS) Sem. I & II B. Sc. (A&G) Sem. I & II	
4.	Business Studies	B.Com. Sem. II	
5.	Management studies & Research	BBM Sem. I & II	
6.	Fashion Designing & Technology	B.Sc. (FDT) Sem. I B.Sc. (ID) Sem. I	


10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)







Designation	Sanctioned	Filled			Actual
		Permanent	Ad-hoc	Part-time	
Professor	1	0	0	0	Nil
Associate Professor	2	0	1	0	01
Assistant Professor	6	1	4	3	09

School of Basic Science

Designation	Sanctioned	Filled			Actual
		Permanent	Adhoc	Part-time	
Professor	1	0	0	0	0
Associate Professor	1	0	0	0	0
Assistant Professor	3	1	0	2	3
Lab Assistant	1	0	0	0	0
Lab Attendant	1	0	0	0	0

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

S N	Name of the Faculty	Qualifi cation	Designat ion	Specialization	No of Years of Experien ce	No. Of Ph.D./M. Phil. Students guided for the last 4 years
1.	Mr. Vishwaprakash Roy 	M. Sc., M.B.A.	H.O.D.	Biotechnology	16+ years	

2.	Dr. Ashish Saraf 	M. Sc., Ph. D.	Assistant professor	Microbiology	7+ years	02
3.	Mr. Prashant Mundeja 	M. Sc., M.Phil.	Assistant professor	Chemistry	8+ years	
4.	Mrs. Deepa Biswas 	M.Sc., B.Ed., M.Phil.	Assistant Professor	Bioscience	7+ years	
5.	Dr. Devyani Sharma  DR. DEVYANI SHARMA	M.Sc., Ph.D.	Assistant Professor	Biotechnology	4+Years	
6.	Dr. Meenakshi 	M.Sc. Ph.D.	Assistant Professor	Applied Microbiology	1+	
7.	Dr. Rubina Bano 	M.Sc. Ph.D.	Assistant Professor	Botany	16 Years	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors :**NIL**
 13. Percentage of classes taken by temporary faculty - programme-wise information

Degree/ Diploma	Name of the Programme	No. of Visiting Faculty
Under Graduate	B. Sc. (Biotechnology)	05
	B.Sc. (Microbiology)	
	Integrated (B.Sc. + M.Sc.) Biotechnology	
	Integrated (B.Sc. + M.Sc.) Microbiology	
Post Graduate	M. Sc. (Biotechnology)	
	M.Sc. (Microbiology)	
	M.Sc. (Bioinformatics)	
	M.Sc. (Biochemistry)	
	M.Sc. (Chemistry)	
M.Phil.	Master of Philosophy in Bioscience, Biotechnology, Microbiology, Biochemistry, Chemistry	NIL
Ph.D.	Doctor of Philosophy in Bioscience, Biotechnology, Microbiology, Biochemistry & Chemistry	NIL

14. Programme-wise Student Teacher Ratio-

Degree / Diploma	Teacher ratio
Under Graduate	1:29
Post Graduate	1:18
Diploma	NA
M.Phil.	NA
Ph.D.	NA

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Designation	Sanctioned	Filled	Actual(Inc. CAS and MPS)		
Technical Staff					
Lab Assistant	6	0	1	0	01
Lab Attendant	6	0	0	0	Nil
Office Assistant Gr. III	2	0	1	0	01
Peon	1	0	0	0	Nil

16. Research thrust areas as recognized by major funding agencies
NIL
 17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies,

- project title and grants received project-wise.: **NONE**
18. Inter-institutional collaborative projects and associated grants received
 - a) National collaboration : **NONE**
 - b) International collaboration : **NONE**
 19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.
NONE
 20. Research facility / centre with
 - state recognition : CGCOST Raipur, Life Science Laboratory, Raipur
 - national recognition : Central Laboratory, National Cave Research & Protection Organization, Raipur
 - international recognition : None
 21. Special research laboratories sponsored by / created by industry or corporate bodies - Nil
 22. Publications:
 - Number of papers published in peer reviewed journals (national / international)
32
 - Monographs : **NONE**
 - Chapters in Books : **NIL**
 - Edited Books : **NIL**
 - Books with ISBN with details of publishers :01
Keshav Kant Sahu, **Deepa Biswas**, S.C. Naithani: Aluminium Stress on Germinating Seeds of Cicer arietinum; ISBN: 978-3-8383-9974- 4 Lambert Academic Publishing, 2010
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) - None
 - Citation Index – range / average : **6**
 - SNIP : **NIL**
 - SJR : **NIL**
 - Impact Factor – range / average : **0.2 to 0.5**
 - h-index : **NONE**
 23. Details of patents and income generated - **NIL**
 24. Areas of consultancy and income generated - **NIL**
 25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad - **NIL**
 26. Faculty serving in

- a) National committees -
- i) Mr. Vishwaprakash Roy is Member of National Cave Research & Protection Organization, Raipur
 - ii) Dr. Ashish Saraf is Member of Society for Basic and Applied Mycology, RDVV Jabalpur
- b. International committees- Nil
- c. Editorial Boards - Mr. Vishwaprakash Roy is Managing Editor, True Health - Monthly Health Magazine, Raipur
- d. any other (please specify) - Nil
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs) -

S.N.	Date	No. of Days	No. of Participants
1	25/01/13 to 27/01/13	03	05
2	18/04/14 to 20/04/14	03	02

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects - 100%
- 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 -
 1. Ms. Yesha Ramani of M. Sc. Biochemistry won 1st Prize in Poster Presentation in National CME on Biochemical Insight into Clinical Immunology, First AMBICON, Chhattisgarh State Chapter on 21,22 of March 2014 organized by Department of Biochemistry, AIIMS Raipur
 2. Mr. Jivesh Shah of M. Sc. Biochemistry won Second Prized in Poster Presentation in National conference on Development & Exploitation of Microbial System for Mankind organized by Department of Microbiology M.G. Women's College, Jabalpur on April 27 to 28, 2012.

30. Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any- Nil

31. Code of ethics for research followed by the departments -

Code of Ethics for Code of ethics for research of University is as per the ordinance mentioned in 3.1(Criterion III) of self study report of University

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

35. Student progression

S.No.	Student Progression	Percentage against enrolled
1	UG to PG	16.66%
2	PG to M. Phil.	0%
3	PG to Ph. D.	0%
4	Ph. D. to Post-Doctoral	0%
5	Employed <ul style="list-style-type: none"> ▪ Campus selection ▪ Other than campus recruitment 	80%

36. Diversity of staff

S.No.	Percentage of Staff who are graduate from	
1	Same University	0%
2	Other Universities within the state	57.14%
3	Other Universities outside the state	42.85%
4	Universities outside the country	0%

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

38. Present details of departmental infrastructural facilities with regard to

- a) Library - 1172
- b) Internet facilities for staff and students - Yes
- c) Total number of class rooms - 8
- d) Class rooms with ICT facility - 0
- e) Students' laboratories - 5
- f) Research laboratories - 0

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university - 1
- b) from other institutions/universities - 2

40. Number of post graduate students getting financial assistance from the university- 05

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology - Nil

42. Does the department obtain feedback from
- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
 - New trends are incorporated in the curriculum as per the market and industry requirements
 - Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Summary of feedback is presented in the meeting of Staff Council and all positive suggestions are incorporated accordingly and required rectification is made as per the suggestion.
 - Alumni and employers on the programmes offered and how does the department utilize the feedback? No

43. List the distinguished alumni of the department (maximum 10)

S.No	Student's Name	Batch	Organisation
1	Swarnendu Chakrabarty	2011-2013	Jindal Power Plant, Raigarh
2	Arvind Chandrakar	2011-2013	State Veterinary Department, C.G.
3	Parul Siyar	2008-2011	P.O. Bank of Baroda
4	Kritika Saxena	2008-2011	Axis Bank
5	Navneet Gavel	2008-2013	Ram Krishna Care Hospital, Raipur, C.G.
6	Ranjana Mahapatra	2011-2013	Entrepreneur(Coaching Institute)
7	Amit Kumar Baghel	2010-2012	Entrepreneur(Agrotech)
8	Ashutosh Pandey	2010-2012	Entrepreneur(Agrotech)
9	Anjay Gupta	2009-2011	Technical Officer, IRL, Lalpur, Raipur
10	Birendra Kare	2010-2012	Panacia Biotech, Baddi, H.P.

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

S.No.	Student enrichment Programmes	Date	Expert/Speaker
1	Four day Workshop on "Hands on Training on advanced Enzymology and its impact on industries)	February 2012	Dr. Madhav Rao, Nitza Biotech, Hyderabad
2	Industrial visit for applied aspects of Bio-fertilizers	March 2012	Dr. Sunil Gupta and Ms. Poonam Chowbey, SRT Agrosience Pvt. Ltd., Durg
3	One day Workshop on "Biotechnology in Today's world and a roadmap to become a Rolemodel"	May 2012	Mrs. Kalpana Sengar, Trainer, Del Carnegie, Sen Antonio, Texas (USA).

4	Educational Tour to Indian Association for cultivation of Sciences, Kolkata	December, 2012	Dr. Deepak Kumar Sinha, Indian Association for cultivation of Sciences, Kolkata.
5	One Day Seminar on Proteomics and Resistant genes	July 2012	Dr. Arup Kumar Mukherjee, Central Institute of Cotton Research, Nagpur.
6	One Day Seminar on Plant Stress and Molecular Markers	January 2013	Dr. Jogeshwar Panigrahi

45. List the teaching methods adopted by the faculty for different programmes.

1. Lecture-Explaining
2. Resource People
3. Group Discussion
4. Field-trip and/or Industrial visits

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Timely contact with the pass out candidates to know about the current employment status and their nature of job of themselves and their classmates.

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

- Students and Faculties participate in Blood donation camps and tree plantations.
- Participation in Conferences, Workshops.

48. Give details of “beyond syllabus scholarly activities” of the department.

S.N.	Date/ month of Event	Activity (Educational tour/ Picnic)
1.	October 2010	Jim Corbett National Park, Seetamadhi, Institute of Biotechnology, Patwa Dangar, Panth University, Nainital, U.K.
2.	February 2011	Gangrel & Murum Silli (One day picnic)
3.	January 2012	Tala (One day Picnic cum excursion)
4.	October 2012	Kolkata-Darjeeling (Educational Tour)
5.	February 2013	Bhoramdev (One day Picnic cum excursion)
6.	August 2013	Chhattisgarh Sahkari Dugdh Sangh Maryadit (Deobogh), Kumhari, Durg.
7.	September 2013	Devleela Biotech, VIP Road, Raipur
8	October 2013	Shimla-Chandigarh-Manali (Educational Tour)

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. NO

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

Multidisciplinary skills and knowledge of the faculty members were effectively used by the students in the sectors like environment, industry, agriculture and allied fields of medical science to serve society.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

STRENGTHS

1. Dedicated team of the department.
2. Diversified and Qualified faculty.
3. The course curriculum is designed according to the requirement of the present scenario that offers the students a wide view and ability required for placement.
4. Exposure to Industries and renowned research laboratories are provided to the students.
5. Projects/ dissertations are arranged in research laboratories in the country for the students to gain expert guidance, and placement opportunity.

WEAKNESSES

1. Number of equipments and facilities provided to the students to be increased.
2. Alumni Meets to be scheduled at regular intervals.
3. Student-Teacher ratio is to be improved.
4. Research projects and data bases to be increased.

OPPORTUNITIES

1. Better facilities regarding Library, Tissue culture Laboratories.
2. Infrastructure gives numerous opportunities to leverage its resources and enrich the curriculum and provide students with learning experiences through Out Bound Learning programs and Social Awareness Program like Plantation, Blood donation Program etc.
3. Being a developing state, the students get more opportunities to excel in their intellectual talents through placements.

CHALLENGES

1. To increase the Student Progression ratio as the career growth of students graduating from this course is comparatively slow.
2. To enhance the placements of students in reputed companies due to increasing competition.
3. To increase the awareness of research and inclination for qualifying CSIR NET/JRF/ SLET exams.

52. Future plans of the department

1. Add on certificate course "Certificate in Scientific Writing" for UG students
2. Add on Diploma in "Intellectual Property Rights" for PG Students.
3. Enhancement in the quality teaching through faculty development programmes.
4. Contribution towards society by producing responsible and competitive candidates.
5. Promotion of research activities: (a.) additional class on importance of research for academic, social, national and departmental growth (b.) more emphasis on practical and Hands-on-Training etc.
6. Strategies to increase student strength by delivering the seminars in various schools of Chhattisgarh, twice in a year.

Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.



Signature of the Head of the institution
HEAD OF THE DEPARTMENT
SCHOOL OF THE SCIENCES
MATS UNIVERSITY

Place: RAIPUR
Date: 19/08/2014