

THE ANNUAL QUALITY ASSURANCE REPORT (AUAR) OF
THE IQAC

NAME OF THE INSTITUTION: MAFATLAL GAGALBHAI SCIENCE INSTITUE
(M. G. SCIENCE INSTITUTE)

YEAR OF REPORT: 2008-2009

PART B:

1. Activities reflecting the goals and objectives of the institutions?

M.G. Science Institute begins the academic year keeping in mind various academic objectives and goals to continue its march towards excellence in higher education. The institute presents a bouquet of courses for undergraduate studies in science. The students can select form as many as ten disciplines of various subjects and not to forget our post graduate courses. Academic excellence has always been an underlying theme of educational planning at the Institute. The activities like seminars, workshops, training sessions, study tours and celebrations of various events create quite a stir among the academic fraternity of the city.

2. New academic programme initiated (UG and PG):

As such there are no new academic programmes initiated, but the Institute wants to build up on its already existing career oriented programmes Geo-informaitcs, chem.-informatics and bio-informatics.

3. Innovations in curricular design and transaction;
The curriculum, although designed by the university, the faculty members at the classroom levels bring innovative techniques to give justice to teaching learning process. They make use of power point presentation, over head projectors to turn the teaching students' friendly. Students are given assignments to keep track of their progress. .
4. We have initiated career oriented programmes in Geology, Chemistry and Biology, Geo-informatics, Chem-informatics and Bio-informatics with the liberal help from the UGC
5. Examination reforms implemented:
 - a. Examinations have remained integral part of academic programmes and they are conducted with utmost seriousness and given its due importance.
 - b. The college professors work as invigilators and take active part in the smooth conduct of the exam.
 - c. Impartiality is maintained at each phase of the exam right form the paper-setting, invigilation, assessment of scripts to the result declaration.
 - d. A high level committee of the Head of the Departments oversees the arrangements of the exams.
6. Candidates qualified NET/SLET/GATE etc.: NIL
7. Initiative towards faculty development programme. :
The faculty members are encouraged to participate in various workshops and seminars. They are given duty leaves for the paper presentation in conferences and seminars.
The various research projects run by the departments give opportunities to junior faculty members to get first hand experience of research activities.

8. Total No of seminars/workshops conducted:

- Chemistry Dept has organized a UGC sponsored State Level seminar on Frontier advances in Chemical Sciences on 25th and 26th March, 2008
- Maths Dept has organized GUJCOST sponsored state level seminar on Chaos theory on 10th and 11th April 2008
- Geology Dept has organized a UGC sponsored State Level seminar on Recent development on Mineral exploration technology On 29th and 30th Aug., 2008
- Botany Dept has organized a UGC sponsored State Level seminar on Environment and Disaster Management on 28th and 29th Jan., 2009
- A departmental Seminar was organized by Geology Dept. on 19th Jan., 2009 in the memory of late shri Chandan Goswami (TYBSc. STUDENT).
- Under the convenorship of Dr. S. G. Yadav Mahatma Gandhi Labor Institute has organized a State level seminar on Issues on Higher education.

Workshops :

- Botany department organized a stale level workshop for teachers on Mushroom Cultivation.
- A Three days workshop on Entrepreneurship Development was organized by Microbiology Dept.
- A workshop to demonstrate Molecular Biology Techniques was organized by Biochemistry Dept.

9. RESEARCH PROJECTS:

- A major research project of 23 lacs capacity on Wetland mapping is sanctioned to Dr. R.D. Shah and Dr. N.Y. Bhatt Geology department by SAC.
- A major research project of 7 lac capacity on Coral reef is sanctioned to Dr. Alpana Shukla , Botany department by ISRO.

10. PATENTS GENERATED, IF ANY: NIL

11. NEW COLLOBORATIVE PROGRAMME:

12. RESEARCH GRANT RECEIVED FROM VARIOUS AGENCIES:

NAME OF THE STAFF MEMBER	DEPARTMENT	FUNDING AGENCY
○ Dr. P.K.Patel	Chemistry	UGC
○ Dr. B.Baldania	Chemistry	UGC
○ Dr. Rina D. Shah	Chemistry	UGC
○ Dr. J.H.Parikh	Chemistry	UGC
○ Dr. J.J.Vora	Chemistry	UGC
○ Dr. M.D. Shukla	Microbiology	GUJCOST
○ Dr. Vivek Upasani	Microbiology	UGC
○ Dr. C.V.pandya	Physics	UGC

13. **DETAILS OF RESEARCH SCHOLARS:**

<u>NAME OF THE RESEARCHER</u>	<u>RESEARCH AREA</u>
DR. B. K. JAIN PRINCIPAL & PH. D. GUIDE	ADVANCED PLANT EMBRYOLOGY AND BIO-DIVERSITY
DR. R. D. SHAH HEAD, GEOLOGY DEPT & PH. D. GUIDE	CLIMATE CHANGE IN TERRESTRIAL ENVIRONMENT
DR. M. D. SHUKLA PROF, MICROBIOLOGY DEPT.	MUSHROOM RESEARCH
DR. H. V. PANDYA HEAD, BIOCHEMISTRY DEPT.	BIOPROSPECTING OF WATER HYACINTH
MS. V. R. NADAGAUDA PROFESSOR, BIOCHEMISTRY DEPT	DYE DEGRADATION
DR. J. H. PARIKH PROFESSOR, CHEMISTRY DEPT	DYE DEGRADATION
DR. P. K. PATEL PROFESSOR, CHEMISTRY DEPT PH. D. GUIDE	ORGANIC SYNTHESIS AND ITS ANALYSIS
DR. ALPANA SHUKLA	COTTON CROP MODELLING USING REMOTE SENSING

14. CITATION INDEX OF FACULTY MEMBERS AND IMPACT FACTOR:

15. HONORS AND AWARDS TO THE FACULTY: nil

16. INTERNAL RESOURCES GENERATED:

NAME OF THE COURSE	INCOME GENERATED
CAREER ORIENTED PROGRAMMES	` 4,73,700/- (Gross)
EMBEDED SYSTEM	` 40,000/- (Gross)
INSTRUMENTATION	NIL

15 details of departments getting assistance/recognition under SAP, COSIST (ASSIST)/DST, FIST, and other programmes)

17. COMMUNITY SERVICES:

- a. 1st Asia pacific international tournament for mentally retarded children was organized in December 2004. College faculty & students worked selflessly as volunteers in these events
- b. The microbiology department of M. G. Science Institute under the leadership of Dr. M. D. Shukla has trained more than 300 tribal women of Chhota Udepur region in mushroom plantation, making them financially independent
- c. Every year Institute arranges collaborative BLOOD DONATION CAMP with Jain Social Group and Green Cross

18. TEACHERS AND OFFICERS NEWLY RECRUITED NIL

19. TEACHING – NON-TEACHING STAFF RATIO 2:1

20. IMPROVEMENTS IN THE LIBRARY SERVICES:

The library of the Institute is computerized and regular books are added as per the requirements of the faculty and the students.

21. NEW BOOKS/JOURNALS SUBSCRIBED AND THEIR VALUE :

22. COURSES IN WHICH STUDENT ASSESSMENT OF TEACHERS IS INTRODUCED AND THE ACTION TAKEN ON STUDENT FEEDBACK:

23. FEEDBACK FROM STAKEHOLDERS

24. UNIT COST OF EDUCATION :

$$\text{` } 3,73,26728.99 / 2225 = \text{` } 16,776/-.$$

25. COMPUTERIZATION OF ADMINISTRATION AND THE PROCESS OF ADMISSIONS AND EXAMINATION RESULTS, ISSUE OF CERTIFICATES

- a. Our admission process is computerized since 1991, following the guide lines of Gujarat University.
- b. There are two internal examinations conducted each year by the institute. While Final Examination is conducted by the Gujarat University.

26. INCREASE IN THE INFRASTRUCTURAL FACILITIES

Fully computerized language lab is built with the assistance of the Govt. of Gujarat.

27. TECHNOLOGY UPGRADATION

- a. Various departments of the college are given computers as part of the technology up gradation. A Computer Laboratory with 10 computers for students and faculty training was erected.

28. COMPUTER AND INTERNET ACCESS AND TRAINING TO TEACHERS, NON-TEACHING STAFF AND STUDENTS

- a. Many departments of the Institute have computers and they access the internet for the academic advancement.
- b. Office and Library were connected with the Internet.

29. FINANCIAL AID TO STUDENTS:

- Many donors and past professors have created some corpus of fund to give financial aid to the toppers of various subjects in the final university examination.
- Government grants are provided to the students belonging to SC & ST categories.

30. ACTIVITIES AND SUPPORT FROM THE ALUMNI ASSOCIATION:

The Alumni association of the Institute conducts annual meetings and conducts programmes to support cultural and academic activities in the institute. They help connect with the past students who have made their mark in their respective fields. The expertise of the alumnus of the institute is utilized for the improvement of the academic standard of the institute.

31. ACTIVITIES AND SUPPORT FROM THE PARENT-TEACHER ASSOCIATION

32. HEALTH SERVICES:

- a. VISA club of our College organized a health Awareness camp, financially assisted by UGC under in Paldi adjoining NID slum area, Ahmedabad. 50 persons were tested for diabetes and blood pressure. More interesting is out of 50 persons, 12 were found positive for diabetes.
- b. On 25th Sept., a blood Donation day was celebrated by the NCC wing and students of the college. Nearly 65 students few staff members have donated the blood.

33. PERFORMANCE IN SPORTS ACTIVITIES:

In the current year the students of our inst. have participated in the various sports activities like Cricket, volleyball, Basket ball, badminton, chess, tennis, football, table tennis, athletics and swimming.

- At the Univ. level our cricket team played upto quarter final. 4 cricket players, Thakker Manthan,Ramanuj Bhargav,Solanki Vaibhav andUtsav Baviskar were selected for the zone.
- Mr. Utasav Baviskar of T.y.B.Sc. are selected for Gujarat Univ. Cricket team and participated in all India Interuniversity Tournament.

- Football team played inter collegiate tournament upto Semi final and Mr. Miresh Suthar and Mr. Kiran Chaudhari were selected to play in Zonal tournament
- Mr. Mitesh Suthar is also selected to play in All India Inter University Tournament.
- Mr. Verma Kunal B. of T.Y. B.Sc. played Inter zonal chess tournament.
- Mr. Chavda Harish, Ujjawal Bhatt and Mr. Jaipal were selected for Basket ball inter zonal tournament.
- In the well disciplined manner organized inter class cricket tournament T.Y. Chemistry team has become champion and T.Y. Chemistry team became runner up.
- Sports day of the insti. Was organized on 6th Dec. Many students have shown keen interest and participated in various athletic events. Among these participants best men and women athletes have been selected. Best athletes among the men were Mr. Singh Prabhat and Suthar Mitesh while among the female was Ankita Purohit.
- Volleyball team has played Gujarat Univ inter college tournament upto semi final. Mr. Vishal Bhatt of F.Y.B.Sc. was selected for zonal.
- Institute has also participated in Kho-Kho, Loan Tennis and athletic Inter collegiate Tournament
- I would like to mention that the Cricket team of M.G. Science is one of the 10 teams which plays in the Central board of cricket tournament organized by Gujarat Cricket board. From these teams players for Ranjit trophy are selected.
- Kapildev Invitation Cricket cup tournament includes 12 teams. One of them is M.G. sci. team. You will be surprised to know that ours is the only college team in the entire Gujarat which is invited by Kapildev cricket club.

34. INCENTIVES TO OUTSTANDING SPORTSPERSONS

The sporting heroes of the institute are duly rewarded with cash prizes and they are also awarded extra bonus marks in the internal exam of the college.

35. STUDENT ACHIEVEMENTS AND AWARDS

Many students are the toppers in the various university exams and they are suitable

appreciated and awarded during the annual function of the college.

- Miss Pankti Parikh --- Biochemistry. **T.Y.B.Sc. Topper**
- Miss Zaveri Purvi – Microbiology **T.Y.B.Sc. Topper**
- Mr. Dudhani Sumesh – Botany **T.Y.B.Sc. Topper**
- Miss Maheshwari Bhumika - Maths **T.Y.B.Sc. Topper**
- Patel Gaurav R - Geology **T.Y.B.Sc. Topper**

- Mr. Krunal Patel of Biochemistry Dept (2005-06 Batch) has cleared NET

- Miss Megna Patel, who passed B.Sc. Biochemistry in June 2004, has received Bill Gates Foundation Scholarship to carry out her research in Diabetes and got registered with Cambridge Univ. for her Ph.D.

- Mr. Jaymin Thakkar of F.Y. B.Sc. won First prize in Inter Collegiate extempore speech organized by Shivanand prize. Institute has also received a trophy for the same.

- Miss Minakshi Sharma and Mr. Yatin Dave participated in RDC parade on 26th January in Delhi representing Gujarat State.

- Minakshi Sharma is also selected for the Youth Exchange Programme and she will be visiting either Russia or Canada.

36. ACTIVITIES OF THE GUIDANCE AND COUNSELLING UNIT

The guidance and counseling cell of the Institute provides the guidance and direction to the final year students for the future career path. They also work in consonance with the placement cell to keep the updated about the various job opportunities.

37. PLACEMENT SERVICES PROVIDED TO STUDENTS:

The placement cell invites and arranges the campus interview of the final year students. The cell coordinates with various agencies to put together the placement activities on the campus.

38. DEVELOPMENT PROGRAMMES FOR NON-TEACHING STAFF:

Non-teaching staff are integral part of the activities on the campus. They are invited to regular meetings of the academic staff. Their views are taken into account when

making decisions about the academic calendar of the institute.

39. GOOD PRACTICES OF THE INSTITUTION:

- a. The institute takes pride in its blood donation activities which has remained a regular annual feature.
- b. A Chirnjiv program of Visa club to provide free tutoring and teaching support to the children of class IV employees of AES is carried out successfully by Miss Apeksha and her team.
- c. The big science laboratories of the Institute with all the latest equipment is a powerful attraction for the science schools in the neighborhood. They are given free access to the laboratories and given instructions in the use of the various equipment. .

40. LINKAGES DEVELOPED WITH NATIONAL/ INTERNATIONAL,
ACADEMIC/RESEARCH BODIES

The various Departments of the Institute have initiated collaborative research programmes with institutions of repute like ISRO, PRL and SAC.

41. ACTION TAKEN REPORT ON THE AQAR OF THE PREVIOUS YEAR

The institute has capitalized on its expertise and started successfully career oriented programmes. Special classes and personally counseling are undertaken to improve the performance of the weak students. Further encouragement is provided to the students for the participation in various cultural activities by a dedicated team of faculty members.

42. ANY OTHER RELEVANT INFORMATION THE INSTITUTION WISHES TO
ADD.

Section C: Outcomes achieved by the end of the year (attach separate sheet if required).

The Institute has always strengthened its position as an institute of repute by consistently providing sound academic results. PHD programmes in the field of chemistry and geology is yet another feather in its cap. Many participants of the institute won so many medals in the Gujarat University Youth Festival.

The process is undertaken to recruit vacant positions of the faculty in the various departments.

Section D: Plans of the HEI for the next year

The Institute is making all out efforts to fill up the vacant positions for the faculties in the various departments and the government is likely to fill up some of the posts. Meanwhile the management is requested to help provide temporary faculty members.

The Institute has also decided to make use of the grants form various government and non-government organizations.

It is also decided to give more focus to the research and development activities at the Institute.

Name & Signature of the Principal

Coordinator, IQAC Chairperson, IQAC