# THE ANNUAL QUALITY ASSURANCE REPORT (AQAR) OF THE IQAC

Name of the Institution: Bharathidasan University, Tiruchirapalli 620 024, Tamil Nadu

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**Year of Report**: 2006-2007

# <u>Part-A</u>: The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year

- 1. Faculty strength were increased to meet requirements in teaching and research.
- 2. New teaching programmes on interdisciplinary topics were introduced.
- 3. Linkages and Collaborations were improved.

# Part-B

- 1. Activities reflecting the goals and objectives of the Institution:
  - Reforms in Curriculum design, updating syllabi etc. to improve quality of teaching programmes.
  - Improving infrastructure facilities.
  - Starting research in frontier areas through collaborations and linkages.

# 2. New academic programmes initiated:

Total number of programmes initiated: 5

Details: 1. M.Tech. (IT)

- 2. Ph.D.
- 3. M.Sc. (Geoscience)
- 4. M.Phil. in Geography
- 5. P.G. in Marine Biotechnology

# 3. Innovations in curricular design and transaction:

- > The curriculum is designed with more choices to suit the Choice Based Credit System.
- > The syllabus of various courses are revised.

# 4. Interdisciplinary programmes started:

Five Year Integrated M.Sc. Program on GeoSciences

M.Phil on Geography

M.Sc. Medical Physics

# 5. Examination reforms implemented:

- Internal examinations conducted for the purpose of Continuous Internal Assessment are made tough and very serious.
- > Experts are invited for valuing the answer papers.
- 6. Candidates qualified: NET/SLET/GATE etc.

NET/SLET/GATE : 7

# 7. Initiative towards faculty development programme:

- Orientation programmes and refresher courses on specific topics are organized regularly in the Academic Staff College of the University to improve the teaching and research qualities of young faculty members.
- Also faculty members are encouraged to attend orientation programmes and refresher courses organized outside the institution.
- > Faculty members are encouraged to attend research conferences and workshops in India and abroad.

# 8. Total number of Conferences /Seminars/Workshops conducted/organized:

29

#### 9. Research projects:

# (a) Newly implemented:

No. of Projects: 27

Total outlay : Rs.713.45 lakhs

#### (b) Completed:

No. of Projects: 15

Total outlay : Rs.168.88 lakhs

#### 10. Patents Generated:

2 Patents

# 11. New collaborative research programmes:

Research collaborations

Yes ✓ No

National

If yes, how many?

12

Overseas Yes ✓ No

If yes, how many?

# 12. Research grants received from various agencies :

No. of Projects: 27

Total outlay : Rs.713.45 lakh

#### 13. Details of Research Scholars:

Nature of	On Roll	Newly	Degree
Registration		Registered	Awarded
Full-time/	268	50	22
Part-time			

# 14. Citation Index of faculty members and Impact factor:

- (i) Some of the research papers published by few faculty members have good number of citations.
- (ii) Science faculty members normally publish their research papers in reputed international journals with high impact factor.

# 15. Honours/ Awards to the faculty:

Brain Pool Invitation Fellowship, Korean Federation of Science & Technology (KOFST) –
 S. Korea – School of Chemistry

- A.C. Banerjee Memorial Lecture Award of National Academy of Sciences
- TWAS-UNSECO Associateship at Centres of Excellence in South, Italy Dr.M.
   Senthilvelan
- Visitor, Instituto de Fisica Teorica, Unversidade Estadual Paulista, Sao Paulo, Brazil -Dr.M. Senthilvelan
- AvH Revisit programme, Germany Prof.M. Palaniandavar.
- Indo-Hungarian Educational Exchange Programme of UGC- Prof. K.Kumaraswamy.
- INSA Visiting Fellow-Dr.A.Ganapathi
- Young Scientist Award from DST,India- Dr.K.Natarajaseenivasan, Dr.Sivaramakrishnan and Dr.V.Rajesh Kannan
- Young Scientist Award from 11th IUPAC International Congress. Dr.Sivaramakrishnan
- Sahitya Akademi Award Prof.V. Ayothi.
- Member, Task Force, ICMR, New Delhi Prof.M.A. Akbarsha.
- Indian National Science Academy (INSA) Overseas Fellowship, Germany Dr. G. Archunan.

# 16. Internal resources generated:

Rs.12,37,75,602/-

# 17. Details of Departments getting SAP, COSIST (ASSIST)/DST-FIST etc. assistance/recognitions:

UGC – SAP: School of Chemistry(Contd.), School of Physics (New).

DST – FIST : School of Physics(Contd.), Department of Animal Science(Contd.), School of Chemistry(New).

# 18. Community Services:

- Awareness programme on "Impact of Globalisation on women in agricultural and weaving sector" 28<sup>th</sup> August 2006
- Orientation on "Gender issues related to HIV/ AIDS" to the Gender volunteers" 9th June 2006.
- Gender Sensitivity Training Programme for Higher Secondary School Teachers 26th & 27th December 2006
- Civil Service training consultancy for rural youth in collaboration with District Employment office.
- Population Education Clubs
- Youth Red Cross Activities

#### 19. Teachers and officers newly recruited:

25

# 20. Teaching Non-teaching staff ratio:

1:3

# 21. Improvements in the Library services:

New books at the text book level and also advanced books based on the requirement and current trend are added.

# 22. New books/ journals subscribed and their cost:

(a) Central Library

Number of books added: 2450 Journals subscribsed: 173

(b) Department Libraries

Number of books added : 4,008

Cost of the books : 26,96,913/-

# 23. Courses in which student assessment of teachers is introduced and the action taken on student feedback:

Feedback about all the courses and the course teachers are obtained from the students and the comments made by the students are discussed with the concerned faculty members for improvement.

#### 24. Unit cost of education:

Approx. : Rs.5000/-

# 25. Computerization of administration and the process of admissions and examination results, issue of certificates:

The examination system has been fully computerised with the in-house developed software, specially suiting to the requirements of the affiliated colleges programmes. The processing of results, DTP printing of Certificates/Degrees etc. are all done without delay.

In the University Departments the admission process including entrance examination, preparation of rank, selection, waiting list is fully computerized which makes the admission very efficient. Also, the conduct of examination and publication of results apart from routine administration are computerized.

#### 26. Increase in the infrastructural facilities:

- Floor space has been expanded to 1,440 Sq.m. for the Department of Geography.
- Electronic Equipments including Computers, Printers, Scanners were added in many Departments.
- Book Shelves, Almyrahs, Visitors' Chairs and other essential furniture were added in few Departments.
- Internet provision was given to new buildings.
- New instruments such as Water distillator, Microbiological incubator, Metal distillator, Low speed centrifuge, TLC equipment, Cooling centrifuge, Laminar flow chamber, Autoclave, Deep freezer, pH meter, Light Microscope (with camera), Light racks were added to the Department of Biotechnology.

# 27. Technology upgradation:

- Wireless network was established to hostels and quarters.
- The high performance computing facility in the Centre for Nonlinear Dynamics of the School of Physics was upgraded.

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 2 IBM Servers, 60 Desktops, few Printers, Running Tables and Projectors were purchased by the Department of Computer Science.

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 e- sources, e- filing and data base were added to the library of the Department of Women Studies.

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- Photo logical microscope and Surveying instruments have been procured by the Department of Geography.
- Internet facility has been provided for faculties, Research Scholars & Students by LAN as well as by Wi-Fi connection.

#### 28. Computer and internet access and training to teachers and students:

Computer and Internet access have been provided to both teachers and students. No training is given. Faculty members are provided with individual desktop with internet facility. The Informatics Centre of the University has a bandwidth of 64 kbps for internet connectivity.

#### 29. Financial aid to students:

The Post Graduate Students belonging to Backward, Most Backward and Schedule Caste and Tribes are getting scholarships from the State Government of Tamil Nadu. Research Scholars receive fellowships from different agencies such as UGC, CSIR, DST, DBT, ICMR, DAE, Bharathidasan University etc.

Total amount of Scholarship : Rs.59,57,752/-Total amount of Fellowship : Rs.25,18,968/-

# 30. Support from Alumni association and its activities :

Several Alumni from various departments have regular contact with the faculty members, scholars and students and take part in the welfare of the departments.

# 31. Support from Parent-Teacher Association and its activities:

There is no formal Parent-Teacher Association in the University. However, all the departments conduct Parent-Teacher Meet on the first day of the programme in the academic year and various issues related to the teaching programmes and students are discussed.

#### 32. Health Services:

The University's Health Centre was established in the year 1993. The Health Centre is located in a building with 300 sq.ft. area, which is very close to the Administrative Building, Hostels and to the Staff Quarters. The Health Centre has physical facilities such as bathroom, toilet, wash basins, fans, lights, drinking water, etc. The health centre has First-aid medicine, IRR Lamp, Electrocardiogram and other basic equipments. The working hours of the Health Centre is from 9.00 a.m. to 5.00 p.m. The Centre has link with all the major hospitals in the city. The health centre has the following medical personnel.

The Health Centre is managed by a qualified part-time Doctor and a qualified full-time nurse.

# 33. Performance in sports activities:

Women Netball team secured fourth position in All India tournament.

#### 34. Incentives to outstanding sports persons:

Nil

#### 35. Student achievements and awards:

- Mr.V. Rajendran, School of Chemistry participated in the Third Asian Biological Inorganic Chemistry Conference (AsBIC-III) held during October 31-November 03, 2006 at Nanjing University, P R China.
- J. Krishnamurthi, School of Chemistry received the Best Poster Presentation Award, in Indo-US-CCNP Symposium held at IICT, Hyderabad held during Nov. 13-14, 2006.

- Ms. V. Kavitha and Ms. M.S. Sameem Banu Qualified NET in Women's Studies
- V.Samrot, Department of Biotechnology -Agasthiar award-27th Annual Conference on IABMS.
- R. Nazeerullah, Department of Microbiology Best paper award at 5th National Conference of Indian Association of Applied Microbiologists (IAAM) on Emerging Trends and evolving Technologies in Applied Microbiology with Special Reference to Microbial Nanotechnology.
- G. Muralitharan and I. Anandavalli, Department of Microbiology Best paper awards at National conference on "Bioprospecting of Marine Resources with special reference to Marine Natural Products and Drug Discovery" organized by Oceanography and coastal area studies, Alagappa University, Karaikudi during April 26 – 28, 2007.
- K.Kalaivani, Department of History Prof. K.R.Hanumanthan Endowment Medal
- Dr. R. Rajkumar, Department of Animal Science was awarded Post Doctoral Fellowship by the City University of Hong Kong, Hong Kong.
- T. Kumuthavalli, Department of Lifelong Learning qualified NET.
- Gopi, Mahesh and Nirmal, Department of Tamil, won prizes in the BARD-FEST cultural event (Skit).

# 36. Activities of the Guidance and Counselling Cell:

Each department has appointed mentors among faculty members to different classes to provide academic, career and personal guidance and counseling to the needy students whenever required.

#### 37. Placement services provided to students:

The University does not arrange common placement programme for the students. However, each department, through their contacts with other institutions and companies in India and abroad, helps the students to get good employment. Also, the students get placements through their own contact if they do their project work outside the University. Similarly, research scholars get placement through their contact during the post-doctoral programmes outside the University. Further alumni help their juniors. Several students get teaching positions in colleges.

# 38. Development programmes for non-teaching staff:

Common development programmes for non-teaching staff are organized rarely. However, noteaching staff who are interested in pursuing higher qualifications through distance education mode are encouraged by the institution. Also, inhouse training is provided to non-teaching staff of the University at regular intervals.

#### 39. Best practices of the institution:

- The curriculum is revised based on the feedback.
- Experts are invited for giving special lectures for the benefit of students.
- Establishment of Women Entrepreneurs Association of Tamil Nadu(WEAT)
- Exposure to integrated language skills
- Industrial Visits
- Seminars are organized on special topics for the benefit of students.

# 40. Linkages developed with national / international , academic / research bodies :

# **School of Physics:**

- University of Colorado, Colorado, USA
- FCT- UNL, Caparica, Portugal
- Indian Institute of Chemical Biology, Kolkatta.
- IUAC, New Delhi
- MRC, IISc., India
- Postdam Inst. For Climate Impact Research, Germany
- Saha Institute of Nuclear Physics, Kolkata
- Department of Mathematics, University of British Columbia, Vancouver, Canada
- Instituto de F´ısica Te´orica, Universidad Estadual Paulista, Brazil
- Departamento de F´ısica Te´orica, Facultad de Ciencias, Universidad de Zaragoza, 50009
   Zaragoza, Spain
- Departamento de F´ısica Te´orica, Facultad de Ciencias, Universidad de Valladolid, 47011
   Valladolid, Spain
- Area de Matema´ tica Aplicada, ESCET, Universidad Rey Juan Carlos, Madrid, Spain
   Departamentode Matem´aticas, Universidad de Salamanca, Salamanca, Spain
- Dipartimento di Matematica ed Informatica, Via. A. Doria 6, I-95125 Catania, Italy
- Institute of Theoretical Physics, State Univ. Sao Paulo, Brazil.

#### **School of Chemistry:**

- Dr. S.Maruthamuthu, Scientist, Central Electrochemical Research Institute, Karaikudi.
   Multifunctional Organic Molecules as Potent Correction Inhibitor of Petrolium Pipeline
- INSA Interacademy Exchange Scientist (2006-2007) collaboration fellowship with Royal Society, U.K.
- Institure fur Technische Chemie of the Leibniz Universitat, Hannover, Germany.
- Dr. Y. Liu, University of Zurich, Switzerland

- Eringathodi SureshAnalytical Science Discipline, Central Salt and Marine hemicals Research Institute, Bhavnagar 364 002, India
- Stoeckli-Evans H, Institut de Chimie, Universite´ de Neuchaˆ tel, CH-2007 Neuchaˆtel, Switzerland
- Dr.V Subramanian, Central Leather Research Institute, Chennai, India

# **Environmental Biotechnology:**

- University of Edinburgh
- School Of Biological sciences Madurai Kamaraj University, Maduarai
- United Nations University, Tokyo, Japan and SHIMADZU Corporation, Japan
- Centre for Research in Medical Entomology, Madurai

#### **Plant Science**

- National Institute for Forestry, Agriculture and Livestock Research, Mexico
- National Research Centre for Banana, Trichy
- Sharmila Pharma -Sharmila Institute of Medicinal Products Research Academy (Hereafter referred as SIMPRA), Thanjavur

#### 41. Any other relevant information:

Nil

# <u>Part – C</u>: Detail the plans of the institution for the next year

In the next year,

- The infrastructure and research laboratory facilities will be improved.
- Research in new frontier areas will be initiated.
- New teaching programmes will be started.
- Scientific meetings in emerging areas will be organized.

Name and Signature of the Coordinator/Director, IQAC

Name and Signature of the Chairperson, IQAC