

**Report of the Expert Committee constituted by the
University Grants Commission to consider the proposal of
Tata Institute of Fundamental Research, Mumbai.**

The University Grants Commission received the proposal from the Tata Institute of Fundamental Research, Mumbai to accord the Deemed to be University Status.

The Chairman, UGC constituted an Expert Committee to examine the proposal and submit their recommendations. The composition of the committee is given in Annexure-I.

The members of the Committee who participated in the visit to the TIFR Mumbai Campus on March 12, 2002 are listed in Annexure I (a) and the members who visited TIFR Centre for Applied Mathematics at Bangalore and the National Centre for Biological Sciences, Bangalore on March 13, 2002 are listed in Annexure I (b)

The Tata Institute of Fundamental Research (TIFR) pursues basic research across a broad canvas which covers physical, mathematical, chemical and biological sciences. In addition, it is pursuing programmes in science education and computer science and technology. TIFR has four campuses viz., Tata Institute of Fundamental Research at Mumbai, National Centre for Radio Astrophysics, Pune, National Centre for Biological Sciences, Bangalore and Homi Bhabha Centre for Science Education, Mumbai.

The whole of Tata Institute of Fundamental Research (including all campuses) has an Academic staff of about 400, graduate students about 200, technical and support staff of about 1400. The total budget of the institute (including plan) is about Rs. 100 crores per year and nearly all of it is provided by the Department of Atomic Energy, Government of India. The Chairman of the Atomic Energy Commission assured the Committee that the Department of Atomic Energy would continue supporting TIFR as it has been doing in the past irrespective of its being granted Deemed to be University status.

The committee was impressed by the high quality research in various disciplines. During past 10 years, a dozen TIFR scientists and mathematicians were awarded the Shanti Swarup Bhatnagar prize as well as 73 fellowships of national academies and about 150 national and international recognition. The School of Mathematics has made outstanding contributions in fields of algebra, differential geometry, discrete mathematics, Lie groups, number theory, partial differential equations and applied analysis. The TIFR Centre for Applied Mathematics at Bangalore runs a collaborative programme with the Indian Institute of Science, Bangalore.

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The School of Natural Sciences has seven departments at Mumbai (viz. Theoretical Physics, Astronomy and Astrophysics, High Energy Physics, Nuclear and Atomic Physics, Condensed Matter Physics and Materials Science, Chemical Sciences and Biological Sciences). The School also has the following three National Centres,

- (i) The National Centre for Radio Astrophysics (NCRA) at Pune Campus with the cylindrical radio telescope at Ootacamund and the world's largest Giant Meterwavelength Radio Telescope (GMRT) at Khodad (near Pune)
 - (ii) The National Centre for Biological Sciences at Bangalore campus
- and
- (iii) The Homi Bhabha Centre for Science Education at Mankhurd campus in Mumbai

The School has set up several field stations for various research facilities, which include the National Balloon Facility at Hyderabad, the Gamma Ray Astronomy and High Energy Astrophysics Laboratories at Pachmarhi and Ootacamund and the Gravitational Laboratory at Gauribidanur.

TIFR contributes to the development of high quality human resource through its graduate study programme which essentially concentrates on the Ph.D degree. There are limited Masters programmes in areas of interest to the Institute. In the opinion of the Committee, expansion and extension of the Masters programme in TIFR and its campuses will prove of great benefit to the nation through the participation of excellent and worldclass Faculty of TIFR. The Institute also offers a summer training programme, the Visiting Students Research Programme (VSRP) for students from universities and other academic institutions. The Homi Bhabha Centre for Science Education has very successfully trained young students for Olympiads in Chemistry, Physics and Mathematics.

Tata Institute of Fundamental Research and its Centres have well equipped laboratories with very specialized equipments. There is research collaboration with some other institutions, but in the opinion of the committee links with universities need to be strengthened by suitable mechanisms.

TIFR library is acknowledged to be one of the best in our country. Almost all journals are available on line for TIFR members. The Institute Computer facilities are adequate and computers find wide use in the institute. The central workshop is well equipped. There are specialized facilities like 600 as well as 800

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MHZ NMR, pelletron, GMRT and so on. TIFR should devise mechanisms for greater utilization of these facilities by University teachers.

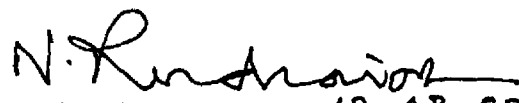
The Committee is very happy to recommend the award of the Deemed to be University status to the Tata Institute of Fundamental Research.

The Administrative structure of the Tata Institute of Fundamental Research has evolved through six decades with involvement of very eminent scientists of our country. It is a time tested structure which appears to be befitting to the UGC model. Therefore the committee feels that the existing structure of TIFR (like the Council of Management, the designation of Director, etc.) should continue as it is. It would be desirable that TIFR has an Academic Council which includes a distinguished scientist as a nominee of the UGC. A Board of Studies for each school may also be created with some outside experts (preferably from Universities).


The Committee places on record its appreciation for the cooperation and gracious hospitality extended by Prof. S.S. Jha, Director, Faculty Members, Administrative staff during the visit of the committee to the institute and its campuses.


(Prof S.K. Joshi) 13/03/02



(Prof H.P. Dixit)


(Prof N. Rudraiah) 13-03-02

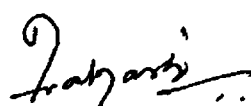

(Dr A.V. Narlikar)


(Prof S. Gadre)


(Prof R.N.K. Banerji)


(Prof Amit Roy)


(Prof D.K. Gautam)


(Dr P. Prakash)