

Mentor's report (16th and 17th of March, 2006)

Name of the Institution: **Institute of science and technology
Jawaharlal Nehru Technological University
Kukatpally, Hyderabad, 500 072 (A.P.)**

Grant of autonomy

The Institution is currently enjoying autonomy to the following extent as detailed below. The Institute has total autonomy with respect to decision making in TEQIP. In addition to that, the Institute has partial autonomy with respect to staff appointments at different levels (staff on contract basis can be appointed by IST Director). Academic autonomy is also partial as it is governed by the University rules & regulations. Financial autonomy exists only with respect to TEQIP funds & sponsored research projects.

The institute has no autonomy as far as faculty recruitments are concerned with regards to the number of posts to be filled & fund allotment. The University also does not have the authority/freedom to recruit staff unless sanctioned by the state government. The NPIU and the SPFU should take up with the state government the issue of filling up of vacant all approved posts.

The Institute should be accorded complete academic autonomy for achieving excellence. The tuition fee collected is not retained by the Institution and is passed on to the Univ. Therefore it becomes difficult for the Institute to create corpus funds. This practice should be discontinued by the University so that the Institute will have sufficient finances.

Actions taken on shortcomings reported by auditors

Project Implementation:

Project ownership has improved considerably as the entire faculty team of IST is involved in the implementation of this project. The entire team is well prepared to move rapidly for overall project implementation.

The syllabus for the PG programs is revised at regular intervals & a common Board of Studies meeting is scheduled for 22nd march to revise & upgrade the syllabus. Some of the redundant programmes offered by different centres should be clubbed with scope for offering more number of electives. The two courses like M.tech. in Geoinformatics and surveying technologies and M.Tech in Environmental geoinformatics should be suitably clubbed with suitable number of electives.

There has been a considerable improvement in the strengthening of academic facilities. Most of the gaps in the experimental setup have been filled up because of procurement of the necessary equipment under TEQIP. Modernization of labs is being undertaken with TEQIP funds. The mentor has visited all the labs, discussed with faculty and the Heads of

constituent centres and is satisfied that each one is aware of all the project components. All the labs in the four centres are in a very fine shape but for faculty and space constraints. With more TEQIP assistance there is scope for further progress and improvement. The following equipment has been procured in the different centres as on date.

PROCUREMENT OF GOODS UPTO 31st MARCH 2005

Library

Sl.No.	Items	Rs. In Millions
1.	Books for library	0.155
Total Amount		0.155

Central Computational Facility

Sl.No.	Items	Rs. In Millions
1	Bio informatics Software (CCF)	1.562
2	Pentium IV P.C with 19" Monitor (CCF)	0.21
Total Amount		1.772

Central Instrumentation

Sl.No.	Items	Rs. In Millions
1	ICP – OES Spectrometer	2.273
2	TEVA Software	0.484
3	Pentium IV P.C with 19" Monitor (CCF)	0.050
4	Lap – top Computer (Seminar Hall)	0.061
Total Amount		2.868

Center for Biotechnology

Sl.No.	Items	Rs. In Millions
1	PCR Machine	0.182
2	UV-Vis Spectrophotometer	0.264
3	Sonicator	0.257
4	CO ₂ Incubator	0.249
5	Electrophoresis	0.715
Total Amount		1.667

Center for Spatial Information Technology

Sl.No.	Items	Rs. In Millions
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SECOND MENTORING REPORT
 INSTITUTE OF SCIENCE & TECHNOLOGY, JNTU, HYDERABAD

1	Arc GIS 9.0 or latest University Lab Kit - additional licenses (CSIT)	0.55
2	Digital Photogrammetry Software Multiple Licenses (DVP, SSK, PHOTOMOD) (CSIT)	0.44
Total Amount		0.99

Center for Environment

Sl.No.	Items	Rs. In Millions
1	Balance	0.099
2	Differential Global Positioning System (DGPS)	1.240
Total Amount		1.339

Center for Water Resources

Sl.No.	Items	Rs. In Millions
1	Pentium IV P.C's of HP brand with 19" monitor	0.24
2	LCD Projector	0.078
3	ERDAS IMAGINE 8.7(2) (CWR)	0.775
Total Amount		1.093

SL.NO.	ITEMS	AMOUNT
1	Books under TDP	0.8
2	e- Journals	0.9
3	Books	1.1
Total Amount		2.8

CENTRAL FACILITIES (SECOND PHASE)

**CENTRAL COMPUTER FACILITY
 AND CENTRAL INSTRUMENTATION**

Sl.NO.	ITEMS	AMOUNT
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SECOND MENTORING REPORT
INSTITUTE OF SCIENCE & TECHNOLOGY, JNTU, HYDERABAD

1.	Gas chromatograph with ECD, FID, and TCD with capillary column and with pre concentrator	1.3
2.	Head Space extractor	0.6
3.	Protein Purification System	1.9
4.	Micro ultra centrifuge	2.3
5.	HPLC Grade water purification system	0.3
6.	Computers	0.9
7.	Server	0.7
8.	UPS 10 KV (2) online	0.4
9.	Turbo Molecular Pump	0.4
10.	ELISA Reader	0.6
11.	Cold Room Facility	0.3
Total Amount		9.8

CENTER FOR BIOTECHNOLOGY

SL.NO.	ITEMS	AMOUNT
1	Gel Doc System	0.49
2	Inverted Microscope	0.68
3	Spectro fluorimeter	0.58
4	UV-crosslinker	0.08
5	Water Purification system	0.25
Total Amount		2.08

CENTER FOR ENVIRONMENT

SL.NO.	ITEMS	AMOUNT
1	UV-Vis Spectrophotometer with software	0.5
2	Microscope with image processing software and hardware for existing phase contrast microscopes	0.3
3	Anaerobic glove box	0.4
4	Water Purification system	0.2
5	Laser gene software	0.13
Total Amount		1.53

CENTER FOR SPATIAL INFORMATION TECHNOLOGY

SL.NO.	ITEMS	AMOUNT
1	Differential Global Positioning Systems	2.0
Total Amount		2.0

CENTER FOR WATER RESOURCES

SL.NO.	ITEMS	AMOUNT
1	UPS (10 KV) (On-line) 2 no.	0.4
2	SMS 8.1	0.2
3	WMS 7	0.1
4	Light tables	0.1
5	Water Quality kit	0.14
6	Digital planimeter	0.22
Total Amount		1.16

A few faculty members have been deputed for training programmes to improve their competence. Plans are on to send other faculty members and also staff to different Institutions in our country for training in the necessary areas. The Institute's centres are also planning to organize in house training programmes by inviting experts from other

Institutions. The Institute has participated in networking activities with its partners by organizing a National workshop and a conference. The Centre for Biotechnology of the Institute is also planning to apply for joint research funding in the month of May.

The Institute has till date conducted five training programmes till date as a part of community service component.

The Institute has also involved itself in conducting a one day National seminar on Technology for Social Justice as a part of networking activity as well as the tribal development plan. All the books needed for the book bank have been ordered.

The targets achieved till date are mostly in line with the plan of action proposed in the CIP. The University has already been given a "A" grade by NAAC. Most of its programs are approved by AICTE.

The reorientation or restructuring of academic programmes can possibly be initiated from this academic year i.e. 2006 – 2007 and not as per CIP.

Other Suggestions:

The faculty position at the Centre for Biotechnology is very unsatisfactory with only one Professor and five temporary faculty on contract basis. As Biotechnology is a very important and emerging discipline that has immense potential to better the quality of human life through research and innovation, a number of start up companies can originate from this centre, provided there is sufficient number of faculty. On account of the importance of Biotechnology to the society, more number of senior faculty must be appointed immediately. Also the Centre should have a faculty strength of at least eight members. Steps should be taken to appoint two faculty members immediately. The centre should also consider collaboration for research with some of the leading hospitals in Hyderabad.