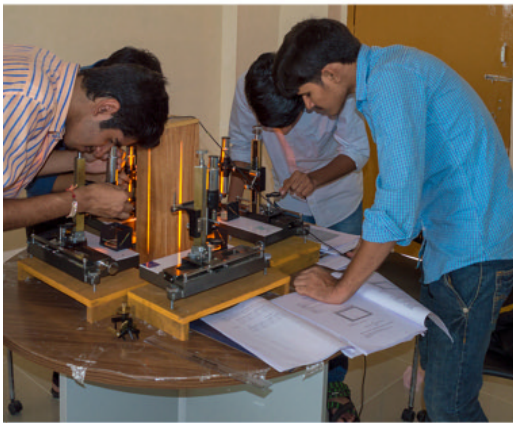


वार्षिक प्रतिवेदन
ANNUAL REPORT
2015-16



भारतीय प्रौद्योगिकी संस्थान तिरुपति
INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

Foreword from the Mentor Director



It is indeed a great pleasure to present to you the first annual report of IIT Tirupati. This institute, and the one at Palakkad, are both being mentored by IIT Madras. With the experience already gained in mentoring successfully a new IIT at Hyderabad a few years ago, it was not very difficult to set the entire process rolling immediately after the announcement was made by the MHRD. Prof. K.N. Satyanarayana was appointed as the Professor-in-Charge of this new IIT.

Each new institute brings along with it new challenges unique to it, and the faculty and staff members involved in this challenging task have to be sufficiently resourceful to grapple with the issues that surface at every turn. The gratifying aspect in the whole exercise is the support given by the Government of Andhra Pradesh and the executives from the local administration at every stage, to the IIT Madras faculty and staff, towards achieving the common goal of establishing a world-class institute in the temple town of Tirupati.

The first task was to identify a temporary campus at Tirupati to house the new institute. A building with four floors, having an area of about 62,000 sq. ft., was acquired on rent from an engineering college on the Renigunta–Tirupati road. The management of the college were

made to carry out alterations to the building to prepare classrooms, faculty rooms, laboratories, meeting rooms, staff rooms, a dining facility, toilets for boys and girls, etc. as per our suggestion in record time. The academic programme was launched on 5 August 2015 with the first batch of students arriving at the campus. The boys' hostel was located in a building belonging to Sri Venkateswara University, the Twenty-First Century Gurukulam, near Alipiri, in Tirupati, 13 km from the temporary campus. The girls' hostel was arranged with IISER Tirupati in their temporary campus at Sri Rama Engineering College, with the facilities to be shared along with their girls.

With regard to the academics, we were fortunate to have a few recently retired senior faculty members from IIT Madras and other IITs willing to spend a few years at the new institute in formulating and teaching the new curricula to the bright students who joined our Institute. The students were thus fortunate to have such experienced faculty members interacting with them on a daily basis, which may not happen even in the older IITs with their bigger class sizes. In addition, several faculty members of IIT Madras also provided support by traveling to Tirupati a couple of days every week to teach various courses. It is indeed wonderful to recognize the spirit of such faculty and staff members who render excellent support in this stupendous task of institution building. I wish to express our appreciation and gratitude to all the staff and faculty members involved for their support.

The permanent campus is crucial, and the state government has identified about 530 acres of picturesque land at Merlapaka Village, near Yerpedu. At present building of the compound wall is under way.

IIT Tirupati was registered as a society on 15 December 2015. It became a full-fledged member of the IIT family from August 2016, after the amendment of the Indian Institute of Technology Act by our Parliament. One round of faculty recruitment has been completed already, and seven young faculty members have joined the Institute.

On behalf of IIT Tirupati I wish to thank the MHRD and the Board of Governors for the continued support for the growth of the Institute.

Date: 11 November 2016

Place: Chennai

Prof. Bhaskar Ramamurthi
Mentor Director, IIT Tirupati

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Indian Institute of Technology (IIT) Tirupati is the first among the IITs announced in 2014 to have its foundation stone laid on 28 March 2015. It started functioning with the support of its mentoring institute, IIT Madras, from the academic year 2015–2016. Presently, it is operating from a temporary campus on the Tirupati–Renigunta road, and plans are well under way to set up its own campus in the next 3 or 4 years at a site (about 530 acres in extent) at Merlapaka Village, Yerpedu Mandal, Chittoor District, Andhra Pradesh.

The academic programme was launched in August 2015 by admitting students to the B.Tech programme in the fields of civil engineering, computer science and engineering, electrical engineering and mechanical engineering. The academic programme was focused on imparting relevant knowledge and skills. The emphasis was on both theoretical and practical understanding through lectures, tutorials and laboratory training. Programmes were also planned to nurture innovation and creativity, teamwork, communication skills, ethics and societal interaction. With the objective of creating technologists who are conscious of social, environmental and sustainable issues, courses in the humanities and social sciences were given due importance in the curriculum. Plans are afoot to start Master's and Doctorate programmes soon.

The Government of Andhra Pradesh is nurturing Tirupati as the knowledge hub of the state. The new permanent campus of IISER Tirupati is to come up about 3 km from the IIT Tirupati campus. Many established institutions such Sri Venkateswara University, Sri Venkateswara Medical College, Sri Venkateswara Institute of Medical Sciences (SVIMS), Sri Padmavati Mahila Visvavidyalayam and Sanskrit University are located in Tirupati. In addition, having an upcoming integrated business city, Sri City, and the Satish Dhawan Space Centre (SHAR), Sriharikota nearby gives this Institute a technical edge. Tirupati town being one of the important cities of Andhra Pradesh, with its international airport and its proximity to Chennai and Bengaluru, has excellent connectivity. In all, IIT Tirupati has great potential to be transformed into an academic and research institute of great repute.



Temporary campus on Tirupati–Renigunta road

Significant milestones

- 9 June 2014—Announcement of new IITs in the Presidential Address
- 10 July 2014—Budget announcement made by the Finance Minister for the five new IITs, including one in Andhra Pradesh
- October 2014—Visit and recommendations by the Site Selection Committee (SSC)
- 19 December 2014—Appointment of the Professor-in-Charge
- 28 March 2015—Laying of foundation stone by the HRD Minister Ms Smriti Zubin Irani in the presence of Mr. Chandrababu Naidu, the Chief Minister of Andhra Pradesh, Mr. Venkaiah Naidu, the Union Minister for Urban Development, Mr. Y.S. Chowdary, the Minister of State, Ministry of Science and Technology and Mr. Ganta Srinivasa Rao, the Minister for Human Resource Management, Andhra Pradesh
- 1 June 2015—Building rented from the CVS Krishna Murthy Theja Charities, Tirupati for the temporary campus
- 5 August 2015—Launch of the academic programme
- 15 December 2015—Formation of the IIT Tirupati Society



Laying of foundation stone, 28 March 2015

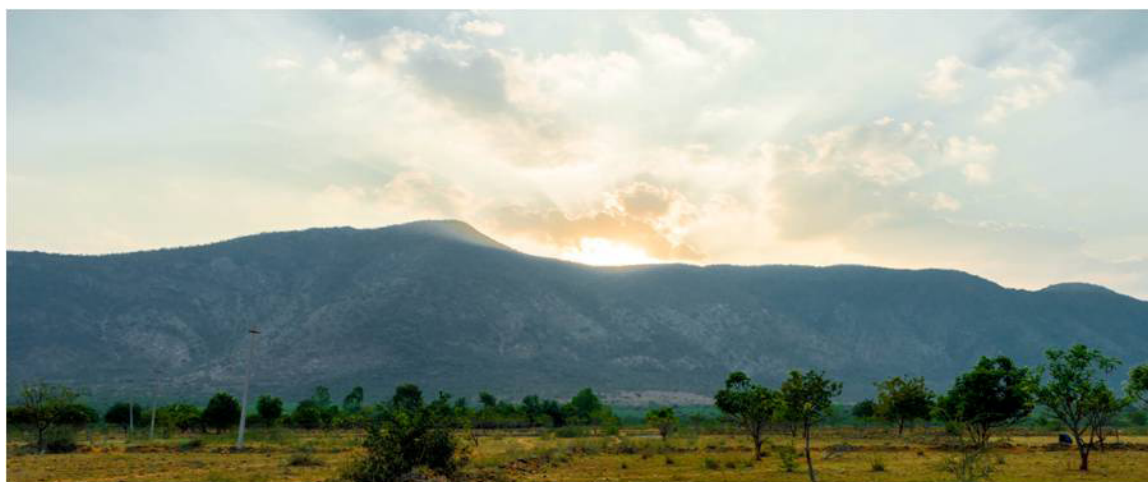
Locations of temporary and permanent campuses

The temporary campus is situated on the Tirupati–Renigunta road. It is located 6 km from the centre of Tirupati town, 4 km from the Renigunta railway station and 8 km from the Tirupati airport.

All facilities such as modern classrooms and laboratories were created at the temporary campus to ensure that the students' experience was no different from that in a well-established institute.

In pursuance of the recommendations of the Site Selection Committee (SSC) of MHRD and with the approval of the competent authority, it was decided to set up IIT Tirupati at a site in Merlapaka Village, Yerpedu (Mandal), Chittoor District, Andhra Pradesh in accordance with Section 93 of the Andhra Pradesh Reorganisation Act, 2014.

The Government of Andhra Pradesh is providing land to an extent of over 530 acres for the development of the permanent campus. This land is located on the Yerpedu–Venkatagiri road, 22 km from Tirupati town and 14 km from the airport. It has a scenic mountain backdrop. In 2017, it is proposed to construct a transit campus consisting of hostel and undergraduate laboratory buildings in the permanent campus site to meet immediate requirements. The permanent campus is expected to be operational by 2019.



A view of the permanent campus site

Infrastructure was created from scratch in a very short period of time. The infrastructure at IIT Tirupati is comparable with that of the older IITs for the purpose of teaching the undergraduate courses. The building at the temporary campus was significantly modified to meet the requirements of IIT Tirupati. Several new installations were carried out to provide the students with an optimum environment for learning.

Classrooms



Classroom at the new institute

Eight 60-seater classrooms and one 120-seater classroom were developed and the necessary furniture installed. All the classrooms were equipped with desktop computers with Internet access, projectors, screens and audio systems. To improve the acoustics, appropriate treatment has been done. A 120-seater virtual classroom was set up. Video conferencing facilities with a 1 Gbps bandwidth connection to the NKN were set up.



120-seater NKN classroom at IIT Tirupati

Laboratory facilities

Physics Laboratory

The initial focus was on setting up the laboratories and getting the foundation courses in physics formulated for the first batch of students joining the institute, in August 2015.

Equipment at the Physics Laboratory

1. Compound pendulum with accessories (five sets)
2. Ultrasonic interferometer (five sets)
3. Experimental setup for obtaining Stefan's constant (five sets)
4. Newton rings experiment (six sets)
5. Spectrometer with diffraction grating (six sets)
6. Mapping of equipotential lines with electrode configuration (five sets)
7. Digital oscilloscope (six sets)
8. Hall effect apparatus with accessories (five sets)
9. Planck's constant using LEDs (five sets)
10. Simulation lab using MATLAB (10 sets)
11. Forbe's method apparatus
12. Linear air track with digital timer (one)
13. Timing car + plane ramp + accessories + inclined plane accessory + curved ramp (one)
14. Four-probe method of measurement of conductivity (four sets)
15. Strain gauge for stress/strain measurements (four sets)

A set of about 10 experiments was planned. Some of the experiments were adopted from the mentoring institute (IIT Madras), and the necessary equipment was procured. The apparatus was fabricated at IIT Madras in record time, to be used in the first semester at the new institute.



Physics Laboratory; students carrying out an optical experiment

Chemistry Laboratory

The undergraduate chemistry laboratory was established in January 2016. It is well ventilated and has new and modern state-of-the-art equipment. Several safety features were installed, including first-aid kits, signage, fire extinguishers, an eye-wash fountain and safety showers. Ecological concerns were addressed through the installation of systems for safe and permissible modes of disposal of different types of laboratory-generated waste.



Chemistry Laboratory

A total of 10 experiments that address societal issues are performed at the chemistry laboratory. These experiments were designed to make practical sessions interesting for the undergraduate engineering students. The following are some of these experiments:

1. *Water quality.* Hardness of samples drawn from the neighbourhood
2. *Pharmacy.* Aspirin (making a medicine)
3. *Natural product.* Tea leaves (extraction of caffeine from different brands of tea available in the market)
4. *Food world.* Citrus fruits (acidity of different fruits)
5. *Material world.* Brass (copper content)

Equipment at the Chemistry Laboratory

- | | |
|---------------------------------|---|
| 1. Laboratory fume hoods | 13. Distilled water system |
| 2. Conductivity meter | 14. Hot air oven |
| 3. pH meter | 15. Rotary evaporator |
| 4. Magnetic stirrer | 16. Chiller for circulation of cold water |
| 5. Preparative weighing balance | |
| 6. Analytical weighing balance | |
| 7. Digital colorimeter | |
| 8. Hot plate | |
| 9. Melting point apparatus | |
| 10. Hot water bath | |
| 11. Ice flakers | |
| 12. Vacuum pump | |

Computer Laboratory

A computer laboratory has been set up, so that the students can perform software-based experiments and programming. The laboratory is equipped with 60 state-of-the-art all-in-one desktop systems, two short view projectors and an audio system. The latest systems and software, including Autodesk packages, were installed in the labs, library and faculty rooms.



Students working at Computer Laboratory

Workshop

In the first semester, workshop training sessions for all the branches of engineering were held in the workshop facilities in the premises of Sri Venkateswara University, Tirupati. The second semester workshop sessions were conducted at IIT Tirupati by procuring and installing the necessary equipment, including pneumatics and hydraulics training kits, a plastic injection moulding machine and FRP fabrication facilities. A basic electrical and electronics lab, and an instrumentation and communications lab, were set up for workshop practice.



Workshop sessions at IIT Tirupati

Library

A library was established at the Institute in 2015 to support its educational and research programmes. The library aims to develop a comprehensive collection of documents of use to the faculty and the students of IIT Tirupati. As of 31 March 2016, the library had about 1300 textbooks and reference books related to engineering, sciences, humanities and the social sciences. The library subscribes to 30 popular magazines and an assortment of selected journals pertaining to the various fields of engineering, technology and life sciences. The library is increasing its collection of learning resources, which in March 2016 included 50 CD-ROMs. It is equipped with a library automation system featuring modern technology and uses the KOHA open source integrated library system and an online public access catalogue (OPAC). The library issues books electronically using two desktop systems, a barcode printer, a receipt printer and a barcode reader.

The library remains open from 8.30 AM to 09.00 PM, seven days a week, except on national holidays. A need for more library resources (books, journals, etc.) was felt, and procurement procedures were put in place.



An interior view of the Institute library

Dining facility

Kitchen and dining facilities were created at the respective hostels. At the Institute building a 120-seater dining facility was established to serve lunch and tea.



Dining facility at temporary campus

Hostels

The men were accommodated in the 21st Century Gurukulam Hostel, rented from Sri Venkateswara University. The hostel is located near Alipiri, 13 km from the Institute. The women were accommodated in the IISER Tirupati hostel. Transport was arranged by the Institute for the students to commute between the hostels and the Institute.

The hostels have Wi-Fi facilities, washing machines, TV, water coolers, water heaters, computer rooms and gyms. Four desktop systems were installed in the common room of the boys' hostel.

Facilities were provided to the students to play indoor and outdoor games. Permission was obtained from Bharatiya Vidya Bhavan for the IIT students to play cricket and football in their grounds in the evenings and on weekends.

A faculty member, a teaching staff member and a member of the supporting staff took on the additional responsibility of caring for the needs of the students in the hostels.

Guest house

Two flats close to the temporary campus were hired to provide boarding and lodging facilities for Visiting Professors. Facilities were created for their stay and board.



Guest house

Security

A round-the-clock security service was provided at the Institute and hostels.

Data network

A 1 Gbps local area network (LAN) covering the entire campus was set up. A 45 Mbps internet leased line was hired from Railtel.

Bank

The Institute operated its bank accounts at the Settipalli branch of State Bank of India. The bank sanctioned loans to around 30 students.

Hospital

All the students were registered with Sri Venkateswara Institute of Medical Sciences, Tirupati for availing medical facilities.

The following B.Tech programmes are being offered at IIT Tirupati from 2015 (at the time of its inception):

Civil Engineering
Computer Science and Engineering
Electrical Engineering
Mechanical Engineering

The intake in each programme is 30 students. A total 109 students joined the Institute in August 2015.

Sl. No.	Category	Male	PwD Male	Female	PwD Female	Total
1	General	42	2	7	—	56
2	SC	11	—	6	—	17
3	ST	7	—	2	—	9
4	OBC	27	1	4	—	32
	Total	87	3	19	—	109*

*Including two candidates in preparatory course

Other branches and postgraduate programmes will be started in the subsequent years.

A credit-based curriculum is followed for eight semesters. Each course is evaluated on a 10-point grading system with letter grades. The cumulative grade point average (CGPA) is calculated at the end of each semester.

Some of the best faculty members of IIT Madras and other IITs have been actively involved in teaching the courses at IIT Tirupati.

Academic orientation programme

The academic year began with an orientation programme. The students and their parents were introduced to the education system at IIT Tirupati, the 4 years of college life ahead and the field of engineering. The orientation programme of the pioneer batch took place on 5 August 2015. The Honourable Minister of HRD, GoI, Ms Smriti Zubin Irani welcomed and addressed the pioneer batch through video conferencing. Mr. Ganta Srinivasa Rao (HRD Minister, Government of Andhra Pradesh), Dr. Sambasiva Rao, IAS (Executive Officer, TTD), Mr. Siddharth Jain, IAS (Collector, Chittoor District), Prof. Bhaskar Ramamurthi (Director, IIT Madras) and a number of dignitaries from the Government of Andhra Pradesh graced the inaugural programme and addressed the students. The students were asked to express their expectations of IIT Tirupati. In the post-lunch session, the students registered for their academic courses. Officials from State Bank of India offered educational loans to the students.



(1) 'HRD Minister Ms Smriti Zubin Irani addressing the students through video conferencing on 5 August 2015' and (2) 'Academic orientation programme'

Talks during the year

- A motivational speech by Dr. L.S. Ganesh, Professor of Management Studies, IIT Madras on 27 August 2015
- A speech on innovation by Dr. Mahesh Panchagnula, Professor of Applied Mechanics, IIT Madras on 19 September 2015
- A speech on career development by Prof. Ravikumar Bhaskaran, formerly Dean Continuing Education and Principal QIP Coordinator, IIT Kharagpur on 10 February 2016
- A special talk titled 'Resolving Atom in Our Backyards: Indigenous Technology in a Globalized World' by Prof. Deshdeep Sahdev, Quazar Technologies, and former Professor, IIT Kanpur on 19 February 2016
- Science Day lecture titled 'Ripples in Space Time: A New Window to the Universe' by Prof. L. Sriramkumar, IIT Madras on 1 March 2016
- A special lecture titled 'Technology Careers in a Hyperconnected World' by Mr. K. Ananth Krishnan, Chief Technology Officer, Tata Consultancy Services (TCS) on 31 March 2016
- A PAN IIT alumni meeting was held in the IIT Tirupati campus on 6 February 2016. The meeting was jointly organised by Prof. Satyanarayana, Professor-in-Charge, IIT Tirupati and Prof. Nagarajan, Dean, Alumni Affairs, IIT Madras.



Gathering at PAN IIT Alumni meet 2016



Mr. K. Ananth Krishnan, Chief Technology Officer, Tata Consultancy Services (TCS) delivering lecture to the students

Financial assistance available to B.Tech. students

Sl. No.	Type of Scholarship	Amount	No. of Students
1	The institute merit-cum-means scholarship for students whose parents' income is less than ₹4.5 lakhs per annum	<ul style="list-style-type: none"> Exempted payment of tuition fee of ₹45,000 per semester ₹1000 for 12 months 	27
2	The institute scholarship for students whose parents' income is less than ₹4.5 lakhs per annum	<ul style="list-style-type: none"> Exempted payment of tuition fee of ₹45,000 per semester 	4
3	SC/ST scholarship	<ul style="list-style-type: none"> Rebate in mess charges up to ₹8000 per semester Free lodging ₹250 pocket allowance 	8

Prof. Bhaskar Ramamurthi, Director, IIT Madras is the Mentor Director of IIT Tirupati. Dr. K.N. Satyanarayana, Professor, IIT Madras has been appointed as the Professor-in-Charge of IIT Tirupati. A project in the name of IIT Tirupati was opened with IC&SR, IIT Madras, and the Professor-in-Charge was delegated the powers of a Head of Department.

Pending amendment of the Institute Act, 1961, IIT Tirupati was registered under the Andhra Pradesh Societies Registration Act, 2001, with registration number 343 of 2015.

The Senate and Academic Council were constituted with Professors from the Mentor Institute, IIT Madras, to advise IIT Tirupati regarding academic matters.

Governing Council/Board of Governors, IIT Tirupati

Mr. Vinay Sheel Oberoi Secretary, DHE, MHRD, New Delhi	Chairman
Mr. R. Subrahmanyam Additional Secretary (TS), MHRD, New Delhi	Member
Prof. Bhaskar Ramamurthi Director, IIT Madras	Member
Ms Sumita Dawra Secretary, DHE, Government of Andhra Pradesh	Member-Secretary
Ms Darshana Momaya Dabral Joint Secretary & FA, MHRD, New Delhi	Member
Ms Tripti Gurha Director (IITs), MHRD, New Delhi	Member
Prof. K.N. Satyanarayana Professor-in-Charge, IIT Tirupati	Member

The Finance Committee and the Building and Works Committee were constituted during the first meeting of the Board of Governors, held on 12 January 2016.

Finance Committee

Mr. Vinay Sheel Oberoi Secretary, DHE, MHRD, New Delhi	Chairman
Prof. Bhaskar Ramamurthi Director, IIT Madras	Member
Ms Darshana Momaya Dabral Joint Secretary & FA, MHRD, New Delhi	Member
Ms Tripti Gurha Director (IITs), MHRD, New Delhi	Member
Prof. K.N. Satyanarayana Professor-in-Charge, IIT Tirupati	Member
Prof. T.S. Natarajan Registrar (I/C), IIT Tirupati	Member-Secretary

Building and Works Committee

Prof. Bhaskar Ramamurthi Director, IIT Madras	Chairman
Chief Engineer , CPWD, Vijayawada	Member
Chief Engineer , APSPDCL, Tirupati	Member
Chairman , Engineering Unit, IIT Madras	Member
Prof. K.N. Satyanarayana Professor-in-Charge, IIT Tirupati	Member
Mr. Ramanujam , Former Chief Engineer, DAE	Member
Senior Project Advisor (Const.) IIT Tirupati	Non-Member-Secretary

Senate/Academic Council

Prof. K. Ramamurthy Dean (Academic Courses), IIT Madras	Chairman
Prof. G. Ranga Rao Department of Chemistry, IIT Madras	Member
Prof. M. Thamban Nair Department of Mathematics, IIT Madras	Member
Prof. S. Kasiviswanathan Department of Physics	Member
Prof. D. Malathy Department of Humanities and Social Sciences, IIT Madras	Member
Prof. Manu Santhanam Department of Civil Engineering, IIT Madras	Member
Prof. P. Sreenivasa Kumar Department of Computer Science and Engineering, IIT Madras	Member
Prof. Harishankar Ramachandran Department of Electrical Engineering, IIT Madras	Member
Prof. T. Sundararajan Department of Mechanical Engineering, IIT Madras	Member
Prof. K. Krishnaiah Department of Chemical Engineering, IIT Madras	Member
Prof. K.N. Satyanarayana Professor-in-Charge, IIT Tirupati	Member
Prof. T.S. Natarajan Professor of Physics, IIT Tirupati	Member

In the absence of permanent faculty and non-faculty posts, faculty members of IIT Madras and other institutions were

Faculty members

Pending sanction of faculty and non-faculty posts, currently serving and retired faculty members from IIT Madras and other institutions taught the courses at IIT Tirupati. These faculty members include:



Dr. K.K. Balasubramanian
Retired Professor, IIT Madras
Chemistry



Dr. S. Subramaniam
Retired Professor, IIT Madras
Chemistry



Dr. G. Ranga Rao
Professor, IIT Madras
Chemistry



Dr. M.N.S. Rao
Retired Professor, IIT Madras
Chemistry



Dr. P.R. Parthasarathy
Retired Professor, IIT Madras
Mathematics



Dr. G. Kamath
Retired Professor, IIT Madras
Mathematics



Dr. S. Rajesh
Senior Project Officer
Mathematics



Dr. P.C. Deshmukh
Retired Professor, IIT Madras
Physics



Dr. T.S. Natarajan
Retired Professor, IIT Madras,
re-employed at IIT Tirupati
Physics



Dr. K. Krishnaiah
Emeritus Professor, IIT Madras
Chemical Engineering



Dr. N.S. Narayanaswamy
Professor, IIT Madras
Computer Science and Engineering



Dr. N.N. Kishore
Retired Professor, IIT Kanpur
Mechanical Engineering



Dr. V. Raghavan
Associate Professor, IIT Madras
Mechanical Engineering



Dr. G. Venkataratnam
Professor, IIT Madras
Mechanical Engineering



Dr. K.L. Narayana
Retired Professor, SV University
Mechanical Engineering

Staff position

To carry out the administrative activities, staff members were recruited on contract and deputation from other IITs.

Deputy Librarian:	1 (on deputation from IIT Guwahati)
Senior Project Advisors:	2
Project Advisors:	4
Senior Project Officer:	1
Project Officers:	7
Project Associates:	3
Junior Assistant:	1 (on deputation from IIT Jodhpur)
Senior Project Assistants:	5
Project Attendant:	1
Total:	25

15 August 2015: Independence Day

The first Independence Day celebrations at IIT Tirupati were celebrated grandly. Prof Satyanarayana, Professor-in-Charge, hoisted the national flag and addressed the students. More than 40 students of the pioneer batch participated in the marchpast. Some students sang patriotic songs with accompanying music to mark the occasion.



Independence Day celebrations

18 September 2015: Freshers' Night

The students celebrated Freshers' Night enthusiastically with a number of cultural events.



Freshers' Night celebration



Fresher's Night celebration

11 November 2015: Diwali celebrations

This was an unusual day at the campus of IIT Tirupati. Of course it was Diwali day, but it was celebrated with a difference. A group of students walked out of their comfort zones and extended a helping hand to a few less privileged kin. This was the day when they were made to realize that being an engineer is not just about understanding a myriad of theories but recognizing the pain of fellow beings and attempting to reduce their agony by bringing them together and sharing on the day of celebrations.



Students at orphanage

The students sponsored food at Mother Teresa Foundation, which houses about a hundred children, elders, orphans or those who were simply disowned by their kith. They went to Abhaya Kshetram in the evening to sponsor evening snacks for 200 ailing souls. They served them food, and they received food for thought in return. Many a pair of seemingly carefree eyes was found to be moist, and many hearts did melt with empathy.

There was Lakshmi Puja after that in the hostel, and yes there were fireworks and a succulent dinner. But there was a lot of silent noise in the hearts. Something had changed in the last 12 hours.

14 November 2015: Field visit to Amara Raja Battery facilities

As part of the educational programme, the students were taken to the automobile and inverter battery production facility owned by the Amara Raja group of companies at IIT Tirupati. The students also visited a food processing plant owned by the same group. The facility produces fruit concentrates under the trade name Galla. The students also visited the research and testing facilities.

18 February 2016: Field visit to Satish Dhawan Space Centre

A field trip to Satish Dhawan Space Centre, Indian Space Research Organization (ISRO), Sriharikota was organised to witness a rocket launch.

The word ISRO invokes a feeling of national pride in the heart of every Indian, and so it was no surprise that the students were delighted at the prospect of visiting their launching and developing facility at Sriharikota on 18 February 2016. To witness the launch and to walk in the same hall where the likes of Bharath Ratna Dr. A.P.J Abdul Kalam sat to take the nation to glory was nothing less than a dream come true. They came to know how the different scientific disciplines combine and interact to create such masterpieces. They learnt how satellite communications and information gathering and processing happen.

19–20 February 2016: Outbound training programme

An outbound training programme was conducted by Lt. Col. (Retd.) Jayakumar in February 2016, Students experienced a change from their indoor routine and enjoyed performing exercises such as the Tarzan jump, monkey crawl, trust fall, caterpillar race and snake race in the sun. These exercises invoke trust, self-belief and team spirit. A discussion on leadership traits and group culture followed the exercises.

26 January 2016: Republic Day celebrations

The Republic Day celebrations at IIT Tirupati were celebrated in a fitting manner. Prof Satyanarayana, professor-in-charge hoisted the National flag and addressed the students. Students sang National Integration songs with music to mark the occasion.





Republic Day celebrations

Social service

The students visited local government schools and two Kendriya Vidyalayas in the second semester to develop awareness about engineering. They taught the school children science, mathematics, English and other subjects and demonstrated interesting experiments under the guidance of Prof. Natarajan. The IIT students also focussed on helping the children with communication skills.



Teaching school children

Trekking

Tirupati is located close to the scenic Seshachalam Hills. These are among the oldest hill ranges of peninsular India. The flora includes rare and untouched species. Both the hostels and the permanent campus site have lush hills at the backdrop that support the red sanders. These hills provided the setting for trekking activities on holidays.

The first experience in the series was on 24 October 2015 at the Molakona Hills. Climbing the rocky slopes was challenging, but the trekkers enjoyed it. They enjoyed a wash in a pool of water at the end of the trek.

The second experience was of the Talakona Hills on 17 January 2016. The climb was easier here, but nevertheless it was demanding.

Clubs

Students formed various clubs and Literary Club to carry out different extra-curricular activities.

Artista. This is the art club, which caters to talents in painting, sketching, craft and creating something beautiful with a theme.

Sargam. The Music Club caters to interests in singing, composing or creating and presenting anything which appeals to the ears.

Sahayog. This club manages what IIT Tirupati is most proud of: its social initiatives—orphange support, school teaching and so forth.

Photography Club. The photography club organised events such as Photography Drive and Independence Click.

Sports

At the 21st Century Gurukulam Hostel, grounds were prepared for volleyball, shuttle badminton and cricket net practice. Indoor sport facilities, including table tennis facilities and a gym, were also created. Arrangements were made for the students to play football and for other athletic activities at the grounds of Bharthiya Vidya Bhavan School, about 3 km from their hostel.

About 15 students had planned to participate in the Inter-IIT Sports Meet to be held at IIT Madras in December 2015. However, the meet was cancelled due to floods.

The students themselves organised various sports events. The prizes were distributed at the Institute Day function, which was held in April 2016.



Students playing at temporary campus

IIT Madras being the Mentor Institute of IIT Tirupati, rendered financial assistance by way of an advance of 3,17,79,367. While all the procurements and related payments, and payment of salaries of ad-hoc employees were handled by the Centre for Industrial Consultancy and Sponsored Research (IC&SR) Wing of IIT Madras, receipt of tuition fees from first-year students, salaries of regular employees and payment of scholarships to first-year students were handled directly by IIT Madras Main Accounts.

The first grant of ₹12.50 crores was released by MHRD in December 2015 through IIT Madras, and the second grant of ₹5.50 crores was released directly to IIT Tirupati Account, opened and operated at State Bank of India, Settipalli branch, Tirupati, in March 2016.

Since all the financial transactions for the year 2015–2016 were handled by IIT Madras and IC&SR, the statements relating to receipts and payments, and the annual accounts for the year 2015–2016 were prepared by IIT Madras as an integral part of IIT Madras Annual Accounts. These were audited by the representative of the Comptroller & Auditor General of India. Copies of the same are annexed.

Indian Institute of Technology, Madras
Grant in Aid Statement for the year 2015-16 (Based on Revised Accounts)

Rs In Crores

Name of the project for which grant received or general Grants	Amount of Grant brought forward from previous year	Amount of Grant received during the year 2015-16	Internal Revenue Generation	Total	Amount utilized during the year 2015-16	Amount unutilized as on 31.03.2016 carried forward to next year
Plan Grant	(10.91)	177.50		166.59	194.33	(27.74)
Non Plan Grant	1.82	240.00	50.24	292.06	318.48	(26.42)
Projects	174.32	359.76	5.33	539.41	322.56	216.85
Total	165.23	777.26	55.57	998.06	835.37	162.69
IIT Palakad- Plan Grant	-	25.00	0.23	25.23	10.74	14.49
IIT Tirupati - Plan Grant	-	18.00	0.28	18.28	8.96	9.32
Grand Total	165.23	820.26	56.08	1,041.57	855.07	186.50

29-09-16

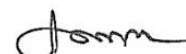

Deputy Registrar F & A

INDIAN INSTITUTE OF TECHNOLOGY - MADRAS

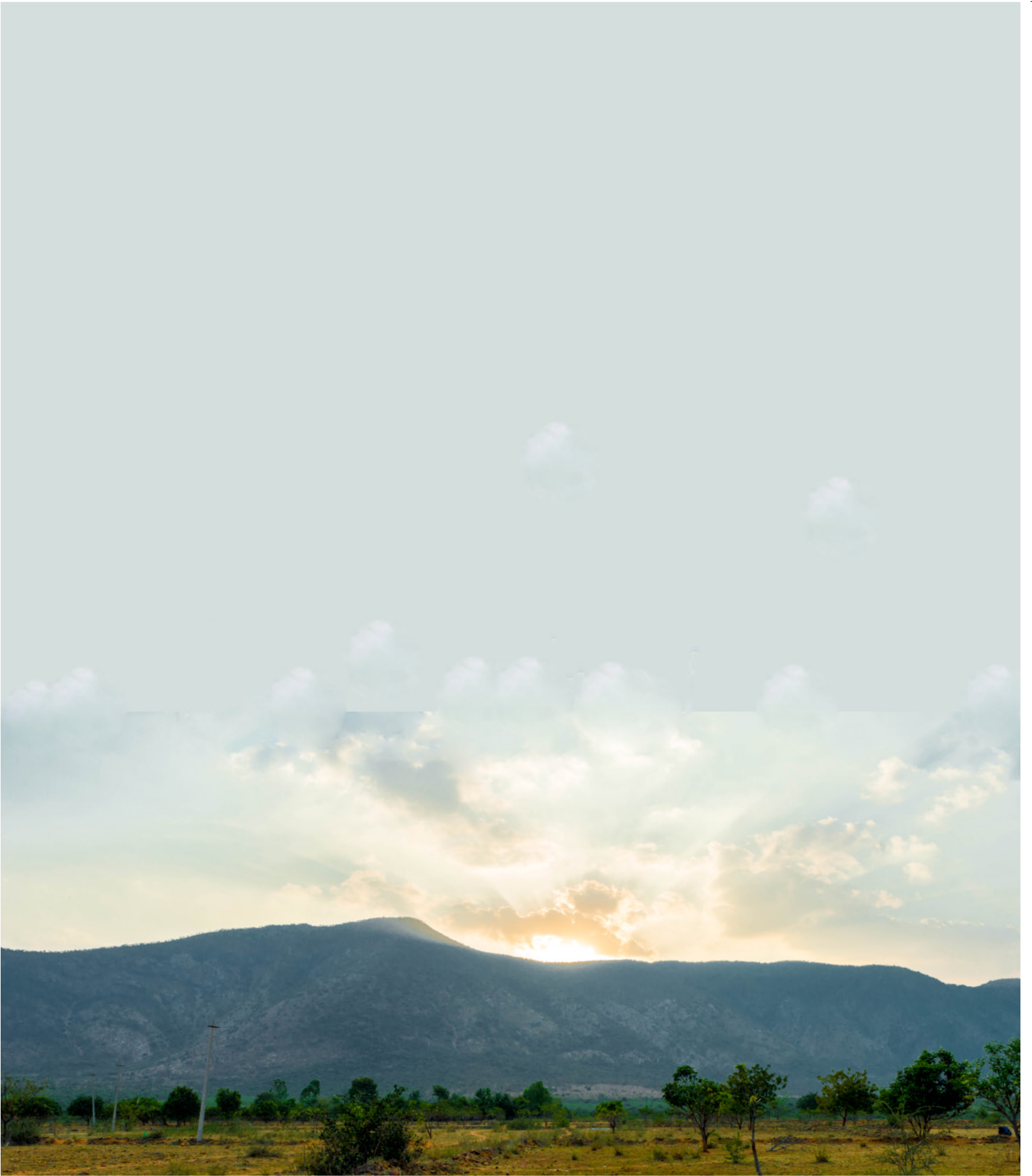
Receipts Payments
Year Ending 31-03-2016

IIT Tirupati Account
State Bank of India
Amount in Rupees

Previous Year		Current Year
	Opening Balance	
0.00	Bank Balance	0.00
0.00	Investments	0.00
0.00	Total	0.00
	Receipts	
0.00	Grant Received (2015-16)	18,00,00,000.00
0.00	Tuition Fee Receipt	28,66,959.00
0.00	Loan from IIT-M A' A/c	32,20,769.00
0.00	Loan from IIT-M F' A/c	2,85,58,598.00
0.00	Receipts Total	21,46,46,326.00
0.00	Grand Total	21,46,46,326.00
	Payments	
0.00	Administrative Exp	634.00
0.00	Salary	63,54,366.00
0.00	Scholarship	3,84,739.00
0.00	Equipments	5,16,23,261.00
0.00	Consumables	7,47,137.00
0.00	Contingency	1,35,83,810.00
0.00	Travel	25,64,835.00
0.00	Components	8,190.00
0.00	Others	1,43,79,988.00
0.00	Total Payments	8,96,46,960.00
	Closing Balance	
0.00	Cash Balance	15,000.00
0.00	Bank Balance	12,49,84,366.00
0.00	Total	12,49,99,366.00
0.00	Grand Total	21,46,46,326.00



Dy.Registrar (F ' A)



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