INDIAN INSTITUTE OF TECHNOLOGY

DHARWAD



॥ सा विद्या या विमुक्तये ॥

भारतीय प्रौद्योगिकी संस्थान धारवाड Indian Institute of Technology Dharwad

Annual Report 2016-17

Indian Institute of Technology Dharwad Dharwad, Karnataka, India – 580011. http://www.iitdh.ac.in, +91 836 2212 839, pro@iitdh.ac.in

Board of Governors

Members

Chairman (ex-officio) Sh. Vinay Sheel Oberoi (15-July-2016 to 28-Feb-2017)

Shri K.K. Sharma

(From 1-March-2017 onwards) Secretary, Department of Higher Education, Ministry of Human Resource Development, Shastri Bhawan, New Delhi

From the Department of Higher Education Shri Bharat Lal Meena (15-July-2016 to Feb-2017)

Shri Jawaid Akhtar (From Feb-2017 onwards) Principal Secretary, Department of Higher Education, Government of Karnataka Director **Prof. Devang. V. Khakhar** (15-July-2016 to 6-March-2017) Director, IIT Bombay

Prof. P. Seshu (From 7-March-2017 onwards) Director, IIT Dharwad

Shri R. Subrahmanyam Additional Secretary (Technical Education), Department of Higher Education, Ministry of Human Resource Development, Shastri Bhawan, New Delhi

Smt. Darshana Momaya Dabral
Joint Secretary & Financial Advisor,
Department of Higher Education,
Ministry of Human Resource Development,
Shastri Bhawan, New Delhi

Nominees of IIT Council Smt. Tripti Gurha Director (IITs), Department of Higher Education, Ministry of Human Resource Development, Shastri Bhawan, New Delhi

Prof. Shiva Prasad Professor In-charge, New IIT Mentoring Cell, IIT Bombay

Contents

From the Director's Desk	.1
Institute Campus	.3
Temporary Campus	. 3
Permanent Campus	. 3
Academics	.4
Infrastructure Development	.5
Outreach Activities	.6
Linkage with NWKRTC Bus Depot Operations, Dharwad	. 6
Life at IIT Dharwad	.7
Student Clubs	. 7
Music and Fine Arts Club	. 7
Astronomy Club	. 7
Electronics Club	. 7
Sports	. 8
Invited Talks	. 8
Summary of Institute Accounts	.9
Balance Sheet as on 31/03/2017	. 9
Income & Expenditure for the Year Ended 31/03/2017	10
Receipts and Payments for the Period from 01/04/2016 to 31/03/2017	12

I am very happy to present the very first annual report of IIT Dharwad.

Indian Institute of Technology Dharwad Society was formed and registered on 15th of July 2016. The Institute of Technology (Amendment) Act 1994, passed by the Parliament, was notified in the Gazette of India on 10th of August 2016. The Honourable Chief Minister of Karnataka, Shri Siddaramaiah and the Honourable Minister for Human Resource Development, Shri Prakash Javadekar inaugurated the IIT Dharwad on the 28th of August 2016. On behalf of the Institute, I would like to place on record our appreciation of the excellent support we have received from MHRD, Karnataka state government, WALMI, our mentor Institute IIT Bombay, Hubli-Dharwad district administration, PWD, Water and electricity boards and many others. We look forward to their continued full support in the future too.

The Institute, presently operating from its temporary campus in WALMI, offers Bachelor of Technology degree program in three branches namely, Computer Science and Engineering, Electrical Engineering and Mechanical Engineering with a sanctioned total strength of 120 students. Our curriculum design as well as delivery has been at par with established institutes and we continue to endeavour to put in place a forward looking, flexible curriculum to help our students become well-rounded human beings so that they help the world face the challenges of this century. We aim to create an atmosphere that nurtures pursuit of one's dreams with passion. We want an ambience where our students, staff and faculty are happy doing what they are supposed to be doing! Wishing to make the learning process filled with fun and joy, we aim to emphasize Hands-on Engineering design & product development with a mechatronic systems approach, as that is the characteristic of most modern disruptive technology driven products. Together with an incubator for start-ups, we envisage IIT Dharwad soon becoming an innovation hub. While attempting to advance the global frontiers of knowledge, our research must also aim to address the needs of the nation. We plan to focus on thematic research where researchers from across the disciplines will work towards impactful goals.

We are on an exciting journey – not many get an opportunity to establish a new IIT. Generations to come will remember us as the first batches of students, staff and faculty. It therefore places an immense responsibility on all of us to make sure we lay the strongest foundation possible; we put in place the right work culture and ambience. Our size may be small but not our vision. We are doing lots of things on many fronts and our IIT at this stage almost has the look and feel of a start-up and all of us work as a single family to ensure that the seeds that have been sown in reap

rich dividends in the years to come. May this IIT flourish with active collaborations at National and International levels and become the most preferred destination for higher education in the years to come.

JAI HIND!

Director

IIT Dharwad

Temporary Campus

Indian Institute of Technology Dharwad currently operates from its temporary campus in Water and Land Management Institute (WALMI) Dharwad (~135 acres) on the National Highway NH-4 connecting Mumbai – Bengaluru, near the Dharwad bench of High Court. WALMI has generously provided all infrastructure support for the residences, class rooms, laboratories etc.

Permanent Campus

About 470 acres of land has been provided by the Karnataka Government for the permanent campus of IIT Dharwad about 2-3 km from existing WALMI campus. Campus development and establishment of infrastructure are being taken up.



Google Earth photo of the site for the permanent site of IIT Dharwad

Page | 3

Academics

IIT Dharwad, presently, is currently primarily following the course and curriculum pattern of mentor institute namely IIT Bombay. The instruction of courses is in collaboration with IIT Bombay faculty members. The Institute has eight Departments:

- 1. Biosciences and Bioengineering (BSBE),
- 2. Chemistry (CH),
- 3. Computer Science and Engineering (CSE),
- 4. Electrical Engineering (EE),
- 5. Humanities and Social Sciences (HSS),
- 6. Mathematics (MA),
- 7. Mechanical Engineering (ME), and
- 8. Physics (PH)

Bachelor of Technology (B.Tech.) programmes started in 2016 in three branches namely, Computer Science and Engineering, Electrical Engineering and Mechanical Engineering. The total number of enrolled students in 2016-17 is 113 – distribution of students is shown below:



All the hostels, classrooms and laboratories necessary for initiating the academic activities of the Institute for first year B.Tech. curriculum have been setup during this year after suitable renovation of existing buildings in WALMI. Some of the facilities are captured below:



Indian Institute of Technology Dharwad Campus





UG Laboratory Facilities (Workshop, Computer lab, Physics Lab, Chemistry Lab)

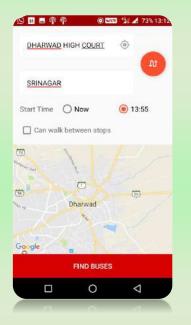
Page | 5

Linkage with NWKRTC Bus Depot Operations, Dharwad

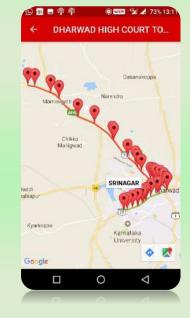
The students of the CSE Department at IIT Dharwad mapped Dharwad city bus routes. They first analyzed the 8000-line city bus schedule, prepared a summary and allocated routes, travelled and compiled all the necessary information. They then developed a mobile application that would display the schedule to the passengers, show the route on map and furthermore, suggest routes to go from Place X to Place Y in minimum time, given a starting time.



Snapshot from the web interface







Snapshots from the mobile app

Life at IIT Dharwad

Student Clubs

Music and Fine Arts Club

The music and Fine Arts Club was one of first clubs to start on the campus. It has grown over time, organizing musical events for the delight of all on the campus.





Astronomy Club

With the power of Astromaster 130 purchased for the club, night owling star gazers have observed various constellations including planets Jupiter and Saturn.

Electronics Club

The club was mainly formed to channelise the passion of young learners, boosting their interaction with new technologies, as well as their desire to contribute to the society through the domain of electronics. The group is preparing to participate in TechFests and competitions. Electronics club has worked in the past year on



traffic lights system (both two ways and four way) using IC's and LED's. They have successfully created a prototype which is on display at the Hostel. Currently the Electronics club is working on the following - Micro controllers – Arduino; Remote control car; Line follower using Arduino; Experiments on different sensors; Basic overview on path finder Robot; Cost-effective autonomous quadcopter etc.



Sports

The Sports enthusiasts of Cricket, Football, Table Tennis, Carom, Volleyball, Chess and other Indoor/Outdoor games formed the Sports Club. The activities of National Sports Organisation curriculum were followed. The training of the students included the strength exercises, endurance exercises, agility exercises, yoga and general

exercise on a regular basis. The Students participated in Inter-collegiate sports fest Awahan.

Invited Talks

Several invited talks were arranged for students to motivate them in various fields. Details of the invited talks are as given below:

Date	Name of the Speaker	Department
15-Sep-2016	Dr. Shree Kumar Apte	Director of the Bio-Science Group at Bhabha Atomic Research Centre (BARC), Mumbai, India
01-Oct-2016	Dr. B. Ravi	Institute Chair Professor of Mechanical Engineering, IIT Bombay
01-Nov-2016	Dr. D. Manjunath	Department of Electrical Engineering of IIT, Bombay
27-Jan-2017	Dr. Anand Pandurangi	Consulting Psychiatrist
08-Feb-2017	Dr. Kannan M Moudgalya	Department of Chemical Engineering of IIT, Bombay
09-Feb-2017	Dr. G V Sreekumar	Professor and Head, Industrial Design Centre, IIT Bombay
10-Feb-2017	Dr. Anand Kulkarni	Professor Emeritus, Electrical and Computer Engineering Michigan Technological University, USA

Summary of Institute Accounts

Balance Sheet as on 31/03/2017

(Amount in Rupees)

Sources of Funds	Schedule	Current year 2016-17	Precious year 2015-16
Corpus/ Capital fund	1	103719211	0
Designated /Earmarked / Endowment funds	2	0	0
Current liabilities and provisions	3	187466453	0
Total (A)		291185664	

Application of Funds	Schedule		Precious year
		2016-17	2015-16
Fixed assets			
Tangible assets	4	26715018	0
Capital Works-in-progress	4	1112188	0
Intangible assets	4	214824	0
Investments from earmarked / Endowment funds	5	0	0
Current Assets	7	80245497	0
Loans, Advances and Deposits	8	182898137	0
Total (B)		291185664	0

Income & Expenditure for the Year Ended 31/03/2017

(Amount in Rupees)

Particulars	Schedule	Current year 2016-17	Precious year 2015-16
Income			
Academic Receipts	9	14768735	
Grants / Subsidies (irrevocable grants received)	10	95000000	
Income from Investments	11	0	
Interest Earned	12	0	
Other Income	13	0	
Prior Period Income	14	0	
Total (A)		109768735	0

Particulars	Schedule	Current year 2016-17	Precious year 2015-16
Expenditure			
Staff Payments and Benefits (Establishment expenses)	15	15663780	
Academic Expenses	16	2324155	
Administrative & General Expenses	17	12460618	
Transportation Expenses	18	1534789	
Repairs & Maintenance	19	2095627	
Finance Costs	20	12585	
Other Expenses	21	0	
Depreciation	4	3757751	
Total (B)		37849305	0

Particulars	Schedule	Current year 2016-17	Precious year 2015-16
Income			
Balance being excess of Income over Expenditure		71919430	
(A-B)			
Adjusted from Capital Fund (Depreciation)		3757751	
Transfer to General Reserve		75677181	
Transfer to/from Designated fund		0	
Building Fund		0	
Others (specify)		0	
Balance being Surplus / (Deficit) Carried to Corpus		75677181	
/ Capital Fund			
Significant Accounting Policies	23		
Contingent Liabilities and Notes on Accounts	24		

Receipts and Payments for the Per			
Receipts	Amount (₹)	Payments	Amount (₹)
L Opening Relanges		I Evenesses	
I Opening Balances a) Cash in hand 	0	I Expenses	15486187
	0	a) Establishment Expensesb) Academic Expenses	2519695
	0	c) Administrative Expenses	14143157
i. In Current Account ii. In Deposit Account		d) Transportation Expenses	1534789
iii. In Saving Account	0	e) Repairs and Maintenance	779219
	0	f) Prior Period Expenses	//9219
II Grant Received	24456 0000	II Payment against Earmarked / Endowment	0
a) From Government of India	311750000	Funds	0
b) Grant in aid due in 2015-16 received in 2016-17	0		
c) From State Government	0		
d) From other sources			
	0	<u>.</u>	
III Academic Receipts		III Payment against Sponsored Projects /	_
a) Fees from Students	19233487	Schemes	0
b) Other Receipts from Students	0		
c) All India Entrance Examination Receipts	0		
1	0		
IV Receipts against Earmarked /		IV Payment against	
Endowment Fund	0	Sponsored Fellowships and	0
		Scholarship	
V Receipts against Sponsored Projects / Schemes		V Investments and deposits made	
	0	a) Out of Earmarked /	
		Endowment Fund	0
		b) Out of Own Funds	C
			0
VI Receipts against Sponsored		VI Term deposits with Schedule Banks	
Fellowships and Scholarship	0	Schedule Danks	0

Receipts and Payments for the Period from 01/04/2016 to 31/03/2017

 VII Income on Investment from a) Earmarked / Endowment Fund b) Other Investment 	0 0	 VII Expenditure on Fixed Assets and Capital Work in Progress a) Fixed Assets b) Work-in-progress 	30767835 0
 VIII Interest Received on a) On Bank Deposits b) Loans, Advances etc. c) Saving Bank accounts d) Accrued Interest 	0 0 0 0	VIII Other Payment including Statutory Paymentsa) Other Adjustable Account	3111003
IX Investment Encashed	0	IX Refund of Grants	
X Term Deposits with schedule bank Encashed	0	X Deposits and Advancesa) Advances Accountb) Refundable Depositsc) Recoverable Deposits	182331547 0 1025850
 XI Other Income (Including Prior Period Income) a) Continuing Education Programme b) Miscellaneous Receipts c) Guest house Receipts 	0 0 0	 XI Other Payment a) Grant from other organizations b) Sundry Creditors c) Loan – Inter Department d) Surplus Transfer to Endowment 	0 0 0 0
XII Deposits and Advancesa) Advances Accountb) Refundable Depositsc) Recoverable Deposits	0 0 0	 V Closing Balances a) Cash in hand b) Bank balances i. In Current Account ii. In Deposit Account iii. In Saving Account 	0 80245497 0 0
XIII Miscellaneous ReceiptsIncluding Satutory Receiptsa) Other Adjustable Accounts	961292		

Page | 13

b) Sundry Debtors	Гotal	0 331944779	Total	331944779
XIV Any Other Receipts a) Grants from other Organisations		0		