

# Pandit Dwarka Prasad Mishra INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN & MANUFACTURING JABALPUR

(An Institute Established by MHRD, Govt. of India)

DUMNA AIRPORT ROAD, P.O. KHAMARIA

JABALPUR - 482 005 INDIA

ANNUAL REPORT 2012-2013

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### **DIRECTOR'S REPORT**

In the recent technology-driven developments and greater global competitiveness, innovations have played a key role. The last decade especially, has witnessed some of the major innovations that have transformed the ways of communication and networking and have resulted in improving the quality of life of people throughout the globe. Realizing the importance of innovative methods, design professionals and academics have started including components in the curricula that motivate students and professionals think innovatively while designing products or systems. Design and manufacturing complement each other in the development of a new product, process or a system. The modern manufacturing environment entails a large variety of cross-



disciplinary activities including Design, IT and ITES (IT enabled services). Obviously, these elements need to find their ways into the engineering curricula and research at educational institutions. In order to integrate the cross disciplinary knowledge that would facilitate and promote the competitive advantage of Indian manufacturing in the global market, the Ministry of Human Resource Development (MHRD), Government of India set up PDPM IIITDM Jabalpur exclusively for imparting education in IT enabled Design and Manufacturing in 2005. Since its inception, PDPM IIITDM Jabalpur has been playing a vital role in producing quality human resources for contribution in India's mission of inclusive and sustainable growth. The Institute aims to set the standards in manufacturing education and research and produce competent and skilled manpower truly adept in design and manufacturing. Through industry and research collaboration the Institute strives to foster growth in Indian manufacturing sector by bringing up next generation technologies, products and devising innovative manufacturing practices.

During the last year, the Institute made enormous progress in almost every front, including research and development, lab establishment, infrastructure development and various important academic programmes and activities. I feel privileged in reporting the achievements and progress of the Institute during the year 2012-13.

### Undergraduate and Research Labs -

Amada Innovation Centre was instituted on December 5, 2012 with two state of the art manufacturing machines gifted by Amada Company. This gift is under a collaborative programme between Govt. of Japan and IIITDM Jabalpur. With these new Computer Numerically Controlled (CNC) machines, the Institute manufacturing facilities have now been equipped with CNC lathe, milling, punching, bending machines, abrasive water jet machine, rapid prototyping machine, Electric discharge machine, injection moulding machine apart from conventional machining systems.

In addition to this, we have material testing and characterization labs. It is worth mentioning here that students and faculty of other government and private institutes in and around Jabalpur are also benefitted by these facilities and the Institute library. Furthermore, we have a very ambitious plan of providing training on these high end machines and systems for skill development of fresh graduates and ITI trained persons and some of the faculty members have initiated focused training programmes that are of great current relevance.

In an effort to provide useful hands on training and self-learning environment, undergraduate electronics and communication labs have been upgraded with sophisticated design, analysis and



fabrication facilities including industry standard software tools such as CST microwave studio, Synopsis, Silvaco, TCAD and Vector Network Analysers, Spectrum Analysers and Rapid PCB prototyping machine etc. Apart from this, excellent research facilities have also been established in the domains of VLSI, Communication, Infrared Imaging and signal systems and control engineering.

With the introduction of the Master's level programme in Mechatronics, research activities in robotics and automation have gained momentum and mechatronics lab has been one of the most active labs due to its interdisciplinary nature. Design lab is also equipped with fabrication equipment and a recent addition is laser cutting machine. It is heartening to mention that the Institute now has a reasonable size of faculty working on various aspects of design education and research.

#### Research -

I feel proud to mention that with a modest number of 27 research publications in 2009, the Institute reached a record of 187 publications in the year 2012-13, as per the Scopus database information, one of the largest abstract and citation database of peer-reviewed literature in the world. This could not have been possible without the dedicated efforts of students and faculty of the Institute.

Quality of Research at any Institute is the true indicator of its research ethos. It is a matter of pleasure to report that some active research groups have been recently emerged due to the dedicated efforts of our Ph.D. scholars and their faculty mentors. These research groups have both undergraduate and post graduate students as members. Under these groups research seminars, workshops, special lectures, training programmes and year-round activities are planned.

A good number of research projects have been submitted to funding agencies by the faculty this year. Here I would like to particularly mention two important projects that have both research and development components. One project has been assigned by Ordnance Factory Board for certain design improvements as a test case to the Institute. In another project, design of an automated no-entry system for heavy vehicles in the city of Jabalpur has been sought by the police department. Right now both the projects have been taken up by the Institute as design challenge projects at Institute level. Another important DST sponsored project that is worth mentioning here is on the development of indigenous technology for low-cost high quality brain controlled wheel chair. In yet another BRNS sponsored project, our faculty team is working on technology development for dieless manufacturing.

#### Academics -

Fourth convocation of the Institute on August 25, 2012 was marked by the gracious presence of Professor S.V. Raghavan, Scientific Secretary, Office of the Principal Scientific Advisor, Government of India, who is also the Chairman, Board of Governors of the Institute. 132 bachelors' degrees, 14 master's degrees and 1 Ph.D. degree were awarded at the Convocation. Gauri Dani received the Directors' Gold Medal for the year 2012 for the best all round performance at the undergraduate level and the Chairman's Gold Medal for the best academic performance was awarded to Komal Dhawan at the undergraduate level.

Students often join Master's programme in engineering with the intent of pursuing an academic career. However, by the end of their programmes, they opt for some other career due to compelling societal circumstances. To encourage our bright Master level students join Ph.D. programme at the



Institute, a dual degree programme has been introduced from this year, where a master level student who has shown good potential for research can convert his programme to dual degree programme of Master + PhD without going through the admission process again.

In order to broaden our horizon of research activities, we have also introduced PhD programmes in Mathematics and Physics from this year. After a long pursuance with the Japanese Embassy, finally we succeeded in hiring a Japanese language teacher Mr. Akio Haga who can also speak Hindi. In addition, we have also hired his wife and an artist Ms. Izumi Haga who is having expertise in Japanese painting, culture and related areas. She will contribute in the "Art and Aesthetics" course being taught to all the undergraduate students.

### Faculty-

Faculty of the Institute are the core of the entire academic and research activities of the Institute. During the last one year, four people have been offered faculty positions and they have already joined the Institute. This makes the Institute faculty strength to 36. Two of our faculty member Dr. Asutosh Shrivastava and Dr. Rajesh Pandey have returned after successful completion of their post-doctoral work under Indo-US research fellowship programme. Dr. Nihar Ranjan Jena has been awarded Indo-Australia Visiting Fellowship Award (2012-13) to work at the University of Queensland, Australia. It is indeed a pleasure to inform that Dr. Sachin Kumar Jain has brought laurels to the Institute by bagging the POSOCO Power System Award (PPSA-2013) which is given for excellence in power sector for his doctoral work completed at IIT Kanpur. He has been serving as a research engineer at the Institute.

Many faculty members have participated in national and international conferences to present their papers or to chair sessions. Due to the dedicated efforts of the faculty, research at the Institute is gaining momentum with a record publication of more than a hundred papers in the year 2012-13 alone.

### Workshops / Conferences / Training Programmes -

Some of the conferences /workshops organized by the Institute faculty are as follows –

- (1) International Conference on Innovations in Design and Manufacturing December 5-7, 2012. Coordinator Professor Puneet Tandon, Co-coordinators Dr. VK Gupta and Dr. Pavan Kumar Kankar.
- (2) Design Workshop 2012 December 5-7, 2012. Convener Dr. VK Gupta, Co-convener Dr. Prashant Kumar Jain.
- (3) NBHM funded Research Promotion Workshop on Introduction to Graph and Geometric Algorithms jointly organized by Dr. Pritee Khanna, Dr. Sraban Kumar Mohanty from the Institute and Prof. Subir Kumar Ghosh from TIFR, Mumbai, Prof. Sudebkumar Prasant Pal from IIT, Kharagpur.
- (4) NPTEL workshop during March 31-April 1, 2012 at the Institute targeting teachers and scholars from MP zone. This was the first workshop held in Madhya Pradesh to encourage and promote the use of NPTEL material. Over 200 participants from 27 different institutions participated in the workshop. Dr. Satyaki Roy from IIT Kanpur and Dr. Tanuja Sheorey from the Institute were coordinators.
- (5) Workshop on Wavelets and its applications (WoW 2012) during July 13-15, 2012 organized by Dr. Pritee Khanna, Dr. Rajesh Pandey and Dr. Pavan Kankar.



- (6) Five computer awareness programmes (skill development programmes) organized for government officials and staff of Government of M.P., during September, 2012- February 2013. Coordinator Dr. Pritee Khanna. This was an initiative of Govt. of M.P. to train their officials and staff in the modern IT tools and their usage. The Institute was entrusted with the responsibility of training more than 160 personnel.
- (7) Electronics Designs Basics during May 3-7, 2012. Coordinators Prof. PN Kondekar and Prof. Jawar Singh.
- (8) Workshop on Virtual Lab during December 18-19, 2012. Coordinators Prof. Tanuja Sheorey and Prof. Vijay Kumar Gupta.

### Infrastructure Development -

Since the last year, infrastructure development has gained momentum. About 12 small and large projects have been taken up by CPWD and hopefully by the year 2013-14, residential complexes with 110 flats for faculty, guest house, lecture hall and tutorial complex will be nearing completion. Further, first phase of road and service network is also expected to be completed by the end of 2013-14. 1000 KVA DG set is about to be installed. Post graduate hostel – Hall 7 is also going to start soon. And most importantly, Basket Ball Court Complex is likely to be completed by the end of 2013 and students will be having their first indoor complex for sports activities.

#### Students -

Students of this Institute have a distinctive character. They work on a number of projects and also contribute significantly in R&D projects. I am glad to mention that in the improved research profile of the Institute, role of undergraduate students has been exemplary. In recognition to the outstanding abilities of our students, every year they receive prestigious fellowships for higher studies abroad. This year also, Deepak Keshwani, Vikrant Upadhyay and Santosh Maurya have been awarded with MEXT fellowship of Government of Japan.

Apart from their academic achievements, students have also contributed in making this campus vibrant and full of life. Cultural festival TARANG 2013 has been one of the most popular events in the entire state of Madhya Pradesh and is also attended by students from the various states. With Tarang 2013, the Technical festival ABHIKALPAN 2013 was also a grand success with larger participation from Colleges/Institutions from different states. Under SPIC- MACAY membership of the Institute, activities have been started and are gaining momentum. Students have created a number of clubs for year-round activities.

A detailed account of Institute's progress and achievements is given in the following sections.



#### THE INSTITUTE

Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design & Manufacturing (PDPM IIITDM ) Jabalpur was established by the Ministry of Human Resource Development on January 24, 2005 under Madhya Pradesh Society Registration Act 1973. The foundation stone of the Institute was laid by Late Shri Arjun Singh, the then Minister of Human Resource Development (MHRD) on February 7, 2005. The first academic session of PDPM IIITDM Jabalpur started from August, 2005. The Institute started operating from the temporary location at the IT Bhawan of the Jabalpur Engineering College. Prof Sanjay G. Dhande, Director, IIT Kanpur was given the additional charge as the Director of the Institute. Simultaneously, the efforts were on to find suitable land where the campus of the new Institute could be developed. On May 3, 2006, a land of 250 acres near Dumna Airport of Jabalpur was identified by the State Government of M.P. and was handed over to the Institute. The construction work of Phase I buildings was started in 2007. Presently, the Institute is operating from its own campus at Dumna Airport road, Jabalpur. First few buildings have come up and others are under construction. Presently the Institute is offering undergraduate, postgraduate and research programmes in Computer Science and Engineering, Electronics and Communication Engineering and Mechanical Engineering. Apart from this, the Institute also offers Ph.D. programmes in Design, Mathematics and Physics and master level programmes in Design and Mechatronics.

#### Vision

PDPM Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Jabalpur shall emerge as a Global Knowledge Hub for quality research and teaching under the broad area of Design and Manufacturing through cross disciplinary, innovative, futuristic and dynamic approaches.

#### Mission

To create an environment of high quality research and training that

- Provides maximal opportunities for intellectual and creative development.
- Provides exposure to solve real life problems through interdisciplinary approaches.
- Encourages students to learn through inquiry and hands on experience rather than simple transmission of knowledge through class room teaching.

#### **Values**

Besides continuing its ongoing activities, the Institute seeks to act in a manner that is guided by a deeprooted sense of shared values and aspirations for its future planning. Working under such a sound frame of reference, the Institute:

- a. Seeks to establish and maintain an environment enabling academic community to take intellectual and creative risks and to embrace changes that will lead to the technological innovations and development in future years.
- Encourages, recognizes and rewards high performance in learning, teaching, scholarship, research
  and other creative activities by promoting intellectual curiosity and protecting the basic principles of
  academic freedom.
- c. Provides an environment that imbibes respect for nature and environment, culture and human values
  - d. Aspires to build an environment of tolerance and reasoned debate without any gender, caste, religious, regional or cross country bias by affirming the worth and personal dignity of every constituent member of the Institute and by contributing to a campus climate of civility.



### **GOVERNANCE**

Administration and Governance: The Institute is governed by the Ministry of Human Resource Development through a Memorandum of Association (MOA). As per the MOA following bodies are the Institute's Administrative Authorities:

- Board of Governors (BOG)
- Finance Committee (FC)
- Senate
- Building & Works Committee (BWC)

## **Board of Governors**

Name of Member	Designation
Prof. S. V. Raghavan Scientific Secretary, Office of the Principal Scientific Advisor, Govt. of India	Chairman
Shri Ashish Kumar Chauhan Managing Director & CEO, BSE Ltd.	Member
Prof. U. B. Desai Director, IIT Hyderabad	Member
Shri D. M. Gupta, IOFS (Retd.) Former DGOF & Chairman, Ordnance Factory Board	Member
Prof. Ashok Jhunjhunwala Professor, IIT Madras	<mark>Memb</mark> er
Shri Amit Khare (IAS) Joint Secretary, Bureau of Administration MHRD, Govt. of India	Member (Ex-officio)
Prof. Ajay Kumar (IAS) Joint Secretary, Dept. of Electronics & Information Technology Govt. of India	Member
Prof. Pradeep Mathur Director, IIT Indore	Member
Prof. Aparajita Ojha Director, PDPM IIITDM Jabalpur	Member (Ex-officio)
Shri Hari Ranjan Rao (IAS) Secretary, Department of IT, Govt. of Madhya Pradesh	Member (Ex-officio)
Prof. G. K. Sharma Professor, IIT Gandhinagar	Member



Designation Name of Member

Member Prof. Tanuja Sheorey

Professor, PDPM IIITDM Jabalpur Member

Prof. R. K. Shyamasundar

Senior Professor Tata Institute of Fundamental Research,

Mumbai

Member **Prof. Puneet Tandon** Professor, PDPM IIITDM Jabalpur

**Acting Secretary** Shri R. P. Dwivedi

**Deputy Registrar** 

Five meetings of the BOG were held during the year 2012-13.

#### **Finance Committee**

Prof. U. B. Desai

MHRD, Govt. of India

PDPM IIITDM Jabalpur

Office of the Principal Scientific Advisor,

PDPM IIITDM Jabalpur

Designation Name of Member

Prof. S. V. Raghavan Chairman (Ex-officio)

Scientific Secretary,

Member

Govt. of India

Director, IIT Hyderabad

Member Prof. Ashok Jhunjhunwala Professor, IIT Madras

Member (Ex-officio) Shri Alok Mishra

Director (Technical) MHRD, Govt. of India

Member (Ex-officio) Prof. Aparajita Ojha

Director, PDPM IIITDM Jabalpur

Member (Ex-officio) Shri Navin Soi Director (Finance)

Secretary (Ex-officio) Shri R. P. Dwivedi

**Deputy Registrar** 

Three meetings of the Finance Committee were held during 2012-13.



## Senate

Professor, CSE IIT Bombay

Senate	
Name of Member	Designation
Prof. Aparajita Ojha Director PDPM IIITDM Jabalpur	Chairperson
Dr. Sunil Agrawal Head (ME Discipline) PDPM IIITDM Jabalpur	Member
Shri S. M. Amane AGM, Tata Motors	Member
Dr. M. Amarnath Assistant Professor, ME PDPM IIITDM Jabalpur	Member
Prof. V. M. Gadre Professor, EE IIT Bombay	Member
Dr. Atul Gupta Associate Professor, CSE PDPM IIITDM Jabalpur	Member
Prof. Vijay Kumar Gupta Dean (Academic) PDPM IIITDM Jabalpur	Member
Dr. Prashant K Jain Associate Professor, ME PDPM IIITDM Jabalpur	Member
Prof. V. K. Jain Professor, ME IIT Kanpur	Member
Dr. Pavan Kankar Assistant Professor, ME PDPM IIITDM Jabalpur	Member
Dr. Pritee Khanna Head (CSE Discipline) PDPM IIITDM Jabalpur	Member
Prof. Uday Khedkar	Member



Name of Member

Prof. P. N. Kondekar

Professor, ECE

PDPM IIITDM Jabalpur

Dr. Lokendra Kumar

**Assistant Professor** 

PDPM IIITDM Jabalpur

Dr. Asish K. Kundu

Head (Natural Sciences)

PDPM IIITDM Jabaipur

Dr. Prabir Mukhopadhyay

Assistant Professor, Design

PDPM IIITDM Jabalpur

Dr. Prabin K Padhy

Associate Professor, ECE

PDPM IIITDM Jabalpur

Prof. Tanuja Sheorey

Dean (Students)

PDPM IIITDM Jabalpur

Dr. Asutosh Shrivastava

Assistant Professor, ECE

PDPM IIITDM Jabalpur

**Prof. Puneet Tandon** 

Dean (P&D)

PDPM IIITDM Jabalpur

Dr. Dinesh Kumar Vishwakarma

Head (ECE Discipline)

PDPM IIITDM Jabalpur

Dr. Parag Vyas

Grau Bär Design, Indore

Shri Santosh Mahobia

Assistant Registrar,

PDPM IIITDM Jabalpur

 $During the Academic \, Year \, 2012\text{-}13 \, three \, Senate \, meetings \, and \, two \, special \, meetings \, were \, held.$ 

**Standing Committees of the Senate** 

Under Graduate Committee of Senate (UGCS)

Prof. Vijay Kumar Gupta

Convener

Dr. Pritee Khanna

Member

Designation

Member

Acting Secretary



Dr. Prabin Kumar Padhy - Member
Dr. Asish Kumar Kundu - Member
Dr. Gautam Dutta - Member

Mr. Aditya Kumar - Student Member
Mr. Abhishek Kumar - Student Member

## Post Graduate Committee of Senate (PGCS)

Prof. Vijay Kumar Gupta - Convener
Prof. Puneet Tandon - Member
Dr. Prabin Kumar Padhy - Member
Dr. Sraban Kumar Mohanty - Member

Mr. Divyansh Patel - Student Member
Mr. Kuldeep Baderia - Student Member

## Students Prizes and Awards Committee of Senate (SPACS)

Dr. Sunil Agrawal - Convener
Dr. Goutam Dutta - Member
Dr. Rajesh K Pandey - Member

## Students Advisory Committee of Senate (SACS)

Prof. Tanuja Sheorey - Convener
Prof. P.N. Kondekar - Member
Dr. Lokendra Kumar - Member
Dr. Anil Kumar - Member
Dr. Sraban Mohanty - Member

Mr. Snehil Vishwakarma - Student Coordinator (Counseling Service)

Mr. Vikas Kumar Malviya - PG Student (Senate Member)
Mr. Kavity Keshav - UG Student (Senate Member)

## **Library Committee of Senate**

Dr. Dinesh Kumar Vishwakarma Convener
Prof. Tanuja Sheorey - Member
Dr. Atul Gupta - Member
Dr. Mukesh K. Roy - Member



Dr. Bhupendra Gupta - Member
Dr. Anil Kumar - Member
Dr. Prabir Mukhopadhyay - Member
Dr. Mamta Anand - Member

Ms. Menika Patel - Assistant Librarian

Mr. Bala Sundresan Representative

member of UG Students

Mr. Saurabh Tiwari - Representative

member of PG Students



## **Building & Works Committee**

Name of Member

Prof. Aparajita Ojha Director PDPDM IIITDM Jabalpur	Chairperson (Ex-officio)
Shri Alok Mishra Director (Technical) MHRD, Govt. of India	Member
Er. D. K. Pandey SE, MPPKVV Co. Ltd., Jabalpur	Member
Er. P. R. Patil Superintending Engineer CPWD (CZ), Bhopal	Member
Prof. G. K. Sharma	Member

Prof. Puneet Tandon
Dean (P&D)
PDPM IIITDM Jabalpur

Shri R. P. Dwivedi Deputy Registrar PDPM IIITDM Jabalpur

**IIT** Gandhinagar

Ex-Officio Secretary & Estate Officer

Member

Designation

Two meetings of the Building & Works Committee were held during 2012-13.



## **ACADEMIC/ADMINISTRATIVE STAFF**

#### **FACULTY**

The Institute has been very particular in selecting the most talented faculty available in the country and has grown from the initial strength of only two faculty members to thirty six faculty members and seven research engineers who also contribute in the Institute's training and research programmes. The Institute also invites people from other Institutes/ organisation as guest faculty to deliver lectures in special topics and/or as a part of course. Present sanctioned strength of faculty and research engineers is 65. Following is a list of faculty members and research engineers along with their fields of specializations.

> Name and Designation

**Professional** Details

Areas of interest & **Specialization** 

**PROFESSORS** 



Prof. Aparajita Ojha

Science and Appl.

PhD from RDV V Jabalpur, Geometric Modeling, Computer Former Professor at Aided Geometric Design, Finite RDVV Jabalpur, former Elements, Spline Theory, Director of University Approximation Theory, Wavelet Institute of Comp. Analysis, Object Oriented/ Aspect Oriented Modelling and Design, Visual Cryptography, Path Planning.



Prof. Puneet Tandon PhD from IIT Kanpur

Geometric Modeling for Design, Engineering & Manufacturing; Conceptual Design, Product Innovation, Design and Development; Mechatronics; Rapid Prototyping & Tooling, Reverse Engineering, NC programming; Tool Design etc.



Prof. Tanuja Sheorey PhD from IIT Kanpur

Algorithm development and Numerical Analysis, Mathematical Modeling of flow through Porous Media: Domain Decomposition and Parallel Computation, Exhaust **Emission Control from Automobiles.** 





Prof. Vijay Kumar Gupta

PhD from IIT Bombay

Smart Structures, Machine Design, Finite Element Methods.



Prof. P. N. Kondekar PhD

PhD from IIT Bombay

Electronic Circuit Design, VLSI Design (MOST Level), Device Simulation and Modeling, RF Identification, RF Power Semiconductor and Modeling.

### **ASSOCIATE PROFESSORS**



Dr. Pritee Khanna

PhD from Kurukshetra University

Computer Graphics, Geometric Modeling, Database Management Systems, Biometrics, Data Structures.



Dr. Atul Gupta

PhD from IIT Kanpur

Software Engineering, Object Oriented Systems, Empirical Software Engineering, Software Testing, Software Engineering Education.



Dr. Prabin Kumar Padhy

PhD from IIT Guwahati

Automatic Controller Tuning, Identification and Control of Processes.



Dr. Sunil Agrawal

PhD from IIT Kanpur

Production and Operations Management, Probability and Statistics, Time Series Snalysis, and Quality Control.





Dr. Prashant Kumar Jain

PhD from IIT Delhi

Rapid Prototyping & Tooling, CNC Machining, Geometric Modeling, CAD/CAM Integration, ComputationalGeometry, Design Automation, Nano Technologies in Manufacturing.

#### **ASSISTANT PROFESSORS**



Dr. Subir Singh Lamba

PhD from IIT Kanpur

Parallel Computing, Computational Fluid Dynamics, Hyperbolic IBVP, Spectral Methods.



Dr. Mukesh Kumar Roy

PhD from IIT Kanpur

Formation and Characterization of Magnetic Nano Particles; Magnetic Multilayer; Immiscible Magnetic Alloys, Low Cost Science Teaching Methodologies.



Dr. Raiib Kumar Jha

PhD from IIT Kharagpur Video Indexing, Motion Detection using Optical Flow, Image Watermarking, Steagnography, Stochastic Resonance for Images, Image enhancement using Multi-Retinex, and newly developed High Pass Filtering Approach.



Dr. Bhupendra Gupta

PhD from IIT Kanpur

Random Graphs and its Applications, Stochastic Process, Probability Theory.



Dr. RaviBabu Mulaveesala

PhD from IIT Delhi

Material Analysis by Thermal Wave Imaging; Optical Techniques for Non destructive Measurements; Ultrasonic Imaging; Radiography; Instrumentation for Non-destructive Measurements.





Dr. Lokendra Kumar

PhD from IIT Kanpur

Spectral Methods, Parallel Algorithms, Partial Differential Equations, Numerical Linear Algebra.



Dr. Rajesh Kumar Pandey

PhD from IT BHU

Wavelet Analysis; Numerical Analysis.



Dr. Asish Kumar Kundu

PhD from JNCASR

Solid State Physics.



Dr. Goutam Dutta

PhD from IIT Bombay

Computational Fluid Dynamics, Heat Transfer, Two Phase Flow Instability analysis, Nuclear Coupled Thermal Hydraulic Instability Analysis.



Dr. H Chelladurai

PhD from IIT Kanpur

Condition Monitoring, Virtual Instrumentation and Artificial Neural Networks.



Dr. Dinesh Kr.Vishwakarma

PhD from IISc Bangalore Analytical and FDTD Modeling, Antenna Analysis and Design, Microwave Engineering, Applied Photonics, Fiber Optic Communication.





Dr. M Amarnath

PhD from IIT Madras

Condition Monitoring and Fault Detection in Rotating Machinery, Acoustics and vibration analysis, Lubricating Oil Tribology, Nondestructive Testing.



Dr. Ashutosh Srivastava

PhD from Jadavpur University

Microelectronics/VLSI, Silicon Detectors/MEMS.



Dr. Anil Kumar

PhD from IIT Roorkee

Solid State Electronic Material (Semiconductor Device & Material Semiconductor Material & Technology Solid State Device & Technology).



Dr. Prabir Mukhopadhyay

PhD from University of Limerick, Ireland

Injury Prediction, Industrial Ergonomics, Occupational Ergonomics, Ergonomics in Improving Productivity, Transportation Ergonomics, Macro Ergonomics, Cognitive Ergonomics



Dr. Sraban Kumar Mohanty

PhD from IIT Guwahati Computer Science & Engineering.



Dr. Mamta Anand

PhD from Banasthali Vidyapeeth American Transcendentalism, Indian Spiritualism, Gender Studies, Cultural Studies, Concept of Human Identity.





Dr. Pavan Kumar Kankar

PhD from IIT Roorkee

Vibrations, Condition Monitoring, Nonlinear Dynamics, Soft Computing.



Dr. Nihar Ranjan Jena PhD from BHU

DNA Dynamics, DNA-Protein Interaction, Enzyme Catalysis, Protein-Inhibitor Binding & Drug Design.



Dr. Jawar Singh

PhD from University of Bristol

VLSI, Low power system design, Nano CMOS and TFET SRAMs, Process Variation and Fault Tolerant SRAM Design, Statistical Analysis of Process Variations in Nano-CMOS Devices.



Dr. Vinay Kumar Singh

PhD from IIT Kanpur

Solid State Device and Organic Electronics.



Dr. Brajesh Pandey

PhD from IIT Bombay

High-speed CMOS Analog and RF Integrated Circuits and Systems Low-Power Mixed Signal Circuit for VLSI ESD and Input-Output (I/O) Circuit Issues Novel Device Structures for VLSI application.



Dr. Sujoy Mukherjee

PhD from IISc Bangalore Structural Dynamics, Smart Materials and Structures.





Dr. Amresh Chandra Mishra

PhD from IIT Kharagpur

Magnetic thin films, Soft magnetic materials, Magnetic transport phenomena.

### **VISITING FACULTY**



Mr. T.V. K. Gupta

Kanpur, MTech

Pursuing PhD from IIT CAD, CAM, Reverse Engineering, Abrasive Water Jet, Machining, CNC, Rapid Prototyping.



Mr. K. K. Balakrishnan

Pursuing PhD from IIT Guwahati, MDes

Industrial Design, Sustainable Design, Product Service Systems, Art & Design.

### **RESEARCH ENGINEERS**



Mr. Awadesh Kumar Singh

ME from AIT, Thailand Mechatronics, Design of MEMS Devices.



Mr. K.K. Soundra Pandian

Patna, BE

Pursuing PhD from IIT Electronics & Communication, Instrumentation, Embedded Programming, Mechatronics.



Dr. Sachin Kumar Jain

PhD from IIT Kanpur

Power Electronics.





Mr. D.S. Ramteke

MTech from IIT Guwahati

Machine Design, Rotor Dynamics.



Mr. B. Mukherjee

Pursuing PhD from IIT Bombay

Microwave Electronics.



Mr. Saket Saurav

BE from RGPV Bhopal

Robotics, Embedded C/C++ and VB/VB. NET Programming.



Mohd. Sharique Husain

BE from RGPV, Bhopal

Database Management System.

## **OFFICE ADMINISTRATION**

## **Group A Officers**



Col. (Retd.) P. S. Sandhu BE, MPM, MCEME, IMCC

Registrar [upto July 1, 2012]



Shri R. P. Dwivedi MCA, MPM, LLB

Deputy Registrar General Administration Finance & Accounts Estate Officer





Shri Vijay Kumar Dubey BE (Civil), MBA

Executive Engineer (Civil)
[On Deputation from CPWD]



Shri Prabodh Pandey MSc, MPM

Assistant Registrar
General Administration
Establishment
Public Information Officer
Official Language Officer



Shri Naresh Joshi MSc

Assistant Registrar
Internal Audit
Finance & Accounts



Shri Rizwan Ahmed MSc, PGDHRM

Assistant Registrar
Purchase & Stores



Shri Ravi Gundavarapu MSc

Assistant Registrar [upto Aug 9, 2012]



Shri Santosh Mahobia MBA

Assistant Registrar Academic, Students



Ms. Menika Patel MLib

**Assistant Librarian** 



### Staff

## **Group B Employees**

Sl. No.	Name (Shri/Ms./Smt.)	Designation
1.	Shri R. K. Mishra	JE(Civil)
2.	Shri Sunil Jat	JE (Civil)
3.	Shri Nitesh Kumar	JE(Elect.)
4.	Shri Pradeep Kumar Nayak	JE (Elect.) [Resigned on April 25, 2012]
5.	Shri Ashok Kumar	Jr. Superintendent
6.	Shri Aloysius Beenu Michael	Sr. Stenographer
7.	Ms. Megha Kushwaha	Sr. Information Library Assistant

## **Group C Employees**

SI. No.	Name (Shri/Ms./Smt.)	Designation
1.	Shri. Sandeep Awasthi	UDC
2.	Shri. Anil <mark>Kumar</mark>	UDC
3.	Shri. Shail <mark>esh Sh</mark> arma	UDC
4.	Shri. Praveen Armo	UDC
5.	Shri. Dev Krishna Jha	Dy. Account Assistant
6	Ms. Sapna Wankhade	Library Assistant
7.	Shri Kamlesh S Warkhade	Care Taker
8.	Shri Akhilesh Shrivastava	TA
9.	Shri Jitendra Gupta	TA
10	Shri Alok Kulkarni	TA
11.	Ms. Bharti Kewat	TA
12.	Shri Rajesh Kumar Singh	TA
13.	Shri Brajesh Kumar	TA
14.	Shri Piyush Kumar Usrethe	TA
15.	Shri Anup Bajpai	TA
16.	Shri Ghanshyam Meshram	TA
17.	Shri Mayur S. Mangole	TA
18.	Shri Anupam Shukla	TA
19.	Shri Rajveer	TA .
20.	Shri Varun Dubey	LA
21.	Shri Jagat Singh	LA
22.	Ms. Aayesha B. Mansoori	LA



23.	Shri Ram Dularey Vishwakarma	LA
24.	Shri Robinson George Markam	LA
25.	Shri Anup Kumar Gupta	LA
26.	Shri Tabish Khan	LA
27.	Shri Manoj Tigga	LA
28.	Shri Simantakar Gupta	LDC
29.	Shri Pankaj Prajapati	LDC
30.	Shri Avashesh Kumar Pal	LDC
31.	Shri Prashant Agnihotri	LDC
32.	Shri Dilip Rangare	LDC
33.	Shri Rajesh Kumar	LDC
34.	Shri Adesh Kumar	LDC
35.	Shri Kanhiya L. Barmaiya	LDC
36	Shri Rajesh	LDC
37.	Shri Moh <mark>d. Izrae</mark> l Khan	Driver
38.	Shri Gane <mark>s</mark> h Prasad Kashyap	Driver
39.	Shri Milind P. Bopde	Electrician



#### **ACADEMIC AND RESEARCH ACTIVITIES**

PDPM IIITDM Jabalpur was established in 2005 by the Ministry of Human Resource Development, Government of India with a unique mission of creating a centre of excellence in education and R&D activities on IT enabled Design and Manufacturing. Since its inception, the Institute has been imparting quality education and training with truly interdisciplinary approach both at undergraduate and post graduate levels. In essence PDPM IIITDM Jabalpur strengthens and enhances academic activities with the following aims and objectives—

#### **Aims**

- a) To propel R&D activities in Design and Manufacturing that become catalyst for devising innovative solutions to societal challenges.
- b) To increase cooperation between IIITDMJ and other academic institutions of higher learning in identified areas of mutual interests in the broad field of Design and Manufacturing.
- c) To create commercial opportunities and build sustainable partnership with Indian industry.

### **Objectives**

- a) To intensify translational research on healthcare, security and consumer products for Indian and Asian markets.
- b) To focus on technologies for improving and diversifying the agricultural productivity of the country.
- c) To promote R&D activities on green energy systems and devices.
- d) To facilitate interdisciplinary design-focused education, mind to market research and entrepreneurial activities.
- e) To act as a hub for a meaningful collaboration and networking between academic partner institutions, design professionals and industry in a hub and spoke model.

#### **Academic Programmes**

**Undergraduate programmes-** The Institute has a unique undergraduate curriculum for imparting education in the following three disciplines of engineering-

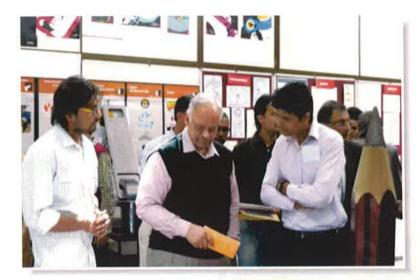
- (i) Computer Science and Engineering
- (ii) Electronics and Communication Engineering
- (iii) Mechanical Engineering

Postgraduate Programmes- The Institute runs MTech and PhD programmes in the following disciplines-

- (i) Computer Science and Engineering
- (ii) Electronics and Communication Engineering
- (iii) Mechanical Engineering

In addition, the Institute also offers M Tech in Mechatronics, Master of Design and PhD in Design.





Prof. S.V. Raghavan, Chairman, BOG interacting with Design Students

Students Practicing in the Workshop



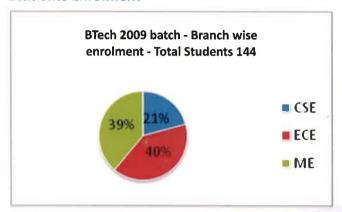


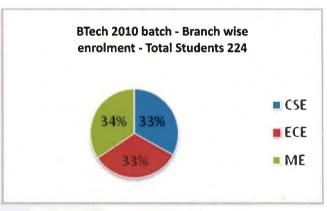
Inaugural Session of International Conference on Innovations in Design and Manufacturing (December 5-7, 2012)



### **BTech Programme**

#### **Students Enrolment**



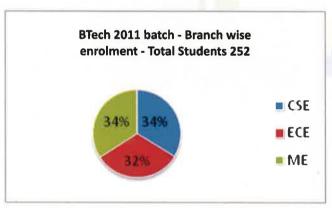


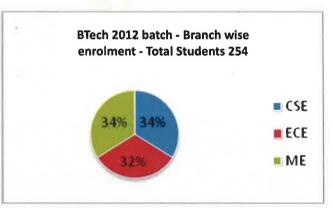
2009 Batch

Branch	OP	ОВС	SC	ST	Total
CSE	19	02	05	04	30
ECE	31	13	09	05	58
ME	29	14	08	05	56
Total					144

2010 Batch

Branch	OP	ОВС	SC	ST	Total
CSE	39	21	11	3	74
ECE	37	20	11	05	73
ME	38	22	11	06	77
Total		*			224





2011 Batch

Branch	OP	ОВС	SC	ST	Total
CSE	44	23	12	06	85
ECE	42	22	11	06	81
ME	43	23	13	07	86
Total					252

2012 Batch

Branch	OP	ОВС	SC	ST	Total
CSE	44	23	13	06	86
ECE	42	23	11	06	82
ME	43	23	13	07	86
Total					254



## **Academic Performance Evaluation Committee Report – Undergraduate**

## Semester II (2011-12)

Batch	No. of Students	No. of Students Passed	No. of Students Terminated
2009	143	143	00
2010	224	223	01
2011	252	252	00

### Semester I (2012-13)

Batch No. of Students		No. of Students Passed	No. of Students Terminated
2009	143	143	00
2010	223	223	00
2011	252	252	00
2012	254	254	00

## **Academic Performance Evaluation Committee Report – Post Graduate**

## Semester II (2011-12)

Batch	No. of Students	No. of Students passed	No. of Students Terminated
2010	30	29	01
2011	50	48	02

### Semester I (2012-13)

Batch	No. of Students	No. of Students passed	No. of Students Terminated
2010	13	13	00
2011	46	43	03
2012	47	47	00



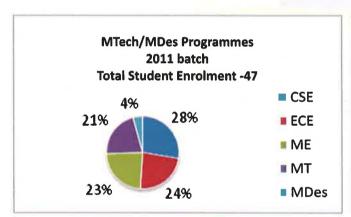
### **Post Graduate Programmes**

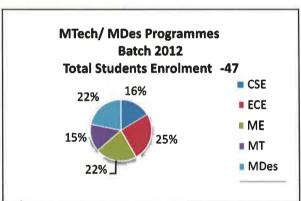
Institute offers Master's Degree Programmes in:

### (a) MTech

- (i) Computer Science & Engineering (CSE)
- (ii) Electronics & Communication Engineering (ECE)
- (iii) Mechanical Engineering (ME)
- (iv) Mechatronics(MT)

## (b) MDes Master of Design





2011 Batch

Branch	OP	ОВС	SC	ST	Total
CSE	08	03	01	01	13
ECE	05	04	02	00	11
ME	07	04	00	00	11
MT	07	03	00	00	10
MDes	00	01	01	00	02
Total	27	15	04	01	47

2012 Batch

Branch	OP	ОВС	sc	ST	Total
CSE	05	03	01	00	09
ECE	07	04	02	01	14
ME	07	03	02	00	12
MT	04	03	01	00	08
MDes	07	02	03	00	12
Total	30	15	09	01	55



### **PhD Programme**

The Institute offers PhD programmes in

- (i) Computer Science & Engineering (CSE)
- (ii) Electronics & Communication Engineering (ECE)
- (iii) Mechanical Engineering (ME)
- (iv) Design

### Students Enrolment in PhD

### 2008 Batch

Branch	OP	SC	ST	Total
CSE	01	00	00	01
ECE	01	00	00	01
ME	01	00	00	01
Design	00	00	00	00
Total	03	00	00	03

### 2010 Batch

Branch	OP	SC	ST	Total
CSE	03	00	00	03
ECE	01	00	00	01
ME	02	01	00	03
Design	00	00	00	00
Total	06	01	00	07

#### 2009 Batch

Branch	OP	SC	ST	Total
CSE	01	00	00	01
ECE	01	00	00	01
ME	01	00	00	01
Design	00	00	00	00
Total	03	00	00	03

#### 2011 Batch

Branch	OP	OBC	SC	ST	Total
CSE	04	01	02	00	07
ECE	07	01	03	00	11
ME	07	02	02	00	11
Design	00	00	01	00	01
Total	18	04	08	00	30

### 2012 Batch

Branch	OP	ОВС	SC	ST	Total
CSE	05	01	00	00	06
ECE	06	02	03	01	12
ME	04	00	01	00	05
Design	00	00	00	00	00
Total	15	03	04	01	23



## **RESEARCH PROJECTS 2012-13**

## Research Projects Approved /Completed/Ongoing

S.No.	Project Title	Duration	Investigator	Funding Agency	Amount	Status
1.	Process Development for the fabrication of Free Form Components Through Incremental Sheet Forming	2012-15	PI : Prof. Puneet Tandon Co-PI: Dr. Prashant Kumar Jain	BRNS, Department of Atomic Energy, Government of India	Rs. 78.45 lakhs	Ongoing
2.	Wavelets and Operational Matrix Based Techniques for Integral and Differential Equations	2012-15	PI : Dr. Rajesh K Pandey	DST, Ministry of Science & Technology, Government of India	Rs. 10.22 lakhs	Ongoing
3.	Brain Controlled Mobile Robot	2012-14	PI : Prof. V K Gupta and Dr. P. K. Padhy	DST, Ministry of Science & Technology, Government of India	Rs. 18.50 lakhs	Ongoing
4.	Constrained Curve Drawing Algorithms for Robot Motion Planning	2010-13	PI: Prof. Aparajita Ojha Co-PI: Prof. Tanuja Sheorey	DST, Ministry of Science & Technology, Government of India	Rs. 9.23 lakhs	Ongoing
5.	Electrical Characterization of Nano Scale MOSFETs Scalability Issues	2010 -13	Pl: Dr. Ashutosh Srivastava	DST, Ministry of Science & Technology, Government of India	Rs. 15 lakhs	Ongoing
6.	Development of a Micro Pump with NEMS Sensing Function for an Automatic Blood Collecting and Measurement System	2010-12	PI: Prof. Puneet Tandon Co-PI(s): Dr. Vijay Kumar Gupta Prof. Tanuja Sheorey	DST, Ministry of Science & Technology, Government of India & Japanese Society for Promotion of Science(JSPS)	Rs.4.38 lakhs (Grant from the Indian Funding Agency)	Ongoing



7,	Virtual Lab: Automated Systems	2010 -12	PI : Dr. Tanuja Sheorey Co-PI(s) : Prof. Vijay Kumar Gupta Prof. Puneet Tandon	MHRD, Govt. of India	Rs. 40 lakhs	Ongoing
8.	Virtual Lab: Manufacturing Engineering	2010 -12	PI: Prof. Vijay Kumar Gupta Co-PI(s): Prof. Tanuja Sheorey, Prof. Puneet Tandon	MHRD, Govt. of India	Rs. 40 lakhs	Ongoing
9.	Simulation study of Thin Base Symmetric Lateral Bipolar Transistor on SOI		PI: Dr. Asutosh Shrivastava	INUP-Center for Nano-electronics IIT Bombay	N.A.	Ongoing
10.	Nano-scale MOSEFT's Scalability Issues and Possible Solutions	Medium term	PI : Dr. Asutosh Shrivastava	INUP-Center-for Nano- electronics IIT Bombay	NA	Completed



#### **RESEARCH PUBLICATIONS 2012-13**

#### Publication in Peer Reviewed Journals 2012-13

- 1. Kumar, A., Ojha, A., Natural path planning using wavelet noise in static environment (2013) Computer Animation and Virtual Worlds, 24 (1), pp. 17-24.
- 2. Gupta, T.V.K., Ramkumar, J., Tandon, P., Vyas, N.S., A study on deviations of the jet with traverse speeds on different materials in pocket milling using abrasive water jet machining process, (2013) Applied Mechanics and Materials, 372, pp. 402-405.
- 3. Soni, S., Khanna, P., Tandon, P., Knowledge support system for aesthetics in product design, (2013) Journal of Computing and Information Science in Engineering, 13 (1), art. no. 011006.
- 4. Sambhav, K., Tandon, P., Kapoor, S.G., Dhande, S.G., Mathematical modeling of cutting forces in microdrilling (2013) Journal of Manufacturing Science and Engineering, Transactions of the ASME, 135 (1), art. no. 014501.
- 5. Tamrakar, D., Khanna, P., Palmprint verification with XOR-SUM Code (2013) Signal, Image and Video Processing, pp. 1-8. Article in Press.
- 6. Rai, P., Khanna, P., Gender classification techniques: A review (2012) Advances in Intelligent and Soft Computing, 166 AISC (VOL. 1), pp. 51-59.
- 7. Mulaveesala, R., Panda, S.S.B., Mude, R.N., Amarnath, M., Non-destructive evaluation of concrete structures by non-stationary thermalwave imaging (2012) Progress in Electromagnetics Research Letters, 32, pp. 39-48.
- 8. Malviya, V.K., Jain, P.K., An object oriented approach to the online simulation of CNC turning and milling machining operations through computational geometry (2013) Computer-Aided Design and Applications, 10 (5), pp. 839-849.
- 9. Mukhopadhyay et al "Ergonomic design intervention at an interactive voice response system in a developing country", Information Design Journal 2013, Accepted for publication.
- 10. Mukhopadhyay et al "Ergonomic design analysis of some road signs in India", Information Design Journal 2013, Accepted for publication.
- 11. Mukhopadhyay et al "Ergonomic analysis of a traditional vehicle plying in rural and semi-urban area in western India", Journal of Human Ergology 2013, Accepted for publication.
- 12. Jha, V.K., Nautiyal, P., Motin Seikh, M., Chatterjee, R., Mahendiran, R., Kundu, A.K., Heat capacity, thermopower and magnetoresistance effects in multiferroic La0.5Bi0.5Mn0.5Fe0.5O3 (2013) Journal of Materials Science, 48 (21), pp. 7629-7634.



- 13. Nautiyal, P., Motin Seikh, M., Pralong, V., Kundu, A.K., Influence of bismuth on the magnetic & electrical properties of La 2MnNiO6 (2013) Journal of Magnetism and Magnetic Materials, 347, pp. 111-115.
- 14. Soni, V., Bhandari, A.K., Kumar, A., Singh, G.K., Improved sub-band adaptive thresholding function for denoising of satellite image based on evolutionary algorithms (2013) IET Signal Processing, 7 (8), pp. 720-730.
- 15 Anurag, S., Kumar, A., Singh, G.K., An efficient iterative method for nearly perfect reconstruction non-uniform filter bank (2013) International Journal of Speech Technology, 16 (3), pp. 261-272.
- 16. Kumar, A., Kumar, V.D., Novel polarization independent metamaterial and its application in patch antenna (2013) Microwave and Optical Technology Letters, 55 (8), pp. 1963-1969.
- 17. Sugumaran, V., Jain, D., Amarnath, M., Kumar, H., Fault diagnosis of helical gear box using decision tree through vibration signals (2013) International Journal of Performability Engineering, 9 (2), pp. 221-233.
- 18. Kumar, A., Singh, G.K., Rajesh, G., Ranjeet, K., The optimized wavelet filters for speech compression (2013) International Journal of Speech Technology, 16 (2), pp. 171-179.
- 19. Rafi, S.M., Kumar, A., Singh, G.K., An improved particle swarm optimization method for multirate filter bank design (2013) Journal of the Franklin Institute, 350 (4), pp. 757-769.
- 20. Amarnath, M., Sugumaran, V., Kumar, H., Exploiting sound signals for fault diagnosis of bearings using decision tree (2013) Measurement: Journal of the International Measurement Confederation, 46 (3), pp. 1250-1256.
- 21. Kumar, A., Kumar V., D., High-performance metamaterial patch antenna (2013) Microwave and Optical Technology Letters, 55 (2), pp. 409-413.
- 22. Kumar, R., Kumar, A., Pandey, R.K., Beta wavelet based ECG signal compression using lossless encoding with modified thresholding (2013) Computers and Electrical Engineering, 39 (1), pp. 130-140.
- 23. Kumar, A., Singh, G.K., Anurag, S., Design of nearly perfect reconstructed non-uniform filter bank by constrained equiripple FIR technique (2013) Applied Soft Computing Journal, 13 (1), pp. 353-360.
- 24. Rajbala, S., Srivastava, A., Pandey, H.O., Kumar, V.D., Investigation of a cross-slot nanoantenna and extraordinary transmission (2012) Micro and Nano Letters, 7 (7), pp. 600-603.
- 25. Ahirwal, M.K., Kumar, A., Singh, G.K., Analysis and testing of PSO variants through application in EEG/ERP adaptive filtering approach (2012) Biomedical Engineering Letters, 2 (3), pp. 186-197.
- 26. Kumar, A., Vishwakarma, D.K., Performance enhancement of patch antenna by fishnet metamaterial (2012) Progress in Electromagnetics Research Symposium, pp. 640-644.



- 27. Kumar, A., Ranjeet, K., ECG signal compression using the optimised wavelet filter banks (2012) International Journal of Signal and Imaging Systems Engineering, 5 (3), pp. 187-195.
- 28. Kumar, R., Kumar, A., Pandey, R.K., Electrocardiogram Signal Compression Using Beta Wavelets (2012) Journal of Mathematical Modelling and Algorithms, 11 (3), pp. 235-248.
- 29. Kumar, A., Rafi, S.M., Singh, G.K., A hybrid method for designing linear-phase quadrature mirror filter bank (2012) Digital Signal Processing: A Review Journal, 22 (3), pp. 453-462.
- 30. Kumar, A., Kuldeep, B., Design of M-channel cosine modulated filter bank using modified Exponential window (2012) Journal of the Franklin Institute, 349 (3), pp. 1304-1315.
- 31. Singh, J., Vijaykrishnan, N., A highly reliable NBTI resilient 6T SRAM cell (2013) Microelectronics Reliability, 53 (4), pp. 565-572.
- 32. Roy, M.K., Mahloniya, R.G., Bajpai, J., Bajpai, A.K., Spectroscopic and morphological evaluation of gamma radiation irradiated polypyrole based nanocomposites (2012) Advanced Materials Letters, 3 (5), pp. 426-432.
- 33. Sugumaran, V., Jain, D., Amarnath, M., Kumar, H., Fault diagnosis of helical gear box using decision tree through vibration signals (2013) International Journal of Performability Engineering, 9 (2), pp. 221-233.
- 34. Amarnath, M., Sugumaran, V., Kumar, H., Exploiting sound signals for fault diagnosis of bearings using decision tree (2013) Measurement: Journal of the International Measurement Confederation, 46 (3), pp. 1250-1256.
- 35. Amarnath, M., Krishna, I.R.P., Detection and diagnosis of surface wear failure in a spur geared system using EEMD based vibration signal analysis (2013) Tribology International, 61, pp. 224-234.
- 36. Amarnath, M., Sujatha, C., Swarnamani, S., Gear fault assessment based on continuous wavelet transforms (2013) Advances in Vibration Engineering, 12 (1), pp. 33-48.
- 37. Kumar, H., Ranjit Kumar, T.A., Amarnath, M., Sugumaran, V., 887. Fault diagnosis of antifriction bearings through sound signals using Support Vector Machine (2012) Journal of Vibroengineering, 14 (4), pp. 1601-1606.
- 38. Amarnath, M., Praveen Krishna, I.R., Empirical mode decomposition of acoustic signals for diagnosis of faults in gears and rolling element bearings (2012) IET Science, Measurement and Technology, 6 (4), pp. 279-287.
- 39. Amarnath, M., Chandramohan, S., Seetharaman, S., Experimental investigations of surface wear assessment of spur gear teeth (2012) JVC/Journal of Vibration and Control, 18 (7), pp. 1009-1024.



- 40. Muralidharan, B., Chelladurai, H., Experimental investigation of magnetic field assisted electro discharge deposition process (2013) Advanced Materials Research, 747, pp. 737-740.
- 41. Jha, R.K., Chaturvedi, A., Chouhan, R., Watermark detection using dynamic stochastic resonance (2013) Fluctuation and Noise Letters, 12 (3), art. no. 1350010.
- 42. Jha, R.K., Soni, B., Aizawa, K., Logo extraction from audio signals by utilization of internal noise (2013) IETE Journal of Research, 59 (3), pp. 270-279.
- 43. Jha, R.K., Soni, B., Chouhan, R., Aizawa, K., Improved watermark extraction from audio signals by scaling of internal noise in DCT domain (2012) Advances in Intelligent and Soft Computing, 166 AISC (VOL. 1), pp. 235-243.
- 44. Pandey, R.K., Kumar, N., Bhardwaj, A., Dutta, G., Solution of Lane-Emden type equations using Legendre operational matrix of differentiation(2012) Applied Mathematics and Computation, 218 (14), pp. 7629-7637.
- 45. Kankar, P.K., Sharma, S.C., Harsha, S.P., Vibration signature analysis of a high speed rotor supported on ball bearings due to localized defects (2013) JVC/Journal of Vibration and Control, 19 (12), pp. 1833-1853.
- 46. Kankar, P.K., Sharma, S.C., Harsha, S.P., Fault diagnosis of rolling element bearing using cyclic autocorrelation and wavelet transform (2013) Neurocomputing, 110, pp. 9-17.
- 47. Kankar, P.K., Sharma, S.C., Harsha, S.P., Vibration-based fault diagnosis of a rotor bearing system using artificial neural network and support vector machine (2012) International Journal of Modelling, Identification and Control, 15 (3), pp. 185-198.
- 48. Karthigan G., Mukherjee S. and Ganguli R., Electromechanical dynamics and optimization of pectoral fin-based ionic polymer-metal composite underwater propulsor (2012) Journal of Intelligent Material Systems and Structures, 23(10), pp. 1069-1082.
- 49. Mukherjee S. and Ganguli R., A comparative study of dragonfly inspired flapping wings actuated by single crystal piezoceramic (2012), Smart Structures and Systems 10 (1), pp. 67-87.
- 50. Mukherjee S. and Ganguli R., Nonlinear dynamic analysis of dragonfly inspired iezoelectric unimorph actuated flapping and twisting wing (2012), International Journal of Smart and Nano Materials 3(2), pp. 103-122.



### Research Publication in Conference Proceedings 2012-13

- 1. Johari, S., Ojha, A., Quickest path problems in stochastic-flow networks with time constraint: A fast and reliable solution (2013) Proceedings of the 2013 3rd IEEE International Advance Computing Conference, IACC 2013, art. no. 6514458, pp. 1555-1560.
- 2. Kumar, V., Chetan, C., Ojha, A., On a visual secret sharing scheme with high quality decryption (2012) Proc. of the 11th IEEE Int. Conference on Trust, Security and Privacy in Computing and Communications, TrustCom-2012 11th IEEE Int. Conference on Ubiquitous Computing and Communications, IUCC-2012, art. no. 6296114, pp. 1200-1203.
- 3. Yadav, G.S., Ojha, A., A fast and efficient data hiding scheme in binary images (2012) Proceedings of the 2012 8th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIH-MSP 2012, art. no. 6274406, pp. 79-84.
- 4. Upadhyay, R., Kankar, P.K., Padhy, P.K., Gupta, V.K., Extraction and classification of Electroencephalogram signals (2012) 2012 IEEE International Conference on Computational Intelligence and Computing Research, ICCIC 2012, art. no. 6510216.
- 5. Agrahari, D.K., Kondekar, P.N., Yadav, P.S., Singh, J., High performance organic field effect transistor with tri-gate (2013) Proceedings International Conference on Intelligent Systems, Modelling and Simulation, ISMS, art. no. 6498347, pp. 627-630.
- 6. Chakraborty, A.A., Kondekar, P.N., Yadav, M.K., Drive current boosting and low sub-threshold swing obtained by P layer in double-gate tunnel FET (2012) 2012 International Conference on Enabling Science and Nanotechnology, ESciNano 2012 Proceedings, art. no. 6149643.
- 7. Kane, L., Khanna, P., Towards establishing a mute communication: An Indian sign language perspective (2012) 4th International Conference on Intelligent Human Computer Interaction: Advancing Technology for Humanity, IHCI 2012, art. no. 6481787.
- 8. Rathore, S.S., Gupta, A., Investigating object-oriented design metrics to predict fault-proneness of software modules (2012) 2012 CSI 6th International Conference on Software Engineering, CONSEG 2012, art. no. 6349484.
- 9. Verma, R., Gupta, A., An approach of attribute selection for reducing false alarms (2012) 2012 CSI 6th International Conference on Software Engineering, CONSEG 2012, art. no. 6349479.
- 10. Tiwari, S., Rathore, S.S., Gupta, A., Selecting requirement elicitation techniques for software projects (2012) 2012 CSI 6th International Conference on Software Engineering, CONSEG 2012, art. no. 6349486.
- 11. Tiwari, S., Rathore, S.S., Singh, A., Singh, A., Gupta, A., An approach to generate actor-oriented activity charts from use case requirements (2012) Proceedings Asia-Pacific Software Engineering Conference, APSEC, 1, art. no. 6462662, pp. 270-275.
- 12. Rathore, S.S., Gupta, A., Validating the effectiveness of object-oriented metrics over multiple releases for predicting fault proneness (2012) Proceedings Asia-Pacific Software Engineering Conference, APSEC, 1, art. no. 6462679, pp. 350-355.
- 13. Tiwari, S., Rathore, S.S., Gupta, S., Gogate, V., Gupta, A., Analysis of use case requirements using sfta and sfmea techniques (2012) Proceedings 2012 IEEE 17th International Conference on Engineering of Complex Computer Systems, ICECCS 2012, art. no. 06299248, pp. 29-38.
- 14. Vastrakar, N.K., Padhy, P.K., Simplified PSO PI-PD controller for unstable processes (2013) Proceedings International Conference on Intelligent Systems, Modelling and Simulation, ISMS, art. no. 6498294, pp. 350-354.



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#### **CONVOCATION 2012**

The fourth convocation of PDPM IIITDM Jabalpur was held on August 25, 2012. The occasion was graced by Prof. S. V. Raghavan, Scientific Secretary, Office of the Principal Scientific Advisor to the Govt. of India and Chairman Board of Governors of the Institute. Parents and guardians of the graduating students and important dignitaries from the city of Jabalpur also attended the event. Total number of degrees awarded were 132 BTech, 14 MTech and 1 PhD. Branch wise details of award of degrees are as follows -

# Bachelor of Technology (BTech)

Sl. No.	Discipline	Total
1.	Computer Science & Engineering	47
2.	Electronics & Communication Engineering	47
3.	Mechanical Engineering	38
	Total	132

## Master of Technology (MTech)

SI. No.	Discipline	Total
1.	Computer Science & Engineering	10
2.	Electronics & Communication Engineering	02
3.	Mechanical Engineering	02
	Total	14

## Doctor of Philosophy (PhD)

SI. No.	Discipline	Total
1,	Mechanical Engineering	01

Apart from this following medals and prizes were also awarded for the outstanding performance of students

Sl. No.	Name of Medal/Prize	Name of recipient	Criterion
1.	Chairman's Gold Medal For the year 2012	Ms. Komal Dhawan	Best academic performance in the graduating class among all disciplines of the undergraduate programs of study
2.	Directors Gold Medal for the year 2012	Ms. Gauri A Dani	Outstanding all round performance and excellent organizational abilities and leadership qualities in the graduating class among all disciplines of the undergraduate programmes of study



3.	Design & Manufacturing Proficiency Gold Medal for the year 2012	Mr. Ankur Jain and Mr. Ankur Pandey	Best cross -disciplinary project in the graduating class
4.	Design & Manufacturing Proficiency Gold Medal for the year 2012	Mr. Vikas Kumar Malviya	Best cross -disciplinary project in the post graduating class
5.	Academic Performance Proficiency Silver Medal for the year 2012	Ms. Komal Dhawan	Outstanding academic performance in the Computer Science and Engineering discipline of the graduating class
6.	Academic Performance Proficiency Silver Medal for the year 2012	Mr. Vigyanshu Sharma	Outstanding academic performance in the Electronics and Communication Engineering discipline of the graduating class
7.	Academic Performance Proficiency Silver Medal for the year 2012	Mr. Manu Rakesh	Outstanding academic performance in the Mechanical Engineering discipline of the graduating class
8.	Design & Manufacturing Proficiency Prize for the year 2012	Mr. Animesh Kumar Sinha	Best project in the Computer Science and Engineering discipline of the graduating class
9.	Design & Manufacturing Proficiency Prize for the year 2012	Mr. Shaik Mohammad Rafi	Best project in the Electronics and Communication Engineering discipline of the graduating class
10.	Design & Manufacturing Proficiency Prize for the year 2012	Mr. Sachin Kumar	Best project in the Mechanical Engineering discipline of the graduating class
11.	Design & Manufacturing Proficiency Prize for the year 2012	Mr. Vikas Kumar Malviya	Best project in the Computer Science and Engineering discipline of the post graduating class
12.	Design & Manufacturing Proficiency Prize for the year 2012	Ms. Rajlaxmi Chouhan	Best project in the Electronics and Communication Engineering discipline of the post graduating class
13.	Design & Manufacturing Proficiency Prize for the year 2012	Mr. Mohammed Rajik Khan	Best project in the Mechanical Engineering discipline of the post graduating class
14.	Directors Silver Medal for the Year 2012	Mr. Akhil Gairola	Outstanding performance in games and sports in the graduating class among all disciplines of the undergraduate programmes of study
15.	Directors Silver Medal for the Year 2012	Mr. Prateek Saxena	Outstanding performance in cultural activities in the graduating class among all disciplines of the undergraduate programmes of study





Prof. S. V. Raghavan, Chairman BOG, delivering convocation address



Student Vikas Malviya receiving medal from the Chairman BOG, Professor S.V. Raghavan



Students in Gown after the Convocation Ceremony 2012



Student Astha Raikwar being awarded BTech degree by the Director



First PhD awarded to Mohd. Rajik Khan in Convocation 2012



#### LIBRARY

The IIITDM Jabalpur library has been constantly enriched by procurement of books and subscription of journals. The Institute library is a hybrid library and provides services in a mixed- mode, electronic and paper environment, particularly in a co-coordinated way. The library is equipped with integrated library system (Library Automation Software) "Softgranth" that is used for library services and its functioning.

#### **Collection Development and Management**

Collection building is one of the important functions of the library that supports academic and research work of students, faculty, staff and other users. The total collection of library as on 31st March 2013 stands as follows:

Collection	In Stock On 31 <sup>st</sup> March 2012	Procured In 2012-13	Total
Books (Text Reference)	9759	898	10657
Gratis Books	67	80	147
Online E-Resource (E-journal)	Given on next pa	ige	
Print Journal	1	2	2 (for the year 2013)
CDs (Received for books)	1017	99	1116
Bound volumes of Journals	56	0	56
Projects Report	27	22	49

## **News Papers and Magazines**

SI. No	Items	Quantity 2011-12	Add on 2012-13	Total
1.	News Papers	11	4 (Hindi)	15 (E-9, H-6)
2.	Magazines	22	11	33

#### **Library Services**

- 1. **WebOPAC:** Book search and user details are provided using WebOPAC.
- 2. **Reference Services:** Reference service helps users to make full use of library resources and services. It provides necessary assistance to users in locating information or document of their choice.
- 3. **Information Alert Services:** The library continues to alert the users about the latest information of their interest by:
  - a) List of new arrivals
  - b) List of new e-Resources
  - c) News items display
  - d) Faculty and student publications display
  - e) Display of forthcoming conferences, other national and international events.
- 4. **Newspaper Clipping Services:** IIITDM Jabalpur preserves news published in any newspaper to keep the news for both Hindi and English.
- 5. Library Seating Capacity: 100 at a time, 4 PC for web OPAC and e-Resources



# **Details of the expenditure**

SI. No.	Items	2012-13
1.	Books	Rs. 7,52,601.00 (approx.)
2.	Journals	Rs. 80,93,994.00 (approx.)
3.	Newspaper and Magazines	Rs. 12,473.00 for News Paper
		Rs. 1,28,014.00 (approx.) September 2012 to December 2013 for Magazine

# E-Resources for the year 2012-2013

SI. No.	Name of Publisher	Name of e-Resource 2012-2013	
1.	AMS	MathSciNet	
2.	Elsevier	Scopus	
3.	Elsevier	Science Direct (Options I)	
4.	ACM	ACM Resources	
5.	ASME	ASME Resources	
6.	IEEE	IEEE Resources	
7.	Springer	Springer Resources	
8.	Society for Industrial and Applied Mathematics Journals (SIAM)	SIAM Journal on Mathematical Analysis SIAM Journal on Matrix Analysis and Applications SIAM Journal on Numerical Analysis SIAM Journal on Scientific Computing SIAM Journal on Applied Mathematics SIAM Review	
9.	American Institute of Physics Journals (AIP)	Applied Physics Letters Journal of Applied Physics	
10.	American Physical Society Journals (APS)	Physical Review B	
11.	IOP Science Journals	Physics Education Smart Materials and Structures Nanotechnology	



12.	American Association of Physics Teachers Journals (AAPT)	American Journal of Physics Physics Teacher
13.	Institute for Operations Research and the Management Science (Informs)	Management Science Operation Research Transportation Science Mathematics of Operations Research Manufacturing & Service Operations Management
14.	Palgrave Macmillan Journals	Journal of the Operational Research Society
15.	Royal Society of Chemistry	Physical Chemistry Chemical Physics
16.	Taylor & Francis	Tribology Transactions  Machining Science and Technology  Journal of Engineering Design  Virtual and Physical Prototyping
17.	Nature Publishing Group	Nature (Print) Nature Photonics
18.	IGI Global	International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME)
19.	Optical Society of America	Journal of Lightwave Technology Optics Letters Optics and Photonics News
20.	Emerald Journals	Emerald Engineering Back files Emerald Engineering e-Journal Collection
21.	Elsevier	OMEGA Energy Package
22.	Sage Journals	Ergonomics in Design Human Factors published by Human Factors and Ergonomics Society Indian Journal of Gender Studies The Journal of Commonwealth Literature Journal of Vibration and Control Language and Literature Language Teaching Research Law, Culture and the Humanities



		Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications Science, Technology and Society: An International Journal Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science
23.	ACS Journals	Nano Letters Journal of Chemical Theory and Computation Journal of Medicinal Chemistry Chemical Research in Toxicology Chemistry of Materials
24.	Wiley	Decision Sciences Journal of Business Logistics Production and Operations Management Microwave and Optical Technology Letters International Journal of Art & Design Education
25.	Acta Press	International Journal of Robotics and Automation
26.	Inderscience Publishers	International Journal of Manufacturing Technology and Management International Journal of Manufacturing Research International Journal of Machining and Machinability of Materials International Journal of Product Development
27.	SPIE	Journal of Nanophotonics
28.	Indian Journals	Library Herald Pearl: A Journal of Library and Information Science SRELS Journal of Information Management
29.	American Association for the Advancement of Science (AAAS)	Science (Print)



#### STUDENTS' LIFE

The Institute has a residential campus and hence students' life at the campus needs to be supported by good infrastructure and facilities for an overall grooming and development. Students of the Institute actively participate in many extra-curricular and co-curricular activities and they also organize various events. These activities are organized under the umbrella of Students' Gymkhana, which is a platform for interaction among students on various fronts. The Gymkhana is self-governed, responsible and accountable students' body under the mentorship of faculty. Students' Gymkhana is governed by the Student Senate that is constituted in a democratic way through elections among students. Student Senate members are elected through direct ballot voting among the members of the General Body, every year in the first week of January. Every registered student is by default a member of students' gymkhana and has the right to vote.

The Students' Senate has 2-3 representatives from each batch. There are approximately 50-60 members in the Students' Senate from all batches of UG and PG programme. Various clubs for Cultural, Sports and Science & Technology work under Students Gymkhana. The coordinators and co-coordinators are selected based on their skills and past performance in the Institute by the members of that club and duly ratified by Student Senate. All members of the Students Gymkhana who have their CPI > 6.5 are eligible to make their candidature for the Student Senate. All members of the student gymkhana who have their CPI=6.0 are eligible to become mentors, coordinators, co-coordinators for various clubs. A senior faculty member designated as Dean Students, looks after and guides the student's representatives in organizing gymkhana activities throughout the year. Apart from this, three faculty members designated as counselors, look after various Cultural, Sports and Science & Technology activities as well as various annual festivals organized by the students' gymkhana. For the year 2012-13, the faculty mentors were as follows—

Professor Tanuja Sheorey, Dean, Students

Dr. Lokendra Kumar upto July 2012 and Dr. Sujoy Mukherjee, Cultural Counselor from August 2012.

Dr. Pavan Kankar, Technical Counselor

Dr. Gautam Dutta, Sports Counselor

### **Various Clubs constituted under Students Gymkhana Activities**

Students have constituted various clubs under three different categories. These categories are (i) Cultural clubs (ii) Science and Technology clubs and (iii) Sports clubs. The Institute being a residential campus, students get ample opportunities to enhance their overall personality by participating in these club activities. Students can be member of a number of clubs besides maintaining their academics. The aim of each club is to nurture talent by imparting training and organizing various events to showcase their talents. These training sessions are organized by gymkhana students during their off time like late evening hours and weekends. Besides, clubs also organize workshops where experts from outside are invited to train the student members. All the clubs organize several extra-curricular and co-curricular competitions throughout the year in a planned way. The main objective of the club activities is a holistic development of the students' personality. Moreover, these activities help nurture the social, cultural, sportsman and technical spirit among the students.



#### A. Cultural Clubs

#### Saaz

Music Club - Saaz is the heart and soul of club activities and is a big hit among students because of its untiring efforts in creating an atmosphere of cultural fusion and festivity in college. Saaz-The Music Club exhibits its entire spectrum of colors during Tarang-The Cultural Fest of institute IIIT DM Jabalpur. It organizes various competitions like AAVEG-The Rock Band Show, Antakshari, Solo Singing, Instrumental Raga etc.

#### **Jazbaat**

A hub for all fun lovers, every year produces a wide variety of performances ranging from one act plays to street plays and mimes to broad ways and each time it astounds us all with its creativity and heart winning acts.

#### **Abhivyakti**

The aim of this club is to bridge the gap between the enthusiastic students in expressing their emotions through art, by inculcating the knowledge of the various techniques and methods and to expand their perspective in the field of art. The intention is to develop a mature understating of art and enjoy it while doing it.

### **Literary Club**

Basic objective of the club is to inculcate within its members elite oratory skills, interpersonal skills, communication skills needed for personal interviews, group discussions, etc. and to help the members explore the depths of literary criticism and analysis as well as develop a sense of literary appreciation. Participating in such activities helps students to combat with the fear of stage performance, and helps in their intellectual development.

### B. Science and Technology Clubs

# **Programming Club**

Programming Club is a center for computer enthusiasts, programmers and people who aspire to be either of the two. This fantastic club accepts new members regardless of programming/computer background. This clubs organises activities related to Linux, Gnome, and Open Source software in general.

#### **Automotive Fabrication Club**

One of the most important qualities of the club is its diversity with students from almost all disciplines of the institute. It provides a platform for students to share and increase their engineering know-how through increased interaction between students at all levels, group activity, lectures, workshops, brainstorming sessions etc.



#### **Robotics Club**

The main aim of Robotics Club is to develop and stimulate interest in robotics among the students of the institute. The Club offers indispensable guidance, workshops and tutorials along with tools, equipment, components and workspace yet it also stands by the subtle acronym of TEAM - 'Together Everyone Achieves More'.

#### **Electronics Club**

This club is a common platform for students from various disciplines to learn and work on electronic circuits, design various circuits useful in a plenty of applications.

#### **CAD Club**

This club gives unlimited opportunities to learn various CAD tools and design their own products, devices and systems using CAD software.

### Shutterbox - Photography Club

This club helps nurture photography hobby of students. The club organizes photo-walks to various places of Jabalpur. These places include Dumna nature reserve, Madan Mahal, Gwarighat, Bedaghat, etc. Various events organised in the Institute are also captured beautifully by the club members.

#### **Web-Designing Club**

Web Design club provides an opportunity to reveal the potential and innovative ideas and also sharpens the skills not only to design, but also to develop a website, more precisely a web application.

#### C. Sports Clubs

#### **Cricket Club**

Cricket club of IIITDMJ holds activities throughout the year and it enjoys active membership from all the batches of the institute. Cricket club organizes deuce ball matches twice a year, hall wise and year wise. Another event organized by the club is 'Cosco' ball tournament. It also takes part in GUSTO (IIITDMJ sports festival) and participates in all sports activities organized by the Students Gymkhana.

#### **Athletics Club**

This club encourages students stay fit and healthy. Every student is encouraged to take part in some kind of athletic activity. Other clubs in sport category are badminton club, chess club, lawn tennis club, football club, basketball club, carom club, throw ball, handball and volleyball clubs.

#### **Students Senate Members 2012-13**

Sl. No.	Name	Programe
1.	Mr. Neeraj Rao (Convener)	PhD ECE 2011 Batch (Summer)
2.	Mr. Nitesh Kashyap	PhD ECE 2011 Batch (Summer)
3.	Mr. Saurabh Tiwari	PhD CSE 2010 Batch (Winter)
4.	Mrs. Vandana Arora	PhD ME 2010 Batch (Winter)
5.	Mr. Lalit Kane	PhD CSE 2011 Batch (Summer)



6.	Mr. Varun Tiwari		
7	Mr. Tamal Ghosh	PhD ME 2011 Batch (Summer)	
8.	Mr. Vikas Malviya	PhD CSE 2012 Batch (Winter)	
9.	Mr. Ravindra Singh	PhD Design 2011 Batch (Summer)	
10.	Mr. Gyan Singh Yadav	MTech CSE 2010 Batch (Summer)	
11.	Mr. Abhinav Bhardwaj	MTech ECE 2010 (Summer)	
12.	Mr. Ashish Jain	MDes Design 2010 (Summer)	
13.	Mr. Santosh Rathore	MTech CSE 2011 (Winter)	
14.	Mr. Naveen Vastrakar	MTech ECE 2011 (Winter)	
15.	Mr. Mitesh Niranjan	MTech ME 2011 (Winter)	
16.	Mr. Deepak Jha	MTech CSE 2011 (Summer)	
17.	Mr. Ghanendra Kumar	MTech ECE 2011 (Summer)	
18.	Mr. Ankit Saxena	MTech ME 2011 (Summer)	
19.	Mr. Lokesh Kr. Verma	MDes Design 2011 (Summer)	
20.	Mr. Neeraj Goswami	MTech MT 2011 (Summer)	
21.	Mr. Anuj Shrivastav	BTech ECE 2008 Batch	
	(Co-convener)		
22.	Miss. Rajbala	BTech ECE 2008 Batch	
23.	Miss. Kirti Singh	BTech CSE 2008 Batch	
24.	Miss. Komal Dhawan	BTech CSE 2008 Batch	
25.	Mr. Shekhar Gupta	BTech ME 2008 Batch	
26.	Mr. Manish Pandey	BTech CSE 2009 Batch	
27.	Mr. Kaviti Keshav Kumar	BTech ECE 2009 Batch	
28.	Mr. Ankur Agrawal	BTech ECE 2009 Batch	
29.	Miss. Richa Jain	BTech ME 2009 Batch	
30.	Mr. Deepak Keshwani	BTech ME 2009 Batch	
31.	Mr. Anil Kumar	BTech CSE 2010 Batch	
32.	Mr. Ankit Kumar	BTech CSE 2010 Batch	
33.	Mr. Nitesh Tripathi	BTech CSE 2010 Batch	
34.	Mr. Aditya Sharma	BTech ECE 2010 Batch	
35.	Mr. Sanjay Sahu	BTech ECE 2010 Batch	
36.	Mr. Varun Yadav	BTech ECE 2010 Batch	
37.	Mr. Shashank	BTech ME 2010 Batch	
38.	Mr. Shubham Yadav	BTech ME 2010 Batch	
39.	Mr. Abhishek Kumar	BTech ME 2010 Batch	
40.	Mr. Rishabh Gupta	BTech CSE 2011 Batch	
41.	Mr. Piyush Srivastava	BTech CSE 2011 Batch	
42.	Mr. Akash Deep	BTech CSE 2011 Batch	
43.	Mr. Vivek Kumar	BTech ECE 2011 Batch	

Student Gymkhana organises three annual events every year. These are

- (1) 'Tarang', the cultural festival
- (2) 'Abhlkalpan', the tech-festival and
- (3) 'Gusto', the sport festival



### STUDENTS' FESTIVALS AND EVENTS

#### **TARANG'13**

The 7th Annual Cultural Festival TARANG'13 was held during 07-10 February, 2013. TARANG is one of the most popular events in and around the city of Jabalpur. It is an avenue for the best talents from the top colleges across the country to battle it out in an array of cultural events. The scale of TARANG can be judged by the fact that it invites participation from more than 150 engineering colleges from across the country. Like the previous years, the 7th cultural festival "Tarang'13" was one of the most successful functions organised by students. With more than 50 competitive events, Tarang provided seamless opportunities for students to participate and demonstrate their talents. The festival hosted famous events like Arz-Kavi Sammelan, Indo-Western Fusion Nite, Aaveg-Rock Band competition, and Prof-Nite featuring famous singer Shilpa Rao.





**TARANG 2013: 'INDO WESTERN FUSION NIGHT'** 

#### **ABHIKAIPAN**

Annual Technical Festival Abhikalpan is organised every year by students. This year the Students Gymkhana organised Technical Festival Abhikalpan 2013 during March 15-17, 2013. There were a multitude of events, both technical and non-technical along with workshops on the changing technologies such as Android and Joomla to name a few. Events related to the domains of Mechanical Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Robotics and Management along with host of informal events were organised.



**Humanoid Robots on Display** 



**Achyut Pallav's Calligraphy workshop** 





Robo-War



ABHIKALPAN 2013: Student preparing for 'ROBOWAR- Right To Kill'

#### **GUSTO**

GUSTO is the annual inter-college sports meet of PDPM Indian Institute of Information Technology, Jabalpur. It was the 7th edition of GUSTO in the sequence which was started from the year 2006 at the Institute. This year GUSTO was held during September 29 - October 2, 2012. It featured a multitude of events viz. Cricket, Volleyball, Football, Badminton, Athletics, Basketball, Lawn Tennis, Table Tennis, Chess, Carom, Sports Quiz and just to perk it up there were many informal events as well.



**GUSTO 2012: Football Match** 



**GUSTO 2012: Chess Competition** 

Apart from the annual festivals, some of the events organised by Gymkhana and student volunteers during 2012-13 are as follows –

#### **LITERARY CLUB:**

Literary Club organises activities like Debates, Poetry, Extempore, Creative Writing, Group Discussions, Seminars, Panel Discussions etc.

## Literary Club organised following activities during 2012-13:

1. Literato Dynamics: Literato Dynamics was the first Literature Festival of the institute. The festival was organised on October 11 and 12, 2012. The festival featured events, like Public Debate, Faculty Panel Discussion, and a talk show 'Café Literary Day'.







Faculty Panel Discussion on "Role of Teachers in developing Young India"

2. **Fiesta da Literati:** The festival was organised on March 7 and 8, 2013. On the occasion of International Women's Day, a panel discussion was organised on "Social and Economic Implications of Women's Empowerment". Eminent persons from different walks of life were invited as panelists.



Panel Discussion on the occasion of International Women's Day



#### **ARTS AND CRAFTS CLUB:**

- 1. Kalakriti-Exhibition: Organised on October 13-14, 2012.
- 2. Intra College Contest: Organised on November 10, 2012.
- Open Arts Contest: Organised on 20th January, 2013
   Events organized: Comic Art, Technical Painting, 3D Paper Modeling



#### **DRAMATICS CLUB**

Jazbaat, the Dramatics Club organised DMD battle jointly with Music and Dance Clubs in September 2012 and January 2013. Different events like One Act Play, Mime, Nukkad were organised by the club.

#### **MUSIC CLUB**

Music Club was instrumental in organizing DMD battle, and organised Solo Song, Instrumental and Rock Band.

#### **DANCE CLUB**

Dance Club organised a number of events, like Solo Dance, Group Dance, Duet Dance and Classical Dance. The club also organised regular teaching session for the club members in association with Pratik Modi Dance Group.



### **SPORTS ACTIVITIES**





#### **SPICMACAY**

Two Spicmacay events were organised in the Institute in the year 2012-13. A Rajasthani musical performance in Sept 2012 and a folk dance performance in January 2013 were organised.

#### **BLOOD DONATION CAMP**

A Blood donation camp was organised on October 13, 2012 by Red Cross Society, Jabalpur. The camp was successful.



#### **SCREENING OF THE DOCUMENTARY**

A documentary on "Economy, Education and Energy" entitled "Zeitgeist: The Addendum" was screened on October 14th, 2012



# IIITDMJ-JAPAN COLLABORATION ACADEMIC PROGRAMME

IIITDM Jabalpur- Japan collaboration is a part of a larger agreement between the Governments of Japan and India. Under the agreement, the two sides have decided to nurture and strengthen PDPM IIIT DM, Jabalpur (IIITDMJ) through the following:

- Academic assistance by Japanese side to develop expertise in those areas in which Japan has developed considerable skills and expertise.
- Formation of Consortium of Japanese universities/institutes/industries for providing academic assistance in teaching and research to the Institute.
- Exchange of scholars between the Consortium partners or other organisations in Japan and IIITDMJ and the visits of IIITDMJ students for development of expertise as mentioned in Item 1.
- To secure financial resources from public/private sectors for development of IIITDMJ.
- Consortium partners to hold joint conferences/ symposia / workshops on advanced research topics in India and Japan.
- Continue discussion to explore other aspects of cooperation with respect to IIITDMJ.

An account of various activities, progress made and events organised under the umbrella of IIITDMJ-Japan collaboration is presented below.

# 1. Research collaboration increased - Joint research work and projects running / under process.

- a) Dr. Pritee Khanna and Prof. Yokota, Tokyo Institute of Technology are jointly working on "Image retrieval and indexing for fast large size image database applicable in internet search and related search queries in other domains for image recognition and identification of diseases".
- b) Dr. Rajib Kumar Jha and Prof. K. Aizawa, University of Tokyo are working on "Dark and low contrast image enhancement using stochastic resonance". Their work is partially sponsored by OMRON Company.
- c) Dr. Prashant Kumar Jain, Dr. Pavan Kankar, Prof Vijay Kumar Gupta from the Institute and Prof. Takashi Matsumura, Tokyo Denki University, Dr. Yoshimi Ito, Professor Emeritus, Tokyo Institute of Technology have submitted a project on "Dynamic Stability in Self-excited Chatter Vibration for Low-speed Milling" for financial support under JSPS-DST programme.
- d) Prof. P. Tandon, Prof. T. Sheorey, Prof. VK Gupta from the Institute and Prof. Warisawa, Tokyo, Prof. Tsuchiya, University of Tokyo, have completed their work on "Development of micro-pump with NEMS sensing function for automatic blood collecting and diagnostic system on handheld devices". The project was financially supported under JSPS-DST funding programme.
- 2. Amada Company of Japan donated two state of the art manufacturing machines to IIITDMJ to enrich the manufacturing lab of the Institute. Total cost of the donated machines is USD 240,000.00. Details of machines are as follows.
  - a) AMADA Sheet Metal Cutting Machine Punching Machine: MODEL: AE255NT
  - b) AMADA Sheet Metal Cutting Machine PRESS BRAKE, MODEL: RGM23512AT
  - c) AMADA PROGRAMMING SOFTWARE: MODEL: AP100NT



3. Visits of Japanese Experts to IIITDMJ - Cooperation in IIITDMJ's teaching programme. Every year about 8-15 experts from Japan contribute in the teaching programme of IIIT DM Jabalpur. This year also some of the renowned experts from academia and industry across Japan visited the Institute. Among them were Professor Yoshimi Ito, Emeritus Professor, Tokyo Institute of Technology, Professor M. Kiuchi, Takashi Nanya, Research advisor to Canon and Prof Kenichi Miura of National Institute of Informatics, Tokyo. They delivered course lectures and extended support in our teaching programme. Following experts from Japan visited the Institute during the session 2012-13.

SI. No.	Name	Course	Affiliation	Duration
1.	Prof. Hatsuhiko Kato	Advanced Computer Architecture	Shonan Institute of Technology, Japan	Jan 7, 2013 – Mar 1, 2013
2.	Prof. Jun Sese	Data Mining (EMF)	Tokyo Institute of Technology	Jan 7 -Jan 11, 2013
3.	Prof. Kenichi Miura	Parallel Processing (EMF)	National Institute of Informatics, Tokyo	Jan 28, 2013 – Feb 1, 2013
4.	Prof. Takashi Nanya	Dependable Computing (EMF)	Mentor, India - Japan Collaboration, Associated with Canon Inc. Japan	Mar 18 -22 2013
5.	Prof. Masato Oguchi	Network Computing (EMF)	Ochanamizu University, Japan	Apr 1 -5, 2013
6.	Prof. Shigekazu Sakai	Visual Design (EMF)	Waseda University Japan	Feb 25, 2013 - Feb 28, 2013
	Prof. Shigekazu Sakai	Supervision for Research and Educational Programme	Waseda University Japan	Mar 01, 2013 – Mar 02, 2013
7.	Prof. Nobuyuki Iwatsuki	Design and Control of Redundant Robots	Tokyo Institute of Technology, Japan	Mar 18, 2013 – Mar 21, 2013
8.	Prof. Tsunemoto Kuriyagawa	Ultra-micro-precision machining including electronics components	Tohoku University, Sendai, Japan	Apr 01, 2013 – Apr 05, 2013
9.	Prof. Takahito Ono	MEMS & Micro-Nano- Fabrication	Tohoku University, Sendai, Japan	Apr 01, 2013 – Apr 05, 2013



- **4. Long Term Internship offers** Internship offers were made by Canon Company, Chiba University, Mitsubishi Heavy Industries and Sona Koyo Steering Systems. Most of the offers were for undergraduate students. Duration Six Months approximately. Following students visited Japanese Universities and industries under the programme in the year 2012-13.
  - · Adarsh Abhinav, Mitsubishi heavy Ind. Ltd., Japan
  - Deepak Keshwani, Mitsubishi heavy Ind. Ltd., Japan
  - Mr. Anubhav Mittal, Canon Japan
  - Mr. Simerdeep Singh Jolly, Canon Japan
  - Mr. Ankur Agrawal, Chiba University, Japan
     Beside this, following two students of master's program also visited Amada Company, Japan for short term internships.
  - Ankit Saxena
  - Suteerth Tripathi

### 5. Joint organisation of Seminars/Conferences/Workshops

Design Workshop has become a regular feature now. Design Workshop 2010 was held in October 2010. Mini Design workshop was held in March 2012 and Design Workshop 2012 was held during December 5-7, 2012. Main Objective for holding such workshops is to facilitate exchange of design ideas amongst faculty, students and industry experts from different parts of the globe.

- 6. Financial support from Government of Japan for mentoring of Post Graduate Students by Japanese experts. Financial support to one student under the PG Mentorship programme was provided by Chiba University. This needs to be strengthened.
- 7. Postgraduate Mentorship Programme. Student Arpit Gupta has completed his M.Tech. Programme in Mechatronics under the mentorship of Prof. Kenzo Nonami, Professor, Chiba University Japan and Prof. Vijay Kumar Gupta of the Institute. Efforts are on to make it a regular feature every year.

#### 8. Kizuna (Bond) Project

Seven students from Institute visited Japan from February 04 to 13, 2012 under the Kizuna Project youth exchange program. The program aimed at promoting global understanding of Japan's revival efforts in response to the earthquake.

- Shubham Tiwari (2010187)
- Anil Kumar (2010023)
- Surbhi Singh (2010196)
- Mayank Garg (2010107)
- Vikas Singh (2010210)
- Harpreet Kaur Makhan (2010251)
- Nitin Chandra (2010127)



#### AMADA MANUFACTURING INNOVATION CENTRE

Amada President Mr. Mitsuo Okamoto donated two models of sheet-metal processing machines AE255NT & RGM23512 Press Brake with AP100 software to Pt. Dwarka Prasad Mishra Indian Institute of Information Technology, Jabalpur on 5th December 2012. Amada Manufacturing Innovation Centre was inaugurated by Professor S.V. Raghavan, Chairman, Board of Governors of the Institute in the gracious presence of Mr Atusushige Abe, Managing Director, Amada Co. Ltd Japan, Mr. Shinichi Takano COO, Amada India and Prof. Aparajita Ojha, Director of the Institute. PDPM IIITDM-Jabalpur is shortly starting a course on sheet-metal fabrication, utilising Amada Machines.

Central Government officials from PDPM IIITDM-Jabalpur and Board members from Amada Co. Ltd. Japan officially announced that the newly launched facility would be named "Amada Manufacturing Innovation Center."

This is the second contribution from Amada Group to India's premier technical institutes.

Previously Amada had donated a set of sheet-metal processing machines, including a laser cutting machine, with high end Press Brake to Indian Institute of Technology-Chennai (IIT). As a platinum sponsor, Amada also supported the global alumni conference (Pan IIT) of IIT shield annually. We will continue to make appropriate contributions to advance India's sheet metal processing industry.



Punching Machine AE255NT & Software installed at PDPM IIITDM Jabalpur



Inauguration of AMADA Manufacturing and Innovation Centre by Prof. S.V. Raghavan – Chairman BOG and Scientific Secretary to the Office of the Principal Scientific Advisor, Govt. of India in presence of Mr. Atsushige Abe, - Managing Director, AMADA Co Ltd., Japan and Director Prof. Aparajita Ojha



Demonstration of Punching Machine AE255NT & Software to guests by AMADA staff



Machine hand over ceremony: Mr. Atsushige Abe handing over machines to Prof. S.V. Raghavan



# SEMINARS/WORKSHOPS/CONFERENCES/TRAINING PROGRAMMES CONDUCTED

#### **NPTEL Workshop**

PDPM IIITDM Jabalpur and IIT Kanpur jointly organised NPTEL workshop at its campus from March 31-April 01, 2012, the first in the state of MP. The aim was to conduct course specific sessions. Important part of the workshop was computer centre practice session. All the NPTEL courses of Phase I and the courses being developed in Phase II were viewed by over 170 participants from 27 different institutions. Lastly, a feedback and concluding session was organised where all the participants were encouraged to give their feedback. The disciplines covered in this workshop were Mechanical



Engineering, Electrical Engineering, Electronics and Communication Engineering, Civil Engineering and Core Sciences and Mathemetics. Prof. Satyaki Roy from IIT Kanpur and Prof. Tanuja Sheorey from the Institute were coordinators.

## Workshop on Wavelets (WoW 2012)

A three day workshop on Wavelets and its Applications was held at PDPM IIITDM Jabalpur from July 13-15, 2012. The Workshop covered topics on wavelets and its applications in various science and engineering domains. Introductory as well as advance concepts were discussed in the workshop. WoW 2012 also provided opportunities for hands-on experience with the use of wavelets in some of the commercial applications such as Biometrics, Biomedical applications and Fault classification.



# Research Promotion Workshop on Introduction to Graphs and Geometric Algorithms

A three day workshop from November 1-3, 2012 on Graphs and Geometric Algorithms was held at PDPM IIITDM Jabalpur funded by National Board for Higher Mathematics. This workshop was jointly organised by Dr. Pritee Khanna, Dr. Sraban Kumar Mohanty of the Institute and Professor Subir Ghosh, TIFR Bombay and Prof. Sudebkumar Prasant Pal from IIT, Kharagpur. This introductory workshop provided an opportunity to the participants for getting exposed to the field of graph and geometric algorithms. Interactive sessions were organized to help budding researchers in the field to discuss with distinguished panel of speakers.

# International Conference on Innovations in Design and Manufacturing

The Institute organised an International Conference on Innovations in Design and Manufacturing during December 5-7, 2012 focusing on a holistic and all-inclusive philosophy of Design enabled Manufacturing. This Conference provided an international forum for presentation of recent developments and innovations on various aspects of theories, analyses and experiments related to Design and Manufacturing. The conference invited key scientists and researchers working in the broad areas of design and manufacturing to exchange their ideas/results on the related research fields.





### Design Workshop on Design in Engineering

The Design Workshop 2012 was organised with the theme "Design in Engineering" during December 5-7, 2012. The Workshop aimed at providing young engineers and designers



- With a clear understanding of the importance of formal design process during product/process/system development
- Knowledge of the design process and skills to unite design and technology in the development process.
- With wider understanding of creative product/process/system development making them acquainted and aware of the role of design in it.
- Also, to inculcate the practice of adopting a holistic approach in product development so that design and engineering go in tandem.
- To highlight the advantages unfolded when formal design process is adopted.
- To inculcate the practice and highlight the importance of formal design process in engineering.

The workshop was well attended by design professionals, researchers and students from various engineering backgrounds.

# **Workshop on Virtual Laboratory**

A two days Workshop on "Virtual Laboratory" was organised during December 18-19, 2012. Development of Virtual Laboratories is a part of a project supported by the Ministry of Human Resources Development (MHRD) under the National Mission on Education using Information and Communication



Tools (ICT). This activity is being carried out under the main phase of the project, to develop simulation based experiments on various laboratory courses of Mechanical Engineering. The idea is to share costly equipment and resources available with limited number of users at the premier Institutes of engineering, among all engineering students. Virtual Labs have been developed keeping the following objectives in mind:

- 1. Virtual Labs work in a complementary fashion to NPTEL in the sense that to teach the student the basic concepts, as well as trigger their imagination and inquisitiveness.
- 2. Virtual Labs will be effective as an instructional tool as well as a self-learning tool. However, Virtual Labs can never truly replace an actual laboratory or the "touch and feel" of actual lab experiments.
- 3. The result of an experiment is provided in one of the following form:
  - a. Modeling the physical phenomenon by a set of equations and carrying out simulations to yield the result of the particular experiment. This can, at-best, provide an approximate version of the "real-world" experiment.
  - b. Providing a corresponding measurement data for the Virtual Lab experiment based on previously carried out measurements on an actual system. This will be closer to the "real-world" experiment.



### Computer Awareness Porgramme for M.P. Govt. Officers and Staff

Our Institute was chosen by the council of e-governance of the Govt. of Madhya Pradesh to impart training on basic computer and application softwares to the officials of 16 departments of Jabalpur district. 345 officials were trained during the programme in 7 different batches. Programme started on 19/9/2012 and duration of the programme was 4 days for each batch. Dr. Pritee Khanna, Head CSE Discipline of the Institute was the convener. Faculty of the Institute Dr. Pavan Kankar, Mr. Manish Shrivastava, Mr. Sharique Husain contributed in the programme. Programme was a great success due to the



help and support of the officers, staff and UG/PG students of the Institute.

#### Hindi Pakhawada - 2012

Like every year Institute celebrated Hindi Pakhawada – 2012 this year also which started from September 14, 2012 and concluded on September 28, 2012. The day of September 14 is observed as Hindi Diwas in the nation because on that date the language Hindi was adopted as official language of the nation by the constituent assembly in the year 1949.

During the period various competitions were organised amongst staff members and students. People enthusiastically participated in these competitions. The concluding ceremony was held on September 28, 2012.



An eminent literary figure of the city Prof. Nisha Tiwari graced the closing function. Winners of various competitions were awarded with the prizes and certificates.

#### Vigilance Awareness Week - 2012

Vigilance Awareness Week - 2012 was observed in the Institute to bring the integrity and transparency in the system and in the functioning of the Institute. The week was started with the pledge of integrity and transparency by all the employees of the institute on 29th October 2012. Various competitions were organized during the week such as speech on the topics related with vigilance awareness and debate on the topic "emergence of





corruption in today's time". Many members of the staff participated and expressed their views and experiences on the topic. Banners and posters were displayed on the prime locations in the institute for spreading awareness against corruption. At the end of the week, on November 02, 2012 a workshop was organized in which members of the society like vendors and contractors associated with the Institute, parents of the students and others were invited with a view to get their feedback, suggestions and to know their ideas about the functioning of the Institute. Valedictory of the week was marked with the presence of Shri S P Yadav, Sr. General Manager, Gun Carriage Factory, Jabalpur as the chief guest of the function.

# International Day of Persons with Disability (IDPD) 3rd December 2012

Institute observed 'International Day of Persons with Disability (IDPD - 2012)' on December 03, 2012 to focus on issues that affect people with disabilities. The day aims to promote an understanding of disability issues and mobilise support for the dignity, rights and well-being of persons with disabilities. The day was observed by holding a discussion forum and Mr. Deepak Khandekar, Commissioner Jabalpur was the chief guest of the occasion. Banners for spreading the related information were also displayed on the prime locations of the Institute.



### **Training Programmes**

### **Empower: Ericsson Training Program 2012-13**

Ericsson had launched a training program for the students from the country's top most Engineering colleges. 47 of our final year students were chosen for this training program by Ericsson this year (2012) the program is known by the name 'Empower'. The program aimed at empowering the students with additional knowledge which enhanced their potential Employability. The program was based on latest Wireless Technologies namely GSM and WCDMA. There were lectures/interactions session by the experts from Ericsson in the related fields. The experts gave the students



the overview on the cell planning, cell sites, antennas used, the programs and the algorithms used and a host of other things which were new for the students. The student's doubts and questions from web based learning were also addressed by the experts in these sessions. The program ended in a certification test after which the students scoring more than 70% marks were awarded certificates for successfully completing the EMPOWER TRAINING PROGRAM with Ericsson.



# **INFRASTRUCTURE DEVELOPMENT**

#### **Existing Infrastructures**

The Institute had shifted from its temporary location i.e Jabalpur Engineering College to its permanent location in July 2009. Since then, Institute has been progressing well in for infrastructure. development. For facilitating immediate starting of classes temporary class room were constructed Besides, CPWD was assigned the job of construction and development of allied infrastructure. In addition to construction of some buildings by Institute's Engineering department, the remaining buildings are being constructed by CPWD. Till the end of financial year 2012-13 there were 28 major and minor works undertaken by the CPWD. The status of buildings and other allied infrastructure completed or under construction is given below:-

- 1. Core Lab Complex: Presently this building is under use as the main Institute building. The building has enough Class Rooms, Labs, Library Computer Centre and Faculty Chambers created through temporary partitions etc. To cater the requirements of additional teaching spaces, workshop and labs etc, some temporary structures have been constructed with pre assigned ultimate use. These structures have quite comfortable accommodation conditions for the students. There are two canteen buildings with connecting footpath, adjacent to this building. Proper parking space has also been developed near the building.
- 2. Hall of Residence I: This hostel building has capacity to accommodate 408 students in single seated rooms. Proper arrangements have been provided for mess and dining purpose in the building itself. Reading rooms, gymnasium T.V. viewing rooms etc. have been developed for students for proper use of their leisure time. Canteen, Stationery shop, Photocopy shop etc have been constructed nearby to the building. The building is well connected through footpath with the academic building and other hostel building.
- 3. Hall of Residence- III: This building is a Triple seater hostel building having total capacity to accommodate 498 students. The building is fully occupied and a part of building is under use as Girls Hostel. Space for kitchen and dining has been developed through removable partitions. A canteen has also been started inside the building itself. Dance & drama rooms, TV viewing rooms, music room, reading rooms playing area etc. have been developed inside the building for providing enough facilities to the students for extra curricular activities.
- 4. Hall of Residence- IV: This building is also a triple seater hostel building having total capacity to accommodate 498 students. The building is completed by the CPWD and presently partially occupied. Dance & drama rooms, TV viewing rooms, music room, reading rooms playing area etc. are being developed inside the building for providing enough facilities to the students for extra curricular activities.
- 5. Suraksha Bhawan: The building is completed by the CPWD. Presently it is planned to use the building for Placement Cell / PG labs etc.
- 6. Lecture Hall and Tutorial Complex: A part of building comprising 08 nos. tutorial rooms have been completed and handed over by the CPWD. The classes have been started in this portion of building. Some offices are also planned to be shifted in spare tutorial rooms. In view to provide sports facilities to the students outdoor volleyball court, tennis court, basket ball court, cricket football ground have already been developed. The students are celebrating since last two years, their sports festival "GUSTO", inside the campus itself. In addition to it a shed for providing indoor badminton court has been developed during the year.





Hall of Residence - IV completed: Capacity 498



Basket Ball Court Complex under construction









Lecture Hall and Tutorial Complex under construction





Residential Flats - Narmada Residency- II and Narmada Residency III under construction



Library-cum-Computer Center under construction



Water supply has been provided in the whole campus through borewells. The water is available in all the areas for 24 hours. An RCC overhead tank along with a RCC sump well has been constructed by the CPWD during the year so as to cater to round the clock water supply demand of all the buildings under use. An uninterrupted electricity supply has been ensured by getting 33 KV HT electrical connections from MPPKVV Co Ltd, through a separate feeder. In addition, 02 nos. Diesel Generators one of 45 KVA and another of 250 KVA is available for electrical supply during the emergency power failure. In addition another DG of 1000 KVA is going to be installed very soon. For keeping the quality sanitation conditions in the campus, the sewage treatment plant has been kept at isolated location along with a sedimentation tank provided for ground water recharge. The work of permanent sewerage lines in hostel area is about to complete by the CPWD. All the occupied buildings, in the campus are well connected with pathways and road lightings. Area lighting has been provided at important and most occupied areas.

### **New Infrastructure Development**

The Institute had shown its keen interest in infrastructure development during this year. As major construction projects were assigned to the CPWD, the Institute concentrated also on planning works for the new projects. The work of Security Barracks, Hall of Resicence-4, RCC over head tank, RCC sump well etc. have been completed by the CPWD. The construction of following buildings is in advance stage by the CPWD.

- 1. Lecture Hall and Tutorial Complex: The main Institute building having total plinth area of 10555 sqm and total estimated cost of Rs.3732 lakhs. Some portion of the building has been taken over and has become functional. 60% work has been completed till the end of this f.y.
- 2. Narmada Residency-II: The building comprising of 55 Nos. 2 bed room residential quarters for staff members with estimated cost of Rs.1599.7 lakhs. The structural work is almost completed and the finishing work is in progress.
- 3. Narmada Residency-III: The building comprising of 60 Nos. of 3 bed room residential quarters for faculty members with estimated cost of Rs.2586.42 lakhs. The structural work is almost completed and the finishing work is in progress.
- 4. Basketball Court Complex (Indoor): The building is meant to provide Indoor sports facility for students. The revised estimate for the building amounting to Rs. 474.83 lakhs has already been sanctioned. 75% work has been completed. The building is going to be complete very soon.
- 5. CC Road from Security Bhawan to Hall of Residence -1: Cement concrete road is being provided from security barrack to Hall of Residence-1 with an estimated Cost of Rs. 115 lakhs. The work is going to be completed very soon.
  - 2 Nos. Type 5 Quarters: the plinth area of the building is approx 370 sqm. The estimated Cost is Rs.73 lakhs. The building is located near Hall of Residence-I and shall provide accommodation to hostel wardens. The building is also going to be completed very soon.
  - Library cum Computer Center: The plinth area of the building is 6120 sqm. The estimated Cost is Rs. 2359 lakhs. The construction activities have already been started and progress is satisfactory.
  - Hall of Residence 7 (Phase-I): The plinth area of the building is 6135 sqm. The estimated Cost is Rs. 1237 lakhs. This hostel building shall provide accommodation for 98 married PG students. The tender for the work has already been floated.



- Hall of Residence 7 (Phase-II): The plinth area
  of the building is 9500 sqm. The estimated
  Cost is Rs. 2369 lakhs. This building shall
  provide single seated accommodation for 404
  PG students. There is facility block well
  connected with hostel block. The tenders for
  the work has already been floated.
- Visitors' Hostel: The plinth area of the building is 2555 sqm. The estimated Cost is Rs.1185 lakhs. The building contains 06 suites, a facility block and 30 nos. double bed rooms for the Institute guests. The progress of work is satisfactory and 20% work is completed.



**SURAKSHA BHAWAN** 

- Rewa Residency 2A: The plinth area of the building is 6550 sqm. The estimated Cost is Rs. 1440 lakhs. The building contains 72 nos. of staff quarter. The tenders have already been floated and the work is going to be started very soon.
- In addition to it the works of Connecting Road from Type V Quarters to Core Lab, 02 Nos. Culvers over water body, and Ring Road etc. have also been started by the CPWD.

### The following works have also been communicated to CPWD for starting the tendering process:

- 1. Primary Health Center: The plinth area of the building is 1532 sqm. The estimated Cost is Rs.495 lakhs. The tenders are going to be called very soon by the CPWD.
- 2. Student Activities Center: The estimated Cost is Rs.1816 lakhs. The building shall provide ample indoor sports facilities to the students.
- 3. Hall of Residence 8 (Girls Hostel-I): The building has provision for single / triple seated rooms with total capacity of 250 students. The plinth area of the building is 6406 sqm. The estimated Cost is Rs. 1512 lakhs.
- 4. Administrative Block: The building has 4850 sqm area and the estimated cost is Rs. 1454 lakhs.
- 5. New construction projects: The Administrative Approval and Expenditure Sanction for following projects have been accorded during the year by the BOG keeping in view the increasing functional demands within the campus.
  - (i) Multi Utility Centre
  - (ii) Technology incubation Centre
  - (iii) Road and Service Networks (Phase 2)
  - (iv) Electrical Networking System (Phase 2)
  - (v) Professional Lab Complex.



**BHUMI PUJAN-LIBRARY CUM COMPUTER CENTRE** 

The Institute has taken up some construction through the Institute Works Department, so as to fulfill its urgent needs of space at its growing stage. Construction some temporary class rooms, laboratories, pathway, canteen, bank ATMs etc. along with area lightings has been carried out by the Institute.



# **EQUIPMENT PROCURED DURING 2012-13**



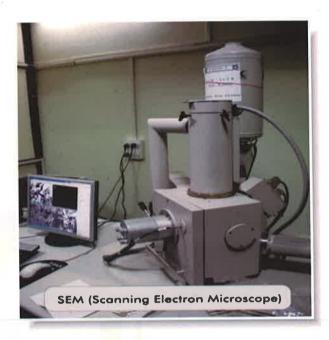


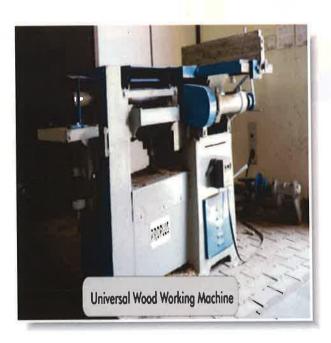


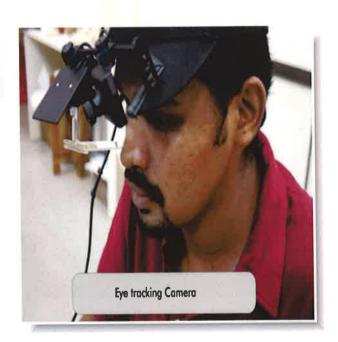








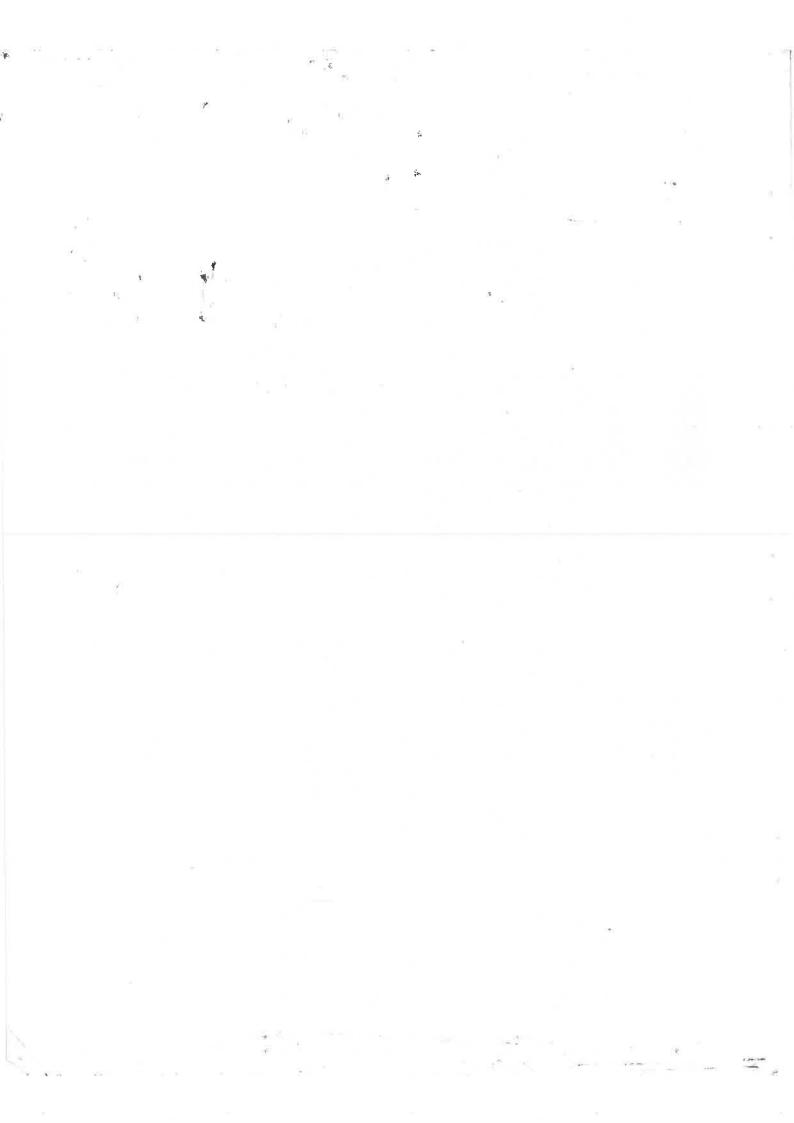












# ANNUAL ACCOUNTS AND ANNUAL AUDIT REPORT FOR THE F.Y. 2012-2013



# FINANCIAL STATEMENTS PANDIT DWARKA PRASAD MISHRA INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING, JABALPUR

#### **BALANCE SHEET AS AT 31ST MARCH, 2013**

			(Amount - Rs.)	(Amount - Rs.)
SL. NO.	PARTICULARS	SCHED ULES	CURRENT YEAR (As on 31/03/2013)	PREVIOUS YEAR (As on 31/03/2012)
1	CORPUS/CAPITAL FUND AND LIABILITIES			
A	CORPUS/CAPITAL FUND	1	188,17,12,292	126,90,24,286
В	RESERVE AND SURPLUS	2	0	0
c	EARMARKED/ENDOWMENT FUNDS	3	1,32,03,923	34,21,501
D	SECURED LOANS AND BORROWINGS	4	0	0
E	UNSECURED LOANS AND BORROWINGS	5	0	0
F	DEFERRED CREDIT LIABILITIES	6	0	0
G	CURRENT LIABILITIES AND PROVISIONS	7	3,46,64,922	19,88,84,925
	TOTAL		192,95,81,137	147,13,30,712
2	ASSETS			
А	FIXED ASSETS INVESTMENTS - FROM	8	<b>75,25,63,833</b>	71,71,20,975
В	EARMARKED/ENDOWMENT FUNDS	9	0	0
С	INVESTMENTS - OTHERS	10	3,87,136	20,00,000
D E	CURRENT ASSETS, LOANS, ADVANCES ETC. MISCELLANEOUS EXPENDITURE (TO THE	11	117,66,30,168	75,22,09,737
_	EXTENT NOT WRITTEN OFF)		0	0
	TOTAL	1	192,95,81,137	147,13,30,712
	SIGNIFICANT ACCOUNTING POLICIES	24	¥2	
	CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

(Naresh Joshi) Asst. Registrar (IA, F&A) (Ram Phal Dwivedi) Dy. Registrar (GA, F&A)

Ximul Kas

(Aparajita Ojha) Director



## FINANCIAL STATEMENTS PANDIT DWARKA PRASAD MISHRA INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING, JABALPUR

## INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31ST MARCH, 2013

NO.		SCHEDULES	( Amount - Rs.)	(Amount - Rs.)
SL. N	PARTICULARS	SCHEDULES	CURRENT YEAR (As on 31/03/2013)	PREVIOUS YEAR (As on 31/03/2012)
1)	INCOME			
A) B) C) D) E) F) G)	INCOME FROM SALES & SERVICES GRANTS/SUBSIDIES(OTHER GRANTS) FEES/SUBSCRIPTIONS INCOME FROM INVESTMENT (Excluding Income from Earmarked/Endowment Funds transferred to Funds) INCOME FROM ROYALTY/PUBLICATIONS, ETC. INTEREST EARNED OTHER INCOME INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK-IN-PROGRESS	12 13 14 15 16 17 18 19	0 12,64,95,772 2,74,70,829 0 0 48,17,085 42,68,508 0	0 12,00,00,000 2,12,39,285 0 0 35,59,610 12,38,219
	TOTAL (A)		16,30,52,194	14,60,37,114
2) A) B) C) D) E)	EXPENDITURE  ESTABLISHMENT EXPENSES  OTHER ADMINISTRATIVE EXPENSES, ETC.  EXPENDITURE ON GRANTS, SUBSIDIES, ETC.  INTEREST PAID  DEPRECIATION FOR THE YEAR	20 21 22 23 8	6,39,71,289 9,22,10,090 0 0 5,11,82,310	6,71,89,076 7,05,68,729 0 0 3,63,21,202
	TOTAL (B)		20,73,63,689	17,40,79,007
	BALANCE BEING SURPLUS/(DEFICIT) FOR THE YEAR  LESS: PRIOR PERIOD ADJUSTMENTS		(4,43,11,495) (1,08,98,589)	(2,80,41,893) (59,81,623)
	BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/CAPITAL FUND		(5,52,10,084)	

(Naresh Joshi) Asst. Registrar (IA, F&A) (Ram Phal Dwivedi) Dy. Registrar (GA, F&A)

Simul Kas

(Aparajita Ojha) Director



FINANCIAL SIAI EMENIS	NAME OF THE ENTITY: Pt. DWARKA PRASAD MISHRA INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING, JABALPUR	RECEIPT & PAYMENT ACCOUNT FOR THE FINANCIAL YEAR ENDING 31" MARCH, 2013
	NAME OF THE ENTITY: Pt. DWAR	

(Amount - Ra.) (Am on 31/03/2012)		6,96,21,850	ě	27,34,740	0			30,50,00,000	42,00,000	4,34,54,981					16,559 25,16,969	2,29,667	34,24,000	40,54,437	5,32,305	26,92,000	4,66,000	0	0 0			
r.R.) TYEAR 03/2013)		15,59,25,862			51,60,889				44,68,00,000		11,29,24,133												2,09,09,833			
(Amount - RE.) CURRENT YEAR (As on 31/02/2013)		6,39,50,143 9,19,75,719		6,45,213	0			0 44,50,00,000	18,00,000	9,72,99,819					0 86,23,914	2,80,484	50,44,800	25,76,954	9,32,668	0	12,49,000 67,874	195039	65,000			
PAYMENTS	I EXPENSES	a) Establishment b) Administrative Expenses	II PAYMENTS MADE AGAINST FUNDS FOR VARIOUS PROJECTS	a) Central Sedor Scholarship (Receivable)     Projects (Other Misc. Expenses)	c) Financial Assistanceship for Design workshop		III INVESTMENTS AND DEPOSITS MADE	a) Out of Earmarked/Endowment Funds     b) Out of Other Funds (Investment - Others)	c) Out of Other Funds (Investment - Against LC)	IV EXPENDITURE ON FIXED ASSETS & CAPITAL WORK-IN-PROGRESS a) Purchase of Fixed Assets b) Expenditure on Capital Work-in-Progress		V REFUND OF SURPLUS MONEY/LOANS	A STUTE DAYMENT		<ul> <li>a) For Expenses(Last year Provsion paid)</li> <li>b) Security Deposit Refunded</li> </ul>		d) Payment for Hall Management e) Student Benefit Account	f) Excess Fee Refund	g) medical Aid Payable h) EMD and PBG Paid	i) Mess Advance	j) Caution Money ( Refund) k) Jee Exam 2012 Paid	I) Medical Insurance Claim (Student) Paid	m) Audit Fees paid n) Emplovee Welfare Paid			
SL NO.																										
(Amount - Pa.) PREVIOUS YEAR (As on 31/03/2012)		5,02,808 18,71,143 12,12,048	34,77,810 2,03,47,074 3,10,26,259		40,00,00,000	0	36,53,707	0		39,10,603 30,50,00,000 0			2,07,562	26,970	1,55,293			1,69,13,279	1.700	36,000	5,69,600	38,143	28,000	1,39,902	00	98,564
			8,05,89,553					81,48,49,815		44,84,12,864					73,46,416											2,41,72,359
(Amount - Ra.) CURRENT YEAR (As on 37/03/2013)		1,67,259 2,32,14,504 27,82,498	36,68,297 2,80,24,834 2,27,32,161		65,00,00,000	15,00,00,000	9,77,719			34,12,864 44,50,00,000 0			16,80,946 2,42,830	1,89,984	22,86,501			2,16,59,980	4,00,690	75,000	3,24,139	1,80,135	8,69,820	80,005	32,113	2,89,862
SL. RECEIPTS	I OPENING BALANCES a) Bank Balances	i) Canara Bánk Grant Account, Jabalpur ii) SBI Grant Account, GEC Campus, JBP iii) SBI Student Fee A/c, Jabalpur	iv) SBI Project Account v) Allahabad bank (Student Fee A/c) vi) Allahabad Bank Current A/c, Jabalpur	II GRANTS RECEIVED	a) From Govt. of India (MHRD) (PLAN)	From Govt. or India (MITKL) Receivable (Last year)	Central Sector Scholarship (Receivable) Projects	Financial Assistanceship for Design workshop	III INVESTMENTS AND DEPOSITS MATURED	a) Fixed Deposit Agnst L/c b) Fixed Deposit Others c) Earmarked/Endow. Funds	IV INTEREST RECEIVED	a) On Bank Deposits	i) On Savings Bank Alc ii) On Project Alc iii) On Project Alc	iii) On trived Deposits iv) Interest From MPPVVCL	b) Income from Penalty	V OTHER INCOMES	a) Income from Student Fees	-Regular Income (2012-13)	-Summer Course -Sale of News Paper/Periodicals	c) Sate of Tenders	d) Recruitment/Admission Form Fees e) Medical Aid Pavable	f) Guest House Income	g) Project Overhead Income h) Income from Bus Service	i) Late fine	j) Income from Rent (Shops)	K) Income from Kili I) Other Mise Income



RECEIPT & PAYMENT ACCOUNT FOR THE FINANCIAL YEAR ENDING 31ST MARCH, 2013



-		2			2001
	CURRENT YEAR (As on 31/03/2013)	PREVIOUS YEAR (As on 31/03/2012)		CURRENT YEAR (As on 31/03/2013)	YEAR (As on 31/03/2012)
VI OTHER RECEIPTS			VII STATUTORY LIABILITIES DEDUCTED AT SOURCE		
a) Security Deposit	20.06.025	23,79,564	a) Association Fee (Other Institution)		
From Others	29,981	75,000	b) GIS (Other Institutes)	9,360	14,160
b) External Scholarship	1,73,650	3,36,501	c) GPF (Other institutes)	1,74,600	1,96,000
c) Employee Welfare Fund	(	000	0) GOLIN	2.38.661	1,83,800
d) Salary Payable(Contractual Emp.)	0 0	0006	e) Professional lax hard	8,85,173	36,75,289
e) Salary Payable(Regular Emp.)	<b>D</b>	oon'e	a) 1% Labour Welfare Cess	4,42,590	7,89,677
t) Honoranum Payable	6.661	0	h) TDS Paid	83,48,161	70,89,924
b) Audit Fees Payable	000'06	65,000	i) New Pension Contribution Paid Institutes Share		34,81,479
i) JEE Examination 2012	_		f) New Pension Contribution Paid Employee Share	43,58,988 1,90,58,664	
j) LEAVE SALARY Payable	27,677 23,34,368	1,77,316	VIII I DANS & ADVANCES		
VII STATUTORY LIABILITIES DEDUCTED			a) Advance for Expenses		200 00 77
AT SOURCE			To Staff	1,47,53,045	1,41,62,137
a) Association Fee (Other Institution)	0	0	To Student	2,40,004	1000
b) GIS (Other Institutes)	7,560	7,560	b) Unier Advances To CPWD Bhooal	56,93,50,000	16,23,00,000
c) GPF (Other institutes)	2 42 492	1.91,718			
(a) Gould (b) Professional Tax Paid	2,37,665	1,83,800	c) Secured Advances CWIP	65,61,614	72,21,970
f) WCT Paid	8,85,173	10,91,469	d) Other Advances	72,78,000	
g) 1% Labour Welfare Cess	4,42,590	5,45,734	e) Project Advance	_	
h) New Pension Cont.	87,06,976 83 48 161 1.90.38.617				
VIII AMOUNT BORROWED	_		IX CLOSING BALANCES		
IX OTHER RECEIPTS FEE ACCOUNT			a) Bank Balances	4 36 762	1.67.259
a) Student Caution Money/Mess Advance	13,20,000	24 24 000	i) Canara barik Grant Account, Jabaipur ii) SBI Grant Account, GEC Cambus, Jabaipur	2,02,20,316	2,32,14,504
b) Hall Mangement A/c	18,45,700	15,07,250	iii) SBI Student Fee A/c, Jabalpur	31,29,422	27,82,498
d) Advance Fees Received	67,63,345	52,54,127	iv) SBI Project Account	89,38,568 3 70 86 461	280.24.834
e) Excess Deposit Fee	24,55,960	42,76,051	Alahabad bank (Student Fee Arc)     Alahabad Bank Current A/c. Jabalour	1,25,15,635 8,23,27,164	J
f) Prepaid Expenses	0 0	12,542		_	
b) Medical Insurance Claim (Student)	1,95,039	0			
i) Alumni Association Sub.	2,49,750	0 0			
j) Student Walfare Fund	3,44,500 1,82,19,094				
		i			
a) Secured Advances CWIP	1,20,38,350	3,60,836			
b) Project Advance c) EMD and PBG Payable	14,75,747	15,03,723			
d) Advance for Expenses	3				
From Staff	1,43,93,075	1,44,34,499			
From Student Other Advance	24,35,183 3,11,25,206	_			
TOTAL	\$44.60.88.292	2 86,77,11,432	TOTAL.	144,60,88,292	92 86,77,11,432



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(Ram Phal Dwivedi) Dy. Registrar (GA, F&A)

(Naresh Joshi) sst. Registrar (IA, F&A)

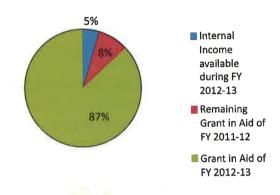


## FUNDS AVAILABLE AND EXPENDITURE INCURRED DURING F.Y. 2012-13

#### Funds Available(in Percentage)-F.Y. 2012-13

#### Funds Available F.Y. 2012-13

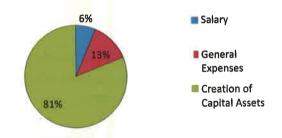
Particulars	Amount Rs. in lakhs
Internal Income available during FY 2012-13	821.70
Remaining Grant-in-Aid of FY 2011-12	1529.58
Grant-in-Aid of FY 2012-13	6500.00
Total	8851.28



#### **Head wise Expenditure during FY 2012-13**

Head	Amount Rs. in lakhs
Salary	526.95
General Expenses	1034.86
Creation of Capital Assets	6678.98
Total	8240.79

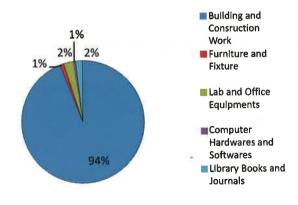
#### Headwise Percentage Expenditure-F.Y. 2012-13



#### **Expenditure- Creation of Capital Assets during FY 2012-13**

· ·	
Particulars	Amount Rs. in Lakhs
Building and Consruction Work	6279.86
Furniture and Fixture	67.71
Lab and Office Equipments	167.49
Computer Hardwares and Softwares	44.64
Library Books and Journals	119.28
Total	6678.98

## Percentage Expenditure on Capital Assets F.Y. 2012-13





## Office of the Director General of Audit (Central Receipt) New Delhi, Branch-Gwalior, Audit Bhavan, Jhansi Road, Gwalior-474002 (M.P)

#### No. Central/AMG-II/SAR/PDPM/IITDM/2012-13/67

Dated: - 09.08.2013

To,

The Director,

Pt. Dwarka Prasad Mishra
Indian Institute of Information Technology, Design & Manufacturing,
Dumna Road, PO-Khamaria,
Jabalpur-482005

Subject:- Separate Audit Report on the accounts of Pt. DPM-IIITDM, Jabalpur for the year 2012-2013.

Sir.

Please find enclosed herewith Separate Audit Report on the accounts of Pt. D.P.Mishra-IIITDM, Jabalpur for the year 2012-2013. You are requested to ensure that the audited accounts are adopted by the Board of Governors before placing the same before the Parliament.

- 2. The date of placement of the above Report on the table of both houses of the Parliament may pleased be intimated and a copy of the printed material may be provided to the undersigned for information.
- 3. It may please be noted that the Management letter is not be presented before the Parliament.
- 4. Kindly acknowledge receipt.

Encl:- 1.Separate Audit Report along with 2 Annexures

Yours faithfully, sd/-xxx Director (Central)



Separate Audit Report of the Comptroller and Auditor General of India on the accounts of Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Manufacturing, Jabalpur for the year ended 31 March 2013

We have audited the attached Balance Sheet of Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Manufacturing (Institute), Jabalpur as at 31 March 2013, Income & Expenditure Account and Receipt & Payment Account for the year ended on that date under Section 20 (1) of the Comptroller and Auditor General's (Duties, Powers & Conditions of Service) Act, 1971. The Audit has been entrusted to the Comptroller and Auditors General of India for the period up to 2013-2014. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

- 2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transaction with regard to compliance with the Law, Rules & Regulations (Propriety & Regularity) and efficiency-cum-performance aspects etc. if any, are reported through Inspection Reports/CAG's Audit Reports separately.
- We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
- 4 Based on our audit, we report that:
  - I. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
  - ii. The Balance Sheet and Income & Expenditure Account and Receipt & Payment Account dealt with by this report have been drawn up in the format approved by the Government of India, Ministry of Finance.



- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Institute in so far as it appears from our examination of such books.
- iv. We further report that:

#### A. Balance Sheet

#### 1. Liabilities

#### 1.1 Current Liabilities & Provisions (Schedule-7)- ₹ 3.47 crore

This does not include ₹ 1.64 lakh being amount payable to M/s Epilog Corporation, USA on successful installation of a lab equipment purchased from the firm. This resulted in understatement of Current Liabilities and Provision and Assets by ₹1.64 lakh.

#### 2. Assets

#### 2.1 Fixed Assets (Schedule-8) ₹ 75.26 crore

- 2.1.1 This does not include ₹41.08 crore being addition to capital works in progress which also resulted in overstatement of advance to CPWD by the same amount.
- 2.1.2 This includes ₹ 1.14 crore being the net value of online journals. It was pointed out in the previous SAR also that the accounting of online journals as fixed assets was not correct and the entire amount should have been accounted for as revenue expenditure irrespective of the magnitude. The Management had accepted the audit view and also assured the BOG (4<sup>th</sup> meeting of 2012) in its Action Taken Report that corrective accounting entries would be taken during 2012-13. However, despite the assurance given to the BOG, no corrective action was found taken. This resulted in overstatement of Fixed Assets by ₹ 1.14 crore and understatement of expenditure by ₹ 32.73 lakh (online journals purchased during the year ₹ 1,11,59,939 minus depreciation charged ₹ 78,87,338).
- **2.1.3.** This does not include ₹ 21.71 lakh being completed works but shown under capital works in progress which also resulted in overstatement of capital works in progress by the same amount.
- **2.1.4.** This does not include the nominal value of land measuring 100 hectares leased to the Institute free of cost by the Madhya Pradesh Government for a period of 30 years.



No disclosure regarding the same was found included in the notes to accounts which is not in accordance with AS 12.

### 2.2 Current Assets, Loans, Advances etc. (Schedule-11)- ₹ 117.66 crore.

This does not include ₹ 5.21 lakh being security deposit with Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Ltd. This has also resulted in understatement of Capital Fund by the same amount.

#### **B.** Income & Expenditure Account

#### **Expenditure**

Expenditure of ₹ 36.18 lakh pertaining to the year 2011-12 was included in the current year's figures. This resulted in overstatement of expenditure of the year by ₹ 36.18 lakh and understatement of prior period adjustment by the same amount.

#### C. General

1. The Annexure to the Separate Audit Report 2011-12 was not printed in the Annual Report of the Institute and not presented before the Parliament.

#### **Effect of Audit Comments on Accounts**

The net impact of the comments given in the preceding paras is that the Assets were overstated by ₹ 107.15 lakh, liabilities understated by ₹ 6.85 lakh and Expenditure overstated by ₹ 3.45 lakh.

#### D. Grant-in-aid

The Institute received grants in aid (Plan) of ₹ 65.00 crore during the year, out of which ₹ 20.00 crore was received in March. In addition to the above, it had unspent balance of ₹ 0.30 crore of the previous year and ₹ 15.00 crore of previous year taken into account this year. Thus out of the total available grant of ₹ 80.30 crore an amount of ₹ 79.43 crore had been utilized leaving unspent balance of ₹ 0.87 crore at end of the year.

Besides above, the Institute received project grants of ₹ 1.41 crore details of which are enclosed at Annexure-2.



- (v) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income & Expenditure Account and Receipt & Payment Account dealt with by this report are in agreement with the books of accounts.
- (vi) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts and subject to the significant matters stated above and other matters mentioned in Annexures-1 and 2 to this audit report give a true and fair view in conformity with accounting principles generally accepted in India:
- (a) In so far as it relates to the Balance Sheet, of the state of affairs of the Pt. D.P. Mishra IIITDM, Jabalpur as at 31 March 2013; and
- (b) In so far as it relates to Income & Expenditure Account of the deficit for the year ended on that date.

Place:- New Delhi Dated:- 09.08.2013

For and behalf of C & AG of India

sd/-xxx

**Director General of Audit** 



## RIGHT TO INFORMATION ACT. 2005 Report (01.04.2012 to 31.03.2013)

The Institute paid emphasis on the implementation of Right to Information Act 2005. Institute has been taking initiatives to make the system transparent and trying to upload maximum information on the website suo-moto for the citizen of India. The implementation of RTI Act 2005 is ensured by the officials designated for the purpose, who are as follows:

Shri Prabodh Pandey,
 Assistant Registrar
 Central Public Information Officer

Shri R P Dwivedi
 Deputy Registrar
 First Appellate Authority

#### Other details are given below:

No. of RTI application received in the Institute : 48

No. of RTI application replied by the Institute : 45 (3 carried forward for the year 2013-14)

No. of first appeals received by the Institute : 17

No. of decisions passed by the FAA of the Institute : 14 (3 carried forward for the year 2013-14)

Amount collected as RTI fee and additional fee : Rs. 8484/-