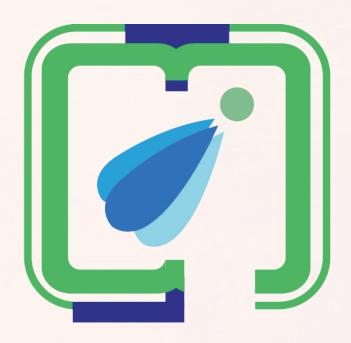
Annual Report 2020-21



Pandit Dwarka Prasad Mishra
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY,
DESIGN AND MANUFACTURING, JABALPUR

(An Institute of National Importance established by an Act of Parliament)

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Director's Desk





Welcome IIITDM Jabalpur friends & fraternity!

It is indeed a great occasion to reflect all our good innings in the academic, research and technical expertise in 2020-21, a year full of hope and potential success for us all. I am very much glad to share that this year we have absorbed 1,892 students, enrolled under various undergraduate, postgraduate and doctoral research programmes, and expect our student strength will rise consistently in coming years too. IIITDMJ achieved 81st Rank in the National Institutional Ranking Framework (NIRF) 2020 and stood first among the five IIITs established by Ministry of Education, Govt of India.

Distinct from many other technical institutions in India IIITDM Jabalpur has an international collaboration with Japan through an MOU signed between the Prime Ministers of the two countries. IIITDM Jabalpur holds an annual meeting of the Steering Committee to review the status of collaboration and prospects of strengthening the international cooperation further with Japan.

In the 11th Convocation, 371 students have been being awarded degrees in different disciplines - 245 B.Tech. degrees, 63 M.Tech. degrees, 13 Ph.D degrees, 24 M.Des degrees, and 25 B.Des degrees. In the academic year 2020-21, 204 placement offers were made for the UG students and 25 offers for the PG students by both the Tier I & II companies. Library extends support to academic & research activities of the Institute by procuring various types of

Director's Desk



reading materials, subscribing to electronic resources, and providing various type of information services. The library provides all latest collection of books, articles, journals, etc. either in the form of online or offline to its users.

Hindi Pakhwada- 2020 was celebrated from September 14-28, 2020 and all the faculties and staff were encouraged to communicate and report in both oral and written forms in Hindi. The Institute has created an excellent infrastructure for a variety of co-curricular and extra-curricular activities such as sports, student publications, Robotics as well as cultural and welfare programmes.

Saaz - Music Club: "Saaz-e-Sukhan" event conducted online 24th July 2020. This event is conducted with the EBSB paired institute IIIT Dharwad. A number of performances were scheduled based on the theme of the event.

Samvaad - The literature and quizzing club organized the EBSB Day on 7th June 2020. The discussion and ideas sharing on the Lifestyle with/after COVID-19 were mainly deliberated.

SPORTS CLUB - In the period from October 2020 to March 2021, five cricket tournaments were organized while maintaining all the COVID-19 protocols such as social distancing, use of sanitizers, etc. These tournaments were organized under the banner of Fit India Movement launched by Hon'ble Prime Minister Shri Narendra Modi Ji. In addition to this, Run for Unity and Fit India Cyclothon were also organized on 2nd October, 2020 and 23rd December, 2020 respectively.

The academic year 2020-21 has been very challenging due to this unprecedented COVID-19, but we were all able to successfully sail through it with added credentials shifting to online mode and continuously engaging through our promising professional and digital network. We have substantially achieved significant success in bringing new projects and able to carry out innovations in our business and technical pursuits. Will continue to open up all our technical avenues and this professional venture in all our future too!

> (Sanjeev Jain) Director

The Institute



Brief Historical Background

Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design & Manufacturing Jabalpur (PDPM IIITDM) was established by the Ministry of Human Resource Development, Government of India on January 24, 2005, under Madhya Pradesh Society Registration Act 1973. The foundation stone of the Institute was laid by Late Shri Arjun Singh Ji, 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 Jabalpur Engineering College. Prof. Sanjay G. Dhande, Director, IIT Kanpur was given the additional charge as the Director of the Institute. Simultaneously, 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. Construction work of phase I buildings was started in 2007.

PDPM IIITDMJ & Japan Collaboration

Distinct from many other technical institutions in India IIITDM Jabalpur has an international collaboration with Japan through an MOU signed between the prime ministers of the two countries. IIITDMJ-Japan relationship is an aspect of wider partnership which include: (i) Universities and Industries in consortium, (ii) Institute's participation in various programs such as JENESYS, JICA Innovative Asia Program, JST funded Sakura Science Program, (iii) Infrastructural support from Japan, (iv) Placement and Internship in Japan, (v) Joint programs and events such as Execution of Joint research projects and Design Workshops (DeW) etc. IIITDM Jabalpur holds an annual meeting of the Steering Committee to review the status of collaboration and prospects of strengthening the international cooperation further with Japan.

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 deep rooted sense of shared values and aspirations for its future planning. Working under such a sound frame of reference, the Institute:

- 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.
- Provides an environment that imbibes respect for nature and environment, culture and human values.
- 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.

Institute at a Glance



No. of Faculty	64		
No. of Officers	13 (9 - Administrative Officers, 04 - Technical Officers)		
No. of Support Staff	46		
No. of Students	UG - 1253, Masters - 165, Ph.D 146		
Academic Programs	 B.Tech Computer Science and Engineering B.Tech Electronics and Communication Engineering B.Tech Mechanical Engineering B.Tech Smart Manufacturing B.Des - Design M.Tech Computer Science and Engineering M.Tech Electronics and Communication Engineering M.Tech Mechanical Engineering M.Tech Mechatronics Engineering M.Tech Smart Manufacturing M.Des - Design Ph.D Computer Science and Engineering Ph.D Electronics and Communication Engineering Ph.D Mechanical Engineering Ph.D Mechanical Engineering Ph.D NS (Mathematics) Ph.D NS (Physics) Ph.D NS (English) 		
Campus	1000000 Sqm.		
Constructed Buildings (Plinth Area)	108133 Sqm.		
Building under Construction (Plinth Area)	18603 Sqm.		
	Major Occupied Building Core Lab Complex + Workshop Annexe Lecture Hall and Tutorial Complex Library cum Computer Center Hostels (Capacity 1400) - 3 No. PG Hostel (Phase-1) (Married Accommodation) Visitor's Hostel		

• Institute at a Glance •



	1	ı		
		Mess and Dining	g Hall	
		Narmada Reside	ency - III (60 Nos	. 3 BHK Flats)
		Narmada Reside	ency - II (55 Nos.	2 BHK Flats)
		Rewa Residency	(72 Nos. 2 BHK	Flats)
		Type V Quarters	s - 2 Nos.	
		Primary Health	Center	
		Security Barrack	<	
		Electrical Substa	ation	
	Students'	Basket Ball Court (Indoor)		
	Activity	Lawn Tennis Co	urt	
		Volley Ball Grou	nd	
		Common Play F	ield + 400 mtrs t	rack
			y Center - Under	construction
		building		
	Other	PG Hostel (Phas	e - II) (Bachelor's	5
	Building	Accommodation	n)	
	Under	Hall of Residence	ce - VIII (Girls Hos	stel)
	Construction			
Total Project		Rs. 2719.00 Lak	h	
Total Research Project		Rs. 1327.88 Lak	h	
Total Consultancy Project		Rs. 1,37,490.00		
Income (FY 2020-21)	Grant in Aid	unspent Balance of FY- 2019-20		
(Rs. in Lakh)	4588.00	-4337.34		
Expenditure (FY 2020-21)	Capital	General	Salary	Total
(Rs. in Lakh)	(Head 35)	(Head 31)	(Head 36)	
	1155.21	1947.24	2011.53	5113.97



Administration and Governance: The Institute is now governed under the IIIT Act 2014. Under the said Act the following are the Administrative Authorities of the Institute:

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

Board of Governors



Chairman **Shri Deepak Ghaisas** Chairman **Gencoval Strategic Services** Pvt. Ltd., Mumbai



Member Prof. R. V. Rajakumar Director IIT, Bhubaneshwar



Member (Ex-officio) Shri Manish Rastogi **Principal Secretary** Dept. of Science & Technology, Govt. of M.P., Bhopal



Member **Prof. Shailendra Singh** Director IIM, Ranchi



Member (Ex-officio) **Shri Amit Khare** Secretary (Dept. of Higher Education), Ministry of Education, Government of India, Delhi



Member Ms. Atreyee Borooah **Thekedath** Founder Director Web.com (India) Pvt. Ltd. Guwahati, Assam



Member (Ex-officio) Shri Rakesh Ranjan Additional Secretary (Technical Education) Ministry of Education, Government of India, Delhi



Member **Shri Prashant Pole** Director Disha Consultants, Jabalpur



Member (Ex-officio) Dr. Jaideep Kumar Mishra Joint Secretary and Group Coordinator Ministry of Electronics & Information Technology, Delhi



Member Shri Subrahmanya S. V. Former Vice President Infosys Ltd., Bengaluru





Member **Prof. Tanuja Sheorey** Professor PDPM IIITDM, Jabalpur



Member (Ex-officio) **Prof. Sanjeev Jain** Director PDPM IIITDM, Jabalpur



Member Prof. N. Kondekar Professor PDPM IIITDM, Jabalpur



Secretary (Ex-officio) Smt. Swapnali D. Gadekar **Acting Registrar** PDPM IIITDM, Jabalpur

Two meetings of the BOG were held during the year 2020-21.

Senate



Chairperson **Prof. Sanjeev Jain** Director PDPM IIITDM, Jabalpur



Member (Ex-officio) **Prof. Puneet Tandon** Head (ME Discipline) PDPM IIITDM, Jabalpur



Member (Ex-officio) Prof. P. N. Kondekar Dean (Planning & Development) PDPM IIITDM, Jabalpur



Member (Ex-officio) **Dr. Prabin Kumar Padhy** Head (ECE Discipline) PDPM IIITDM, Jabalpur



Member (Ex-officio) Prof. V. K. Gupta Dean (Academic) PDPM IIITDM, Jabalpur



Member (Ex-officio) Dr. Atul Gupta Head (CSE) PDPM IIITDM, Jabalpur



Member (Ex-officio) Dr. Dinesh Kumar Vishwakarma Dean (RSPC) PDPM IIITDM, Jabalpur



Member (Ex-officio) Dr. Prabir Mukhopadhyay Head (Design) PDPM IIITDM, Jabalpur



Member (Ex-officio) Dr. Prashant Jain Dean (Student Affairs) PDPM IIITDM, Jabalpur



Member (Ex-officio) Dr. Subir Singh Lamba Head (Natural Science) PDPM IIITDM, Jabalpur





Member Prof. Aparajita Ojha Professor PDPM IIITDM, Jabalpur



Member **Prof. Tanuja Sheorey** Professor PDPM IIITDM, Jabalpur



Member **Prof. B. K. Chakravarthy** Professor **Industrial Design Centre** IIT, Bombay



Member Prof. K. K. Biswas Ex. Professor IIT, Delhi



Member **Prof. Sushil Kumar** IIM, Lucknow



Member Shri Jitendra Chaddah Senior Director. Intel India, Bangalore



Member Shri C. M. Venugopalan Vice President, Bosch Ltd., Bangalore



Secretary (Ex-officio) Smt. Swapnali D. Gadekar **Acting Registrar** PDPM IIITDM, Jabalpur

Three meetings of the Senate were held during 2020-21.

Various Standing Committee of the Senate:

Students Advisory Committee of the Senate (SACS)

- Dr. Prashant Kumar Jain, Dean Students, Convener (Ex-Officio)
- Prof. P N Kondekar, Member, Head, Counseling Service, (Ex-Officio)
- Dr. Deepmala, Member (Warden, Hall-1)
- Dr. Matadeen Bansal, Member (Warden, Hall-3)
- Dr. Shivdayal Patel, Member (Warden, Hall-4)
- Dr. Sujoy Mukherjee, Member (Warden, PG Hostel)
- Dr. Prabir Mukhopadhyay, Member (Faculty other than warden)
- Mr. Amit Tapriya, Students Member (Students Senate Representative)
- Mr. Sourav Saha, Students Member (Students Senate Representative)
- Mr. Shantanu Singh, Students Member (Representative of Counseling)
- Mr. Shubham Sharma, Students Member (Representative of Counseling)

Scholarship and Prize Award Committee of Senate (SPACS)

- Dr. Subir Singh Lamba (Convener)
- Dr. Anil Kumar (Member)
- Dr. M Z Ansari (Member)
- Dr. Saurabh Pratap (Member) (upto December 4, 2020)
- Dr. Shivdayal Patel (Member)



Academic Programme Committee of Senate (APCS) (01 April 2020 - 13 August 2020)

- Dr. Prabin Kumar Padhy (Convener)
- Dr. Atul Gupta (Member)
- Dr. Bhupendra Gupta (Member)
- Dr. M Z Ansari (Member)
- Dr. Matadeen Bansal (Member)
- Dr. Sangeeta Pandit (Member)

Academic Programme Committee of Senate (APCS) (14 August 2020 - 31 March 2021)

Chairman

- Prof. Sanjeev Jain, Director
- HoD, CSE Member
- Member HoD, ECE
- HoD, ME Member
- HoD, Design Member
- HoD, NS Member
- Professor-in-Charge (Academic) Member Secretary

Other Committee

- **Institute Library Committee**
- Dr. L. K. Balyan (Convener)
- Dr. Ayan Seal (Member, CSE)
- Dr. M. Amarnath (Member, ME)
- Dr. Trivesh Kumar (Member, ECE)
- Dr. Sangeeta Pandit (Member, Design)
- Dr. N. K. Jaiswal (Member, NS)

Finance Committee



Chairman **Shri Deepak Ghaisas** Chairman Gencoval Strategic Services Pvt. Ltd., Mumbai



Member (Ex-officio) **Shri Anil Kumar** Director (Finance) Ministry of Education, Government of India, New Delhi



Member (Ex-officio) **Shri Amit Khare** Secretary (Dept. of Higher Education), Ministry of Education, Government of India, New Delhi



Member Ms. Atreyee Borooah **Thekedath** Founder Director Web.com (India) Pvt. Ltd., Guwahati, Assam



Member (Ex-officio) Shri Rakesh Ranjan Additional Secretary (Technical Education) Ministry of Education, Government of India, New Delhi



Member **Shri Prashant Pole** Director Disha Consultants, Jabalpur





Member (Ex-officio) **Prof. Sanjeev Jain** Director PDPM IIITDM, Jabalpur



Secretary (Ex-officio) Smt. Swapnali D. Gadekar **Acting Registrar** PDPM IIITDM, Jabalpur

One meeting of the Finance Committee was held during the year 2020-21.

Building and Works Committee



Chairman (Ex-officio) Prof. Sanjeev Jain Director PDPM IIITDM, Jabalpur



Member Shri Ajay Singh Chief Engineer DRDO, New Delhi



Member **Shri Atul Kumar Pandey** Project Engineer-cum-Estate Officer IIT, Indore



Member **Shri Anil Kumar Pandey** SE (Electrical) MPPKVVCL, Jabalpur



Member **Shri Prashant Pole** Director Disha Consultants, Jabalpur



Secretary (Ex-officio) Smt. Swapnali D. Gadekar Acting Registrar & OIC PDPM IIITDM, Jabalpur



Member Prof. P. N. Kondekar Dean (Planning & Development) PDPM IIITDM, Jabalpur

Two meetings of the B&WC were held during the year 2020-21.

Office Administration





Mr. R P Dwivedi Joint Registrar (On Lien) MCA, MPM, LLB



Ms Swapnali D. Gadekar Deputy / Acting Registrar **Finance and Accounts** Purchase and Store Secretary (BOG) First Appellate Authority (RTI) MBA



Mr. Vijay Kumar Dubey **Executive Engineer (Civil)** Civil Engineering, MBA



Mr. Naresh Joshi **Assistant Registrar** (on lien) M.Sc.



Ms. Menika Patel **Assistant Registrar** Library MLib



Mr. Rizwan Ahmed **Assistant Registrar Academics Student Affairs** Establishment M.Sc., LL.B.



Mr. Santosh Mahobia **Assistant Registrar Internal Audit** General Administration Official Language Officer MBA



Mr. Shailesh Sharma **Assistant Registrar** Purchase and Store & PS to Director M.Com, MCA, LL.B., MA (Hindi) (From - 04/11/2020)



Mr. Omvir Singh Bhadauria Placement cum Public **Relation Officer** (Assistant Registrar) Placement ME, PGDBA (From - 21/12/2020)

Office Administration



Technical Officers



Shri Awadhesh Kumar Singh **Technical Officer** Mechatronics ME From Asian Institute of Technology, Thailand



Dr. K K Soundra Pandian Technical Officer (on deputation) **Electronics & Communication** PhD - IIT Patna



Shri D S Ramteke **Technical Officer** Machine Design Pursuing PhD – IIT Indore



Shri Aditya Sharma Technical Officer Computer Science & Engineering M.Tech. (CS)

GROUP 'B' STAFF

No.	Name	Designation
1.	Shri R. K. Mishra	Assistant Engineer (Civil)
2.	Shri Sunil Jat	Assistant Engineer (Civil)
3.	Shri Ashok Kumar	Superintendent (on Deputation)
4.	Shri Aloysius Beenu Michael	Jr. Superintendent
5.	Ms. Megha Kushwah	Jr. Superintendent
6.	Shri Sandeep Awasthi	Jr. Superintendent
7.	Shri Anil Kumar	Jr. Superintendent
8.	Shri Dev Krishna Jha	Jr. Superintendent
9.	Shri Kanhaiya Lal Barmaiya	Jr. Superintendent (From - 22/10/2020)
10.	Shri Nishant Karda	Jr. Superintendent (From - 22/10/2020)
11.	Shri Mayank Sharma	Junior Engineer (Civil) (From - 17/11/2020)
12.	Shri Piyush Jain	Junior Engineer (Civil) (From - 02/03/2021)
13.	Smt. Savita Shah	Staff Nurse (on contract) (From - 23/11/2020)

Office Administration



GROUP 'C' STAFF

No.	Name	Designation
1.	Shri Praveen Armo	Sr. Assistant
2.	Smt. Sapna STayade	Sr. Assistant
3.	Shri Kamlesh S Warkade	Sr. Assistant
4.	Shri Jitendra Bahadur Singh	Sr. Assistant
5.	Shri Pankaj Prajapati	Sr. Assistant
6.	Shri Simanta kar Gupta	Sr. Assistant
7.	Shri Prashant Agnihotri	Sr. Assistant
8.	Shri Rajesh Kumar	Sr. Assistant
9.	Shri Adesh Kumar	Sr. Assistant
10.	Shri Rajesh	Sr. Assistant
11.	Shri Akhilesh Shrivastava	Sr. Technician
12.	Shri Alok Kulkarni	Sr. Technician
13.	Smt. Bharti Kewat	Sr. Technician
14.	Shri Piyush Kumar Usrethe	Sr. Technician
15.	Shri Anup Bajpai	Sr. Technician
16.	Shri Ghanshyam Meshram	Sr. Technician
17.	Shri Mayur S. Mungole	Sr. Technician
18.	Shri Anupam Shukla	Sr. Technician
19.	Shri Varun Dubey	Sr. Technician
20.	Smt. Aayesha B. Mansoori	Sr. Technician
21.	Shri Ram Dularey Vishwakarma	Sr. Technician
22.	Shri Milind P. Bopde	Sr. Technician
23.	Shri Robinson George Markam	Sr. Technician
24.	Shri Anup kumar Gupta	Sr. Technician
25.	Shri Tabish Khan	Sr. Technician
26.	Shri Manoj Tigga	Sr. Technician
27.	Shri Abhishek Bawane	Jr. Assistant
28.	Shri Richard Saberio	Jr. Assistant
29.	Shri Rahul Kumar Deshmukh	Jr. Assistant
30.	Ms. Aishwarya Pradhan	Jr. Assistant
31.	Smt. Neha Sharma	Jr. Technician (From - 19/10/2020)
32.	Shri Mohd. Izrael Khan	Driver
33.	Shri Ganesh Prasad Kashyap	Driver

Computer Science and Engineering

epartment of Computer Science and Engineering (CSE) offers design-centric programs such as BTech (CSE), MTech in CSE with specialization (AI and Data Science), and Ph.D. in various research areas. The department has enthusiastic students numbering around 600 which includes BTech, MTech students, and Ph.D. scholars. The department has highly qualified faculty members who graduated from top engineering institutions. The curriculum is being constantly upgraded to allow engineers to be equipped with necessary skills required for efficient hardware-software interaction and system

development. The graduates find broad scope in IT and product manufacturing-related industries in addition to application development avenues and higher studies. The department laboratories are well equipped with powerful Workstations, HPC Servers, Debian Linux servers, and network



infrastructures such as the ISDN equipment, network distribution switches, firewall, and redundant wireless access controller to cater to the computing needs of the institute research and professional efforts.

The department faculty strength is likely to go up to fifteen with five new faculty members likely to join soon. Most of our faculty are working in the cutting-edge teaching and research in AI and Computational Intelligence, IOT and Embedded Systems, and Image and Vision Engineering domains. Recently, the department has organized an International Conference on "Machine Vision and Augmented Intelligence" (MAI 2021) during Feb 11-14, 2021. Also, many national level training programs have been organized by the faculty of the department.



Faculty CSE





Aparajita Ojha PhD – RDVV Jabalpur Professor CAGD, Finite Elements, Spline Theory, Approximation Theory, Wavelet Analysis



Pritee Khanna PhD - Kurukshetra University Associate Professor Computer Graphics, Dbms, Data Structures, Algorithms, Computer Enabled Product Design



Atul Gupta PhD – IIT Kanpur Associate Professor Software Engineering, Machine learning



Sraban Kumar Mohanty PhD – IIT Guwahati Assistant Professor (Grade I) I/O Efficient algorithms for Matrix Computations



Vinod Kumar Jain PhD - ABV-IIITM Gwalior Assistant Professor (Grade I) Location Estimation in Indoor Wireless Networks



Manish Kumar Bajpai PhD - IIT Kanpur Assistant Professor (Grade I) Parallel Algorithms, Image Reconstruction



Ayan Seal PhD – Jadavpur University Assistant Professor (Grade I) Thermal Face Recognition for Biometric security System (Image Processing and Computer Vision)



Kusum Kumari Bharti PhD – ABV- Indian Institute of Information Technology Management, Gwalior Assistant Professor (Grade II) Text Clustering



Neelam Dayal Ph.D. - MNNIT Allahabad Assistant Professor (Grade II) Software Defined Network Security



Durgesh Singh PhD - IIT BHU Assistant Professor (Grade II) **Image Processing**



Journals

- 1. Avaneesh Singh, Saroj Chandra, Manish Bajpai Study of Non-Pharmacological Interventions on COVID-19 Spread Computer Modeling in Engineering & Sciences https://www.techscience. com/CMES/v125n3/40796 2020
- 2. Avaneesh Singh, Manish Bajpai, SEIHCRD Model for COVID-19 spread scenarios, disease predictions and estimates the basic reproduction number, case fatality rate, hospital, and ICU beds requirement Computer Modeling in Engineering & Sciences, https://www.techscience.com /CMES/v125n3/40797 2020
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- 4. Ashish Kumar Gupta, Ayan Seal, Pritee Khanna, Ondrej Krejcar, Anis Yazidi, AWkS: Adaptive, Weighted k-Means based Superpixels for Improved Saliency Detection Pattern Analysis and Applications, 24 625-639, 2020
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- 13. Animesh Sengupta, Ayan Seal, Chinmaya Panigrahy, Ondrej Krejcar, Anis Yazidi, Edge Information based Image Fusion Metrics using Fractional Order Differentiation and Sigmoidal Functions, IEEE Access, 8, 88385--88398, 2020
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- 15. Krishna Kumar Sharma, Ayan Seal, Multi-



- view Spectral Clustering for Uncertain Objects, Information Sciences, 547(8), 723-745, 2020
- 16. Krishna Kumar Sharma, Ayan Seal, Clustering analysis using an adaptive fused distance, Engineering Applications of Artificial Intelligence, 96, 103928, 2020
- 17. Mohan Karnati, Ayan Seal, Ondrej Krejcar, Anis Yazidi, Facial Expression Recognition using Local Gravitational Force Descriptor based Deep Convolution Neural Networks, IEEE Transactions on Instrumentation & Measurement, 10.1109/TIM.2020. 3031835, 2020
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Electronics And Communication Engineering

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- Signal and Image Processing
- Micro & Nano electronics
- Power and Control Systems
- Microwave and Communication engineering

The Discipline offers four years B.Tech. programme to cater to the ever-challenging needs of technical excellence in field of Electronics and Communication. In addition, it has strong research programmes leading to M.Tech. and Ph.D. degree in all the four major areas of Electronics and Communication Engineering. Currently a large number of Ph.D. and M.Tech. students are engaged in cutting edge research in the Discipline. The Discipline has several state-of-the-art facilities for assisting teaching and research and development in RF & Microwave, Printed RF circuits, Wireless Communication, Digital Signal & Image processing, Nano-electronics and VLSI, Drives & Devices etc.

Faculty ECE





P N Kondekar PhD – IIT Bombay Professor Microelectronics, VLSI-CMOS level design, Nano electronics devices and Semiconductor power devices, technology for Education



Prabin Kumar Padhy PhD - IIT Guwahati Associate Professor **Control Systems**



Dinesh Kumar Vishwakarma PhD – IISc Bangalore Associate Professor Electromagnetics, Antannas, Microwave, Applied Photonics, Photonic crystals and Optical Communication



Anil Kumar PhD - IIT Roorkee Assistant Professor (Grade I) Multirate signal processing



Manoj Kumar Parihar Ph.D. – IIT Delhi Assistant Professor (Grade I) Reconfigurable Printed Circuits



Sachin Kumar Jain PhD - IIT Kanpur Assistant Professor (Grade I) Power Quality



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Varun Bajaj PhD From IIT Indore Assistant Professor (Grade I) **Applied Signal Processing**



Biswajeet Mukherjee PhD – IIT Bombay Assistant Professor (Grade I) Microwave and Antenna Engineering



Dip Prakash Samajdar PhD – University of Calcutta Assistant Professor (Grade II) Electronic Science (Material Science)



Atul Kumar PhD – IIT Guwahati Assistant Professor (Grade II) Chaotic Communication, Wireless Communication



Trivesh Kumar PhD - IIT Kanpur Assistant Professor (Grade I) RF, Microwave and Antennas

Faculty ECE





Ravi Panwar PhD - IIT Roorkee Assistant Professor (Grade I) **Broadband Radar Absorbing Materials** Using Fractal Frequency Selective Surface (FSS) for stealth application.



Irshad Ahmad Ansari PhD – IIT Roorkee Assistant Professor (Grade II) Image Processing



Pankaj Sharma PhD – IIT Indore Assistant Professor (Grade II) Nanoelectronics, Photovoltaics, IoT, VLSI



Navjeet Bagga PhD – IIT Roorkee Assistant Professor (Grade II) Microelectronics and VLSI



Amit Vishwakarma PhD – IIT Guwahati Assistant Professor (Grade II) Computer Vision



Pushpa Raikwal PhD - DAVV Indore Assistant Professor (Grade II) VLSI Design



Koushik Dutta ${\sf PhD-IIEST,\,Shibpur}$ Assistant Professor (Grade II) Metal Oxide Based Gas Sensors



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- 3. Singhai, Paridhi; Ateek, Abdul; Kumar,

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- 4. Bhalerao, Siddharth; Ansari, Irshad Ahmad; Kumar, Anil;, Reversible ECG Data Hiding: Analysis and Comparison of ANN, Regression SVM and Random Forest Regression, 2020 International Conference on Communication and Signal Processing (ICCSP), Chennai, India, pp. 0667-0671, 28-30 July 2020
- 5. Y Manish, N KP, Jawar Singh, Apurba Chakrborty, Optimized Parasitic Resistance Performance of MultiFin Device.
- 6. Sumit Kale, PN Kondekar, Performance study of HfO2 gate & spacer dielectric Dopant Segregated Schottky Barrier SOI MOSFET, 2014 International Conference on Signal Propagation and Computer Technology (ICSPCT 2014).
- 7. PS Yadav, PN Kondekar, J Singh, DK Agrahari, High performance pentacenebased organic transistor with HfO2-Al2O3 as dielectrics,
- 8. Ankit Dixit, Dip Prakash Samajdar, Vibhuti Chauhan and Navjeet Bagga, Performance Comparison of III-V and Silicon FinFETs for Ultra Low Power VLSI Applications, International Conference on Computing, Communication and Sensor Networks (CCSN) 2020, Kolkata, India 17-18 Oct. 2020
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Mechanical Engineering

echanical Engineering Discipline has started journey in the year of 2005. Over the last decade, we have grown our expertise and competence in the core Mechanical Engineering curriculum and research.

We have a strong undergraduate program in Mechanical Engineering and Smart Manufacturing. At the postgraduate level, we offer Master and Doctoral programmes. Several sponsored candidates from industries and research laboratories carry out their postgraduate studies in our department.

The primary focus of our pedagogy is to impart technical know-how to students, promote their problem solving and innovation skills and keep them abreast with new technologies. The department offers a wide spectrum of optional courses to the students to pursue their interest. The course contents are periodically updated to keep them in line with the global developments. Undergraduate students are encouraged for hands-on-training, in the form of course projects and participate in various sponsored research projects. The department is known for maintaining active research groups to carry out funded collaborative and interdisciplinary research. We have state of the art research facilities to support our academic programs and research. The research funding will help us to maintain and modernize our research infrastructure.



Faculty ME





Puneet Tandon PhD - IIT Kanpur Professor Computer Aided Design, computer Aided manufacturing, Rapid Prototyping & Tooling Technologies, Reverse Engineering, Product Innovation, Design and Development



Tanuja Sheorey PhD - IIT Kanpur Professor CFD, Algorithm Development, Parallel Computation.



Vijay Kumar Gupta PhD – IIT Bombay Professor Mechanical Engineering (Design)



Sunil Agarwal PhD – IIT Kanpur Associate Professor Industrial Engineering



Prashant Kumar Jain PhD - IIT Delhi Associate Professor Rapid Prototyping & Tooling, CNC machining, Geometric Modeling, CAD/CAM Integration, Computational geometry, Nano Technologies in Manufacturing



Goutam Dutta PhD - IIT Bombay Associate Professor (on lien) Thermal and Fluid Engineering (Mechanical)



M Amarnath PhD – IIT Madras Assistant Professor (Grade I) Condition based maintenance, Tribology



H Chelladurai PhD - IIT Kanpur Assistant Professor (Grade I) Design & Manufacturing



Mohd Zahid Ansari PhD - Inha University, Korea Assistant Professor (Grade I) MEMS, Biosensor, Mechanical Design, Optimization



Sujoy Mukherjee PhD - IISc Bangalore Assistant Professor (Grade I) Smart Materials and Structures, Structural Dynamics, Aeroelasticity, Flapping Wing MAV



Harpreet Singh PhD – IIT Roorkee Assistant Professor (Grade II) Manufacturing



Shiv Dayal Patel PhD – IIT Delhi Assistant Professor (Grade II) Progressive Damage Modelling, Composites, Stochastic Finite element Analysis, Impacts, Probabilistic Design, Sensitivity based Design Optimization

Faculty ME





Himansu Sekhar Nanda PhD - National Institute for Materials Science, Japan (Degree awarded from University of Tsukuba, Japan Assistant Professor (Grade I) Advanced Health Care Material Manufacturing (scaffold based biomaterials for tissue engineering and drug delivery)



R Seetharam Ph.D. - NIT, Warangal Assistant Professor (Grade II) Metal Forming - Bulk/Sheet Metal Forming Metal flow analysis and micro structure modeling of hot upset Al-B4C composite



Ponappa K PhD – IIT Delhi Assistant Professor (Grade I) (Casting of Metal Matrix Composites & Machining) Fabrication of Magnesium Based Metal Matrix Composites by two step Stir Casting Process and their Grindability Studies.



Tushar Choudhary Ph.D. - NIT, Jamshedpur Assistant Professor (Grade II) CFD, FEA, Automobile, Thermodynamics, I.C. Engine, Manufacturing



Manu Srivastava PhD - Delhi University Assistant Professor (Grade II) Additive Manufacturing



Saurabh Pratap PhD – IIT Kharagpur Assistant Professor (Grade II) Maritime Logistics



Journals

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Conference Publications

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- 7. Gourav K. Sharma, Piyush Pant, Prashant K. Jain, P. K. Kankar, P. Tandon, Thermal and fluid flow modelling of a heating bed for application in metal AM process", International Conference on Recent Advances in Mechanical Engineering, (RAME - 2020), DTU, Delhi Technological University, September 18-19, 2020
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- 9. Yash Soni, Narendra Kumar, Mohit Tyagi and Prashant K. Jain, Feasibility study of the hybrid Pellet-Based Additive Manufacturing Extruder with commercial 3D FFF printer, International Conference on Industrial and Manufacturing Systems (CIMS - 2020), NIT Jalandhar, October 9-11, 2020
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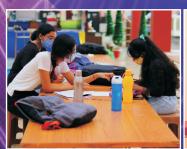


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- 19. Abhinav Anand Sinha, Tushar Choudhary, Performance Analysis of Simple Gas Turbine with Renewable Sources of Fuel, 4 INTERNATIONAL CONFERENCE ON INNOVATIONS IN MECHANICAL ENGINEERING (ICIME-2021), GURU NANAK INSTITUTIONS HYDERABAD, 26th - 27th February, 2021
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Design

he Design Discipline at PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur offers a "holistic" design program. The discipline offers four years Bachelors in Design (BDes), two years Masters in Design (MDes) and PhD in Design programmes. The curriculum is a unique blend of design and technology to ensure that they are well equipped when they finally graduate from the Institute. The uniqueness of the curriculum is that, all the students have to mandatorily learn different areas of design in the initial semesters. In the advanced semesters, students are given a choice to choose electives mainly in three major domains; product, space and communication design. The students have the liberty to pursue Bachelors / Master's thesis in their domain of interest. Thus, the students graduating from the discipline have a good understanding of different facets of design, different technologies related to design and at the same time specialises along one of the major domains namely product, space or communication design, giving them an advantage of convenient and efficient switches from one domain to another. The rigorous curriculums, the intense research methodologies, the diligent practice in skills create knowledge-based professionals of industrial design and innovation. The modern-age facilities of Epilog Laser Cutting, 3D Printer, Colour Laser Jet Printer, Vertical Plastic Injection Moulding, Universal Wood Working, Vacuum Forming, Eye Tracking System, Heart Rate Monitor, Heat Stress Meter etc. with support staff skilled in wood, metal, polymer, FRPs and composite fabrication provide an incredible hands-on practical training to the students. The discipline, which started in the year 2008, has produced many good designers who have excelled in different facets of design as practicing designers, design entrepreneurs and design educators. The students of our discipline are trained in a manner that facilitate them taking up any challenging role, which demands design intervention.







Faculty Design





Prabir Mukhopadhyay PhD - University of Limerick, Ireland Associate Professor Ergonomics



Puneet Tandon PhD - IIT Kanpur Professor Computer Aided Design, computer Aided manufacturing, Rapid Prototyping & Tooling Technologies, Reverse Engineering, Product Innovation, Design and Development



Sangeeta Pandit PhD – IIT Guwahati Assistant Professor (Grade II) Design Ergonomics



Tripti Singh PhD - Banasthali University Assistant Professor (Grade II) Visual Communication, New Media



Amrita Bhattacharjee PhD – IIT Guwahati Assistant Professor (Grade II) Lighting Design and Visual Perception



Journals

- 1. Amol & Sangeeta Pandit, New hand-cart for Old-Delhi whole sale market designed and engineered using generic product development process, Indian Journal of Pure & Applied Physics, Vol. 58, 698-705, 2020
- 2. Gaurav Patel and Prabir Mukhopadhyay Ergonomic Analysis and design intervention in symbols used in hospitals in central India Applied Ergonomics, Vol 94. 2021 https://doi.org/10.1016/ j.apergo.2021.103410 Published online 2021
- 3. Amrita Bhattacharjee and Swati Pal, Preferred illumination level by the viewers for displaying paintings in exhibition space, Journal of Optics, Vol.50, Issue 02, 289-298, 2021

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- 1. Pallavi Rani and Amrita Bhattacharjee, Design of an Awareness Model to Develop Proper Sanitary Habit Among the Rural People of Jharkhand, 2nd Innovative Product Design and Intelligent Manufacturing systems: National Conference (IPDIMS 2020), NIT Rourkela, 11-20, December 2-3, 2020
- 2. Pandit, S., Jagtap, S., and Gupta, S., Bamboo as a sustainable material for furniture design in schools especially in rural and remote areas, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec, 2020
- 3. Pandit, S., Padia, N., Gupta, S., Design intervention in the field of Metrology / Quality control, 8th International Conference on Advancements and

- Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec, 2020
- 4. Pandit, S., Gupta, S., Padia, N., Jagtap, S., 'Sustainability of indoor air-purifier, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec, 2020
- 5. Pandit, S., Sonawane, P., Vattam, R., 'Ornamental Plant Nursery Layout Design, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec. 2020
- 6. Pandit, S., Vattam, R., Sonawane, P., 'An Ergonomics analysis of sowing operation for small and marginal farmers, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec, 2020
- 7. Pandit, S., Rao, Ch. A., Parashar, P., Ergonomic analysis of workload of vegetable cart vendors in the manual pushcart used for vending vegetables, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec, 2020
- 8. Pandit, S., Parashar, P., Rao, Ch. A., 'Risk analysis of musculoskeletal disorders (MSDs) on palledars working in mandi of sec-16, faridabad, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020), IIT Ropar, Accepted, 19-20 Dec, 2020

Natural Science

atural Sciences are the integral part of IIITDM Jabalpur since its inception. The fields of Natural Sciences, already integrate various other disciplines of the Institute with some emerging fields such as Materials Engineering, Nanomaterials, Biomedical Physics, Numerical Analysis & Scientific Computing, Image processing etc. Moreover, the applications of various science and technology-based knowledge emerge out of Natural Sciences.

The basic purpose of the interdisciplinary curriculum of the Institute is to expand the knowledge and applications overlapping different fields of experts. The learning process cannot be restricted to limited space and therefore Natural Sciences coupled with other disciplines to follow the same. The intellectual growth through liberal education would fulfill the desire for satisfaction qualitatively rather than quantitatively. Research and development is the key to the future generation and prosperity of a nation through an academic institution with an interdisciplinary curriculum. The source of basic science knowledge is the foundation of all other disciplines' inventions as well as applications. Having Physics and Mathematics as an integral part of the UG & PG curriculum directly plays an important role in the growth of research and development at IIITDM Jabalpur.

Physics

The physics discipline has six faculty members and who undertake cutting-edge research on various fields of application in the field of science and technology. Some of these areas are Magnetic materials, Multiferroics, Nanomaterials for magnetism and other applications, Biomedical Physics, and Electrodeposited magnetic thin films.

Mathematics

Mathematics discipline has six faculty members and discipline would focus on various fields of Parallel Computing, Computational Fluid Dynamics, Hyperbolic IBVP, Spectral Method and Probability Theory, and Topological study of Wireless Networks and Wireless Communication.

Faculty Natural Science •





Asish Kumar Kundu PhD - INCASR Deemed University Associate Professor Solid State Physics



Subir Singh Lamba PhD – IIT Kanpur Assistant Professor (Grade I) Parallel Computing, Spectral Method and



Mukesh Kumar Roy PhD – IIT Kanpur Assistant Professor (Grade I) Nuclear Physics Technique, Material Science



Bhupendra Gupta PhD - IIT Kanpur Assistant Professor (Grade I) **Probability Theory**



Lokendra Kumar PhD - IIT Kanpur Assistant Professor (Grade I) Spectral Methods, High Performance Computing, Elliptic Partial Differential Equations



Nihar Ranjan Jena PhD - Banaras Hindu University Assistant Professor (Grade I) Molecular modelling of structures and interactions of biomolecules, complexes and clusters



Amaresh Chandra Mishra PhD – IIT Kharagpur Assistant Professor (Grade I) Electrodeposited magnetic film coated wires for GMI (Giant magneto-impedance) sensor applications



Nihar Kumar Mahato PhD – IIT Kharagpur Assistant Professor (Grade I) Applied Functional Analysis and optimization



Manoj Kumar Panda PhD - IIT Kanpur Assistant Professor (Grade I) Mathematical Modelling of Bio-Fluid Dynamics (Phototactic bioconvection), CFD, Hydrodynamic Instability



Neeraj Kumar Jaiswal PhD - ABV-IIITM Gwalior Assistant Professor (Grade I) **Applied Physics**



Deepmala PhD - Pt. Ravishankar Shukla University, Raipur Assistant Professor (Grade I) Fixed Point theory and Applications, Dynamic Programming, Integral Equations, Nonlinear Analysis



Yashpal Singh Katharria PhD - Jawaharlal Nehru University/ Inter-University Accelerator Centre, New Delhi Assistant Professor (Grade I) **Experimental Condensed Matter Physics**

Faculty Natural Science •





Mamta Anand PhD - Banasthali Vidyapith, Rajasthan Fulbright Fellow, Harvard University (USA) Assistant Professor (Grade I) Cultural Studies, Language, Literature, Communication & Cognitive Science



J Al Muzzamil Fareen PhD - Anna University Chennai Assistant Professor (Grade II) Language, Literature, Linguistics & Communication

Journals

- 1. A.Kumar, I.Sharma, L.K.Balyan, Design of low power multiplierless FIR filter with enhanced adder efficiency using flower pollination optimization, Applied Acoustics, 174 107792 2021
- 2. A. Kumar, I.Sharma, S.Vishwakarma, L.K.Balyan A Novel Technique for Common Sub-expression Elimination for Digital FIR Filters using Hit and Miss Transform Applied Acoustics 174 107793 2021
- 3. A. K. Mittal, L. K. Balyan, Numerical solutions of time and space fractional coupled Burgers equations using timespace Chebyshev pseudospectral method, Mathematical Methods in the Applied Sciences, 44(4), 3127-3137, 2021
- 4. Himanshu Singh; Anil Kumar; L. K. Balyan; H. N. Lee, Spatial Entropy Quartiles based Texture Aware Fractional-order Unsharp Masking for Visibility Enhancement of Remotely Sensed Images, IEEE Transactions on Systems, Man, and Cybernetics: Systems, 1-14, 2021
- 5. Amar Deep, Deepmala and R. Ezzati, Application of Petryshyn's xed point

- theorem to solvability for functional integral equations, Appl. Math. Comput, 395, 125878, 2021
- 6. M. Rabbani, Amar Deep and Deepmala, On some generalized nonlinear functional integral equations of two variables via measures of noncompactness and numerical method to solve it Math. Sci. Accepted, -, 2021
- 7. N. R. Jena, S. Pant, H. K. Srivastava, Artificially expanded genetic information systems (AEGISs) as potent inhibitors of the RNA-dependent RNA polymerase of the SARS-CoV-2, J. Biomolecular Structure and Dynamics, Not Available, 1-17, 2021
- 8. GP Singh, AK Aman, RK Singh, M. K. Roy Room temperature dielectric and optical studies of Cd-doped ZnO nanostructures, Bulletin of Materials Science 44 (3), 1-11, 44, 1-11 2021
- 9. Avinash K. Mittal, Lokendra K. Balyan, Manoj K. Panda, Parnika Shrivastava, Harvindra Singh Pseudospectral analysis and approximation of two-dimensional fractional Cable equation Mathematical Methods in the Applied Sciences https://doi.org/10.1002/mma.7362 2021



- 10. Saurabh Yadav, S. Dash, A. K. Patra, G. R. Umapathy, S. Ojha, Shiv P. Patel, R. Singh and Y. S. Katharria, Effects of Energetic Ion Irradiation on ?-Ga2O3 Thin Films, ECS Journal of Solid State Science and Technology, 9, 45015, 2020
- 11. L.K. Balyan, A.K. Mittal, M. Kumar, M.Choube Stability analysis and highly accurate numerical approximation of Fisher's equations using pseudospectral method, Mathematics and Computers in Simulation, 177, 86-104 2020
- 12. N. Sajwan, I. Sharma, A. Kumar & L. K. Balyan Performance of Multiplierless FIR Filter Based on Directed Minimal Spanning Tree: A Comparative Study, Circuits, Systems & Signal Processing, 39, 5776-5800, 2020
- 13. A. K. Mittal & L. K. Balyan, Numerical solutions of two dimensional fractional Schrodinger equations Mathematical Sciences, 14, 129-136, 2020
- 14. Avinash K. Mittal, Lokendra K. Balyan, Numerical solutions and stability analysis for solitary waves of complex modified korteweg-de vries equation using Chebyshev pseudospectral methods Numerical methods for partial differential equations, 36(6), 1662-1681, 2020
- 15. Amar Deep, Deepmala, J Roshan, K.S. Nisar and T Abdeljawad, An extension of Darbo's fixed point theorem for a class of system of nonlinear integral equations, Advance in Difference Equations 2020, 483, 2020
- 16. Amar Deep, Deepmala and Mohsen Rabbani, A numerical method for the solvability of some non-linear functional integral equations, Applied Mathematics and Computation, 402, 125637, 2020

- 17. Amar Deep, Deepmala and Cemil Tunc, On the existence of solutions of some non-linear functional integral equations in Banach algebrawith applications, Arab Journal of Basic and Applied Sciences, 27(1), 279-286., 2020
- 18. R. Dubey, Deepmala, V. N. Mishra, Higher-order symmetric duality in nondifferentiable multiobjective fractional programming problem over cone contraints Statistics, Optimization & Information Computing, 8 187-205, 2020
- 19. S. K. Tripathi, B. Gupta and K. K. S. Pandian The Shortest Register With Non-Linear Update for Generating a Given Finite or Periodic Sequence IEEE Communications Letters 24, 1173-1177 2020
- 20. Shailendra Kumar Tripathi, Bhupendra Gupta, Mayank Tiwari, An Alternative Approach to Preserve Naturalness with Non-Uniform Illumination Estimation for Images Enhancement Using Normalized L2-Norm Based on Retinex., Multidimensional Systems & Dignal Process, 31, 1091-1112, 2020
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- 22. A. Haque, R. Das, D. Ghosh, A. Gayen, Asish K. Kundu, M. M. Seikh, Unravelling the role of Bi-substitution on vibronic ferromagnetism in La2?xBixMnCoO6 (x = 0, 0.5 and 1), Journal of Magnetism and Magnetic Materials, 514, 167159, 2020



- 23. A. Haque, A. Shukla, U. Dutta, D. Ghosh, A. Gayen, P. Mahata, M. Vasundhara, Asish K. Kundu, M. M. Seikh, Incompatible magnetic and dielectric properties of BiCu3-xMnxTi4-yMyO12 (x = 0 & 0.5; y = 1 & 1.5 and M = Fe & Mn),Ceramics International, 46, 5907-5912, 2020
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- 25. Pankaj Srivastava, Abhishek, Varun Sharma, N. K. Jaiswal, First principle insights of CO and NO detection via antimonene nanoribbons Appl. Phys. A, 126, 687, 2020
- 26. R. Yogi and Neeraj K. Jaiswal, First-Principle Study of Cl Functionalized Zigzag AlN Nanoribbons, Integrated Ferroelectrics, 250, 114, 2020
- 27. N. R. Jena, Role of Different Tautomers on the Base-Pairing Abilities of Some of the Vital Antiviral Drugs used Against COVID-1 Physical Chemistry Chemical Physics, 22, 28115-28122, 2020
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- 29. Dr. J. Al Muzzamil Fareen, Creating language awareness: Teaching and learning of remedial grammar and vocabulary for effective language use Applied Linguistics Research Journal 4(5), 121 - 136,2020
- 30. Dr. J. Al Muzzamil Fareen, English language use and usage in formal and social contexts: A critical review

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- 2. Dr. J. Al Muzzamil Fareen, English Language Use and Usage in Formal and Social Contexts - A Critical Review Paper ID: ICCIASH-2020/267, First Online International Conference on "Continuity, Consistency and Innovation in Applied Sciences and Humanities" (ICCIASH-2020) St. Martin's Engineering College, Dhulapally, Secunderabad, T.S, India, 163-171, 13th& 14th August 2020
- 3. Dr. J. Al Muzzamil Fareen, Pedagogy and practice: Learning language and soft skills online amidst COVID-19, Online International Conference on Engineering Response to COVID-19 (IOCER COVID-19), JIS College of Engineering, Kalyani, West Bengal, India., Presentation, 08-09, October 2020
- 4. Dr. J. Al Muzzamil Fareen, EPP Program Plan: Conducting target situation analysis to develop relevant professional competency skills for seeking placements, ILTERG (International Language Teacher Education Research Group), ILTERG (International Language Teacher Education Research Group), Turkey, Presentation, 16-17, October 2020

Book, Books Chapters and Monographs



Dr. Prittee Khanna, Monographs

- 1. Impact of Region atrophy on Alzheimer's disease and its identification using 3Dtexture analysis, IOP Publishing, UK, ISBN: 978-0-7503-3279-8, Co-Author: Shiwangi Mishra, 2020.
- 2. Cancelable Biometric Systems from Research to Reality: The Road Less Travelled, CRC Press-Taylor and Francis, USA, ISBN: 978-0-367-42244-8, Co-Author: Harkeerat Kaur, 2020.

Dr. Manoj Singh Parihar, Book Chapter

1. Reconfigurable Slot-Based MIMO Antenna for Cognitive Radio Application, Springer, Co-Authors: Shilpi Singh, M. S. Parihar, 2020.

Dr. Varun Bajaj, Book Chapter

- 1. Data Deduplication Applications in Cognitive Science and Computer Vision Research, Data Deduplication Approaches: Concepts, Strategies, and Challenges 2020, (Elsevier), 2020.
- 2. Classification of schizophrenia patients through empirical wavelet transformation using electroencephalogram signals, Modelling and Analysis of Active Biopotential Signals in Healthcare Volume-1 2020, 1.1-1.26 doi:10.1088/ 978-0-7503-3279-8ch1, 2020.
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- 5. Electroencephalogram Signals based Emotion Classification in Parkinson's Disease using Recurrence Quantification Analysis and Nonlinear Classifiers, Computer-aided Design and Diagnosis Methods for Biomedical Applications, CRC Taylor & Francis 2021, CRC Taylor & Francis 2021, Co-Authors: M Murugappan, Smith K. Khare, Waleed Alshuaib, Ali K Bourisly, Varun Bajaj, G. R. Sinha, 2021.
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Dr. Ravi Panwar, Book Chapter

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- 2. Chip resistor loaded fractal frequency selective surface based miniaturized broadband microwave absorber from 2 to 18 GHz, Algorithms for Intelligent Systems (AIS), Springer Nature Pvt. Ltd. Singapore, 978-981-15-0633-8, Co-Authors: Tanveer Kaur, Arpit Sahu, 2020.
- 3. An optimal design of split-ring resonator and electronic waste composite based cost-effective microwave absorber for

Book, Books Chapters and Monographs



low observable applications, Algorithms for Intelligent Systems (AIS), Springer Nature Pvt. Ltd. Singapore, 978-981-15-0633-8, Co-Author: Arpit Sahu, 2020.

Prof. Puneet Tandon, Book Chapter

- 1. Simulation of Extrusion of Thermoplastic Binder in Additive Manufacturing Process, In: Shunmugam M., Kanthababu M. (eds) Advances in Additive Manufacturing and Joining (Chapter 28, pp.319-328), Lecture Notes on Multidisciplinary Industrial Engineering, Springer, Singapore. doi:10.1007/978-981-32-9433-2 28, ISBN: 978-981-32-9432-5; ISBN: 978-981-32-9433-2 (eBook), Co-Authors: Dayam, S., Priyadarshi, S. and Tandon, P, 2020.
- 2. Numerical modelling and development of new technical solutions in metallurgy and material processing, In: Edited by: Pesin A. Ito M. (Eds), Solid State Phenomena 304. ISSN: 1662-9779. doi:10.4028/www.scientific.net/SSP.30 4, ISSN: 1662-9779, Co-Authors: Pesin, A., Tandon, P., Pustovoytov, D., Korchunov, A., Pesin. I. and Dubey, A, 2020.
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Dr. M. Z. Ansari, Book Chapter

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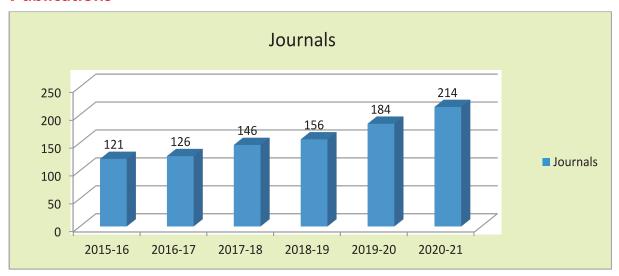
Dr. Prashant Kumar Jain, Book Chapter

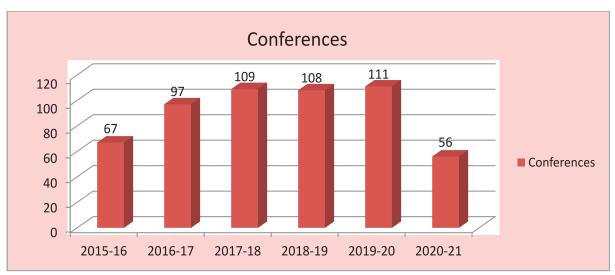
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- 2. Investigations on the Development of Heated Build Platform for Additive Manufacturing of Large-Size Parts, Manufacturing Engineering, Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore, pp 1-17, Gawali S.K., Narendra Kumar, P. K. Jain, 2020.
- 3. On the Numerical Investigation of Material Deposition in Fused Filament Fabrication, Manufacturing Engineering, Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore, pp 19-36, Co-Authors: A. S. Yadav, Narendra Kumar, P. K. Jain, 2020.

Patents & Publication

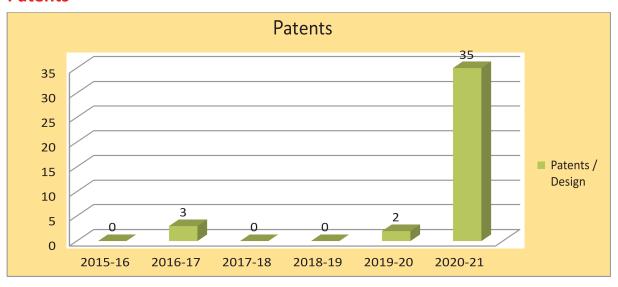


Publications





Patents



Academic and Research Activities - 📝



a. Academic Programmes

Undergraduate Programmes:

The Institute has a unique undergraduate curriculum for imparting education in the following Discipline of Engineering & Design.

Computer Science and Engineering (CSE) B.Tech.

Electronics and Communication Engineering (ECE) B.Tech.

B.Tech. Mechanical Engineering (ME)

Smart Manufacturing (SM) B.Tech.

B.Des. Design (DS)

Postgraduate Programmes:

The Institute runs M.Tech., M.Des. and Ph.D. Programmes in the following Branch:

Computer Science and Engineering (CSE) M.Tech.

M.Tech. **Electronics and Communication Engineering (ECE)**

M.Tech. Mechanical Engineering (ME)

Mechatronics (MT) M.Tech.

M.Des. Design (DS)

Computer Science and Engineering (CSE) Ph.D.

Electronics and Communication Engineering (ECE) Ph.D.

Ph.D. Mechanical Engineering (ME)

Ph.D. Design (DS)

Ph.D. **Natural Science (Mathematics)**

Natural Science (Physics) Ph.D.

Ph.D. Natural Science (English)

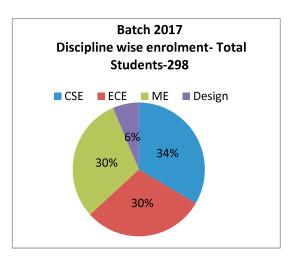


b. Academic & Students Enrolment

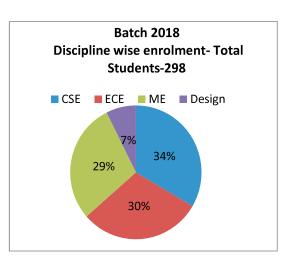
Undergraduate Programmes

(I) B.Tech Programme- Students Enrolment

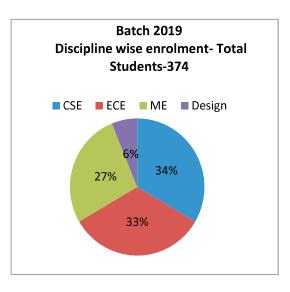
2017 Batch								
Branch	Branch OP OB SC ST Total							
CSE	50	28	15	7	100			
ECE	44	24	14	6	88			
ME	44	25	15	7	91			
Design	12	3	2	2	19			
Total	150	80	46	22	298			



2018 Batch							
Branch	anch OP OB SC ST						
CSE	54	26	14	6	100		
ECE	46	26	12	5	89		
ME	35	30	14	8	87		
Design	12	6	2	2	22		
Total	147	88	42	21	298		



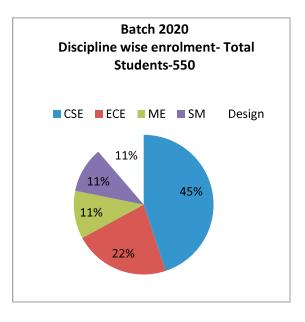
2019 Batch						
Branch	ОР	ОВ	sc	ST	Total	
CSE	65	34	18	8	125	
ECE	57	39	19	9	124	
ME	43	36	15	8	102	
Design	11	8	2	2	23	
Total	176	117	54	27	374	



Academic and Research Activities - []



2020 Batch						
Branch	ОР	ОВ	sc	ST	Total	
CSE	125	66	37	19	247	
ECE	59	35	19	9	122	
ME	25	22	9	5	61	
SM	26	18	10	4	58	
Design	29	18	10	5	62	
Total	264	159	85	42	550	



(ii) **B.Tech Programme - Academic Performance Evaluation Committee Report**

Undergraduate Semester II (2019-20)

Batch	No. of Register Students	No. of students Passed	No. of Students Terminated/Withdrawal
2016	267	267	0
2017	301	298	3 (withdrawal)
2018	304	298	6 (Withdrawal)
2019	390	385	5 (Withdrawal)

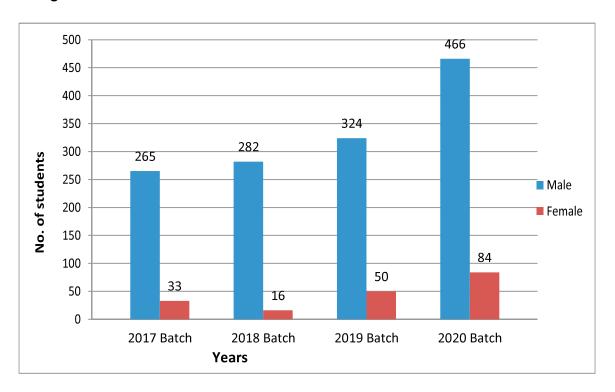
Undergraduate Semester I (2020-21)

Batch	No. of Students	No. of students Passed	No. of Students Terminated/Withdrawal
2017	298	298	0
2018	298	298	0
2019	385	374	11 (Withdrawal)
2020	560	550	10 (Withdrawal)

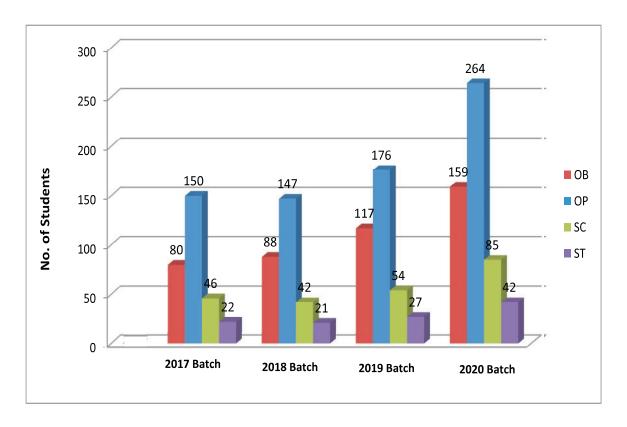
Academic and Research Activities



(iii) Graph Showing Status of Male and Female Students in the Undergraduate Programme.



(iv) **Graph Showing Status of Category wise Students in Undergraduate Programme**



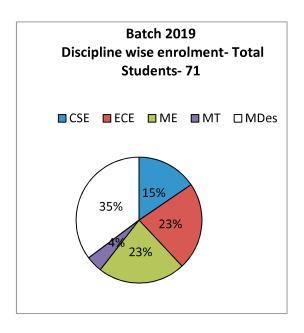


Postgraduate Programmes

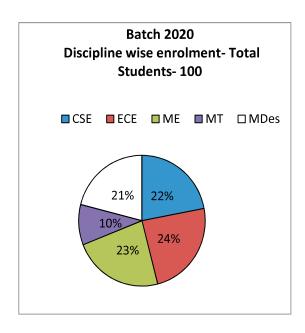
Institute offers master's degree Programme in: -

- (a) M.Tech
- (i) Computer Science & Engineering (CSE)
- (ii) Electronics & Communication Engineering (ECE)
- Mechanical Engineering (ME) (iii)
- Mechatronics (iv)
- Master of Design (M.Des) (b)
- (1) **Students Enrolment**

M.Tech & M.Des 2019 Batch							
Discipline	ОР	ОВ	sc	ST	Total		
CSE	7	3	1	0	11		
ECE	9	3	4	0	16		
ME	10	5	1	0	16		
MT	1	1	0	1	3		
MDes	9	10	5	1	25		
Total	36	22	11	2	71		



M.Tech & MDes 2020 Batch							
Discipline	ОР	ОВ	sc	ST	Total		
CSE	10	8	4	0	22		
ECE	15	4	5	0	24		
ME	11	8	3	1	23		
MT	5	4	1	0	10		
MDes	13	6	2	0	21		
Total	54	30	15	1	100		



Academic and Research Activities • [



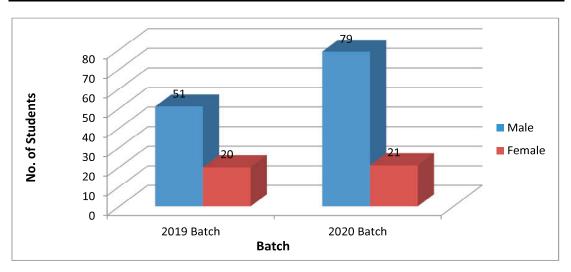
(1) **Postgraduate - Academic Performance Evaluation Committee Report** Postgraduate Semester II (2019-20)

Batch	No of Student	No of Pass	No of Terminated/Withdrawal
2018	95	95	0
2019	81	79	2 (withdrawal)

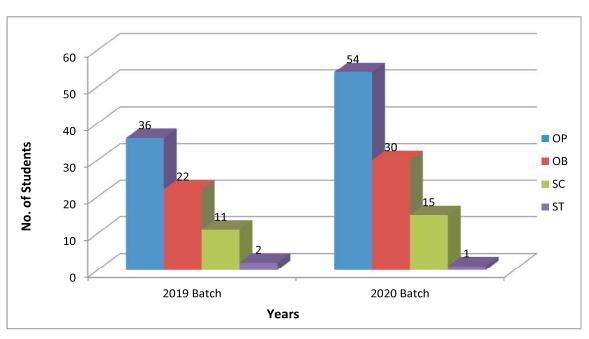
Postgraduate Semester I (2020-21)

Batch	No of Student	No of Pass	No of Terminated/Withdrawal
2019	79	71	7 (withdrawal)
2020	100	100	0

Graph Showing Status of Male and Female Students in the post Graduate Programme.



Graph Showing Status of Category wise Students in the post Graduate Programme.





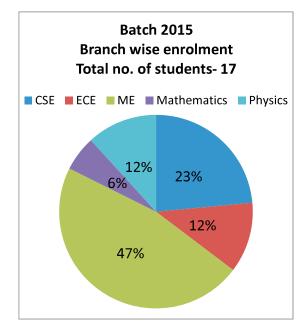
Ph.D. Programs

The Institute offers Ph.D. in following Discipline

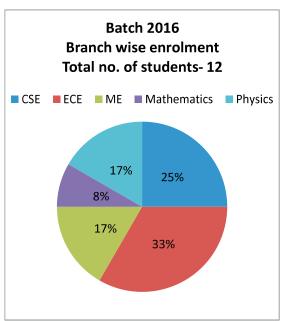
- Computer Science & Engineering (CSE) (i)
- (ii) **Electronics & Communication Engineering (ECE)**
- (iii) Mechanical Engineering (ME)
- (iv) Design
- Natural Science (Physics, Mathematics) (v)
- (vi) **English**

Students Enrolment in Ph.D. (1)

2015 Batch							
Discipline OP OB SC ST Total							
CSE	3	1	0	0	4		
ECE	2	0	0	0	2		
ME	4	2	2	0	8		
Mathematics	1	0	0	0	1		
Physics	1	1	0	0	2		
Total	11	4	2	0	17		

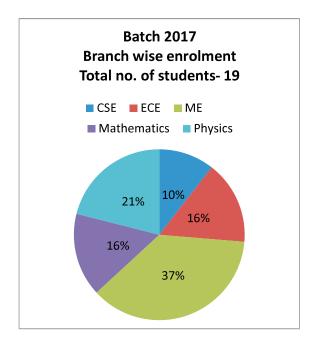


2016 Batch							
Discipline	ОР	ОВ	SC	ST	Total		
CSE	2	0	1	0	3		
ECE	2	2	0	0	4		
ME	2	0	0	0	2		
Mathematics	1	0	0	0	1		
Physics	1	1	0	0	2		
Total	8	3	1	0	12		

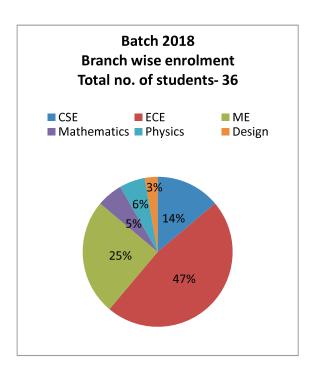




2017 Batch							
Discipline	ОР	ОВ	sc	ST	Total		
CSE	1	1	0	0	2		
ECE	3	0	0	0	3		
ME	3	2	2	0	7		
Mathematics	0	3	0	0	3		
Physics	1	3	0	0	4		
Total	8	9	2	0	19		



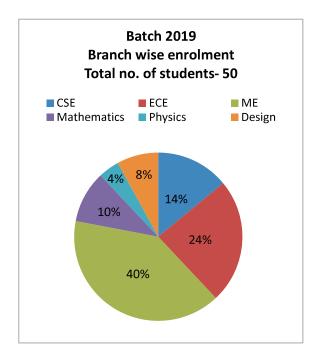
2018 Batch								
Branch	Branch OP OB SC ST Total							
CSE	4	1	0	0	5			
ECE	11	5	1	0	17			
ME	5	2	2	0	9			
Mathematics	0	2	0	0	2			
Physics	1	1	0	0	2			
Design	1	0	0	0	1			
Total	22	11	3	0	36			



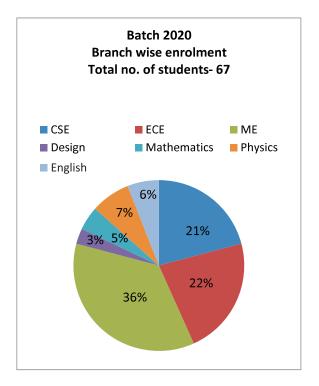
Academic and Research Activities



2019 Batch							
Discipline OP OB SC ST Total							
CSE	6	0	1	0	7		
ECE	5	6	1	0	12		
ME	8	6	5	1	20		
Mathematics	1	4	0	0	5		
Physics	1	1	0	0	2		
Design	0	1	1	2	4		
Total	21	18	8	3	50		



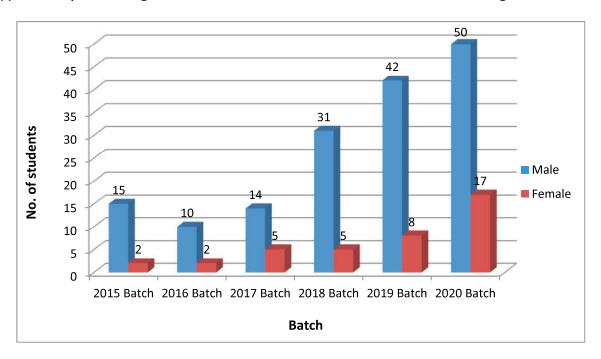
	2020 Batch							
Discipline	ОР	ОВ	sc	ST	Total			
CSE	8	5	1	0	14			
ECE	8	6	1	0	15			
ME	16	5	3	0	24			
Design	1	1	0	0	2			
Mathematics	1	2	0	0	3			
Physics	3	2	0	0	5			
English	1	3	0	0	4			
Total	38	24	5	0	67			



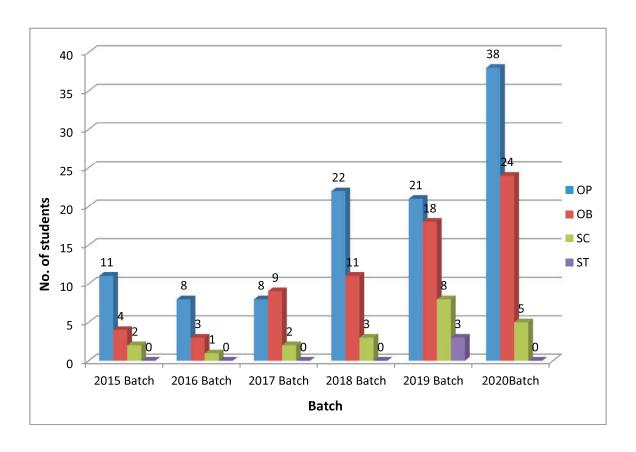
Academic and Research Activities •



(I) Graph Showing Status of Male and Female Students in the Ph.D. Programme.



(II) Graph Showing Status of Category wise Students in the Ph.D. Programme





Financial Year 01/04/2020 to 31/03/2021

PROJECTS

(I) Institutional Projects

S. No.	Project Title	Duration	Investigator	Funding Agency	Total Sanctioned Amount Rs. in Lakh	Status
1.	Electronics & ICT Academy	2015-22	Chief Investigator: Prof. Aparajita Ojha, Co-Chief Investigators: Prof. V.K. Gupta, Prof. P.N. Kondekar, Dr. Atul Gupta, Dr. P.K. Jain	Ministry of Communications and Information Technology, DEIT HRD Division	2,500.00	Ongoing
2.	National Initiative for setting up DIC Hub/Spoke Model	2016-21	Coordinators: Prof. Tanuja Sheorey and Dr. Atul Gupta	MHRD, Govt. of India through RDVV JABALPUR	100.00	Ongoing
3.	Special Manpower Development Programme for Chips to System Design	2015-21	PI: Prof. P.N. Kondekar	CEERI	119.00	Ongoing



(ii) Research Projects

SI.N o.	Project Title	Duration	Investigator	Funding Agency	Total Sanctioned Amount in Rs. Lakh	Status
1.	Implementation of Sigma Delta Modulator Using Nanowire Electrically Doped Hetero Material Tunnel Field Effect Transistor (TFET) for Ultra Low Power Applications	2016-19	PI: Dr. Dheeraj Sharma	SERB DST	43.49	On- Going
2.	Development of Adaptive Double Sided incremental Forming Process For dieless Manufacturing	2017-22	PI: Prof. P. Tandon, Co PI : Dr. P.K. Jain	IMPRINT- India, MHRD	247.72	On- Going
3.	Design, Simulation and development of conformal phased array antenna for airbone applications	2017-21	PI: Dr. Dinesh Kumar Vishwakarma, Co PI: Dr. Manoj Singh Parihar	DRDO	52.78	On- Going
4.	Mechanistic Model Development for Fission Product (FP) Retention for Computer Code PRABHIVINI	2017-19	PI: Dr. Gautam Dutta	BARC	11.97	On- Going
5.	Radiation effects in Gallium Oxide	2017-21	PI: Dr. Yashpal Singh Katharria	UGC	8.13	On- Going
6.	Smart Manufacturing and Condition Monitoring	2018-23	PI: Prof. Vijay K. Gupta, Co PI: Prof. P. Tandon	DST-FIST	194.40	On- Going
7.	Establishment of Research facility for Advanced Microwave and Communication Engineering	2018-23	PI: Dr. Dinesh Kumar V. Co-PI: Dr. Manoj S.Parihar, Dr. Matadeen Bansal	DST-FIST	205.20	On- Going
8.	Study of Resistive switching in gallium oxide thin films for non-volatile memory application	2018-21	PI: Dr. Yashpal Singh Katharria	UGC-DAE	1.35	On- Going
9.	Development of Mathematical Models to Minimize the impact of Airline disruption in Real Time Basis	2018-21	PI: Dr. Deepmala	CSIR	18.96	On- Going



10.	Analytical Modeling & Simulation of 3-5 nano structure-based hybrid solar cells	2018-21	PI: Dr. D.P. Samajdar	SERB	26.70	On- Going
11.	FPGA Prototype of non- recursive key based crypto system for secure transmission of real time privacy signal	2018-21	PI: Dr. Varun Bajaj CoPI: Dr. Sraban Kumar Mohanty	DST	24.98	On- Going
12.	Mathematical modeling of biased swimming micro-organisms via bioconvection	2018-21	PI: Dr. Manoj Kumar Panda	SERB	6.60	On- Going
13.	First principle investigations of 2-D nitrides as electrodes materials for alkali-ion batteries	2019-22	PI: Dr. Neha Tyagi (Mentor: Dr. Neeraj Kumar Jaiswal)	DST-WOS- A)	26.98	On- Going
14.	Development of Induction- conduction based material deposition system for metal additive manufacturing	2019-22	PI: Dr. Prashant Kumar Jain	SERB	42.34	On- Going
15.	Numerical Modeling and development of New methods for hybrid metal forming of complex parts of ultra –high strength (UHS) materials	2019-21	PI: Prof. Puneet Tandon	DST-RFBR	19.64	On- Going
16.	Empowering women through visual communication tools	2019-21	PI: Dr. Tripti. Singh	DST (SEED)	13.65	On- Going
17.	Modelling suspensions of active swimming micro-organisums under external graditents via Bioconvection	2019-22	Dr. Manoj Kumar Panda	SERB	21.92	On- Going
18.	Scientific and Industrial Applications of Bioconvection Via Mathematical Modelling	2019-22	Dr. Manoj Kumar Panda	CSIR	5.47	On- Going
19.	Mathematical and Computational modelling of Epidemic Forecast and Disease Transformation	2019-21	Dr. Manish Kumar Bajpai	SPARC	48.90	On- Going



20.	Prediction of Diseases through computer assisted diagnosis system using images captured by minimally-invasive and non-invasive modalitiees	2019-21	Dr. Ayan Seal	SPARC	47.69	On- Going
21.	Investigation of sp2/sp3 edge functionalized GaNnanoriboons for spintronic device applications	2019-22	Dr. Neeraj Kumar Jaiswal	SERB	21.44	On- Going
22.	Development of Multi- operational Microwave Heating Setup for the near net shape material processing	2019-21	Dr. Harpreet Singh	SERB	22.04	On- Going
23.	Hybrid Scaffold Manufacturing using Surface Modification of 3D-Printed Hydrophobic Scaffolds	2019-21	Dr. Himansu Shekar Nanda	SERB	23.25	On- Going
24.	Studies on electronic and optical Properties in Group III -V _ N Quaternanry Semiconductor Quantum Dots Uaing Density Functional Theory And K Dot Method	2019-22	Dr. DIP Prakash Samajdhar	CSIR	17.10	On- Going
25.	Design and Development of centralized database on scholarship/fellowships awarded in S&T Sector	2020-23	Dr. Manish Kumar Bajpai	DST	24.13	On- Going
26.	Ergonomic Intervention In the Classroom Environment for Enhanced Learning	2020-22	Dr. Prabir Mukhopadhyay	NCERT	07.98	On- Going
27.	MI studies of electrodeposited nickel based thinfilm alloys for lowmagnetic field sensor application	2020-23	Dr. Amaresh Chandra Mishra	BRNS	25.15	On- Going
28.	Scale effect approach to evaluate the erosion mechanism and performance features in micro abrasive water jet machining process: A study of new approach	2020-	Prof. Puneet Tandon	SERB- TARE	18.30	On- Going



	based on process parameters and materials microstructures					
29.	Design and Development of ADHAAR (Autonomous Drone for Himalayan region Analysis, Assessment and Rescue)	2021-24	Co-PI Dr. Irshad Ahmad Ansari	JCBRO	0.88	On- Going
30.	Investigation of Computational Intelligence Capabilities for Digital Signal Protection	2021-24	PI Dr. Irshad Ahmad Ansari	STEM Research Society	2.05	On- Going
31.	Low Profile Dielectric Resonator Antennas for Compact, Wideband and Conformal Applications	2021-24	PI Dr. Biswajeet Mukherjee	SERB	26.07	On- Going
32.	Computer Aided Design For Development of Hardware Prototype for Diagnosis of Diabetes Using ECG Signals	2020-23	PI Dr. Varun Bajaj	CSIR	6.97	On- Going
33.	An Efficient use of Discarded Heterogeneous Electronic Waste for Development of cost Effective Microwave Absorber	2017-20	PI: Dr. Ravi Panwar	SERB DST	43.95	Comple- ted
34.	National Resource Center (NRC) for Design	2018-21	PI: Prof. Puneet Tandon CoPI: Dr. Sangeeta Pandit	MHRD	19.70	Comple- ted



(iii) Consultancy Projects

S. No.	Name of Consultancy work (Project Title)	Consultant (Name of Faculty)	Funded By (Name of Client)	Amount received (in Rupees)
1.	Method of better prediction of stock market using signals	Dr. Lokendra Kumar Balyan	AUM Securities	15,000.00
2.	Physiotherapy Device for upper and Lower Limb exercise	Dr. Sangeeta Pandit	Inventin Design Private Limited	1,500.00
3.	Tread Mill Test Machine for Patients	Dr. Sangeeta Pandit	Recorders & Medicare Systems Private Limited	1,000.00
4.	Augmented Reality	Dr. Subir Singh Lamba and Dr. Bhupendra Gupta	Brain Programmers Private Limited	50,000.00
5.	Data Acquisition, Digitization And Transfer of Furnace Data (Temperature) From (i) Sealed Retort No.1 Furnace (VFJ NO. 4543) AND (ii) PIT TYPE GAS CARURTZING FURNACE (VFJ NO. 2060) TO COMPLY WITH INDUSTRY 4.0	Dr. Irshad Ahmad Ansari	Vehicle Factory Jabalpur	24,990.00
6.	Design and Development of a mobile interface for digital seed moisture meter.	Dr. Matadeen Bansal	AVI AGRI Business Limited	35,000.00
7.	Implementation of Signal and Image Processing algorithms for related application	Dr. Varun Bajaj and Dr. Irshad Ahmad Ansari	Jagadish Chandra Bose Research Organisation	10,000.00

Faculty Achievements



S. No.	Name	Awards/Achi evements	Details	Awarded By	Date
1.	Prof. Aparajita Ojha	Achievement	Member, International Advisory and Programme Committee, CVIP 2020	CVIP organisers, IIIT Allahabad	2020
2.	Dr. Manish Kumar Bajpai	Member	BoS, VIT University, Bhopal	VIT University Bhopal	2020
3.	Dr. Manish Kumar Bajpai	Secretary	Inter Chapter Section Relation, IEEE Bombay Section	IEEE Bombay Section	2020
4.	Dr. Dinesh Kumar V.	Innovation Ambassador 2020-21	Trained as an Innovation AmbassadorMIC, AICTE	MIC, AICTE	2021
5.	Dr. Varun Bajaj	Associate Editor:	IEEE Sensors Journal	IEEE	1 Aug. 2020- Till now
6.	Dr. Varun bajaj	Subject Editor-in- Chief:	IET Electronics Letters	IET	12 June 2020- till now
7.	Dr. Varun bajaj	Subject Editor	IET Electronics Letters	IET	Nov 2018- 11 June 2020
8.	Dr. Ravi Panwar	Top Read Articles of Journal	The article entitled, "Design and development of low radar cross section antenna using hybrid metamaterial absorber" recognized as the Top 10% most downloaded articles Microwave and Optical Technology Letters (Wiley)	Wiley, US	06Jun. 2020
9.	Prof. Puneet Tandon	International Organizing Committee	Third International Conference on Smart Technologies for Energy, Environment & Sustainable Development (ICSTEESD-2020)	G. H. Raisoni College of Engineering, Nagpur, India	4-5 Dec. 2020

• Faculty Achievements • — —



10.	Prof. Puneet Tandon	International	International Conference	Faculty of Engineering	Oct.
	The state of the s	Organizing Committee	on Mechatronics and Artificial Intelligence (ICMAI-2020)	and Technology, Shree Guru Gobind Singh Tricentenary (SGT) University, Gurugram, India	2020
11.	Prof. Puneet Tandon	Advisory Committee	International Conference on Industrial and Manufacturing Systems (CIMS - 2020)	Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA	26-28 June 2020
12.	Prof. Puneet Tandon	Program Committee	The 7th International Conference on Digital Manufacturing and Automation (ICDMA 2020)	Osaka International Convention Center, Osaka, Japan, National Tsing-Hua University, Taiwan and Royal Melbourne Institute of Technology, Australia, Science and Engineering Institute	10-12 May 2020
13.	Prof. Puneet Tandon	International Organizing Committee - Asia	The 17th International CAD Conference, CAD 20	Polytechnic University of Catalonia, Barcelona, Spain	6-8 July 2020
14.	Dr. Mohd. Zahid Ansari	Program Committee	Workshop on Optimization Techniques for Solving Engineering and Management Problems (OTSEMP)	IIITDM Jabalpur Brahmos	2-6 March 2020
15.	Prof. Puneet Tandon	Honour	Member, Editorial Board, Journal of Modern Mechanical Engineering and Technology	Zeal Press, UK	23 March 2021
16.	Dr. Manu Srivastava	Evaluator	Toycathon 2021, an inter-ministerial initiative organized by Ministry of Education's Innovation Cell	Government of India	Since 31st Jan 2021
17.	Prof. Puneet Tandon	Honour	Member Editorial Board, Theory and Technology of Metallurgical Production	Ministry of Education and Science of the Russian Federation	19 Nov. 2020
18.	Prof. Vijay Kumar Gupta	Honorary Professor	Indian Institute of Risk and Reliability	Society for Reliability and Safety (SRESA)	2020
19.	Dr. Mohd. Zahid Ansari	Reviewer Recognition	Recognition for reviewing manuscripts for publications	Journal of Manufacturing Processes, Elsevier	20 Oct. 2020

• Faculty Achievements •



20.	Prof. Puneet Tandon	Advisory Committee	International Conference on Advances in Materials, Mechanics, Mechatronics and Manufacturing (IC4M 2021)	Online	06-07 March 2021
21.	Prof. Puneet Tandon	International Programme Committee	8th International Conference on Research into Design (ICoRD' 21)	IDC School of Design, Indian Institute of Technology Bombay, India,The Design Society	7-9 Jan. 2021
22.	Prof. Puneet Tandon	International Organizing Committee	International Conference on Mechatronics and Artificial Intelligence (ICMAI-2021)	Faculty of Engineering and Technology, Shree Guru Gobind Singh Tricentenary (SGT) University, Gurugram, India	26-27 Feb. 2021
23.	Prof. Vijay Kumar Gupta	Honour	Member, BOS, Mechanical Engineering, Rajasthan Technical University Kota	Rajasthan Technical University Kota	2021
24.	Ankit Dlxit, Dr. D. P. Samjdar	Best Research Award	Performance Investigation of III-V material over Conventional Silicon in Nanoelectronic Devices	Engineering and Theoretical Physics" in Student's Research Convention (SRC) - 2021 held at Indian Institute of Technology (IIT), Kanpur	27-28 March 2021
25.	Dr. J. Al Muzzamil Fareen	Innovation Ambassador 2020-21	Trained as an Innovation AmbassadorMIC, AICTE	MIC, AICTE	16 Feb. 2021

Conference Organised •



- 1. Dr. Manish Kumar Bajpai Convener, MAI 2021, IIITDM Jabalpur, SPARC, Feb 11-14,2021
- 2. Puneet Tandon, International Organizing Committee, Third International Conference on Smart Technologies for Energy, Environment & Sustainable Development (ICSTEESD-2020) G. H. Raisoni College of Engineering, Nagpur, India, -, 4-5 December 2020
- 3. Puneet Tandon, International Organizing Committee, International Conference on Mechatronics and Artificial Intelligence (ICMAI-2020), Faculty of Engineering and Technology, Shree Guru Gobind Singh Tricentenary (SGT) University, Gurugram, India, -, October 2020
- 4. Puneet Tandon, Advisory Committee, International Conference on Advances in Materials, Mechanics, Mechatronics and Manufacturing (IC4M 2021), Online, -, 06-07 March 2021
- 5. Puneet Tandon, International Programme Committee, 8th International Conference on Research into Design (ICoRD' 21), IDC School of Design, Indian Institute of Technology Bombay, India, The Design Society, 7-9 January 2021
- 6. Puneet Tandon, International Organizing Committee, International Conference on Mechatronics and Artificial Intelligence (ICMAI-2021), Faculty of Engineering and Technology, Shree Guru Gobind Singh Tricentenary (SGT) University, Gurugram, India, -, 26-27 February 2021
- 7. Puneet Tandon, Program Committee, The 7th International Conference on Digital Manufacturing and Automation (ICDMA 2020), Osaka International Convention Center, Osaka, Japan,

National Tsing-Hua University, Taiwan and Royal Melbourne Institute of Technology, Australia, Science and Engineering Institute, 10-12 May 2020.

Key Note:

- 1. Prof. Aparajita Ojha, Explainable Artificial Intelligence, SMARTCOM 2020, G B Pant Institute of Engineering & Technology (GBPIET), 06/27/2020.
- 2. Dr. Sangeeta Pandit, Lecture, Ergonomics for the unorganized sector, Advance and futuristic trends in mechanical and materials engineering (AFTMME-20), IIT Ropar, 19-12-20.
- 3. Dr. Tripti Singh, Lecture, Digital Media as Skill Set in profession of Architecture, SANRACHANA 2020, Hitkarni Collage of Architecture & Twin Planning and Indian Institute of Architecture, Jabalpur, M.P. India, 03-04-20.
- 4. Prof. Puneet Tandon, Hybrid Manufacturing, 3rd International Conference on Advances in Mechanical Engineering and Nanotechnology (ICAMEN-2021), Online (Jointly organized by Manipal University Jaipur, India and National Institute of Technology, Uttarakhand, India), 19 March 2021.
- 5. Dr. Deepmala, Advanced Optimization & Heuristic Method for Industrial Applications one-week faculty development webinar, Department of Basic Science and Humanities, Ramgarh Engineering College, Ramgarh, 27/07/2020
- 6. Dr. Deepmala, An Optimization Approach to Airline Disruption Management Webinar, lecture series Department of Mathematics, USTM, 25/06/2020.

• Events •—



S. No.	Name	Event Type	Name of Event	Sponsoring Agency	Venue	Role	Start Date	End Date
1.	Dr. Kusum Kumari Bharti	FDP	Python Programming	MeiTY, Govt of India, E&ICT Academy	Online	Academic Level Coordinator	07 Sep. 2020	18 Sep. 2020
2.	Dr. Kusum Kumari Bharti	FDP	Data Science for All	MeiTY, Govt of India, E&ICT Academy	Online	Academic Level Coordinator	27 July 2020	07 Aug. 2020
3.	Dr. Kusum Kumari Bharti	One Month Training Program	Artificial Intelligence and its Applications	BEL	Online	Organizer	01 April 2020	30 April 2020
4.	Prof. Aparajita Ojha	Abhyas (High End Workshop)	Blockchain Technology and Applications	DST	IIITDM Jabalpur	Coordinator	18 Jan. 2021	25 Jan. 2021
5.	Prof. Aparajita Ojha	Online Training programme	Blockchain Technology and Applications	MeiTY, Govt of India, E&ICT Academy	Online	Coordinator	17 Oct. 2020	22 Oct. 2020
6.	Prof. Aparajita Ojha	Faculty Develop- ment Programme	Quantum Computing	MeiTY, Govt of India, E&ICT Academy	Online live sessions	Academy Level Coordinator	24 Aug. 2020	29 Aug. 2020
7.	Prof. Aparajita Ojha	Faculty Develop- ment Programme	Demystifying 5G for ASIC	MeiTY, Govt of India, E&ICT Academy	Online live sessions	Coordinator	24 Aug. 2020	04 Nov. 2020
8.	Prof. Aparajita Ojha	Faculty Develop- ment Programme	Deep Learning for Computer Vision	Self Sponsoring under E&ICT Academy	Online live sessions	Coordinator	17 Aug. 2020	22 Aug. 2020
9.	Prof. Aparajita Ojha	Faculty Develop- ment Programme	Artificial Intelligence & Deep Learning	Self Sponsoring under E&ICT Academy	Online live sessions	Coordinator	17 Aug. 2020	22 Aug. 2020
10.	Prof. Aparajita Ojha	Faculty Develop- ment Programme	Machine Learning for Computer Vision	MeiTY, Govt of India, E&ICT Academy	Online live sessions	Principal Coordinator (Joint programme)	17 Aug. 2020	22 Aug. 2020
11.	Dr. Dinesh Kumar V.	IPR workshop	Innovation and Patent filing	PDPM IIITDM Jabalpur	Online live sessions	Event Organizer	16 Dec. 2020	16 Dec. 2020
12.	Dr. Ravi Panwar	Workshop	TSDSI Workshop on Standards Driven Research and Innovation in India	IIT Bhilai	Online live sessions	Co- organizer from participating Institute	28 July 2020	28 July 2020





13.	Prof. Puneet Tandon	Workshop	XP-Pen D'Kalp Design Challenge 2020 (http://dkalp. org/)	PDPM IIITDM Jabalpur	Online live sessions	Coordinator (Host)	Dec. 2020	Mar. 2021
14.	Dr. P K Jain	FDP	Two Week Global Online Summer FDP as co-principal coordinator on "Advanced Optimization Techniques and Hands on With MATLAB/ SCILAB	Jointly organized by seven Electronics & others ICT Academies, MNIT Jaipur, IIT Guwahati, IIT Roorkee, IIT Kanpur, IIITDM Jabalpur, NIT Patna and NIT Warangal, July 13-24, 2020	Online	Organizer	13 July 2020	24 July 2020
15.	Prof. T. Sheorey	FDP	FDP on MechatronicsTE QUIP, RGPV	FDP on Mechatronics TEQUIP, RGPV	Online mode	Expert / Organizer	25 July 2020	27 July 2020
16.	Prof. T. Sheorey	Workshop	V Lab Workshop	V Lab Workshop	TEQIP Online mode	Expert / Organizer	26 June 2020	27 June 2020
17.	Dr. Y. S. Katharria	Convener	National webinar series on Experimental and Computational Tools for Materials Research	IIITDMJ	Online mode	Online (IIITDMJ & CURAJ)	01 June 2020	08 June 2020
18.	Dr. Nihar Kumar Mahato	COORDINAT OR	International Symposium on Recent Trends in Mathematical Sciences (ISRTMS)	Online Mode	Online mode	IIITDM Jabalpur	22 Dec. 2020	22 Dec. 2020

Invited Talks and Expert Lectures •— []



S. No.	Name	Presentation Type	Organzation Name	anzation Name Title D	
1.	Pritee Khanna	Webinar	MGMM, Jabalpur	Computer Vision – Applications and Challenges	30 May 2020
2.	Ayan Seal		Jabalpur Engineering College	Data Science using R Programming	20 August 2020
3.	Durgesh Singh	Expert Lecture	National Institute of Technology, Kurukshetra and Engineering College of Bikaner, Bikaner	Advanced Learning Tools for Data Science	29 June 2020
4.	Durgesh Singh	Expert Lecture	BIT Meshra Ranchi	Data Science and Analytics	16,18 August 2020
5.	Kusum Kumari Bharti	Expert Lecture	Arya College of Engineering and Research Center, Jaipur	FDP on Machine Learning	21-25 Sep. 2020
6.	Kusum Kumari Bharti	Expert Lecture	Rajasthan College of Engineering for Women	FDP on ML and Its Application to Health Care Structure	19-21 Sep. 2020
7.	Kusum Kumari Bharti	Expert Lecture	Geetanjali Instute of Technical Studies, Udaipur	Machine Learning & Its Aspects	23 - 25 August 2020
8.	Aparajita Ojha	Expert lecture	JUIT, Wakhanghat, HP	Industry 4.0 and Blockchain Technology	15 June 2020
9.	Aparajita Ojha	Expert lecture	GB Pant institute of Engineering and Technology, Paudi, Garhwal, Uttarakhand	Introduction to Artificial Intelligence and Deep learning	27 July 2020
10.	Aparajita Ojha	Expert lecture	PDPM IIITDM Jabalpur	Leadership: As I Understood	09 July 2020
11.	Aparajita Ojha	Expert lecture	GB Pant institute of Engineering and Technology, Paudi, Garhwal, Uttarakhand	introduction to AI and Machine Learning	31 August 2020
12.	Aparajita Ojha	Expert lecture	E&ICT Academy, Joint Programme NIT Patna, MNIT Jaipur, IIT Guwahati and IIITDM Jabalpur	Importance of LMS in Online teaching	13 August 2020
13.	Dr. Manish Kumar Bajpai	Invited talk	NIT jamshedpur	Mesh Free approach for beniign brain tumor detection and segmentation	2020
14.	Pritee Khanna	Expert Lecture	MMMUT, Gorakhpur	Medical Image Analysis	15 Oct. 2020
15.	Pritee Khanna	Expert Lecture	GSSSIET for Women, Mysuru	Biometrics - A Double- Edged Sword	09 Oct. 2020

Invited Talks and Expert Lectures



16.	Dr. Prabir Mukhopadhyay	Talk online	Gandhingram Rural Institute, Tamil Nadu		
17.	Dr. Prabir Mukhopadhyay	Talk online	PDPM IIITDM Jabalpur(ATAL AICTE funded FDP on "Leadership, Excellence and Soft Skills for Professional Career")	Technology Humanization As A Guiding Tool Towards Leadership And Excellence	11 August 2020
18.	Dr. Prabir Mukhopadhyay	Online Pannel Discussion	National Institute of Design, Bhopal	Industrial Design Education post COVID-19	22 July 2020
19.	Dr. Tripti singh	Zoom meeting	Kurukshetra University	Projects and Startups possibilities for students	29 April 2020
20.	Dr. Tripti singh	Zoom meeting	Kurukshetra University	Demand Supply and Pricing for Startups	04 May 2020
21.	Dr. Sangeeta Pandit	Webinar	PSG College of Technology, Coimbatore	Ergonomics for the engineers	28 Dec. 2020
22.	Dr. Prabir Mukhopadhyay	Invited Talk for Institute Innovation Ambassa-dor	PDPM IIITDM Jabalpur	Design Thinking	23 Dec. 2020
23.	Dr. J. Al Muzzamil Fareen	AICTE sponsored Online Faculty Develop-ment Programm on Leadership, Excellence and Soft Skills for Professional Career	PDPM IIIT DM Jabalpur	Oral Presentation and Group Communication Skills – Key to Professional Success	9 Sep. 2020
24.	Dr. J. Al Muzzamil Fareen	AICTE sponsored Online Faculty Develop-ment Programme on Leadership, Excellence and Soft Skills for Professional Career	PDPM IIIT DM Jabalpur	Essentialities of Personality Development: Non Verbal Communication Skills	10 Sep. 2020
25.	Dr. Mamta Anand	Faculty Develop-ment Program	Literature for Development of Mind Dept. of English, Govt. Science College, Jabalpur World Bank, Dept. of Higher Education, Govt. of M.P. Bhopal	Literature and Creativity - New Perspective, Creation of Mind an Energy system & Language the OS of Human Mind	19 -22 Feb. 2021

Invited Talks and Expert Lectures • _____



26.	Dr. Irshad Ahmad Ansari	Online Expert Lecture in FDP - "Emerging Trends and Techniques in Research"	SIRT Bhopal	How to write research proposal	25 June 2020
27.	Dr. Irshad Ahmad Ansari	Online Seminar on "Data Protection & Cyber Security"	IES College of Technology , Bhopal	Video Protection: Current Trends & Future Challenges	30 May 2020
28.	Dr. Irshad Ahmad Ansari	Online Expert Lecture under TEQIP-III	Indira Gandhi Government Engineering College Sagar (M.P.)	Introduction to Multimedia Processing & Research Avenues & Challenges in Multimedia Processing	01 August 2020 & 02 August 2020
29.	Dr. Manoj Singh Parihar	Invited Talk	RTU Kota	Rectifier Integrated Antennas for RF Energy Harvesting/Wireless Power Trasfer	13 Feb. 2021
30.	Dr. Manoj Singh Parihar	Invited Talk	RTU Kota	Basic to recent developments in antenna technology	2 Dec. 2021
31.	Dr. Manoj Singh Parihar	Invited Talk	St Xavier Technical Institute Mumbai	Basic to current advances in antenna technology	12 July 2020
32.	Dr. Manoj Singh Parihar	Invited Talk	MITS Gwalior (online)	Rectfier Integrated Antennas for RF Energy Harvesting/ Wireless Power Trasfer	19 Sep. 2020
33.	Dr. Manoj Singh Parihar	Expert Lecture	MITS Gwalior (online)	Basic to Next Generation Antenna trends	2 August 2020
34.	Dr. Varun Bajaj	Expert talk	ECE and CS deaprtment, G. H. Raisoni College of Engineering, nagpur	Machine learning Algorithm & it's Application in Biomedical	22 January 2021
35.	Dr. Varun Bajaj	Expert talk	Expert talk on Artificial Intelligence Application in Biomedical System, AICTE Training and Learning (ATAL) Academy Sponsored Online Faculty Development Programm,	Artificial Intelligence Application in Biomedical System	5-6 January 2021
36.	Dr. Varun Bajaj	Expert talk	AICTE sponsored STTP on Applications of AI in Electrical & Electronics	Artificial Intelligence Application in Biomedical System	4-5 Nov. 2020
37.	Dr. Varun Bajaj	Expert talk	ECE and CS	Machine Leaning application in healthcare	24 Oct. 2020
38.	Dr. Varun Bajaj	Expert talk	Short Term Training Program (STTP) under RGPV TEQIP III,	Signal Processing, webinar	1-2 Sept. 2020



39.	Dr. Varun Bajaj	Expert talk	Short Term Training Program (STTP) under RGPV TEQIP,	Recent Trends of Signal Processing and Machine Learning with Biomedical Application,	4-5 July 2020
40.	Dr. Varun Bajaj	Expert talk	under RGPV TEQIP III,	Non-stationary signal processing for Computer aided design,	16 June 2020
41.	Dr. Varun Bajaj	Expert talk	Sagar Institute Bhopal	Identification of neurological disorders using EEG signals	30 April 2020
42.	Dr. Koushik Dutta	Webneir (Expert Lecture)	Pailan Technical campus & Pailan College of Management and Technology, Kolkata, India	An Overview on BJT Fabrication Technology	13 Sept. 2020
43.	Dr. Matadeen Bansal	Invited Talk	MITS Gwalior	Cognitive NOMA with Cooperative Relaying	23 Sep. 2020
44.	Dr. Matadeen Bansal	Webinar	Sagar Group of Institutions Bhopal	Cognitive Radio NOMA	25 July 2020
45.	Dr. Matadeen Bansal	Invited Talk	Gyan Ganga Institute of Technology and Science Jabalpur	Machine Learning in Communcation	06 Junary 2021
46.	Dr. Sachin Kumar Jain	Expert Lecture	GGITS	Smart Energy Systems	19 August 2020
47.	Dr. Sachin Kumar Jain	Expert Lecture	LNCT Bhopal	AI Applications in Power Systems	05 Nov. 2020
48.	Dr. Sachin Kumar Jain	Expert Lecture	IIT BHU	Data Analytics in Smart Grid	03 March 2021
49.	Dr. Sachin Kumar Jain	Expert Lecture	LNCT Bhopal	Role of Data Analytics in Smart Grid	24 March 2021
50.	Dr. Navjeet Bagga	Speaker in a Faculty Develepoment Program	Basics of Digital CMOS Circuits	Digital Design and Emerging Trends in Signal Processing (Faculty Development Program)	10-22 August 2020
51.	Dr. Navjeet Bagga	Speaker in a Technical Session	Emerging Trends in Device Engineering for Improved Performances	STTP on Emerging Trends in VLSI Design	15 Sep. 2020
52.	Dr. Ravi Panwar	Invited talk	IIT BHU	Progress in advanced electromagnetic structures for stealth application: An effort towards Self-reliant India	31 Dec. 2020
53.	Dr. Ravi Panwar	Expert talk	IEEE International e- Conference on "Innovations in Engineering & Technology" (ICIET-20), Sponsored by AICTE, Jabalpur	An effort towards electronic waste management under the Swacch Bharat Mission of Government of India	26 Nov. 2020

Invited Talks and Expert Lectures



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54.	Dr. Ravi Panwar	Invited talk	IIIT Pune	Progress in frequency selective surface based smart electromagnetic structures for airborne stealth applications	10 Nov. 2020
55.	Dr. Ravi Panwar	Invited talk	Neelkanth Institute of Technology Meerut	Electronic Waste Management: A Massive Initiative Towards Swachh Bharat Mission of Government of India	
56.	Dr. Ravi Panwar	Invited talk	IIT Roorkee	Design, development, and performance evaluation of metamaterial absorbing structures	
57.	Dr. Ravi Panwar	Expert talk	IIT Bhilai	Electromagnetic interference shielding solutions and testing technologies	28 July 2020
58.	Dr. Dinesh Kumar V.	Expert Lecture	STTP on Evolution of RF Electromagnetics from Microwave to mmWave Technologies at VJTI Mumbai	Electromagnetic Simulation using FDTD Methos	23 Dec. 2020
59.	Dr. Dinesh Kumar V.	Expert Lecture	International Symposium on Antenna Design for Future Generation Wireless Communication at VNIT Nagpur	Nanophotonics and Plasmonics in Furture Communication Systems	05 March 2021
60.	Dr. D P Samajdar	Invited Talk	IIT Bombay	Nanostructured Solar Cells	20 Nov. 2020
61.	Dr. D P Samajdar	Invited Talk	SGSITS Indore	Modelling of Nanoscale Devices for Low Power Applications	12 Dec. 2020 and 19 Dec. 2020
62.	Prof. Puneet Tandon	Expert Lecture	Terna Engineering College	Smart Manufacturing	28 May 2020
63.	Dr. P K Jain	Expert talk	Department of Industrial and Production Engineering, National Institute of Technology – Jalandhar, under TEQIP-III	Studies related to STL & its repairing	
64.	Dr. Amarnath	Invited Talk	K.S.Institute of Technology	Enhancement in the performance of the journal bearing using microwave irradiation method	27 - 31 July 2020
65.	Dr. Amarnath	Expert lecture	Vidhyavardhaka college of engineering	Introduction to sensor signals and data acquisition	27-29 July 2020



66.	Dr. P K Jain	Expert talk	Department of Industrial and Production Engineering, National Institute of Technology – Jalandhar, under TEQIP-III	Digital Transformation in Manufacturing and Product Life Cycle Management	20-24 July 2020
67.	Dr. P K Jain	Expert talk	Jointly organized by seven Electronics & ICT Academies, MNIT Jaipur, IIT Guwahati, IIT Roorkee, IIT Kanpur, IIITDM Jabalpur, NIT Patna and NIT Warangal	Introduction to MATLAB for Optimization Techniques	13-24 July 2020
68.	Dr. Manu Srivastava	Webinar	Manav Rachna International Institute of Research and Studies	Additive Manufacturing	30 August 2020
69.	Prof. Puneet Tandon	Expert Lecture	Gyan Ganga Institute of Technology and Sciences (GGITS)	Hybrid and Smart Manufacturing	28 August 2020
70.	Prof. Puneet Tandon	Expert Lecture	Maulana Azad National Institute of Technology	Design Thinking	28 Sep. 2020
71.	Dr. P K Jain	Expert talk	Human Resource Development Centre, Doctor Harisingh Gour Vishwavidyalaya Sagar,	Google tools for online teaching / learning	31 August- 6 Sept. 2020
72.	Dr. P K Jain	Expert talk	TRINITY institute of technology and research, Bhopal under TEQIP-3	Additive Manufacturing and its Applications	28 August - 1 Sep. 2020
73.	Dr. P K Jain	Expert talk	Gyan Ganga Institute of Technology and Science, under Atal Academy AICTE Sponsored	Additive Manufacturing and its Applications and Computational Intelligence in CNC	24-28 August 2020
74.	Dr. Amarnath	Invited Talk	Bnglr inst of tech	Experimental Investigations to Assess the Effect of Nano material Additives on the Tribological Performance of Lubricating Oil	31 August 2020 to 4 Sept. 2020.
75.	Dr.Harpreet Singh	ORAL	NITTTR Chandigarh	Electrochemical Honing (ECH), in STC "ADVANCES IN MFG METHODS"	7-11 Sep. 2020
76.	Dr. P K Jain	Expert talk	Dr. Bhimrao Ambedkar University Agra	Introduction to Additive manufacturing" during	7-11 Sept. 2020
77.	Dr. P K Jain	Expert talk	SKITM&G Rajasthan Technical University Kota	Additive manufacturing: Future perspective	7-11 Sept. 2020
78.	Dr. P K Jain	Expert talk	Truba Institute of Engineering & Information Technology Bhopal	Enhanced Computational Facility for CNC Machines	18 Sept. 2020

Invited Talks and Expert Lectures •—



79.	Dr. P K Jain	Expert talk	NIT Jamshedpur under TEQIP-3	Programming Basics in MATLAB and App Development through MATLAB	1-6 Sept. 2020
80.	Dr. P K Jain	Expert talk	Indira Gandhi Engineering College Sagar	Basics of CNC Machining	15 Sept. 2020
81.	Dr. P K Jain	Expert talk	Poornima College of Engineering Jaipur	3D Printing	14-18 Sept. 2020
82.	Dr. P K Jain	Expert talk	Bhartiya Vidyapeeth College of Engineering	Additive Manufacturing: Issue and Challenges	14-18 Sep. 2020
83.	Dr. P K Jain	Expert talk	Bhartiya Vidyapeeth College of Engineering	Recent Research trends in Additive Manufacturing	14-18 Sept 2020
84.	Dr. P K Jain	Expert talk	Vaishnavi Institute of Technology and Science, Bhopal under TEQIP-3	Additive Manufacturing and its Application	1-3 Sept. 2020
85.	Dr. P K Jain	Expert talk	Indira Gandhi Engineering College Sagar	Computational Intelligence in CNC	15 Sept. 2021
86.	Dr. P K Jain	Expert talk	National Institute of Technology Manipur, Imphal	Additive Manufacturing: Issues and challenges	3-7 Nov. 2020
87.	Dr. P K Jain	Expert talk	G H Raisoni College of Engineering, Nagpur	Biomedical Applications of Additive Manufacturing	2-7 Nov. 2020
88.	Prof. Puneet Tandon	Expert Lecture	National Institute of Technology Hamirpur	Hybrid Manufacturing	25 Nov. 2020
89.	Dr. P K Jain	Expert talk	Rajkiya Engineering College, Mainpuri	Additive Manufacturing: Fundamentals and Processes	21-25 Dec. 2020
90.	Dr. P K Jain	Expert talk	National Institute of Technology Jalandhar	Pre-Processing for 3D Printing	14-18 Dec. 2020
91.	Dr. P K Jain	Expert talk	Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh	3D Printing Data Formats	07-19 Dec. 2020
92.	Prof. Puneet Tandon	Expert Lecture	Gyan Ganga Institute of Technology and Sciences (GGITS)	Metal Additive Manufacturing	24 August 2020
93.	Prof. Vijay Kumar Gupta	Expert Talk	NIT Jalandhar	Robotics and Automation	22 July 2020
94.	Prof. Puneet Tandon	Expert Lecture	Jointly organized by North- Eastern Hill University, Shillong and Dr. B.R. Ambedkar National Institute of Technology Jalandhar	The Role of Teachers as Facilitators in the present era of Digital Technologies	21 Oct. 2020
95.	Prof. Puneet Tandon	Expert Lecture	JAWAHAR R-ABI RVKY RAFTAAR Agribusiness Incubator, IABM, JNKVV, Jabalpur	Product Design and Design Thinking	20 Nov. 2020



96.	Dr. Mohd. Zahid Ansari	Invited Talk	NIT	Piezoresistivity and its applications in N/MEMS	18 August 2020
97.	Prof. Puneet Tandon	Expert Lecture	Gyan Ganga Institute of Technology and Sciences (GGITS), Jabalpur	Product Development	15 Dec. 2020
98.	Prof. Puneet Tandon	Expert Lecture	Visvesvaraya National Institute of Technology, Nagpur	Hybrid Manufacturing	14 Dec. 2020
99.	Dr. Amarnath	Invited Talk	CMR Hyd	Advances in Mechanical ENGINEERING & Manufacturing Processes	11 - 13 May 2020
100.	Dr. Tushar Choudhary	Online	Bharti college of Engineering & Technology	Hybrid Gas Power cycle and Renewwable Energy Sources	11 June 2020
101.	Dr. Amarnath	Invited Talk	Kongu Engineering College,	Introduction to Sensors and Signal processing techniques for condition monitoring of rotating machines	07-11 Sept. 2020
102.	Dr. P K Jain	Expert talk	GLA university Mathura	AM Data Preparation and Application	19-24 July 2020.
103.	Dr. Manu Srivastava	Expert speaker for FDP	KPR Institute of Engineering and Technology, Coimbatore	Design of Experiments	10 July 2020
104.	Prof. Puneet Tandon	Expert Lecture	SKITM&G, Jaipur and Rajasthan Technical University (RTU), Kota	Hybrid Manufacturing	09 Sep. 2020
105.	Prof. Puneet Tandon	Expert Lecture	Raisoni Group of Institutions	Design Thinking	09 June 2020
106.	Prof. Puneet Tandon	Expert Lecture	IPS Academy, Institute of Engineering & Science	Research and Projects Related to 3D Printing	07 Oct. 2020
107.	Prof. Puneet Tandon	Expert Lecture	Oriental Institute of Science and Technology	Design Thinking	07 Sep, 2020
108.	Prof. Vijay Kumar Gupta	Guest Lecture	G.H. Raisoni College of Engineering Nagpur	Energy Harvesting and Self Sensing	4 August 2020
109.	Prof. Puneet Tandon	Expert Lecture	JC Bose University of Science and Technology, YMCA Faridabad	Role of Teachers in the present era of Digital Technologies	02 Nov. 2020
110.	Dr. Manu Srivastava	Training programme	Ordnance Factory, Khamaria, Jabalpur	Training programme for quality professionals - quality guide;	12-15 January 2021
111.	Dr. Ponappa K	Training programme	Ordnance Factory, Khamaria, Jabalpur	Training programme for quality professionals - quality guide;	12-15 January 2021
112.	Dr. Sujoy Mukherjee	Lecture	Ordinance Factory Training Center, Khamaria	Technical Drawing and Specifications	20 January 2021

Invited Talks and Expert Lectures



113.	Dr. P K Jain	Expert talk	Lakireddy Bali Reddy	MATLAB programming for	25 Jan.
		·	College of Engineering, Mylavaram, Andhra Pradesh	STL file error repair and	to 06 Feb.
114.	Dr. P K Jain	Expert talk	Lakireddy Bali Reddy	Recent research trends in	2021 25 Jan.
	J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Expert talk	College of Engineering, Mylavaram, Andhra Pradesh	Additive Manufacturing	to 06 Feb. 2021
115.	Dr. Tushar Choudhary	online	G H Raisoni College of Engineering	Hybrid Gas Power cycle	1 Feb. 2021
116.	Prof. Vijay Kumar Gupta	Expert Lecture	Arya Institute of Engineering Technology and Management Jaipur	Robotics: Industry 4.0 Applications	11 Feb. 2021
117.	Prof. Vijay Kumar Gupta	Expert Lecture	Arya Institute of Engineering Technology and Management Jaipur	Robotics: Introduction	10 Feb. 2021
118.	Prof. Puneet Tandon	Expert Lecture	Pillai College of Engineering, New Panel, Navi Mumbai	Design Thinking in Product Design	15 Feb. 2021
119.	Dr. P K Jain	Expert talk	Government College of Engineering Bargur, Krishnagiri, Tamilnadu	MATLAB applications in programming	15-20 Feb. 2021
120.	Dr. P K Jain	Expert talk	PS Academy, Indore	STL file Manipulation and Data Preparation for 3D Printing	2-7 March 2021
121.	Prof. Puneet Tandon	Expert Lecture	Central Institute of Petrochemicals Engineering & Technology (CIPET), Korba	Dieless Manufacturing	05 March 2021
122.	Prof. Vijay Kumar Gupta	Expert Lecture	NIT Hamirpur	Condition Monitoring: Basics	22 March 2021
123.	Dr. P K Jain	Expert talk	Department of Mechanical Engineering, Sagar Institute of Science Technology and Research SISTec-R, Bhopal	Additive Manufacturing and it's Applications	12-13 March 2021
124.	Prof. Puneet Tandon	Expert Lecture	Department of Mechanical Engineering, Maulana Azad National Institute of Technology, Bhopal	Design Thinking	16 March 2021
125.	Dr. P K Jain	Expert talk	IET, Dr. Bhimrao Ambedkar University, Agra (India)	Additive Manufacturing and it's Applications	20-21 March 2021
126.	Dr. Y. S. Katharria	Expert Lecture	J.C.Bose University of Science and Technology, YMCA, Faridabad	Gallium nitride epilayers for blue light-emitting diodes	06 Nov. 2020
127.	Dr. Y. S. Katharria	Invited Talk	V. B. S. Purvanchal University, Jaunpur	GaN light-emitting diodes: Some issues and resolutions	14 June 2020



S. No.	Inventor Names	Patent No.	Title	Status	Year	Date of Filing
1.	Mr. Ajay, Mr. Tanuj Satti, Mr. Tushar Choudhary, Mr. Ranjit Varma, Mr. Virendra Kumar Shrivastava, Mr. G. Sayiram, Ms. Pallavi Ranjan, Mr. Anivel Sambasivam and Mr. Ravi Kant Mittal	202111006553	Bioprinting Device and System For Wound Healing	Granted	2021	13-Feb- 2021
2.	Prof. Tanuja Sheorey, Prof. Vijay Kumar Gupta and Mr. Rakesh Kumar Haldkar	202021016334	A Wearable Blood Extraction and Sampling Device and Method of Its Operation Thereof	Filed	2020	15-Apr- 2020
3.	Dr. Prabin Kumar Padhy and Mr. Bharat Verma	202021015342	System and Method For Online Tuning of Controller	Filed	2020	23- May- 2020
4.	Abhishek Pahuja, Manoj Parihar, Dinesh Vishwakarma	202021024822	Solar Cell Device With Improved Absorption and Trapping Efficiency and Method of Its Working Thereof	Filed	2020	12-Jun- 2020
5.	Ravi Panwar and Ravi Yadav	202021026301	A Process For Developing Broadband Microwave Absorbing Composite Using Heterogeneous Electronic Waste of Discarded Batteries and A Product Thereof	Filed	2020	22-Jun- 2020
6.	Dr. Shivdayal Patel and Prof. Tanuja Sheorey	202021053251	Two-point Oxygen and/or Air Suction Cardio-pulmonary Resuscitation (CPR) Device	Filed	2020	12-Jul- 2020
7.	Mr. Nimit Nitinbhai Shah and Prof. Puneet Tandon	202021053250	Fluid Dispensing Device	Filed	2020	12-Jul- 2020
8.	S. S. Panwar, A. Gupta, M. A. Ahad, T. Mathur, S. Kolgaonkar, Puneet Tandon	202021030820	A Frugal Laundry System and Method of Its Operation Thereof	Filed	2020	20-Jul- 2020



9.	Mr. Ravi Yadav	202021044157	Process For Producing	Filed	2020	10-Sep-
	and Dr. Ravi Panwar		X-band Radar Absorbing Material			2020
10.	Biswajeet Mukherjee and Monika Chauhan	202021039785	Dielectric Resonator Antenna (DRA) System and Method of Designing Thereof	Filed	2020	14-Sep- 2020
11.	Mr. Nimit Nitinbhai Shah and Dr. Prabir Mukhopadhyay	202021041252	A Bicycle Convertible to a Tricycle Cart System and Method of Its Operation Thereof	Filed	2020	23-Sep- 2020
12.	Rishika Kedia, Puneet Tandon	202021041871	A Collapsible Garment Hanger	Filed	2020	26-Sep- 2020
13.	Mr. Yogesh Kumar Bhanu, Prof. Puneet Tandon, Mr. Nimit Nitinbhai Shah, Mr. Prasad Gadve, and Dr. Vipul Kalley	202021042365	A Device To Treat Pneumo-hydrothorax	Filed	2020	29-Sep- 2020
14.	Mr. Nimit Nitinbhai Shah and Dr. Prabir Mukhopadhyay	202021042488	A Self Configurable Modular Trasnporation System	Filed	2020	30-Sep- 2020
15.	Mr. Ravi Yadav, Dr. Ravi Panwar and Prof. Dharmendra Singh	202021050272	Method For Manufacturing Radar Absorbing Material Using Microwave Heat Treated Electronic Waste	Filed	2020	18- Nov- 2020
16.	Dr. Biswajeet Mukherjee and Ms. Monika Chauhan	202021050396	System and Method For Wireless Communication Using a Three Port Dielectric Resonator Antenna	Filed	2020	19- Nov- 2020
17.	Mr. Nimit Nitinbhai Shah, Mr. Prasad Gadve, Mr. Yogesh Kumar Bhanu and Dr. Prabir Mukhopadhyay	202021051605	Assistive Walker For Walking On Inclined Surfaces	Filed	2020	26- Nov- 2020
18.	Mr. Yogesh Kumar Bhanu And Prof. Puneet Tandon	202021052098	Automated External Cardiac Defibrillation System Based On High- current Rectilinear Biphasic Waveform and Method of Operation	Filed	2020	30- Nov- 2020
19.	Yogesh Kumar Bhanu and Puneet Tandon	202121001563	A System For Supporting Body Movements While Using a Toilet Seat	Filed	2021	13-Jan- 2021



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20.	Varun Chaudhary and Ravi Panwar	202121001685	A Process For Producing A Customized Conformal Electromagnetic Interference Shielding Structure	Filed	2021	13-Jan- 2021
21.	Rajat Jaiswal and Dr. Irshad Ahmad Ansari	202121002300	Water Purifier With On-demand Total Dissolved Solids and Consumption Tracking	Filed	2021	18-Jan- 2021
22.	Harshit Garg, Siddhant Lohia, Kuhu Pyasi, Varun Bajaj	202121001774	System and Method For Assisting In Parking of A Vehicle	Filed	2021	14-Jan- 2021
23.	Abhishek Pahuja, Manoj Parihar, Dinesh V	202121001817	Beam Scanning Antenna and A Method Thereof	Filed	2021	14-Jan- 2021
24.	Tejkaran Narolia, Vijay Gupta	202121001943	System and Method For Harvesting Energy	Filed	2021	15-Jan- 2021
25.	Saurabh Yadav, Vijay Gupta	202121009802	A Multipurpose Hand Tool	Filed	2021	9-Mar- 2021
26.	Ms. Shivangi Pande, Mr. Puluguju Daniel Akhil Kumar and Dr. Biswajeet Mukherjee	202121012265	Asymmetric Umbrella With A Strain Reducing Hand Band	Filed	2021	22- Mar- 2021
27.	Ms. Shivangi Pande, Mr. Akshay Kenjale, Mr. Aditya Mathur, Mr. Puluguju Daniel Akhil Kumar, Ms. Maitrayee Gautami, Mr. Nikhil Krishna Reddy and Dr. Biswajeet Mukherjee	202121012746	System and Method For A Walking Aid Providing Assisted Communication For A User	Filed	2021	24- Mar- 2021
28.	Mr. Sachin Gupta and Dr. Prabir Mukhopadhyay	202121012756	Storage Cum Bed System	Filed	2021	24- Mar- 2021
29.	Mr. Suyash Satyakant Chavan, Ms. Manisha and Dr. Prabir Mukhopadhyay	202121012753	Cleansing Apparatus For One Hand Amputee	Filed	2021	24- Mar- 2021
30.	Ms. Krutika Shet, Mr. Samanta Hire, Mr. Shrunoti Tatiya and Dr. Prabir Mukhopadhyay	202121013355	Fluid Dispensing Cleaning Apparatus	Filed	2021	26- Mar- 2021



Design

S. No.	Inventor Names	Design No.	Title	Status	Year	Date of Filing
1.	Mr. Nimit Nitinbhai Shah, Mr. Prasad Gadve, Mr. Yogesh Kumar Bhanu And Dr. Prabir Mukhopadhyay	335567-001	WALKING FRAME (without wheel)	Filed	2020	26-Nov- 2020
2.	Mr. Nimit Nitinbhai Shah, Mr. Prasad Gadve, Mr. Yogesh Kumar Bhanu And Dr. Prabir Mukhopadhyay	335567-002	WALKING FRAME (with wheel)	Filed	2020	26-Nov- 2020
3.	Mr. Nimit Nitinbhai Shah and Dr. Prabir Mukhopadhyay	336607-001	TRICYCLE CART	Filed	2020	21-Dec- 2020
4.	Mr. Mr. Harshit Sharma and Dr. Sangeeta Pandit	338101-001	TABLE	Filed	2021	28-Jan- 2021
5.	Mr. Lovish Bandwal, Mr. Pranoti Sonawane, Mr. Yagnesh Gohil and Dr. Prabir Mukhopadhyay	338277-001	WALKING STICK	Filed	2021	29-Jan- 2021

Session Chaired



- 1. Dr. Kusum Kumari Bharti, Big Data Analytics with Machine Learning, CIS, 05/09/2020 and 6/9/2020.
- 2. Dr. Ravi Panwar, Microwave absorbing structures, National Conference on Microwave Absorbing Materials, IIT Roorkee, 8/23/2020
- 3. Dr. D P Samajdar, CCSN 2020, 17-10-2020.
- 4. Dr. Ravi Panwar, Communication Systems, IEEE International e-Conference on "Innovations in Engineering & Technology" (ICIET-20), Sponsored by AICTE, Jabalpur, 26-11-2020
- 5. Dr. Varun Bajaj, Signal Processing, IEEE International Conference on Adnvanced Communication Technologies and Signal Processing (ACTS -2020), 4-6 Dec 2020, NIT Silchar, 6/10/2020.
- 6. Dr. Prashant K. Jain, 2nd International Conference on Recent Advances in Mechanical Engineering, (RAME-2020), Delhi Technological University, India, International conference, 2020.
- 7. Dr. Prashant K. Jain, Technical Session in the "International Conference on Industrial and Manufacturing Systems" (CIMS-2020), organised by the Department of Industrial and Production Engineering, Dr. B.R. Ambedkar NIT Jalandhar, International, conference, 2020.

- 8. Dr. Amarnath, International Conference (ICOFTIME2020) Presidency University, Bengaluru. 2020, 11th and 12th September 2020 in virtual mode.
- 9. Dr. Ponappa K, ICMMM-2020, Conference BITS Tamilnadu, 2020, 9-10-10-2020.
- 10. Puneet Tandon, Application of Design Knowledge in Practice (Automotive, Aerospace, Biomedical Devices, etc.), 8th International Conference on Research into Design (ICoRD' 21), IDC School of Design, Indian Institute of Technology Bombay, India, 2021, 10-01-2021.
- 11 Dr. Tushar Choudhary, Session 8, International Conference on " Advancement in Materials, Manufacturing and Energy Engineering "ICAMME-2021, 18 - 20th February, 2021,.
- 12. Dr. Tushar Choudhary, Session 2, 1st International Conference on Mechatronics and Artificial Intelligence (ICMAI - 2021) at SGT University, 2021
- 13. Dr. Prabir Mukhopadhyay, Application of Design Knowledge in Practise, 8th International Conference on Research Into Design, IDC School of Design, IIT Bombay, 2021.

Workshop and Events •



Organized under Institute's Innovation Council

- 1. Orientation Session on National Education Policy (NEP), 24/11/2020, IIC 3.0 Council Members.
- 2. IPR workshop on Patenting software related inventions, 22/10/2020, Speaker: Ms. Rekha, patent attorney.
- 3. Orientation Session on IPR, 10/12/2020, Speaker Dr. Dinesh Kumar V.
- 4. IPR workshop on "Innovation and Patent Filing", 16/12/2020, Speaker: Mrs. Sukku Singh a patent attorney.
- 5. IPR Workshop on Patent commercialization and Technology Transfer, 22/12/2020, Speaker: Mrs. Aditi Gehlot, patent attorney.
- 6. Orientation Session on Design Thinking by The Innovation Ambassador, 23/12/2020, Speaker: Dr. Prabir Mukhopdhyay.
- 7. Success Story Telling (Startup), 23/12/2020, Speaker: Mr. Suteerth Tripathi, Founder-Director of Inochi Care Pvt. Ltd (Alumni of the Institute).

- 8. Success Story Telling (Startup), 23/12/2020, Speaker: Mr. Atul Gupta, CTO & Director, Robokriti India Pvt Ltd, Jabalpur, MP (Alumni of the Institute).
- 9. My Story Motivational Session by Successful Innovators, 28/12/2020, Speaker: Mr. Ratandeep, Cofounder, Next Big Innovation Labs (Alumni of the Institute).
- 10. Motivational Session by Successful Innovator, 28/12/2020, Speaker: Dr. Amal Chaturvedi, Senior Manager with Roche Sequencing Solutions based at California, USA (Alumni of the Institute).
- 11. Orientation Session on "NISP: National Innovation & Start-up Policy", 31/12/2020, Speaker: Dr. Dinesh Kumar V.
- 12. Panel Discussion on Atmanirbhar Bharat- Vocal for Local, 31/12/2020, Dr. Dinesh Kumar V.
- 13. IPR workshop on Innovation and Patent ability Criteria, 11/01/2021, Speaker: Mr. Shashwat Parihar, Patent Attorney.

Convocation 2020



The 11th Convocation of the Institute was held this year for 2020 batch passed out students. The occasion was graced by the Hon'ble Defence Minister, Government of India Shri Rajnath Singh Ji and Shri Deepak Ghaisas, Chairperson, Board of Governors of the Institute along with other dignitaries. Parents and guardians of the graduating Students and distinguished guests from Jabalpur and other parts of India also attended the event through online mode.

A total number of 370 degrees were awarded. Branch/Programme wise details are as follows: -

Bachelor of Technology (B.Tech)

Sr. No.	Discipline	Total
1.	Computer Science & Engineering	98
2.	Electronics & Communication Engineering	70
3.	Mechanical Engineering	76
4.	B. Des	25
	Total	269

Master of Technology (M.Tech.)

Sr. No.	Discipline	Total
1.	Computer Science & Engineering	13
2.	Electronics & Communication Engineering	18
3.	Mechanical Engineering	25
4.	Mechatronics Engineering	8
5.	Master of Design	24
	Total	88

Doctor of Philosophy (Ph.D.)

Sr. No.	Discipline	Total
1.	Computer Science & Engineering	3
2.	Electronics & Communication Engineering	5
3.	Mechanical Engineering	2
4.	Natural Science (Mathematics)	2
5.	Natural Science (Physics)	1
	Total	13

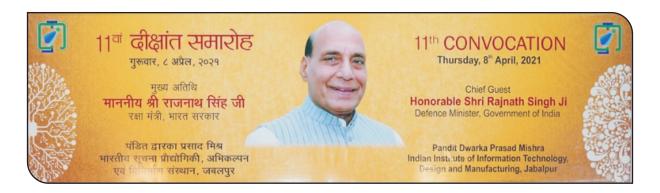
Medals / Prizes



S. No.	Name of Medal / Prize	Name of recipient	Criterion	
1	Chairman's Gold Medal (CGM)	Ms. KANIKA DHIMAN	Best Academic Performance in the Graduating Class among All Discipline of the Undergraduate Programme.	
2	Director's Gold Medal (DGM)	Mr. MANISH PRADHAN	Best All-round Performance in the Graduating Class among All Discipline of the Undergraduate Programme.	
		Mr. MANISH PRADHAN		
	Mr. TANAI MATHUR			
	D&M Proficiency	Mr. AMISH KUMAR NAIDU	The best cross disciplinary project in the	
3	Gold Medal (UG)	Mr. ANIKET MISHRA	Graduating class of undergraduate programme.	
		Mr. SHIVAM GARG		
		Mr. KESHAV YADAV		
4	D&M Proficiency Gold Medal (PG)	Mr. ANKIT NAYAK	The best cross-disciplinary thesis from among the graduating MTech / MDes / Ph.D. students.	
		Ms. KANIKA DHIMAN		
		Mr. JAY MANAK BOHRA		
_	Academic Performance Proficiency Silver	Mr. MANISH PRADHAN	Outstanding Academic Performance in All	
5		Proficiency Silver Mr. PAI NAMIT NARASIMHAN study.	Discipline of the Undergraduate Programme of study.	
	Medal	Ms. TANISHQA BOBDE		
		Ms. UNS JAYA PANDIT		
6	IIITDM Proficiency	Mr. AYASKANT PANIGRAHI	Best Project in the Graduating Class among the	
6	Prize (UG)	Mr. RISHAB BAJPAI	Undergraduate Programme of study.	
		Mr. GOURAV SIDDHAD		
7	IIITDM Proficiency Prize (PG)	Mr. RAJESH KUMAR	Best Thesis work in the Postgraduate Programme of study.	
		Mr. AMOL		
8	Director's Silver Medals	Mr. AMIT TAPRIA	Outstanding Performance in Cultural Activities in the Graduating Class among all discipline of the Undergraduate and Postgraduate Programme of study.	
9	Director's Silver Medals	Ms. KANIKA DHIMAN	Outstanding Performance in Games and Sports in the Graduating Class among all discipline of the Undergraduate and Postgraduate Programme of study.	

Glimpses of 11th Convocation•

















Scholarship, Freeships & 📖 Financial Assistance



Academic year of students starts from the month of August & ends in the month of July.

The expenses incurred for MCM & Tuition Waiver are

- From April 2020 to July 2020 1. for financial year 2019-20.
- 2. From Aug 2020 to March 2021 — for financial year 2020-21.
- 1. Expenses incurred from April 2020 to July 2020 (in the Year 2019-20 for the Year 2019-20).

S. No.	B.TECH Batch	Total No. of Students eligible to get Merit Cum Means for F.Y. 2019-20	Amount paid for 4 months @Rs.1000/- per month	Total Amount Paid
1	2016	61	4000.00	2,44,000.00
2	2017	55	4000.00	2,20,000.00
3	2018	44	4000.00	1,76,000.00
4	2019	89	4000.00	3,56,000.00
			Total Rs.	9,96,000.00

Scholarship, Freeships & .___ Financial Assistance



Expenses incurred from August 2020 to March 2021 for (F.Y. 2020-21.) 2.

S. No.	B.TECH Batch	Total No of Students eligible to get Merit Cum Means F.Y. 2020-21.	Amount paid for 8 months @Rs.1000/- per month	Batch 2017 Tuition Waiver Rs.49,000/- (Sem-I&II) Batch 2018 Tuition Waiver Rs.53,900/- (Sem-I&II) Batch 2019 Tuition Waiver Rs.59,290/- (Sem-I&II) Batch 2020 Tuition Waiver Rs.59,290/- (Sem-I&II)	Total amount paid
			(A)	(B)	A+B
1	2017	64	5,12,000.00	62,72,000.00	67,84,000.00
2	2018	62	4,96,000.00	64,68,000.00	69,64,000.00
3	2019	89	6,56,000.00	1,05,53,620.00	1,12,09,620.00
	Total:				

Total amount paid towards MCM Scholarship including Tuition Waiver is Rs. 9,96,000 + Rs. 2,49,57,620/- (Rs. 2,59,53,620.00)

Madhya Pradesh State Scholarship M.P. Portal Online 2.0 under the Scheme: Mukhyamantri Medhavi Vidharthi Yojna-2020-21.

S.No	S.No No of students		Year	
1.	73	1,00,38,180.00	2020-21	

Ministry of Social Justice and Empowerment, New Delhi (Payments of Students Scholarship Year 2020-21.

S. No.	Batch	No of students	Amount (in Rs.)
1.	2019	10	1,50,000/-
2.	2018	10	1,30,000/-
3.	2016	10	3,86,400/-

Students' Festivals and Events •



Apart from concentrating on academic activities, the Institute also places emphasis on an allround development of its students. The Institute has, therefore, created excellent infrastructure for a variety of co-curricular and extra-curricular activities such as sports, student publications, Robotics as well as cultural and welfare programmes.

There are three areas of Students Gymkhana viz. Cultural, Science and Technology, and Sports. At present twenty three clubs of students gymkhana have been functioning and being administered by students under the guidance of faculty counsellors of respective area.

STUDENTS' GYMKHANA

Students' Gymkhana is constituted to evolve a disciplined self-governance for carrying out various extracurricular in-campus activities and to establish a responsible and accountable student body. Students' Gymkhana is governed by Student Senate which is constituted in a democratic way through elections among each discipline and batch of the students. Student Senate members are elected through direct ballot voting.

Student gymkhana is headed by Dean (Students). Dean (Students) chairs all the meetings of the Student Senate and guides student representatives in organizing gymkhana activities throughout the year. Apart from this, three faculty members designated as Sports, Cultural and Technical Counselors, look after sports, cultural and technical activities respectively and respective major festivals organized by the students' gymkhana.

Due to Covid-19 Pandemic and lockdown, Institute ran its academic activities through online mode and in the absence of students in the campus lots of events/activities related to Cultural, Science & Technology could not performed. However, some events held through online mode along with some sports activities held following social distancing. New council of student senate has been constituted. They are preparing new activity calendar of various events which shall be started from new session (Academic year 2021-22).

CULTURAL CLUBS:

Following event are conducted through online under Cultural Clubs.

Saaz - Music Club: "Saaz-e-Sukhan" event conducted online 24th July 2020. This event is conducted with the EBSB paired institute IIIT Dharwad. A number of performances were scheduled based on the theme of the event.

Saaz: The Antakshari event conducted by Saaz is an online collaborative event encouraging teamwork between musicians through a timeless musical

game and a healthy competition.

Students' Festivals and Events •





The event officially began on 17th June 2021. As an ice-breaker between the team members, each team was asked to come up with a unique name for their team. Within a day's time, the titles that each team decided to stamp on themselves were creative and impressive. The first part of Antakshari, the "live event", was conducted on 20th June 2021 and was a zoom meeting amongst the participants.



Jazbaat - The Dramatics Society has history of giving some breathtaking performances and the eve of 2nd May was destined to witness and add a few more to the list of feathers in its cap. The Annual Mono-Act Competition- "Rangmanch" was organized with full enthusiasm this year virtually through Zoom on Sunday, 2nd May, 2021.





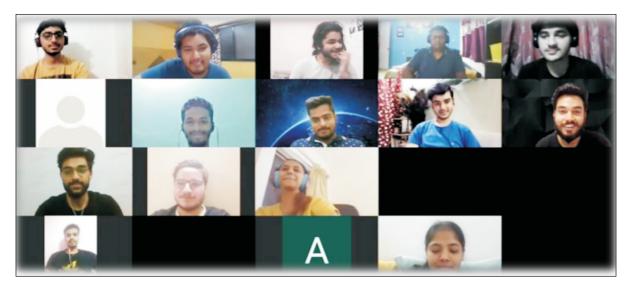
Students' Festivals and Events •—







Samvaad - The literature and quizzing club organized the EBSB Day on 7th June 2020. The discussion and ideas sharing on the Lifestyle in COVID-19 were mainly deliberated on how can we go about our daily lives in the Institute with social distancing and other guidelines of the COVID-19 is discussed.



SCIENCE & TECHNOLOGY

Following event are conducted online under Science & Technologyby various clubs.

Business and Management Club

- 3rd April Earn while you learn session.
- 5th May Introduction to Stock market.
- 2nd June session on Crypto trading.



Students' Festivals and Events •—



Automotive and Fabrication Club

- 9 May Doubt clearing session regarding club activities
- 22 May Session on basics of Aerodynamics

Racing Club

- 9 May Department wise Overview session
- 16 May Information and differences between Electric Vehicle and IC Vehicles
- 23 May Discussion session between EV and IC



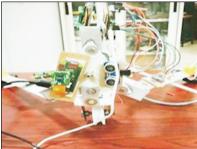




Robotics Club

- 16 May Basics of Arduino
- 14 June Session on basic 3D modelling and model creation
- 16 June Present: Ongoing Robot Design Challenge







CAD Club

- 24 May Session on basic sketching in solidworks
- 30 May Session on 3D printing
- 19 June Session on basic features in Solidworks

Programming Club

- 3 April Newbie 2020.2 Contest
- 10 April Dev 101: Introduction to Development
- 16 June Q/A session on Internships and Opportunities

Shutter box The Photography Club

- 19 April Editing session
- Astronomy Club
- 4 April Astroquiz

Students' Festivals and Events •— •



SPORTS CLUB:

In the period from October 2020 to March 2021, five cricket tournaments were organized while maintaining all the COVID-19 protocols such as social distancing, use of sanitizers, etc. Faculty Members, Staff Members and PG Students participated actively in these tournaments. These tournaments were organized under the Banner of Fit India Movement launched by Hon'ble Prime Minister Shri Narendra Modi Ji. In addition to this Run for Unity and Fit India Cyclothon were also organized on 2nd October, 2020 and 23rd December, 2020 respectively.









Introduction

Institute Library is the knowledge hub of the PDPM IIITDM Jabalpur. Library extends support to academic & research activities of the Institute by procuring various types of reading materials, subscribing to electronic resources and providing various type of information services. The library provides all latest collection of books, articles, journals, etc. either in the form of online or offline to its users. The said materials are available in the form of CD, DVD, on-line databases, e-journals and print materials related to engineering and technology, applied science, management, humanities, design and other new emerging areas.

During the year library continued its mission of facilitating the creation of new knowledge skill through the acquisition, organisation and dissemination of library materials. The Library team is highly motivated, knowledgeable and always extends support to provide better service to the users.

Institute library not only proactively work on its collection building and infrastructural augmentation, but also puts lot of emphasis on facilities for the users.



Statistical Representation of Library Collection

Collection development is one of the important functions of the library and plays a vital role in supporting academic curriculum and research activities of the users. The collection of books, journals, thesis, reports, and other reading materials are the best and biggest asset of the Institute library. The total collection of books in the library between 1st April 2020 to 31st March 2021 are as follows



	Section A					
SI.No.	Medium	Collection	In Stock on 31st March 2019	In Stock on 31st March 2020	In Stock on 31st March 2021	
		Books	14613	15001	15001	
		Gratis Books	832	908	923	
1	Documentary Sources	Subscribed Print Journal	11	11	11	
	(Print)	Project Reports/Thesis	445	449	497	
		Gratis Project Reports/Thesis	0	131	131	
2	Non Documentary Sources(Non Print)	CDs/DVDs/Floppy (Received with Project Reports, Books & Magazines)	2059 Books = 1382 Floppy= 02 Project Thesis = 401 Magazine = 274 Total = 2059	2069 Books = 1369 Gratis Books = 17 Floppy= 02 Gratis Conference = 02 Project Thesis = 405 Magazine = 274 Total = 2069	2112 Books = 1369 Gratis Books = 17 Gratis Floppy= 02 Gratis Conference = 02 Project Thesis = 427 Project Thesis through email= 14 Magazine = 281 Total = 2112	
3	Archives	Bound Volumes of Journals	93	93	175	
э 	(old)	Bound Volumes of Magazines	341	341	341	

Section B					
SI.No.	Medium	Collection	Procured In2018-19	Procured In2019-20	Procured In2020-21
1	Print	Subscribed News Papers	19 (E-7, H-12)	19 (E-7, H-12)	
2	Materials	Subscribed Magazines	26	27	
3	Non-Print Materials	Subscribed Online E- Resources (E-Journal)	14114	39,523	48,871

^{*}Institute library has 11 nos. subject collection/databases (Total 48,871 nos. journals are available under subject collection/databases and individual journals).

Section C				
1	Hindi	Hindi Books	380	424
1	Collection	Gratis Hindi Books	54	434



Hindi Collection

Besides the regular procurement of course books, Institute library has procured the Hindi books like: Novels, Inspiration books, Story books, Famous Autobiography books, Hindi awarded books etc. The total collection of Hindi books is 434.

Book Bank

Institute Library has maintained the book bank section for SC/ST students. This section contains approximate 978 books, especially recommended textbooks are issued to SC/ST students only.

Circulation Desk and Reservation Counter

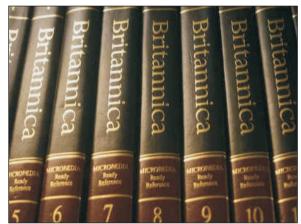
The circulation desk provides check-in and check-out services of reading materials to the users and also providing personal assistance for general enquiries about the library. The library provides advance reservation facility for those reading materials which have already been issued to other user. The library issues the books to the users as per their designations. Details of numbers of books and their validity are given below.

Loan Criteria for Library Users				
Sl. No.	Member Category of the Institute Library	No. of books issued at a time	Loan duration	
1.	Faculty Member	20	180 days	
2.	Research Engineer	20	180 days	
3.	All Non- Teaching Member	05	30 days	
4.	Post graduate student (PG and PhD.)	07	30 days	
5.	Under Graduate Student (UG)	07 (Including Semester books)	15 days	

Reference Service

Various types of book collections are maintained by the institute library reference section like, Encyclopedias, Handbooks, Dictionaries, Thesis, Reports and Rare Books etc.

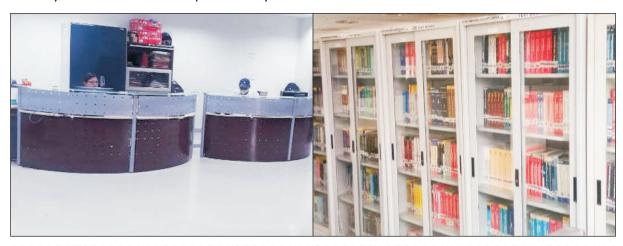
Reference section continues to help the library users to make full use of library resources and services. It renders necessary assistance to the users for searching the documents of their choice.





Digital Library

- **1. e-Resources in Institute Library**: e-Shodh Sindhu (e-SS) established by Ministry of Human Resource Development (MHRD), now known as Ministry of Education, and supported by INFLIBNET Centre, Gandhinagar, Gujarat. The consortium provides various e-resources to our Institute like ACM Digital Library, ASME Journals Online, Springer, JSTOR, JGate Plus (JCCC), etc. Apart from this, Institute subscribes various e-resources from the publishers directly. The individual titles under the collections are approximately 48,871.
- **2. Electronic Thesis and Dissertation :** Institute Library has preserved thesis and project report submitted by the postgraduate and doctoral students in electronic format as well as print format. These reading materials are maintained and preserved a full-text database since 2008 on Intranet. Library users can access and download this facility 24x7.
- 3. National Digital Library (NDL) Resources: Ministry of Human Resource Development (MHRD), now known as Ministry of Education, under its National Mission on Education through Information and Communication Technology has initiated the National Digital Library of India (NDL, India). It is being developed at IIT Kharagpur. Throughout the year, library users can actively access the resources provided by the NDL.



List of NDL India e-Resources				
SI. No.	Name of Resources/ Journal	Mode of Resources/Journal		
1.	World e-Book Library	Online		
2.	South Asia Archive (SAA)	Online		

4. WEB-OPAC: The WEB OPAC is one of the most heavily used databases of the library and is accessible 24x7 through library web page. Besides listing all the documents available in the library, it allows on-line reservation, status of books, user details, overdue details, etc. Institute library is providing download facility of e-resources, CD-ROM of study materials on single platform.





Plagiarism Detection Software (PDS): The 5. Ministry of Education, Govt. of India initiated a programme "Shodh Shuddhi" and provides a web based plagiarism detection software system "URKUND" for academic integrity and improving the quality of research in India. The Institute Library is availing the facility and has subsequently provided login facility to all the faculty members. In view of the importance in checking the seriousness of plagiarism



in the research, Institute has subscribed another plagiarism detection software named "TURNITIN" for the users.

- **Reprography:** Institute library provides photocopy facility to users on nominal charges. 6.
- 7. **CCTV Camera:** Institute library has installed CCTV Camera for surveillance.

	List of e-Resources				
SI. No.	Name of e-Resource	Titles/Collection			
1.	ACM Digital Library	1162			
2.	ASME Journals Online	33			
3.	Institute for Studies in Industrial Development (ISID) Database	The Institute for Studies in Industrial Development (ISID) has created On-line Indexes of Indian Social Science Journals (OLI) and Press Clippings on diverse social science subjects. It provides access to Indexes of 125 Indian Social Science journals and major newspaper articles, editorials and news features.			
4.	JGate Plus (JCCC)	J-Gate Custom Content for Consortium (JCCC) is a virtual library of journal literature created as a customized e-journals access gateway and database solution. It acts as a one point access to 7900+ journals subscribed currently under UGC INFONET Digital library consortium as well as university libraries designated as Inter Library Loan (ILL) Centers besides index to open access journals.			
5.	JSTOR	3165			
6.	MathSciNet	Provides database of reviews, abstracts and bibliographic information for much of the mathematical sciences literature			
7.	Oxford University Press	262			



8.	Springer Link	1725
9.	Nature Journal	Access to Nature Weekly Magazine.
10.	Web of Science	Provides access to the world's leading citation databases which includes Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI) and Arts & Humanities Citation Index (A&HCI) with 20 year back-files on lease basis. Its Analyze Tool also helps in finding hidden trends and patterns, gain insight into emerging fields of research, identify leading researchers, institutions, and journals, and trace the history of a particular field of study.
11.	IEEE: IEL Level II	34,496

Library Services for Users

Library Opening and Closing Hours: Institute library opens on Institute holidays for providing best facility to the users and timings are as follows:

Library Timing			
Opening a	nd Closing	Issue/re-issue/return timing	
Monday to Friday (Including Institute Holiday)	08:00 am to 11:00 pm	09:00 AM to 05:30 PM	
Saturday and Sunday (Including Institute Holiday)	09:00 am to 08:00 pm	(Monday to Saturday)	

- Study Room: The library has a "Study Room Facility" with more than 100 seating capacity for the users which is open 24 X 7 throughout the year.
- Online Payment System: Library users can make the library related payment through Internet banking system on library bank account.



Provides Other Services

- Book Locate Service: Institute Library also helps library users who are unable to find the books. The library staff provide full support to the users for searching the required reading materials, if available.
- Book Desk Service: Institute library is in receipt of various requests related to books reservation through mail/telephone and the circulation desk duly store the same and provide to the respective user.
- Information Alert Services: Time to time library alerts the users regarding latest



information through e-mail and the same is displayed on notice board. The under mentioned alerts are provided to all the library users:

a) New Arrival Books.	b) New Subscribe e-Resources.	
c) News Arrival other items.	d) Faculty and Student publications.	
e) Forthcoming conferences, seminar, workshop other national and international events.	f) Scholarship and fellowship information.	
g) Workshop/lectures for e-resources usage.	h) Trail/free access resources	
i) Remote access facility for online resources		

- Newspaper Clipping Services: Institute library has also preserved Institute related news published in subscribed newspapers and it is too useful in future for ready reference. Institute library is planning to newspaper clipping alert service on monthly basis through email.
- Users Orientation/Conferences/Workshop Services: Institute has organized orientation program for new library users about collections, databases and services of the library. Library conducted the short training programs, workshop, etc. for "How to Use" electronic resources like IEEE, Elsevier etc. for faculty members, research scholars and students. This programmes is useful to library user for their research purposes.

Under Process Project

The following works are under progress to digitize the library:

- Procurement of RFID System: Self check in/check out through Kiosk, Drop Box and Security Gate.
- **Procurement of Upgraded Library Automation Software :** Procurement of new library software to fulfil all the services. Like emails services, SMS alert, etc.



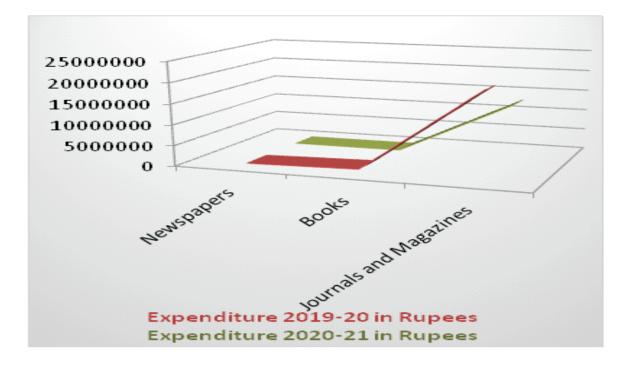
Future Plan

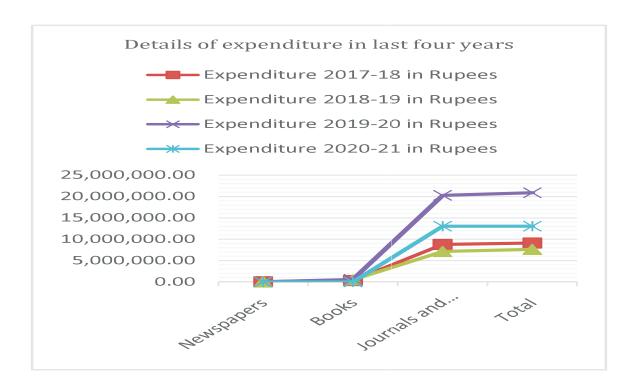
- **Digital Library Section:** 10 15 numbers of computers will be additionally procured for digital library to facilitate users to easily access e-resources, e-journals, Institutional repositories, etc. during library timing.
- **Library Trainees :** To augment the services, 2 nos. of library trainees shall be inducted in future.



Details of Expenditure					
SI. No.	Items	Expenditure 2018-19	Expenditure 2019-20	Expenditure 2020-21	
1.	Newspapers	Rs. 25857.00 (Approx.)	Rs. 24386.00 (Approx.)	Rs. 3595.00 (Approx.)	
2.	Books	Rs. 4,60,269.14 (Approx.)	Rs. 5,71,391.68 (Approx.)	Rs. 0.00	
3.	Journals and Magazines	Rs. 7133030.05 (Approx.)	Rs. 2,02,68,601.96 (Approx.)	Rs. 1,30,32,839.00 (Approx.)	
Total		Rs. 76,19,156.00 (Approx.)	Rs. 2,08,64,379.00 (Approx.)	Rs. 1,30,36,434.00 (Approx.)	









Campus Placements Report 2020-21

Training & Placement Cell always comes forward to encourage the students to participate in various programmes, activities, workshops and training. These activities are conducive to make students fit for their career growth. The Institute has taken the initiative to start a specialized training programme on soft skills that help students to make them fit receptacle. The Institute organized various successful campus placement activities where students have already come up with flying colours and gather one more feather in their caps.



Highest package offered in the year 2020-21 is 43 LPA by Microsoft and overall average package is 11.23 LPA. A total of 82 companies had visited the Institute and offered 242 offers to the students of graduating year 2020-21 which include various multinational organizations including Microsoft, AMAZON, Zeta Suit, Myntra, Google, Browserstack, Samsung R & D, American Express, X-epic, Brahmos Aerospace, Samsung, Yuj Design, Cognizant, BYJU'S, HackerEarth, Rakuten, Clevertap, Capgemini, ORACLE CGBU, TCS DIGITAL, Infosys, 314e, Deloitte, Cloudlex, PaveAI, 1mg, Ericsson, Infoedge, Trell ThinkDesign, Libsys, Playgames, Desmania etc. Apart from other organization of repute viz., Amazon, American Express, CISCO, Hackerearth, Hero Motocorp, IBM, ISRO, Precisely, Quantiphi, RCI DRDO, Trell, Indiamart, World Startup Festival, Eaton, Yash Technologies, IISC Bangalore, IIT (Delhi, Kanpur, Varanasi, Madras) has offered Project Based Internship (PBI) for a duration of 06 months. Regular Technical and soft skills sessions were also organized from various corporate leaders and Alumni to motivate and guide the students.

Hindi Pakhwada 2020 •



Hindi Padkwada- 2020 was celebrated from September 14-28, 2020 and concluded on September 28, 2020. This year this event was celebrated through online mode due to the corona pandemic. September 14 is observed as Hindi Diwas as Hindi have been declared as the official language of the nation by the constituent assembly in the year 1949.

During the period various competitions were organized amongst staff members and students. People enthusiastically participated in these competitions. The closing ceremony was held on September 28, 2020. Winners of various competitions were awarded with the prizes.





The Institute is located at the Mehgavan village, Jabalpur near Dumna Airport. The campus spreads over a land of 100 hectare (250 acres) area. The development of Infrastructure work for the campus was started in the year 2006-07. The campus has now come into a developed shape with flora and fauna coupled with greenery all-around. The land is full of ups and downs. A water channel collecting the rain water from the surrounding areas flows almost at the middle of the campus.

The Campus has three separate zones, meant for different kind of activities performed in these zones. In the **Academic** cum Administrative Zone, which is in the middle part of the Campus, all the Academic buildings like Lecture and Tutorial Complex, Library com Computer Centre, Core Lab Complex, Administrative Block cum Technology Incubation Centre, Primary Health Centre, and Open Air Theatre etc. are located. A ring road is available to connect all these buildings.

In the Hostel Zone, which is at the South -West side of the Academic Zone all the Hostels for students, Mess and Dining Hall and the Student Activity Centre are located.

The **Residential Zone** is at the South - East side of the Academic Zone having staff / faculty quarters and the Visitors Hostel.

All the buildings at the Campus are connected with the Cement concrete roads and pathways. The Primary Health Centre located at the Junction Point of the Academic and Residential Zone provides the First-aid facility to the residents. The Ambulance facility is available round the clock in the Campus. Bus facility is being provided to the residents at the prescheduled timings every day, on a predefined route, covering important places at the Jabalpur city.

The infrastructure facilities, available in the

three Zones of the Campus are as under:

Academic Zone

All the Academic and Administrative buildings are situated in this Zone, which is located next to the main entrance to the campus. A Cement concrete circular road connects all the buildings in this Zone. The important Academic and other buildings in this area are as under:

Administrative Block cum Technology and **Business Incubation Centre:** The building is located next to the Main Entrance of the campus. The Directorate, Registrar office, Deans' offices, Academic Section, Student Section, Account Section, Purchase & Store Section, Placement Cell, and Institute Works Department and other important offices of the Institute are available at the Ground and First floor of the building.

The Technology and Business Incubation Centre with the supporting infrastructure is



Administrative Block cum Technology and **Business Incubation Centre**

located on the Second floor of the building.

Library cum Computer Centre: It is a Ground plus three floor building. The building contains fully furnished Computer Centre and Computer labs, and Computer Science Department. Library with separate furnished reading rooms are available 24x7 for the continuos reading of the students. The Electronics and ICT Academy is also located in this building.





Library cum Computer Centre

Primary Health Centre (PHC): The Primary Health Centre (PHC) facilitates the residents at the campus for the first aid for illness. The building is located at the junction point of the Academic zone and the Residential zone. The doctors of different specialised fields are available daily at the PHC on a pre-defined schedule. However, the nursing staffs are available round the clock, in the PHC.



Primary Health Centre

Lecture Hall & Tutorial Complex (LHTC): It is the main Academic building of the Institute having sufficient number of class rooms, lecture halls and seminar halls for different academic activities. The Design Studio is also located in this building, in which academic activities for the B.Des & M.Des Programmes are performed. A Design Arena is available in



Lecture Hall and Tutorial Complex

the building for design display works. The Yoga sessions are also performed in this area.

Core Lab Complex: The Core Labs as required for experimental works during initial courses for UG Students are available in this building. In addition, professional labs for the Mechanical Engineering discipline have presently been accommodated at the Ground floor of the building. The Professional labs for the Electronics and Communication discipline have been accommodated at the First floor of the building.



Core Lab Complex

Visitors' Hostel : The building provides accommodation for the visiting faculties, newly joined faculties and other guests to the Institute. It is located next to the Primary Health Centre building. It has 30 single seated rooms and 06 suite. The connected facility block to the building has kitchen and dining facilities and some halls for meetings.



Visitors' Hostel

The guests in the building can enjoy the nature during their stay, because of its ideal location.



Residential Zone:

The Residential Zone of the Campus is located at the rear side. Three number of multi storied buildings, providing Residential flats to faculty and staff members are presently available in this area. The Cement Concrete Roads are available for connecting the residential buildings. Park and Play fields have been developed in this area for amusement of residents. The following are the important buildings in this area:

Narmada Residency-II: The building provides Residential flats to the staff and faculty members. It has 55 Nos. of flats with two Bedrooms, Drawing cum Dining room and a Kitchen.



Narmada Residency II

Narmada Residency-III: The building provides accommodation for senior faculty members. It has 60 numbers of flats with three Bedrooms, Drawing cum Dining room and a Kitchen. The building is now fully functional.



Narmada Residency III

Rewa Residency-2: The building provides accommodation for staff members and research scholars. It has 72 numbers flats



Rewa Residency II A and B

with two Bedrooms, Drawing cum Dining room and a Kitchen. The building is now fully functional.

Hostel Zone

All the Hostel buildings for students are available in this area of the campus. The buildings and other infrastructure facilities in the area are as under:

Hall of Residence I: It is a single seated hostel building having capacity to accommodate 404 students. Three blocks out of total six numbers of blocks in the building are presently being used for the girls students. The girls' wing is fully isolated with the other parts of building. The facility block in the building contains recreational facilities like Reading Room, TV viewing room and Canteen, etc. for the students. The building is well connected with roads and pathways with other parts of the campus.



Hall of Residence I

Hall of Residence III: The building has triple seated rooms with a capacity to accommodate 498 students. The building is well connected with roads and pathways, with the other parts of the campus. The



recreational facilities like TV viewing room, Dance and Drama room, Gymnasium, Canteen etc. are available inside the building. An indoor Badminton Court has also been provided inside the building. Green lawns and plants all-around the building enrich the beauty and environmental conditions inside the building and keep the students well connected with the nature.



Hall of Residence III

Hall of Residence IV: This building also has triple seated rooms with a total capacity of 498. The building is well connected with roads and pathways with the other parts of the campus. The facility of Canteen, TV viewing room, Reading Room, Dance and Drama room etc. have been provided inside the building. Green lawns and plants allaround the building enrich the beauty and environmental conditions inside the building and keep the students well connected with the nature.



Hall of Residence IV

Mess and Dining Hall: The building provides dining facility to the students. It is located centrally in the hostel area. The pathways are available from all the hostels to



Mess and Dining Hall

reach the building. The different Mess have been provided on the two floors of the building, so as to provide hassle free mess/ dining services to the students.

Type V Quarters (2 Nos.): It is a residential building located in the hostel area. The building is meant to provide residence to faculties associated with the student activities. The building contains two numbers of 2-BHK, duplex type quarters.



2 Nos Type V Qtrs.

Hall of Residence VII: It is a PG hostel building.

Married Accommodation (Phase I): The building provides accommodation to PG students (married). It has 98 one BHK flats.



PG Hostel Phase I (Married Accommodation)



Students Activity Centre (SAC): There is a facility block, well connected with the hostel units. The Open Air Theater and the Basket Ball Court (Indoor), pertaining to the Student Activity Centre building is presently in use. The remaining part of the SAC complex is expected to be ready for use, very soon.



Student Activity Centre

Security Barrack: The building provides temporary accommodation to the off duty security guards at the campus. It is located at the southern side extreme end of the campus.

Tree Plantation Works : Like previous years the Horticulture works and tree Plantation



Security Barrack

works, including maintenance of plants and lawns near and around all the buildings, along the Roads and Pathways and other parts of the campus have been carried out throughout the year. The plantation work in the campus is being done under the valuable consultancy services and the Horticulture Plan provided by the Tropical Forest Research Institute (TFRI), Jabalpur. The cleaning and sanitation works have also been carried out throughout the year at all corners of the campus, under Swachh Bharat Mission. The sanitisation inside the buildings and open areas has been carried frequently in view of the Pandemic situation observed during the year.



Annual Account (FY 2020-21)



Fund Available and Expenditure incurred during FY 2020-21

(I) Grant in Aid received during FY 2020-21

Particulars	GIA (Rs in Lakhs)
Salary	1847.00
General Expenditure	1892.00
Capital Expenditure	849.00
Total Amount	4588.00

(II) Expenditure for FY 2020-21

Particulars	GIA (Rs in Lakhs)
Salary	2011.53
General Expenditure	1947.24
Capital Expenditure	1155.21
Total Amount	5113.98

(A) Salary Expenditure for FY 2020-21

Particulars	GIA (Rs in Lakhs)
Academic	1201.25
Non Academic	331.29
Other component of Salary	478.99
Total Amount	2011.53

(B) General Expenditure for FY 2020-21

Particulars	GIA (Rs in Lakhs)
Outsourced Manpower	754.68
Electricity	189.85
Assistantship/Scholarship	725.31
Repair & Maintenance	70.36
Travelling Allowance	8.73
Transportation Expenses	11.23
Honorarium	49.26
Student Support Service	10.86
Other Expenses	126.96
Total Amount	1947.24

(B) Capital Expenditure for FY 2020-21

Particulars	GIA (Rs in Lakhs)
Civil & Electrical	771.77
Furniture & Fixture	115.42
Lab and Office Equipment	41.43
Computer hardware and Software	100.75
Books and Journals	123.6
Electrical Installation	2.24
Total Amount	1155.21

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(S.D. Gadekar)
Deputy Registrar (F&A)

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(S.D. Gadekar)
Acting Registrar

(Sanjeev Jain)
Director

• Annual Account (FY 2020-21)



BALANCE SHEET AS AT 31st, MARCH 2021

AMOUNT IN Rs.

SOURCES OF FUNDS	SCHEDUL ES	CURRENT YEAR (FY 2020-21)	PREVIOUS YEAR (FY 2019-20)
CORPUS/ CAPITAL FUND	1	3,527,778,083	3,422,537,234
DESIGNATED/ EARMARKED/ ENDOWMENT FUNDS	2	-	-
CURRENT LIABILITIES & PROVISIONS	3	729,953,798	684,948,655
TOTAL		4,257,731,881	4,107,485,889
APPLICATION OF FUNDS			
FIXED ASSETS	4		
TANGIBLE ASSETS		3,065,108,777	3,066,649,855
INTANGIBLE ASSETS		4,079,766	3,326,376
CAPITAL WORK-IN-PROGRESS		26,905,394	20,678,503
INVESTMENTS FROM EARMARKED/ ENDOWMENT FUNDS	5		
LONG TERM		-	-
SHORT TERM		-	-
INVESTMENTS- OTHERS	6	-	-
CURRENT ASSETS	7	614,221,739	468,143,412
LOANS, ADVANCES & DEPOSITS	8	547,416,205	548,687,743
TOTAL		4,257,731,881	4,107,485,889
SIGNIFICANT ACCOUNTING POLICIES	23		
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24		

(S.D. Gadekar) Deputy Registrar (F&A)

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(S.D. Gadekar) Acting Registrar

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(Sanjeev Jain) Director

• Annual Account (FY 2020-21)



INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD 01.04.2020 TO 31.03.2021

AMOUNT IN Rs

	T	, , , , , , , , , , , , , , , , , , , 		AMOUNT IN Rs.
	PARTICULARS	SCHEDULE	CURRENT YEAR (FY 2020-21)	PREVIOUS YEAR (FY 2019-20)
Α	INCOME			
	ACADEMIC RECEIPTS	9	12,79,65,645	11,36,47,641
	GRANTS/ SUBSIDIES	10	37,53,23,011	23,59,07,717
	GRANT TAKEN FROM INTERNAL CORPUS		2,05,55,289	15,87,08,629
	INCOME FROM INVESTMENTS	11	0	0
	INTEREST EARNED	12	2,43,03,327	2,55,10,182
	OTHER INCOMES	13	26,00,852	31,63,238
	PRIOR PERIOD INCOME	14	0	30,69,133
	TOTAL (A)		55,07,48,125	54,00,06,540
В	<u>EXPENDITURE</u>			
	STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)	15	20,11,53,627	17,70,98,823
	ACADEMIC EXPENSES	16	8,01,37,279	8,18,92,118
	ADMINISTRATIVE AND GENERALEXPENSES	17	10,64,90,931	12,11,46,387
	TRANSPORTATION EXPENSES	18	11,23,660	35,12,533
	REPAIRS & MAINTENANCE	19	69,63,012	1,09,49,552
	FINANCE COSTS	20	9,791	16,932
	DEPRECIATION	4	11,18,32,132	21,86,08,714
	OTHER EXPENSES	21	0	9,512
	PRIOR PERIOD EXPENSES	22	42,85,990	22,63,414
	TOTAL (B)		51,19,96,422	61,54,97,985
	BALANCE BEING EXCESS OF INCOME OVER EXPENDITURE (A-B)		38,751,703	(75,491,445)
	TRANSFER TO INSTITUTE CAPITAL FUND			
	INTERNAL INCOME	9 11 12 13	15,48,69,824	14,23,21,061
	BUILDING FUND		0	0
	BALANCE BEING SURPLUS (DEFICIT) CARRIED TO GENERAL FUND		15,48,69,824	14,23,21,061
	BALANCE BEING SURPLUS (DEFICIT) CARRIED TO CORPUS FUND		(116,118,121)	(217,812,506)
	SIGNIFICANT ACCOUNTING POLICIES	23		
	CONTINGENT LIABILITIES AND NOTE TO ACCOUNTS	24		

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(S.D. Gadekar) Deputy Registrar (F&A) galiner

(S.D. Gadekar) Acting Registrar

(Sanjeev Jain) Director

• Annual Account (FY 2020-21)



PANDIT DWARKA PRASAD MISHRA INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, **DESIGN AND MANUFACTURING, JABALPUR**

RECEIPTS & PAYMENT ACCOUNT FOR THE FINANCIAL YEAR 2020-2021

		-	-			-	AMOUNT IN ₹
S.No.	RECEIPTS	CURRENT YEAR (FY 2020-2021)	PREVIOUS YEAR (FY 2019-2020)	S.No.	PAYMENTS	CURRENT YEAR (FY 2020-2021)	PREVIOUS YEAR (FY 2019-2020)
	I OPENING BALANCES				EXPENSES		
∢`	A) CASH BALANCE		0	(A	STAFF PAYMENTS & BENEFITS	90,59,735	65,98,328
В	B) BANK BALANCES			B)	B) ACADEMIC EXPENSES	6,29,42,470	7,95,03,163
	i) SBI GRANT A/C	2,38,616	2,39,265	(C)	ADMINISTRATIVE AND GENERAL EXPENSES	2,85,80,229	3,21,28,419
	ii) ALLAHABAD BANK STUDENT FEE A/C	3,14,634	0	(D	TRANSPORTATION EXPENSES	1,42,820	6,01,119
	iii) ALLAHABAD BANK STUDENT FEE A/C	8,094	5,36,97,199	E	REPAIRS & MAINTENANCE	23,14,848	48,31,396
	iv) ALLAHABAD BANK GRANT CURRENT A/C	2,94,278	2,27,696	Ð	F) FINANCE COSTS	9,875	19,788
	v) PROJECT A/C						
	a) ALLAHABAD BANK SERB PROJECT A/C	37,07,410	0	=	PAYMENTS AGAINST EARMARKED/ENDOWMENT FUNDS	47,96,822	1,01,76,693
	b) ALLAHABAD PROJECT A/C	2,74,39,470	3,69,20,017		PAYMENTS AGAINST SPONSORED PROJECTS/SCHEMES	1,48,65,820	82,58,853
	c) E&ICT ACADEMY A/C	85,48,817	28,41,614	≥	PAYMENTS AGAINST SPONSORED FELLOWSHIPS AND SCHOLARSHIPS		0
	d) STARTUP A/C	5,450	3,860	A)		4,03,436	6,71,700
	e) QIP AICTE	43,20,786	44,91,696	B)	EXTERNAL SCHOLARSHIP	87,96,540	69,17,700
	vi) ALLAHABAD GRANT SAVING BANK A/C	3,23,92,990	24,91,56,871	۸	INVESTMENTS AND DEPOSITS MADE		
	vii) SBI TICKET A/C	303	418	(A)	OUT OF EARMARKED/ENDOWMENTS FUNDS		0
	viii) AXIS BANK	2,73,32,669	97,46,502	B)	OUT OF OWN FUNDS (INVESTMENTS- OTHERS)		0
				>	VI TERM DEPOSITS WITH SCHEDULED BANKS		
	II GRANTS RECEIVED			¥	A) INVESTMENTS AND DEPOSITS MADE	15,96,99,995	35,00,00,000
₹	FROM GOVT. OF INDIA (MHRD) (PLAN)-) GENERAL	18,92,00,000	13,00,00,000	B)	INVESTMENTS AND DEPOSITS MADE (SUBSIDIARY ACCOUNTS)		
В	FROM GOVT. OF INDIA (MHRD) (PLAN) - FOR (REATION OF CAPITAL ASSETS	8,49,00,000	2,50,00,000	M	EXPENDITURE ON FIXED ASSETS & CAPITAL WORK-IN-PROGRESS		
S	C) FROM GOVT. OF INDIA (MHRD) (PLAN)- SALARY	18,47,00,000	10,60,00,000	(A	PURCHASE OF FIXED ASSETS	95,44,261	2,36,57,902
				B)	EXPENDITURE ON CAPITAL WORK-IN- PROGRESS		0
	II ACADEMIC FEE			₹	OTHER PAYMENTS INCLUDING STATUTORY PAYMENTS		
۷	A) ACADEMIC FEES	19,44,97,941	13,39,54,393	A)	ASSOCIATION FEE (OTHER INSTITUION)		0
В	B) ADVANCE FEES RECEIVED		0	B)	GIS (OTHER INSTITUTES)	7,800	6,600
ပ	C) STUDENT CAUTION MONEY		36,000	(၁	GPF (OTHER INSTITUTES)	65,000	55,000
	D) ALUMNI ASSOCIATION SUB.		3,45,000	D)	GSLIS	3,18,666	2,49,888
Ш	E) STUDENT WELFARE FUND		0	E)	E) PROFESSIONAL TAX PAID		1,38,556
щ (F) EXCESS DEPOSIT FEE	0000	0	E)	WCT PAID		
בן פי	G) HALL MANAGEMEN ACCOUN	74,81,973	0	<u>ල</u> :	G) LABOUR WELFARE CESS	9,33,603	11,898
Ľ	H) STUDENT BENEFIT ACCOUNT		0	Ē	H) NEW PENSION CONT.	3,17,59,685	2,83,52,378
						4,00,14,141	-10,0F,00,1

Annual Account (FY 2020-21)



PANDIT DWARKA PRASAD MISHRA INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, **DESIGN AND MANUFACTURING, JABALPUR**

RECEIPTS & PAYMENT ACCOUNT FOR THE FINANCIAL YEAR 2020-2021

		_	FOR THE FINANCIAL TEAK 2020-2021	TEAK 2	120-2021		AMOUNT IN ₹
S.No.	RECEIPTS	CURRENT YEAR (FY 2020-2021)	PREVIOUS YEAR (FY 2019-2020)	S.No.	PAYMENTS	CURRENT YEAR (FY 2020-2021)	PREVIOUS YEAR (FY 2019-2020)
2	RECEIPTS AGAINST EARMARKED/ENDOWMENT FUNDS	1,48,79,506	2,50,91,031	<u>(</u> C	J) GST PAID	49,14,191	4502437
>	RECEIPTS AGAINST SPONSORED PROJECTS/SCHEMES	11,81,898	1,73,66,093		VAT PAID		0
N	RECEIPTS AGAINST SPONSORED FELLOWSHIPS AND SCHOLARSHIPS			K)	FLAG DAY CONTRIBUTION		8,250
¥	CENTRAL SECTOR SCHOLARSHIP RECEIVED	42,52,981	10,91,675	XI	IX REFUNDS OF GRANTS/PROJECT A/C CORPUS		
B	EXTERNAL SCHOLARSHIP	1,04,39,630	69,23,700	×	X DEPOSITS & ADVANCES		
				(V	A) CPWD, BHOPAL		15,06,10,000
N	VII INCOME ON INVESTMENTS FROM			B)	B) Digital Web World	1,27,553	
(A	EARMARKED/ENDOWMENT FUNDS (E&ICT ACADEMY)		0	ပ်	P.H.E. MECHANICAL ADVANCE PAYMENT	10,65,623	
B)	OTHER INVESTMENTS		0	(Q	D) ADVANCE FOR EXP STAFF & OTHER		1,33,21,668
ΰ	OTHER INVESTMENTS (SUBSIDIARY ACCOUNTS)	0	0	E	D B CROP LTD	2,50,594	
 	VIII INTEREST RECEIVED/ACCRUED			F)	F) STARTUP		
(A	INTEREST RECEIVED	89,32,682	96,62,141	(9	G) ADVANCE TO NICSI		0
B)		15,73,356	0	(H	H) SECURITY DEPOSIT	7,92,900	7,31,315
×			0	(EMD AND PBG	36,00,900	24,84,600
×	TERM DEPOSITS WITH SCHEDULED BANKS ENCASHED			3	J) SECURITY DEPOSIT-MPPKVVCL		0
(A	INVESTMENTS AND DEPOSITS MATURED INSTITUTE	5,70,00,000	27,70,00,000	()	K) ADVANCE TO DAVP		0
B			0	r) (1	L) ADVANCE TO OPTIMIZATION WORKSHOP		0
×	OTHER INCOME (INCLUDING PRIOR PERIOD INCOME)			(W	M) ADVANCE TO TFRI		0
A)	OTHER INCOMES	18,13,817	23,51,159	(N	N) ADVANCE TO INNOVATION PROJECT	0	0
				X	OTHER PAYMENT		
₹	DEPOSITS AND ADVANCES			₹	A) HALL MANAGEMENT ACCOUNT	9,320	70,81,500
Ϋ́	A) SECURITY DEPOSIT	25,000	2,95,318	B)	STUDENT BENEFIT ACCOUNT		51,20,500
B)	EMD AND PBG	28,25,180	40,10,000		C) STUDENT CAUTION MONEY	51,000	19,79,977

Annual Account (FY 2020-21)



(Sanjeev Jain)
Director

(S.D. Gadekar) Acting Registrar

(S.D. Gadekar)
Deputy Registrar (F&A)

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PANDIT DWARKA PRASAD MISHRA INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, **DESIGN AND MANUFACTURING, JABALPUR**

RECEIPTS & PAYMENT ACCOUNT FOR THE FINANCIAL YEAR 2020-2021

		-	=			F	AMOUNT IN ₹
S.No.	RECEIPTS	CURRENT YEAR (FY 2020-2021)	PREVIOUS YEAR (FY 2019-2020)	S.No.	PAYMENTS	CURRENT YEAR (FY 2020-2021)	PREVIOUS YEAR (FY 2019-2020)
(C)	C) ADVANCE TO CSAB 2013		1,72,81,500	D)	EXCESS DEPOSIT FEE PAID	3,46,18,126	2,16,66,828
(O	SECURITY DEPOSIT-MPPKVVCL (CONTRACTORS)		0	E)	ALUMNI ASSOCIATION SUB.PAID		0
E)			0	F)	F) PM CARES FUND	3,02,892	0
F)	RECEIPTS FROM AMEC/NWSG WORKSHOP			(G)	G) NCOME TAX PAYABLE	8,90,428	0
(S)	G) CPWD, BHOPAL	2,75,00,000	0	H	H) ONLINE PUBLICATIONS	48,65,488	0
Ĥ	H) ADVANCE FROM EXPENSES OF STAFF & OTHER	26,62,008	19,42,615	J)	I) OTHER EXPENSES	73,92,949	2,20,16,350
×	MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS			J)	J) PROVISIONS PAID	12,91,51,887	11,08,04,525
¥	A) ASSOCIATION FEE (OTHER INSTITUION)		0	S	K) CREDITORS PAID	20,02,36,447	11,65,31,805
B	B) GIS (OTHER INSTITUTES)		0	IIX	XII CLOSING BALANCES		
(၁	GPF (OTHER INSTITUTES)		0	(A	CASH BALANCE		0
(Q	GSLIS	2,390	0	B)	BANK BALANCE		
E	PROFESSIONAL TAX		208		i) SBI GRANT A/C	2,37,967	2,38,616
F)	F) WCT				ii) ALLAHABAD BANK STUDENT FEE A/C	10737974.63	314634
(9	G) LABOUR WELFARE CESS	98,853	862'368		iii) ALLAHABAD BANK STUDENT FEE A/C	44,200	8,094
H)	H) NEW PENSION CONT.				iv) ALLAHABAD BANK GRANT CURRENT A/C	3,58,752	2,94,278
(l	TDS RECOVERED	19,53,156	29,84,389		v) PROJECT A/C		
J)	SUNDRY CREDITORS	4,83,236	0		a) ALLAHABAD BANK SERB PROJECT A/C	44,59,885	3707410
₹	K) FLAG DAY CONTRIBUTION		8,250		b) ALLAHABAD PROJECT A/C	2,96,38,291	2,74,39,470
L)	L) GST	2,51,451	14,83,107		c) E&ICT ACADEMY A/C	9,34,232	85,48,817
(M	M) FINANCIAL SOFTWARE		30,952		d) STARTUP A/C	5,632	5,450
ΧIX	XIV ANY OTHER RECEIPTS				e) QIP AICTE	31,57,919	43,20,786
A)	A) NPS INTEREST & OTHER		0		vi) ALLAHABAD GRANT SAVING BANK A/C	8,99,17,804	3,23,92,990
B	B)OTHER RECIEPTS	37,38,987	1,97,33,178		vii) SBI TICKET A/C		303
ပ	C) RECIEVABLE TO STUDENT	11,98,974	17,60,000		viii) AXIS BANK	1,51,22,253	2,73,32,669
0	D) A/C RECIEVABLE		0		ix) SWAP FACILITY		
E)	RECEIVED AGAINST PAYMENT OF COMPUTER		0				
F)	PROJECT CONSULTANCY PAYABLE		0	XIII	XIII ANY OTHER PAYMENTS		
					a) FEE RECIEVABLE STUDENT	15,82,742	
					b) INTEREST ON PROJECT A/C PAID	41,165	
					c) EXPENSES PAYABLE	14,33,695	12,79,567
	TOTAL	90 61 96 537	114 17 71 245		TOTAL	90 61 96 537	114 17 71 245
	200	100,00,10,00	CT-5(1)(1)(T)			100,00,10,00	11,11,11,11





RIGHT TO INFORMATION ACT 2005

Report

(01-04-2020 to 31-03-2021)

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 citizens of India. The implementation of RTI Act 2005 is ensured by the officials designated for the purpose, who are as follows:

Shri Santosh Mahobia	Smt. Swapnali D Gadekar	Prof. P N Kondekar
Assistant Registrar	Acting Registrar	Professor
Central Public Information Officer	First Appellate Authority	Transparency Officer

Other details are given below:

No. of RTI application received in the Institute 41

No. of RTI application replied by the Institute 41

No. of first appeals received by the Institute 17

No. of decisions passed by the FAA of the Institute 17

Amount collected as RTI fee and additional fee 980/-