PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur (An Institute of National Importance Established by an Act of Parliament)

पी.डी.पी.एम. भारतीय सूचना प्रौद्योगिकी, अभिकल्पन एवं विनिर्माण संस्थान, जबलपुर (संसदीय अधिनिय<u>म द्वारा स्थापित राष्ट्रीय महत्व का संस्थान)</u>

QUARTERLY NEWSLETTER

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PDPM Indian Institute of Information Technology Design & Manufacturing Jabalpur Dumna Airport Road, Dumna, Jabalpur – 482005, Madhya Pradesh, India https://www.iiitdmj.ac.in

Keynotes from the Director's Desk



Dear All,

We are happy to present the October 2021 Issue of our Institute Quarterly Newsletter to you.

This issue will provide a glance into our academic and research accomplishments, co-curricular extracurricular and developmental outreach activities.

Your suggestions are always solicited to help us more reachable to you.

Warm regards,

Prof. Sanjeev Jain Director, PDPM IIITDM Jabalpur

Focal News and Events

Glimpses from Independence Day



Glimpses of Nakshatra Vatika













Electronics and ICT Academy @ IIITDM Jabalpur

E&ICT Academy, an initiative of the Ministry of Electronics and Information Technology, established at our institute, with an important aim to prepare manpower for two missions 'Digital India' & "Make in India' has conducted ten Faculty Development Programs (FDPs) in online mode, gathering an overwhelming response from all over the country. These FDPs were attended not only by Faculty but also by students interested to learn some of the hot topics in niche & latest technologies.

Research, Sponsored Projects & Consultancy Activities

SCI Listed Journal Publications: Till September 30, 2021

Year	2021
Number of Publications	32

Conference Publications: Till September 30, 2021

Year	2021
Number of Publications	02

Projects Granted (Sponsored Research Projects): Till September 30, 2021

Year	2021
Number of Project	03

Projects Granted (Sponsored Consultancy Projects): Till September 30, 2021

Year	2021
Number of Project	07

Patent Granted/Published: Till September 30, 2021

Year	2021
Number of Patent	03

Faculty Achievements

Dr. Prashant Jain

- Organized Two Week Global Online Summer FDP as Principal coordinator on "MATLAB Programming for Additive Manufacturing and 3D Printing (MPAM)", Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India, Jointly organized by four Electronics & ICT Academies, MNIT Jaipur, IIT Guwahati, IIITDM Jabalpur and NIT Patna, September 20-October 1, 2021 https://www.iiitdmj.ac.in/amec.iiitdmj.ac.in/
- Organised DST SERB Sponsored High end workshop "Karyashala" under accelerate Vigyan scheme on "High end workshop on DoE, Material characterization and advanced Manufacturing techniques" at Mechanical Engineering Department, PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur, Jabalpur, September 20-26, 2021 (with Dr. Manu Srivastava).

https://www.iiitdmj.ac.in/others/workshops/karyashala-MCAMT/

Dr. Manish Kumar Bajpai

• Member, Board of Study, Center for Advance Study, AKTU Lucknow.

Dr. Anil Kumar, Dr. Varun Bajaj and Dr. Biswajeet Mukherjee

• Listed as top 2% researchers and Scientist in the world from our institute. https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3

Dr. Anil Kumar

- Got Rank 2 in AD Scientific Index 2021. (url:https://www.adscientificindex.com/scientist.php?id=353015)
- Appointed as Member, Editorial Board of Computational and Mathematical Methods, from 2018-2021.
- Guest Speaker at workshop in "Electronics & ICT Academy Sponsored Training Programme on Advanced Optimization Techniques and Hands on with Matlab/SCILAB" at MNIT Jaipur, India, on September 6-17, 2021

Dr Varun Bajaj

- Associate Editor of IEEE Sensors Journal and Subject Editor-in-Chief of IET Electronics Letters in this year. He
 has edited two books in IOP Publisher titled "High performance computing for Intelligent Medical Systems"
 and "Advanced Security Solutions for Multimedia" in this year 2021. As per the data provided by Stanford
 University, he has been listed as top 2% Scientists/ researchers in the international level from our institute.
- He was session chair in 10th International Conference on Health Information Science (HIS 2021) Melbourne, Australia. He has given the expert talk in Adani Institute of Infrastructure Engineering, Ahmedabad, G. H. Raisoni College of Engineering, Nagpur and Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Ramnagaria, Jagatpura, Jaipur during 2021.

Dr. Ravi Panwar

- Received a research grant on "Conformal exterior stealth tanker drone" from the ARTPARK @IISc Bangalore seed-funded by DST and the Government of Karnataka in August 2021.
- Dr. Ravi Panwar delivered an invited talk on "Recent advancement in metamaterial microwave absorbing structures and techniques" under the IEEE Antennas and Propagation (APS) Student Chapter at Department of Electronics and Communication Engineering, Malviya National Institute of Technology (MNIT) Jaipur, Oct. 09, 2021.
- MP Young Scientist Award won by the Mr. Varun Chaudhary Ph.D. student, under the supervision of Dr. Ravi Panwar. He secured the First Position and was rewarded with a cash prize of Rs. 25,000 /- by the Madhya Pradesh Council of Science and Technology (MPCOST), 2021. Mr. Varun is working towards electromagnetic interference mitigation techniques.
- "Swachhta Saarthi Fellowship" awarded to Mr. Ravi Yadav, a Ph.D. student under the supervision of Dr. Ravi Panwar under the Waste to Wealth Mission of the Government of India, 2021. Besides, Mr. Yadav is also selected for "Swachhta Saarthi of the Year" under the aforementioned programme. Mr. Ravi is working towards electronic waste-based cost-effective microwave absorbers for stealth applications.

Dr. Amit Vishwakarma

- Patent with the title "Joint Recognition of Apple, Potato, Tomato, and Grape Plants Diseases using Transfer learning" was filed on 26/08/2021 in the Indian patent office by Dr. Amit Vishwakarma.
- Invited speaker of "Online AICTE Training and Learning (ATAL) FDP on IoT and Cloud-based Sensors and Networks" held at Pranveer Singh Institute of Technology Kanpur, India in the year 2021.

Dr. J. Al Muzzamil Fareen

• Faculty Development Programme (FDP) Organized

An online All India council for Technical Education (AICTE) Teaching and Learning (ATAL) sponsored FDP on Personal Effectiveness has been organized and conducted on 23-27 August 2021 at PDPM Indian Institute of Information Technology, Design & Manufacturing, Jabalpur.

S. No.	Faculty Name (Assistant Professor)	Dept.	Date of Joining
1	Dr. Munesh Singh	CSE	August 09, 2021
2	Dr. Vijaypal Singh Rathore	CSE	August 06, 2021
3	Dr. Avinash Chandra Pandey	CSE	August 05, 2021
4	Dr. Abhishek Verma	CSE	August 02, 2021

New Faculty Joined

Events Organized (FDP, Seminar, Workshop & Conferences)

Support from Foreign Institutes & Institutes of National Importance FDP Social Robotics had the support from
foreign faculty. The experts came from University of Siena, Italy, Waseda Institute, Japan, Kyushu University,
Japan. We also had experts from IITs, IIITs and NITs of India. The expert talks and hands on exposed the
candidates to the recent happenings in the field of Robotics and its usage in the field of healthcare. In the
recent times where Covid 19 had brought the healthcare system on its knees, the deployment of Robots in
healthcare system is of utmost importance to provide a contactless service.

List of FDPs that took place in the Summer Session 2021

- Data Science for All,
- Social Robotics & AI, Python Programming,
- Deep Learning & Its Applications,
- MATLAB Programming for Additive Manufacturing and 3D Printing,
- Quantum Computing IBM Backed.

An intensive two-week online certification programme has been organized jointly by Dr. Pilli Emmanuel Shubhakar, Prof. Kanupriya Sachdev (MNIT Jaipur), Dr. Kusum Kumari Bharti (PDPM IIITDM Jabalpur), Dr. M P

Singh, Dr. J P Singh (NIT Patna), and Prof. Gaurav Trivedi (IIT Guwahati) for the Faculty Members of Engineering and Technological Institutions. It was open to Industry Personnel and Doctoral Students of Indian organizations. This workshop has covered fundamentals of Quantum Computing and introduces Quantum Cryptography and Quantum Machine Learning. Domain experts were from IBM Labs India / IBM Partners who have handled all the sessions and conducted online lab and training sessions. Total 220 faculties, researchers, and students had registered for this course.



ATAL Sponsored FDP on "Reinforcement Learning and It's Application"

PDPM IIITDMJ had organized a five day Faculty Development Program, sponsored by AICTE Training and Learning (Atal) from 7th to 11th June 2021. In total 200 participants from different regions of the country participated in this program. IITs and IIITDMJ faculties had shared their knowledge with the participants. During the FDP, organizers had conducted 14 sessions in total having 3 sessions each day. On day 1, Dr. Manish Kumar Bajpai and Dr. Kusum Kumari Bharti had



delivered the talk on the Introduction of Reinforcement Learning and Swarm Intelligence. On the second day, Prof. Aparajita Ojha and Dr. Aditya Nigam had discussed Generative Adversarial Networks and Reinforcement Learning. A yoga session had been taken by Mr. Paramanand. On the third day, Dr. Kusum Kusum Bharti and Dr. Puneet Gupta had talked about Artificial Bee Colony and Adversarial Learning. On the fourth day of the workshop, Dr. S. K. S. Ali had shared the basic ideas of Deep Reinforcement Learning. On the last day of the workshop, Grey wolf Optimization and the practical aspect of Adversarial Learning had been discussed. During this entire workshop, the participants have learned how to use reinforcement learning to solve a wide variety of problems. Moreover, they have also learned how to use the food searching behavior of the different organisms in nature, for example, bees, birds, and grey wolves, etc., to solve real-world problems. Dr. Kusum Kumari Bharti, Principal Coordinator, and Dr. Manish Kumar Bajpai, Co-coordinator of Faculty Development Workshop had concluded the workshop with heartfelt thanks.

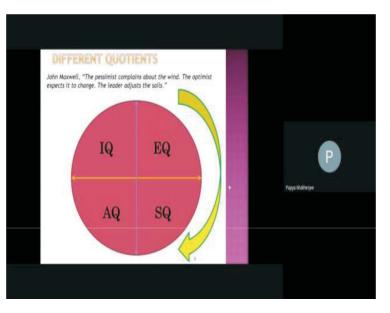
ATAL Sponsored FDP on "Introduction to Quantum Computing and Information"

Five-Day Online Faculty Development Program (FDP) from 5th-9th July, 2021 on Introduction to Quantum Computing and Information was launched at PDPM IIITDM Jabalpur. This FDP is financially sponsored by AICTE Training and Learning (ATAL) Academy and is organized by the Department of Electronics and Communication Engineering, PDPM IIITDM Jabalpur. About 130 participants from 21 different states of India have registered in this FDP. The participants include Faculty Members, PG Students, PhD Research Scholars, PG Teachers and Professionals. The main objective of this FDP is to provide an in-depth exposure on Quantum Computation and Information starting from the fundamentals to applications. This will help the participants to enrich their knowledge on different aspects of Quantum Computing and Information in the current age of Fast Computing.



ATAL Sponsored FDP on "RESEARCH METHODOLOGIES AND DESIGN THINKING FOR LEADERSHIP, EXCELLENCE AND SOFT SKILLS"

PDPM IIITDM Jabalpur hosted a Five-day Faculty Development Programme entitled, "Research Methodologies and Design Thinking for Leadership, Excellence and Soft Skills". This FDP was attended in virtual/online mode by 150 participants from Pan India. The participants were from all parts of the country. As per the mandate of the FDP, there were 14 technical sessions and the last 15th session was hosted for Feedback and Evaluation. As per instructions of AICTE, a technical session on Life Skill Management was also organized. This session was taken by Smt. Papya Mukherjee, Retd. Principal of Shriram Bhartiya Kala Kendra, New Delhi who talked on, "Leadership and Excellence: An art of Life Skill management"



ATAL Sponsored FDP on "Personal Effectiveness"

Developing and shaping personal efficiency in every aspect of our life and endeavor has become the urge of any individual. Personal effectiveness, caliber and steadfastness to achievement contributes for the success and growth of any professional. This Five-Day Online Faculty Development Program (FDP) on Personal Effectiveness, conducted from 23-27 August, 2021 aims at developing the intrapersonal and interpersonal communication skills and cognitivel abilities of the faculties. It mainly focusses on helping them to become self-reliant, capable, and efficiently perform in their personal and professional pursuits. The course content has been delivered by a pool of resource persons and practitioners from premier academic institutions and industries. Faculty members of the AICTE approved institutions, Bureaucrats, Consultants and Executives from both Public and Private sectors attended the programme. Dr. J. Al Muzzamil Fareen, the Coordinator of this ATAL FDP thanked the participants for their wholesome attendance and involvement throughout the





programme. Also, she acknowledged the crucial role of ATAL for sponsoring the FDPs and providing a great opportunity for the higher educational institutions to conduct it in and across the nation.

SPORTS NEWS & EVENT

Yoga is our ancient tradition and cultural heritage, which has been going on since time immemorial. Different Educational Institutions, Government offices, Public representatives, NGOs, Corporate firms, and people from all spheres of life celebrate every year 21st of June as the International Day of Yoga (IDY). 21st of June is declared as the International Day of Yoga (IDY) by the United Nations General Assembly on 11th December, 2014 and since 2014, IDY has been celebrated internationally as a festival with great joy and enthusiasm. However, due to the current outbreak of the pandemic, IDY-21 is to be celebrated in the digital platform and the theme of IDY-21 is Be With Yoga Be At Home. In accordance with the directives received from the Department of Higher Education, Ministry of Human Resources Development, Government of India and Ministry of AYUSH (MoA), no mass gathering was advisable this year due to the contagious nature of COVID-19. Therefore, all the members of the PDPM IIITDMJ family participated in IDY 2021 from their homes only.



To commemorate this special occasion of IDY 2021, a number of events are planned which are as listed below:

1. Special Yoga Sessions were conducted by Yoga Instructor Ms. Archana Tiwari for five days (15-18th June and 21st June 2021) from 7AM to 8AM via online platform. In addition to this, a special Yoga session was organized on 19th June, 2021 by Mr. Bharat Bhusan. About 45 participants registered for the workshop. However, Yoga



Instructor Ms. Archana Tiwari conducts Yoga sessions throughout the year in our Institute in both online and offline mode.

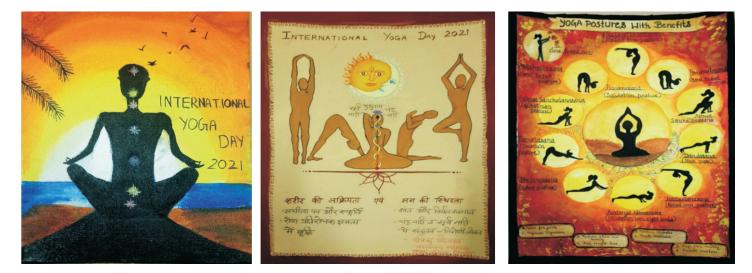
2. Essay Competition for Employees and Students

Topic for Students: Yoga and Youth

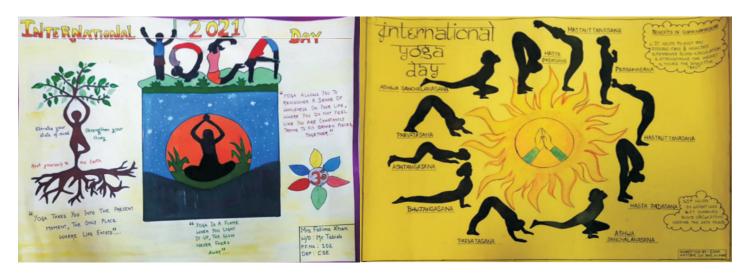
Topic for Employees: Importance of Yoga in the Current Scenario.

Word Limit: 500 words

About 17 employees and 7 students participated in this Essay Competition. Top three essays from each category were awarded.



3. Poster Competition for Employees and their Dependents



Topic: (1) Yoga Postures with Benefits; (2) International Yoga Day 2021

Nine participants registered in this competition and the top three posters were awarded.

4. Online Expert Lecture and Valedictory Function on 21st June, 2021.

Ms. Rekha Kakodia, who is an Ayurvedacharya and Guest Faculty of Rani Durgawati Vishwavidyalaya, Jabalpur (M.P.) delivered an online lecture with the Theme Yoga and Covid 19. She discussed the importance of Yoga in the current scenario and in maintaining a healthy life free from stress and anxiety. We should take care of both our physical and mental health as well to stay fit and fine. In the Valedictory session, our Hon'ble Director Prof. Sanjeev Jain discussed the significance of Yoga for the wellness of our mind and physique. He also discussed the relevance of Yoga in the National Education Policy and stressed that Yoga needs to be included in the curriculum as well. He also announced the names of the Winners of Poster and Essay Competitions. The Program ended with the Vote of Thanks by Dr. Harpreet Singh.



The coordinators of IDY 2021 were Dr. Dip Prakash Samajdar (Assistant Professor, ECE), Dr. Harpreet Singh (Assistant Professor, ME), Dr. Kusum Kumari Bharti (Assistant Professor, CSE) and Mr. Rizwan Ahmed (Assistant Registrar, Establishment).



Fit India Badminton Tournament-2021

Fit India Movement is a nation-wide movement to encourage people to remain healthy and fit by including physical activities and sports in their daily lives. Fit India Movement was launched by Hon'ble Prime Minister of India Shri Narendra Modi Ji on 29 August 2019.

• In order to promote Fit India Movement, PDPM IITDM Jabalpur organized a Badminton Tournament for Institute Faculty, Staff, and their family members from 9th September to 26th October 2021. In this tournament, 41 teams are participated from all categories i.e





under 12 years, women singles, men singles, mixed doubles, and men doubles. Total 81 matches were conducted to select the winners. All participants have enthusiastically participated in the event with real sportsmanship, which led to the grand success of this event. The winners and the runner-up of this tournament listed in the Table given below

हिंदी पखवाड़ा 2021

प्रत्येक वर्ष की भांति इस वर्ष भी संस्थान में हिंदी पखवाड़ा 2021 मनाया गया जो कि 14 सितंबर 2021 से प्रारंभ हुआ तथा 28 सितंबर 2021 को समाप्त हुआ। राष्ट्र प्रत्येक वर्ष 14 सितंबर को हिंदी दिवस के रूप में मनाता है, क्योंकि इसी दिन संविधान सभा द्वारा वर्ष 1949 में हिंदी को राजभाषा के रूप में अपनाया गया।

पखवाड़े के दौरान प्राध्यापकगण, कर्मचारियों एवं विद्यार्थियों हेतु विभिन्न प्रतियोगिताओं का आयोजन किया गया। लोगों ने उत्साह पूर्वक इन प्रतियोगिताओं में हिस्सा लिया। समापन समारोह 28 सितंबर 2021 को मनाया गया जिसमें विभिन्न प्रतियोगिताओं के विजेताओं को पुरस्कार प्रदान किये गये।

प्रतियोगिताओं का विवरण इस प्रकार है -

इसके अतिरिक्त केन्द्र सरकार द्वारा चलायी जा रही प्रोत्साहन योजना के अंतर्गत वर्ष में 20,000 या अधिक शब्द हिंदी में लिखने / टाइप करने वाले कर्मचारियों हेतु – प्रथम (2 पुरस्कार), द्वितीय (3 पुरस्कार) एवं तृतीय (5 पुरस्कार) क्रमश: रु. 5000/–, रु. 3000/– व रु. 2000/–प्रदान किये गये।

कार्यक्रम का नाम	दिनांक	समय	स्थान
राजभाषा प्रतिज्ञा	14-09-2021	दोपहर 03.30 बजे से	प्रशासनिक भवन
संकाय (फैकल्टी) सदस्यो	ं हेतु		
हिन्दी निबंध लेखन प्रतियोगिता (अधिकतम ममय - 01 घंटा, अधिकतम शब्द - 400 शब्द) शीर्षक - आधुनिक विषव नवावारों में इंजीनियरिंग कैसे योगदान करती है? [How does engineering contribute to modern world innovations?] (अथवा) आज की अर्थववस्था की दृष्टि से इंजीनियरिंग का अध्ययन कितना प्रासीमक है? [How relevant is studying engineering in terms of today's economy]	निबंध स्वयं द्वारा हस्तलिखित होना अनिवार्य है, हस्तलिखित निबंध rajbhasha@iiitdmj.ac.in पर 17-09-2021 (शुक्रवार) शाम 4 बजे तक भेजना होगा।		
विद्यार्थीगण हेतु			
हिन्दी निर्धेध लेखन प्रतियोगिता (अधिकतम शब्द - 400 शब्द) शीर्षक - इंजीनियरिंग तकनीक लोगों की कैसे मदद करती है? [How does engineering technology help people?] (अथवा) इंजीनियरिंग राष्ट्रीय बुनियादी ढांचे के विकास को कैसे प्रभावित करती है? [How does engineering impact national infrastructure development?]	निबंध स्वयं द्वारा हस्तलिखित होना अनिवार्य है, हस्तलिखित निबंध rajbhasha@iiitdmj.ac.in पर 17-09-2021 (शुक्रवार) शाम 4 बजे तक भेजना होगा।		
कर्मचारियों हेतु			
हिन्दी टिप्पण एवं प्रारूपण प्रतियोगिता (अधिकतम समय - ३० मिनट)	21-09-2021	दोपहर 03.30 बजे से	संस्थान सभाकक्ष (भूतल)
हिन्दी निवंध लेखन प्रतियोगिता (अधिकतम समय - ०१ घंटा, अधिकतम शब्द - ४०० शब्द) <i>विषय - हिन्दी का भविष्य एवं भविष्य की हिन्दी</i>	22-09-2021	दोपहर 03.30 बजे से	संस्थान सभाकक्ष (भूतल)
हिन्दी हास्य व्यंग्य / कविता पाठ प्रतियोगिता	23-09-2021	दोपहर 03.30 बजे से	संस्थान सभाकक्ष (भूतल)



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Prof. P. N. Kondekar Director I/C PDPM IIITDM Jabalpur

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