





DST-Technology Enabling Centre

MEDICAPS UNIVERSITY

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Coordinator's Message

Dear Reader,

It is with great pleasure that we present the latest edition of the newsletter of Technology Enabling Centre, Medicaps University. As we continue our journey of fostering innovation, collaboration, and technological advancements, we take pride in the milestones we have achieved and the promising initiatives ahead.

At TEC-MU, our mission is to bridge the gap between academia and industry, by creating a dynamic ecosystem where ideas can transform into tangible solutions for real-world challenges. Through continuous engagement with academic institutions, industry leaders, and policymakers, we are shaping a future driven by technology and innovation.

Over the past months, we have taken significant strides in this direction. Our recent agriculture cluster meet provided a platform to the farmers, entrepreneurs and agriculture industries to share, discuss, address critical challenges and explore cutting-edge solutions. Additionally, the TEC-MU has done a MoU with Indore Biotech Inputs and Research Pvt. Ltd. to enhance our collaboration and impactful research and development.

We extend our sincere gratitude to all stakeholders, experts, and partners who contribute to our collective success. Your unwavering support and dedication fuel our vision to make our region a hub of technological solutions that drive societal and industrial growth.

Let us continue working together to shape a future where technology and innovation lead the way.

Best Regards,

Prof. (Dr.) Birajashis Pattnaik

Coordinator

DST-TEC Medicaps University

Vision, Mission & Objectives

About TEC

The Technology Enabling Centre (TEC) at Medicaps University, Indore is a world-class facility that has been established with the support of Department of Science and Technology (DST), Government of India. The primary objective of TEC is to create an ecosystem for technology development within universities and provide a platform for researchers to network with other institutes, national laboratories, and industry partners.

At TEC, our focus is on providing an enabling ecosystem, process, and support system for researchers to turn their ideas into reality. Our state-of-the-art facility is equipped with cutting-edge technologies and equipment, as well as a team of experienced professionals who are committed to providing the resources and expertise needed to take research and development to the next level.

Vision

At the Technology Enabling Centre (TEC), Medi-Caps University, our vision is to foster technology advancement and commercialization by creating a dynamic network of academic researchers, R&D institutes and industries.

Mission

Our mission is to create an ecosystem for technology development by:

- By promoting the culture of entrepreneurship and innovation.
- Acting as a catalyst in driving technology transfer and exchange.
- Empowering academia and industry through collaborative partnerships.

Objectives

- 1.To create an ecosystem for technology development within the university and around the region.
- 2.To assess the technology requirements of MSMEs and map the technologies available in the University.
- 3.To build a platform for researchers to network with other institutes, national laboratories, and industry partners.
- 4. To provide mentorship, training and capacity building in collaboration with industry and research organizations.
- 5. To provide advisory on technology advancement and commercialization, such as financial planning, business plan development and market study

DST TEC-MU Infrastructure and Human Resource

The Technology Enabling Centre is well equipped with co-working space, a board room, seminar hall, and eight independent office spaces. The Centre has high-speed internet connectivity, a Smart Board for meetings and presentations, seminar hall equipped with projector, and speaker system.

The team is lead by Prof. (Dr.) Birajashis Pattnaik, Pro-Vice Chancellor, Medicaps University, and co-coordinator Prof. (Dr.) R. K. Shukla, Head, Mechanical Department. The team has also includes Dr. Satendra Singh, Consultant, Ms. Shristi Gupta, Trainer, and Mr. Manas Panda, Data Entry Operator.



Prof. (Dr.) Birajashis Pattnaik Coordinator, TEC Medicaps University



Prof. (Dr.) R. K. Shukla Co-Coordinator, TEC Medicaps University



Dr. Satendra Singh Consultant, TEC Medicaps University



Ms. Shristi Gupta Trainer, TEC Medicaps University



Mr. Manas Panda Data Entry Operator, TEC Medicaps University

Services at DST-TEC-MU

For Academia

For Industry

For MSME

- Commercialization of technology solutions.
- Development of technology-based pilot plant projects.
- Connecting with Industries.
- Training sessions and workshops.
- Connecting with national and scientific research facilities.
- Technology Consultation (including Design, Automation, and Optimization).
- Intellectual Property Facilitation

- Technology transfer based on Technology readiness Level
- Tailored solutions in collaboration with experts
- Connecting with both national and scientific research laboratories.
- Technology licensing.
- Collaborative development of products and processes.
- Addressing multiple disciplinary challenges
- Enhancing skills and providing training.

- Technology Consultation (including Design. Automation, and Optimization).
- Evaluation of technology readiness and enhancements.
- Training and workshops on emerging technologies.
- Technology marketing services utilizing various channels.
- Technology transfer to the industry.
- Mining, scouting, and development of technology.
- Facilitating funding and IP services

Focused Areas



Pharma and Healthcare



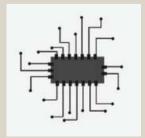
Agriculture and Food Processing



Mechanical and Manufacturing



AI/ML and **Data Science**







Electronics and Sensors Civil and Architecture Cross-Disciplinary

2nd CEO Conclave

Fostering Growth Through Innovation and Collaboration

DST-TEC, Medicaps University organized the Unveiling Ceremony of Technology Enabling Centre and 2nd CEO Conclave on September 28, 2024. The event marked the attendance of over 50 industry persons. The inauguration was graced by Chief Guest Gourav Banel (IAS), Additional Collector, Indore, Hon'ble Chancellor, Shri R.C. Mittal, Hon'ble Vice-Chancellor Prof (Dr.) D.K. Patnaik, Pro-Vice Chancellor, Prof. (Dr.) D. K. Panda and OSD to Chancellor Shri Palash Garg and governing body members.

The event aimed to bridge the gap between academia and Industry. During the event, three panel discussions were conducted from the fields of Mechanical and Manufacturing, Agriculture Food processing and Pharma and Healthcare, where key challenges faced by the industry were discussed and the strong collaboration need for and technological advancements were highlighted which marked the success of this wonderful event. In this event more than 50 industrial persons participated from different industries.



Expert Lecture on Technology Readiness Level and Technology Transfer



DST-TEC, Medicaps university organized an Expert lecture on TRL and Technology Transfer on December 27, 2024. The first session was taken by Dr. Christ P. Paul. **Professor** head. Additive and Manufacturing **Technology** lab. Technology Transfer cell & AIC pi-Hub RRCAT on Technology Readiness level. The lecture covered several critical aspects of the TRL by explaining the concept of TRL, a systematic scale used to measure the maturity of a technology. The second session was taken by Dr. Archana Chaudhary, Executive Manager (IPR Management and **Technology** Commercialization) at IIT Indore, on IPR and technology transfer. The session provides a comprehensive overview of the current state of intellectual property rights globally. It provides practical solutions for and protecting intellectual managing property in rapidly changing a technological landscape. She highlighted the role of IP in fostering innovation, driving economic growth, ensuring fair competition and technology transfer. In this event more than 50 participants from different organizations were participated.

1st Program Advisory Group (PAG) Meeting

The DST-Technology Enabling Centre (TEC) at Medicaps University successfully organized its inaugural Program Advisory Group (PAG) meeting on January 30, 2025, at the Technology Enabling Centre. The primary objective of this meeting was to align the strategic goals of TEC, gather constructive suggestions for improvement, and explore innovative ideas to enhance future initiatives.

The meeting was graced by the presence of esteemed members, including: Prof. (Dr.) D. K. Patnaik, Vice-Chancellor, Medicaps University, Dr. Krishna Kanth Pulicherla, Scientist E, DST, Dr. Sanjay Kumar, Chief Scientist & Head, Metal Extraction and Recycling Division, Dr. S. K. Kashyap, Coordinator, TEC G.B. Pant University, Prof. (Dr.) D. K. Panda, Coordinator, TEC Medicaps University, Dr. R. K. Shukla, Co-coordinator, TEC Medicaps University.

The CWC members includes Mr. Bharat Bhushan Singh, Tata International, Prof. V. Ganeshan, Dean Research, Prof. Pramod Nair, Dean Engineering, Prof. S. D. Upadhyay, Dean Agriculture, Prof. A. A. Koser, Dean Science, Prof. P. Siluvainathan, Registrar, and Mr. Sanjay Dhare, CFAO, Medicaps University.

The special invitees includes Shri Palash Garg, OSD to Chancellor, Medicaps University, Shri Akshit Garg, Board Member, Medicaps University, Prof. Dhruva Ghai, Pro-Chancellor, Oriental University, Prof. Sarita Kansal, I/C MIIC, Medicaps University, Prof. Ram Bansal, Manager, MII Foundation.



1st Program Advisory Group (PAG) Meeting

The meeting commenced with a formal introduction of all PAG members. This was followed by the opening remarks of Prof. (Dr.) D. K. Patnaik, Vice-Chancellor, Medicaps University, who emphasized the significance of the TEC and its role in fostering technological advancements. Subsequently, Prof. (Dr.) D. K. Panda, Coordinator of TEC, presented a comprehensive progress report, highlighting the milestones achieved by TEC thus far. He provided insights into the existing collaborations and partnerships with industry and academia, as well as outlined the future roadmap and strategic plans for TEC.

Key Discussions and Outcomes

The members actively participated in discussions and provided valuable inputs on several crucial areas, including: Capacity building and skill development programs, Enhancing industry-academia interactions and addressing identified challenges, Funding opportunities and resource requirements for upcoming initiatives, Key focus areas for future growth and development.

The meeting concluded with a consensus on actionable strategies to strengthen the TEC's impact and drive innovation through collaborative efforts. The contributions and suggestions from all members were greatly appreciated, and their insights will play a vital role in shaping the future direction of the TEC at Medicaps University.



Agriculture Cluster Meet

Strengthening Collaboration for Sustainable Agriculture

DST- Technology Enabling Centre, in collaboration with MII. MIIC & Department of Agriculture, Medi-University successfully Caps organized an "Agriculture Cluster Meet" on February 15, 2025. This was aimed foster event to collaboration between government, industry, and academia to address critical challenges and opportunities in agriculture. This meet emphasized sustainable practices, advancements agri-technology, supply chain in resilience, and policy support to ensure food security. The event was by several distinguished graced guests, including Prof. (Dr.) D. K. Patnaik, Vice-Chancellor, Prof. (Dr.) Vice-Birajashis Pattnaik. Pro Kumar Chancellor. Shri Ashish Kanesh, Joint Director, Horticulture, Ujjain; Shri Dayaram Jatav, Joint Director, Horticulture, Indore; Shri Dhoom Singh Chouhan, Deputy Director, Horticulture; Ms. Sunita Assistant Director. Verma. Agriculture: Dr. Sandeep Yaday. Assistant Director, DDA Indore; Prof. (Dr.) S. D. Upadhyay, Dean Agriculture.



Agriculture Cluster Meet

Strengthening Collaboration for Sustainable Agriculture



The meet witnessed participation from government officials. progressive farmers. agriculture industry representatives, Professors, and researchers from the agriculture department. Farmers highlighted the challenges they face in agriculture, while government officials discussed various policies. schemes. support mechanisms available to them. Industry representatives and academia extended their expertise and solutions to address these issues. Discussions during the event focused capacity building, skill on development programs, industry interaction, funding opportunities, resource requirements, and key areas for growth and development. The session concluded with valuable insights and recommendations from all stakeholders, paving the way for industry-academia stronger collaboration in the agriculture sector.

Industry Outreach Programs

The Industry Outreach program by TEC consisted of Industry visits and meetings with the important stakeholders of the industry. This helped promote between academia and industry, understand the requirements of the industry and realtime problems faced by the industry. Through regular dialogues with the industry, opportunities for collaboration and knowledge exchange established. This helped identify the gap between technological advancements and real-world applications and bridge the gap between academia and industry ultimately contributing to the growth of both sectors.

Following Industries were covered in the outreach program:

- Indore Biotech Inputs and research Pvt. Ltd.
- Manay Chetna Vikas Kendra
- Oorja Technical Services Pvt. Ltd
- Rajshree Engineering Pvt. Ltd.
- Wan cosmetics Lab LLP
- Natrax, Pithampur
- Mahindra & Mahindra Ltd
- Delite Automac Pvt Ltd



Memorandum of Understanding (MoU)



DST- Technology Enabling Centre, Medicaps University signed a Memorandum of understanding (MoU) with Indore Biotech Inputs and Research Pvt. Ltd., Indore to work together in the key areas such as research, patents, exchange of technical expertise, joint projects etc.

Achievements

The achievements of DST-TEC Medicaps University in the form of key performance indicators (KPI) are shown below:

S. No.	Key Performance Indicator	Present status
1	Industrial visits	18
2	Problem statement collected from industries	38
3	Working on Industrial Problem to providing solution	28
4	Events organized (Workshop, Expert Lecture/ Conclave etc.)	03
5	Events Proposed (Workshop, Expert Lecture/ Conclave etc.)	03
6	Memorandum of understanding (MoU)	01

Upcoming Events!

- Food Processing Cluster Meet: Enhancing Innovation and Collaboration in the Food Industry
- Manufacturing Sector Cluster Meet: Fostering Innovation, Collaboration, and Growth
- Pharma Cluster Meet

The Technology Enabling Centre at Medi-Caps University is actively involved in promoting innovation, research, and collaboration. We invite you to participate and work with us in advancing these initiatives.

For more information, please contact us

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