

FROM LAB TO MARKET | Partnership shows how academic innovations can benefit industry

IIT-I licenses micro 3D printing innovation to VFUse Metal

Our Staff Reporter

INDORE

The Indian Institute of Technology-Indore has taken a major step toward turning research into real-world solutions by licensing its advanced micro-additive manufacturing technology to VFUse Metal Pvt. Ltd. This partnership is a scintillating example of how academic innovations can benefit industry and support the country's push for self-reliance under the Atmanirbhar Bharat initiative.

The technology, known as "Laser Decal Transfer (LDT)

based μ -3D Printer," has been developed by researchers from the department of mechanical engineering at IIT Indore.

The team includes Prof. Palani Iyamperumal Anand, Prof. Vipul Singh, Dr. Anshu Sahu and Krishna Tomar. This unique system allows for highly precise micro 3D printing using thin-film feedstock, offering exceptional material efficiency.

With its compact and efficient design, this micro 3D printer is suitable for a wide range of applications, including micro-electronics, biomedical devices, flexible wearable technology, sensors



used in critical sectors and advanced manufacturing. Its ability to produce structures at the micron scale makes it a valuable tool for industries that demand precision.

Speaking about the development, Prof. Suhas S. Joshi, director of IIT-Indore said, "This technology transfer reflects IIT Indore's commitment to pushing the boundaries of research and ensuring that our innovations create real impact in society. We are proud to see our faculty's work moving from the lab to industry."

Prof. Abhirup Datta, dean of research and development, added, "This collaboration

shows how focused efforts in research and innovation can lead to strong industry partnerships. We are continuously working to translate IIT-Indore's cutting-edge technologies into valuable commercial solutions."

By transferring this technology to VFUse Metal Pvt. Ltd., IIT-Indore continues to strengthen its focus on building strong connections between academia and industry.

The institute remains committed to leading the way in technology transfer and encouraging innovation-based entrepreneurship across the nation.