

IIT Guwahati and Miraclus Orthotech join forces to drive breakthroughs in orthopaedic technology

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The partnership will initiate industry-academia exchange programmes



Indian Institute of Technology Guwahati (IIT-G) has signed a Memorandum of Understanding (MoU) with Miraclus Orthotech, a leading orthopedic implant manufacturer, to collaborate on innovative research, development, and testing of advanced orthopedic implants and instruments.

This partnership marks a significant milestone in advancing biomedical engineering by combining IIT Guwahati's expertise in cutting-edge research with Miraclus Orthotech's industry leadership. Together, they aim to address critical challenges in the medical device sector and deliver high-quality, efficient solutions to improve patient care.

The partnership will focus on four key areas:

- **Research and Development:** Joint efforts to design next-generation orthopedic implants and instruments.
- **Product Testing and Validation:** Leveraging IIT Guwahati's state-of-the-art facilities to ensure products meet global quality standards.
- **Skill Development:** Conducting workshops, training programs, and knowledge-sharing sessions to provide students and researchers with practical exposure to medical device technology.
- **Intellectual Property Creation:** Co-developing patents and publishing research outcomes to advance the field.

As the next step, IIT Guwahati jointly with Miraclus plans to establish a facility equipped with advanced prototyping and testing tools for orthopedic implants and instruments. This facility will serve as a hub for interdisciplinary research, bringing together experts from biomedical engineering, materials science, and clinical practice.

Additionally, the partnership will initiate industry-academia exchange programmes, allowing researchers and students to work closely with industry professionals to bridge the gap between theoretical research and practical implementation. A roadmap for regulatory approvals and commercialisation will also be developed to accelerate the transition of innovative medical devices from the lab to the market.