



INDIAN INSTITUTE OF TECHNOLOGY MANDI

भारतीय प्रौद्योगिकी संस्थान मंडी

Institute Colloquium

“Patenting Through Design Thinking”



26th September,
2025



05:00 PM



Auditorium,
North Campus

Prof. Dipankar Deb

**Centre for Artificial
Intelligence & Robotics (CAIR)
IIT Mandi**

“Patenting Through Design Thinking”

Prof. Dipankar Deb

Affiliation: - Faculty In-charge and Director-Incubation of IIT Mandi Catalyst, and a Professor at the Centre for Artificial Intelligence and Robotics (CAIR), IIT Mandi

Abstract: -

In today’s innovation-driven economy, the boundary between creativity and intellectual property protection is increasingly vital. This talk explores how *Design Thinking*—with its emphasis on empathy, ideation, prototyping, and iteration—can be strategically leveraged to generate patentable inventions. By aligning user-centric problem solving with structured IP frameworks, innovators can uncover hidden opportunities for novelty and utility. Real-world case studies will demonstrate how reframing challenges through design thinking not only fosters breakthrough ideas but also ensures their protection through patents. Participants will gain practical insights into integrating design methods with patent strategy to maximize innovation impact and long-term value creation.

Bio-Sketch: -

Prof. Dipankar Deb is the Faculty In-charge and Director-Incubation of IIT Mandi Catalyst, and a Professor at the Centre for Artificial Intelligence and Robotics (CAIR), IIT Mandi. He also serves as the Coordinator of the Centre for Innovation and Entrepreneurship at IIT Mandi.

He received his Ph.D. from the University of Virginia, USA (2007), an M.S. from the University of Florida, USA (2004), and a B.Tech from NIT Surathkal (2000).

Prof. Deb is a Senior Member of IEEE, a Fellow of IETE and IE(I), and a Life Member of ISTE. He previously served as an Assistant Professor at IIT Guwahati (2010–2012) and brings over six years of industrial experience, having worked in New York, USA and at GE Global Research, Bengaluru.

He holds 6 US patents and 11 Indian patents, has published 62 SCI-indexed journal articles, and presented over 40 international conference papers. In addition, he has authored 12 books with reputed publishers such as Springer and Elsevier, and is the author of

an upcoming book with Springer Nature titled *Patenting through Design Thinking*. He also serves as a Book Series Editor with CRC Press (Control Theory and Applications) and Springer (Studies in Infrastructure and Control).

His research spans Adaptive Control, Active Flow Control, Renewable Energy, Cognitive Robotics, and Machine Learning. He has been listed in the Top 2% of researchers worldwide by Stanford University for three consecutive years (2020, 2021, and 2022).
