

## Report on

# TECHNOLOGY READINESS LEVELS MRL, IRL, IP COMMERCIALIZATION AND TECHNOLOGY TRANSFER

A session on “**Technology Readiness Levels (TRL), Manufacturing Readiness Levels (MRL), Innovation Readiness Levels (IRL), IP Commercialization and Technology Transfer**” was organized to provide students with a comprehensive understanding of the journey from laboratory research to market deployment.

The expert speaker Dr. K. L. Mokariya explained the concept of Technology Readiness Levels (TRL) and how it is used to assess the maturity of a technology, starting from basic research to system validation and commercialization. The importance of Manufacturing Readiness Levels (MRL) in evaluating production feasibility and scaling up innovations for industrial application was also discussed. Further, Innovation Readiness Levels (IRL) were introduced to help students understand the preparedness of an idea for market adoption and business integration.



The session also covered Intellectual Property (IP) commercialization strategies, highlighting how patents and other IP assets can be monetized through licensing, startups, and industry collaborations. The process of technology transfer from academic institutions to industry was elaborated, emphasizing documentation, valuation, agreements, and partnership models.

Real-world examples and case discussions helped students understand how innovative ideas progress through different readiness stages before reaching the market. The session was interactive and informative, encouraging participants to think beyond invention and focus on scalability, protection, and commercialization of technology.

Overall, the session provided valuable insights into transforming research outcomes into viable commercial products and strengthened students' understanding of innovation management and entrepreneurship.



Total of 71 students participated in the session from various engineering departments. The students actively engaged in the discussion. The session concluded with a vote of thanks given by Pror. A. S. Mishal.