

## DEPARTMENT OF MECHANICAL ENGINEERING

### ACHIEVEMENTS

Session	Title of Patent	Name of Author	Filed / Published / Granted	Date of Filing / Publication / Grant	Patent Application Number
2024-25	Sleek Argonomic Bicycle	1. Mr. Saswat Kumar Das (Assistant Professor), 2. Mr. Krishna Kumar Karothiya (Assistant Professor), 3. Mr. Vinay Sharma (Student), 4. Mr. Vipul Gupta (Student)	<b>Filed</b>	21/08/2024	202411063019
	Prosthetic Leg Control System and Method Thereof	1. Mr. Saswat Kumar Das (Assistant Professor), 2. Mr. Krishna Kumar Karothiya (Assistant Professor), 3. Mr. Vinay Sharma (Student), 4. Mr. Vipul Gupta (Student)	<b>Filed</b>	21/08/2024	202411063021
2023-24	An All Weather Protection for Vehicles	Mr. Saswat Kumar Das (Assistant Professor)	<b>Published</b>	01/12/2023	202311076368
	Robotic Grasping and Positioning Device	Ms, Ashish Kumar Singh	<b>U.K. Design Patent Granted</b>	20/10/2023	6325321

Robot Apparatus Container	Ms, Ashish Kumar Singh (Assistant Professor)	<b>U.K. Design Patent Granted</b>	20/10/2023	6325319
Solar Cell Phone Cover	Dr. Anand Prakash Singh (Professor)	<b>U.K. Design Patent Granted</b>	10/10/2023	6316580
Solar Panel Mobile Stand	Dr. Anand Prakash Singh (Professor)	<b>U.K. Design Patent Granted</b>	10/10/2023	6316581
Welding Electrode and Method for Manufacturing Thereof	1. Dr. Sumit Mahajan (Assistant Professor), 2. Dr. Vishal Vasistha (Assistant Professor)	<b>Published</b>	06/10/2023	202311059014
Overhead Water Tank with Air-insulated Layer	1. Mr. Krishna Kumar Karothiya (Assistant Professor), 2. Mr. Satya Prakash Gupta (Assistant Professor)	<b>Published</b>	06/10/2023	202311058991
Method of Preparation of Nano Emulsified Hydrous Ethanol-Diesel-Al <sub>2</sub> O <sub>3</sub> Fuel	1. Dr. Sumit Mahajan (Assistant Professor), 2. Dr. Vishal Vasistha (Assistant Professor)	<b>Published</b>	06/10/2023	202311058984
Weed Detection in Crops Using Machine Learning Techniques	Mr. Saswat Kumar Das (Assistant Professor)	<b>Published</b>	11/08/2023	202311048893
Process of Implementing IoT to Decarbonise Road Transport and Mitigate Global Emission Using Electric Vehicle	Dr. Vishal Vasistha (Assistant Professor)	<b>Published</b>	21/07/2023	202311040804

2022-23	Intelligent inhaler for Asthmatic Patients	Mr. Saswat Kumar Das (Assistant Professor)	<b>Germany Utility Patent Granted</b>	30/09/2022	2022093017304700DE
2021-22	Rapid Covid 19 Detection System Using Deep Learning Through Lu+B12:B28ngs X-Rayimages	1 . Mayank Raj (Assistant Professor) 2 . Saswat Kumar Das (Assistant Professor)	<b>Published</b>	22/10/2021	202011016779
	Drone Surveillance System for Ragging Detection	Mayank Raj (Assistant Professor)	<b>Published</b>	17/09/2021	202011011163
	Wearable Heart Condition Monitoring Device	Mayank Raj (Assistant Professor)	<b>Published</b>	23/07/2021	202011002362
	An Auto matic Water Quality Monitoring System	Mayank Raj (Assistant Professor)	<b>Published</b>	23/07/2021	202011002131
	Intelligent Micro Grid Design for Rural Agriculture Irrigation	Mr. Ashish Kumar Singh (Assistant Professor)	<b>Published</b>	22/07/2022	202241034180
	Apparatus and Process for Converting Waste Plastic Materials into Fuel	1 . Saswat Kumar Das (Assistant Professor) 2 . Dr. Deo Raj Tiwari (Associate Professor)	<b>Published</b>	23/04/2021	201911042326

- Dr. Girish Dutt Gautam received a certificate of reviewer in Science Direct and Scopus Conference in 2024.
- Dr. Girish Dutt Gautam published a book titled “*Idea to Business Model*” (S. K. Kataria & Sons) in 2024.
- Mr. Krishna Kumar Karothiya published a book titled “*Indian Tradition Culture and Society*” (VSRD Academic Publisher) in 2022.
- Mr. Manoj Kumar received a certificate from NPTEL in “*Thermodynamics*” course in 2021.
- Mr. Saswat Kumar Das received a certificate from NPTEL in “*NBA Accreditation and Teaching Learning in Engineering*” (NATE).
- Mr. Krishna Kumar Karothiyareceived a certificate from NPTEL in “*I. C. Engine*”.