

AUTOMATA

NEWSLETTER

Department of Mechatronics Engineering,
School of Automobile, Mechanical & Mechatronics Engineering

April 2024 Issue Vol: 9

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The HoD's Message
Dr. Shahbaz Ahmed Siddiqui



I'm delighted to contribute a few sentences to the department's bulletin. The world of current technology is changing swiftly, therefore it's important for us to stay up to date on the latest advancements in the field. The department arranges a variety of events, including conferences, webinars, seminars, faculty development programs, and other extracurricular and co-curricular activities, to educate students about current and prospective technical breakthroughs. The department has also won recognition for the range of activities in which its faculty and students participate. I want to see more of these kinds of events in the future for the overall development of the department.

Vision

Global excellence in Mechatronics domain to provide comprehensive solution for industrial advancements and societal challenges.

Mission

M1: Impart value-based education to fulfil industrial needs by nurturing inter-disciplinary knowledge for enhancing academic and professional excellence.

M2: Provide with state-of-art academic and research facilities, fostering humanistic values and peer teaching-learning approach for enhancing employability and entrepreneurship skills.

M3: Encourage inter-disciplinary approach to foster research and innovative ideas for smart Mechatronics system by experiential learning.

M4: Provide opportunity to exhibit and enhance life long learning skills with ethical values and social relevance.



The event was a one-day visit organized by the International Society of Automation (ISA) MUJ Chapter, in partnership with the Department of Mechatronics Engineering to Ashray Care Home situated in Nevta, Jaipur. The event started off with students at the care home displaying their various talents followed by few rounds of fun games. Eatables and other prizes were distributed among the children at the care home which brought joy to them. Moreover, several students volunteers from MUJ actively contributed to the event by donating various items.

Journal Publications

S. No	TITLE
1	Malhotra, M., Garg, A., & Rawat, M. (2024). Photocatalytic Degradation of Ofloxacin in Wastewater Using Mg-Ni Co-doped TiO ₂ Catalyst. <i>Chemical Engineering & Technology</i> , 47(4), 683-691.
2	Pandey, K. K., Rawat, M., Yadav, A., Parhi, D. R., Singh, R., & Pathak, V. K. (2024). Obstacle negotiation and navigation control of robotic agents in a dynamic and complex terrains. <i>International Journal on Interactive Design and Manufacturing (IJIDeM)</i> , 1-20.

S. No	TITLE
3	Misra, M., Srivastava, A. K., Kadam, A. N., Salunkhe, T. T., Kumar, V., & Nikalje, A. P. G. (2024). Substantial enhancement of optoelectronics and piezoelectric properties of novel hollow ZnO nanorods towards efficient flexible touch and bending sensor. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 685, 133232.
4	Kumar, V., Vaid, K., Johns, T., Negi, A., Misra, M., Behera, B., & Kim, K. H. (2024). Advancements in metal organic framework-based materials for the detection of antioxidants in food and biological fluids. <i>TrAC Trends in Analytical Chemistry</i> , 117522.
5	Das, S., Ranjan, P., & Chakraborty, T. (2024). Study of oxide-based nano cluster X3O4 (X= Ti, Fe and Zn) for biomedical applications: a CDFT approach. <i>Journal of Mathematical Chemistry</i> , 1-17.
6	Kolhe, N. D., Walekar, L. S., Kadam, A. N., Kulkarni, M. A., Parbat, H. A., Misra, M., ... & Mali, M. G. (2024). Facile construction of multifunctional xNiCo2O4/BiVO4 heterojunction with accelerated charge transfer for efficient photocatalytic treatment of Cr (VI), MB and TC under visible light. <i>Chemosphere</i> , 352, 141353.
7	Sharma, P., Ranjan, P., & Chakraborty, T. (2024). Applications of conceptual density functional theory in reference to quantitative structure–activity/property relationship. <i>Molecular Physics</i> , e2331620.
8	Sharma, L., Gupta, R. K., Lamba, C. S., Kumar, A., & Lathar, P. (2024). Efficient practical Byzantine Consensus-based reputation method for IoT based electronic waste tracking and tracing system using blockchain. <i>Multimedia Tools and Applications</i> , 1-34.
9	Singh, B. P., Goyal, S. K., Siddiqui, S. A., Shrivastava, D. R., Singh, S., Alotaibi, M. A., ... & Afthanorhan, A. (2024). A Novel Approach for Enhanced Real-Time Event Diagnosis for Grid Connected Microgrid with Multiple Distributed Energy Resources (DERs). <i>International Journal of Mathematical, Engineering & Management Sciences</i> , 9(3).
10	Jain, M., & Patil, S. (2024). Material testing for injection molded and 3D printed pristine/glass reinforced nylon at various strain rates. <i>Journal of Reinforced Plastics and Composites</i> , 07316844241248504.

Conference Publications

S. No	TITLE
3	Mahapatra, R., & Gaurav, K. (2023, December). Real Time Quality Assessment in a Production Line: Machine Learning Approach. In 2023 International Conference on Modeling, Simulation & Intelligent Computing (MoSiCom) (pp. 504-509). IEEE.
4	Sharma, S., & Randhawa, P. (2024, January). IoT-Powered AC Temperature Management for Eco-Smart Infrastructures. In 2024 2nd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT) (pp. 59-63). IEEE.
5	Kumawat, A. K. (2024, February). Control and Modelling of Industrial Electro-Hydraulic Actuation System. In 2024 2nd International Conference on Computer, Communication and Control (IC4) (pp. 1-3). IEEE.

Book Chapter Publications

January 2024	SOLID MATERIALS FOR APPLICATIONS IN LIFE SCIENCES: AN INTRODUCTION	Dr Prabhat Ranjan/Mechatronics Engineering
September 2023	COMPUTATIONAL ANALYSIS OF X3O4 (X MN, FE, AND CO) NANOFIBERS	Dr Prabhat Ranjan/Mechatronics Engineering

Department Achievements

 MANIPAL UNIVERSITY
JAIPUR



Department of Mechatronics Engineering

Congratulates

Rahul Marion Anthony
(2020-2024)

For getting Selected in
UNO MINDA



“I am writing to express my sincere gratitude to the placement cell of Manipal University for their exceptional support and guidance throughout my journey towards securing a placement. Their dedication, professionalism, and commitment to helping students like me succeed are commendable.”

 MANIPAL UNIVERSITY
JAIPUR



Department of Mechatronics Engineering

Congratulates

Aaresh Rajawat
(2020-2024)

For getting Selected in
UNO MINDA



“It gives me great pleasure to tell you everything about my experience receiving a full-time offer from UNO Minda thanks to my campus placements! We were presented with several remarkable possibilities by our prestigious institution, Manipal University Jaipur, which allowed us to network with numerous successful, progressive companies. I owe an obligation of gratitude to our institution, esteemed faculty members, and my friends for their important guidance and advice that helped me on my road that resulted in my placement. I'm now excited to start this new chapter in my life and further my career at UNO Minda!”



Mr. Mohit Jain was conferred upon with Ph.D for the thesis titled “Tooth Bending Performance and Characteristic Analysis of Nylon 6 based Standard Involute and Asymmetric Gears”

 MANIPAL UNIVERSITY
JAIPUR



Department of Mechatronics Engineering

Congratulates

Lohit Shandilya
(2020-24)

For getting Selected in
JSW Group



“At MUJ, I found an environment brimming with opportunities for both personal and intellectual growth. I'm ready to embark on a career with limitless possibilities”

Faculty with additional Responsibility at MUJ level

