>>> DEPARTMENT OF MECHANICAL ENGINEERING

# NEWS LETTER

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2022-2023 VOLUME 4



### **DEPARTMENTAL NEWS**

### >>> TECHNICAL VISIT @ TI MALL



A visit to see the function of heating ventilation and air conditioning Plant. How they work, & how does the coefficient of performance measure?

During the visit different components like chiller, compressor, evaporator, & condensors' were overviewed.

## >>> TECHNICAL VISIT @ JASH ENG.PVT. LTD.



>>> Different shops of the company have been seen. Those shops are :- Store shop, foundation shop, machine shop, valve shop, sewage treatment plant, CNC m/c and industry profile presentation etc. From that visit students are realised how the product is manufactured and how the people works in different shops and what are the basics of industry.

#### PAPER PUBLICATIONS

- 1. GANGSAR, A.R. BAJPEI, AND R. PORWAL, A REVIEW ON DEEP LEARNING BASED CONDITION MONITORING AND FAULT DIAGNOSIS OF ROTATING MACHINERY. NOISE & VIBRATION WORLDWIDE, 2022. 53(11): P. 550-578.
- 2. P. GANAI, V. PARE, B.R. RAWAL, AND B.S. MORE, BIO-MECHANICAL ANALYSIS OF PLATE SYSTEM USED FOR OPENING WEDGE HIGH TIBIAL OSTEOTOMY. MATERIALS TODAY: PROCEEDINGS, 2022. 61: P. 90-95.
- 3. A. BHAMDARE, A. ATULKAR, AND R. PORWAL, DESIGN, STATIC STRUCTURAL ANALYSIS AND TOPOLOGY OPTIMIZATION OF A FOUR WHEELER CONNECTING ROD. MATERIALS TODAY: PROCEEDINGS, 2022. 66: P. 829-833.
- 4. A. GUPTA, A. ATULKAR, AND R. PORWAL, INVESTIGATIONS ON IC ENGINE PISTON RING MADE OF COMPOSITE MATERIALS. JOURNAL OF MINES, METALS & FUELS, 2022. 70.
- 5. P. MANDLOI, B. DHAKAR, V. PARE, AND S. MANEPATIL, EXPERIMENTAL INVESTIGATION OF WEAR PROPERTIES OF AA6061+ AL2O3 METAL MATRIX COMPOSITE FABRICATED BY VACUUM STIR CASTING METHOD. MATERIALS TODAY: PROCEEDINGS, 2022. 61: P. 55-61
- 6. A. BULIWAL, B. DHAKAR, AND V. PARE, FABRICATION OF ALUMINUM BASED METAL MATRIX COMPOSITE USING STIR CASTING METHOD AND CHARACTERIZE ITS TRIBOLOGICAL PROPERTIES. MATERIALS TODAY: PROCEEDINGS, 2022. 61: P. 78-83.
- 7. U. SINGH, AND B.S. MORE, PREDICTION OF FLOW PARTICLE BEHAVIOR IN CYCLONE SEPARATOR USING COMPUTATIONAL FLOW DYNAMICS. INTERNATIONAL JOURNAL OF PERFORMABILITY ENGINEERING, 2022. 18(2): P. 128.
- 8. H. SHARMA, B. MORE, AND G. MOURYA, NUMERICAL ANALYSIS OF TRIANGULAR PRISM AT LOW REYNOLDS NUMBER. MATERIALS TODAY: PROCEEDINGS, 2022. 66: P. 1120-1125.
- 9. D. NIGWAL, D.K. PASI, AND M. CHOUKSEY, EFFECT OF NONLINEAR CONICAL SPRINGS ON THE VIBRATION CHARACTERISTICS OF SEVEN DEGREE-OF-FREEDOM CAR MODEL USING MATLAB/SIMSCAPE. INTERNATIONAL JOURNAL OF DYNAMICS AND CONTROL, 2023. 11(2): P. 491-503.
- 10. D. NIGWAL, D.K. PASI, AND M. CHOUKSEY, MODELLING AND SIMULATION OF CAR SUSPENSION WITH LINEAR AND NONLINEAR SPRING, IN RECENT ADVANCES IN MACHINES AND MECHANISMS: SELECT PROCEEDINGS OF THE INACOMM 2021. 2022, SPRINGER. P. 361-372.
- 11 P. GANGSAR, M. CHOUKSEY, A. PAREY, AND Z. ALI, DIAGNOSTICS OF COMBINED MECHANICAL AND ELECTRICAL FAULTS OF AN ELECTROMECHANICAL
- SYSTEM FOR STEADY AND RAMP-UP SPEEDS. JOURNAL OF VIBRATION ENGINEERING & TECHNOLOGIES, 2022. 10(4): P. 1431-1450.
- 12. R. SHARMA, P. GANAI, V. PARE, H. KANCHWALA AND S. J. SRIHARI, VALIDATION OF A STEERING SYSTEM MATHEMATICAL MODEL VIA TEST RIG MEASUREMENTS, IN RECENT ADVANCES IN MACHINES AND MECHANISMS: SELECT PROCEEDINGS OF THE INACOMM 2021. 2022, SPRINGER. P. 167-176.
- 13. M.R. PATTNAYAK, P. GANAI, R.K. PANDEY, AND J.K. DUTT, M. FILLON, AN OVERVIEW AND ASSESSMENT ON AERODYNAMIC JOURNAL BEARINGS WITH IMPORTANT FINDINGS AND SCOPE FOR EXPLORATIONS. TRIBOLOGY INTERNATIONAL, 2022: P. 107778.
- 14. P. GANAI, J.C. ATWAL, R.K. PANDEY, AND J.K. DUTT, PERFORMANCE STUDIES OF SELF-ACTING OIL-LUBRICATED BUMP JOURNAL BEARING UNDER LIGHTLY LOADED CONDITIONS EMPLOYING POCKETED TOP FOILS. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART C: JOURNAL OF MECHANICAL ENGINEERING SCIENCE, 2022. 236(15): P. 8714-8730.
- 15. EKOE A AKATA, D. NJOMO, B. AGRAWAL, A. MACKPAYEN AND A. ALI, TILT ANGLE AND ORIENTATION ASSESSMENT OF PHOTOVOLTAIC THERMAL (PVT) SYSTEM FOR SUB-SAHARAN TROPICAL REGIONS: CASE STUDY DOUALA, CAMEROON. SUSTAINABILITY, 2022. 14(23): P. 15591.
- 16. S.K. SHEJKAR, B. AGRAWAL, A. AGRAWAL, AND G. GUPTA, PHYSICAL, MECHANICAL, AND SLIDING WEAR BEHAVIOR OF EPOXY COMPOSITES FILLED WITH SURFACE MODIFIED WALNUT SHELL PARTICULATE. POLYMER COMPOSITES, 2022. 43(10): P. 7526-7537.
- 17. U.S. GUPTA, S. TIWARI, U. SHARMA, AND K. VILIYA, COLD GLOW DISCHARGE NITROGEN PLASMA PRETREATMENT OF BANANA FIBRE FOR IMPROVING THE MECHANICAL CHARACTERISATION OF BANANA/EPOXY COMPOSITES. JOURNAL OF THE INSTITUTION OF ENGINEERS (INDIA): SERIES D, 2022. 103(2): P. 417-429.
- 18. S.S. PATEL AND A. LANJEWAR, A CRITICAL REVIEW ON DIFFERENT ROUGHNESS GEOMETRIES AND THEIR EFFECT ON HEAT TRANSFER AND FRICTION FACTOR. ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, 2022: P. 1-41.

### **WORKSHOP ON OUTCOME BASED EDUCATION**



**1 YEAR CO-CURRICULAR ACTIVITIES** 

- MITANSH JARIYA PLAYER OF MECHANICAL HELPED COLLEGE GET 2ND IN CHESS NODALS.
- MRADUL PATORIA 3RD IN POETRY COMPETITION IN AAYAM 2023 IN "KAHO KAHAANI".
- PRATEEK CHOURASIYA HELPED COLLEGE GET 1ST IN BADMINTON NODALS