

THE MASTER STROKE

A QUARTERLY
MECHANICAL ENGINEERING
NEWSLETTER

Volume 1
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DEPARTMENT OF MECHANICAL ENGINEERING
SCHOOL OF STUDIES OF ENGINEERING AND TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA , BILASPUR (C.G.)

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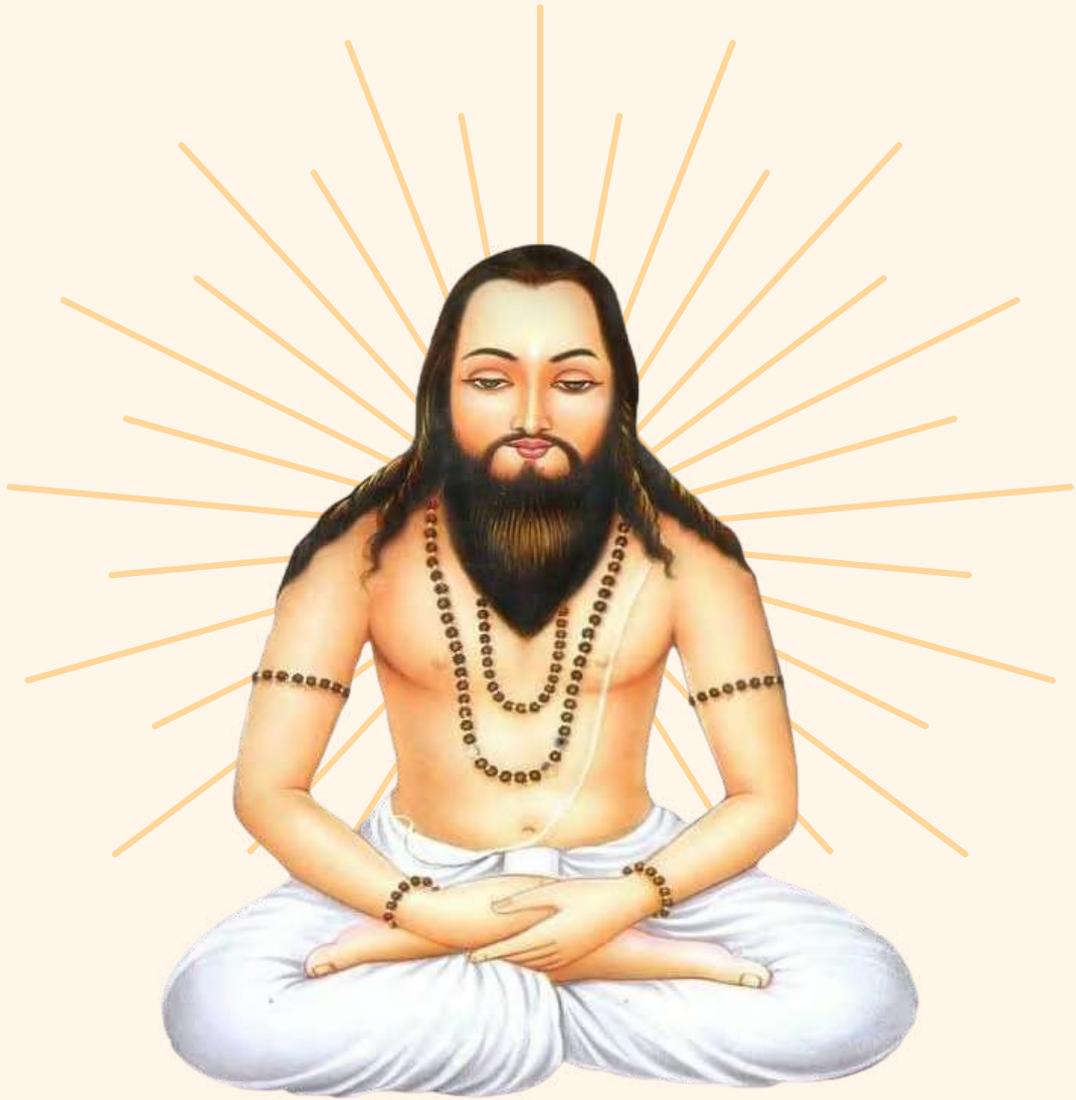
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Saint Shri Guru Ghasidasji



Message from the H' Vice Chancellor



PROF. ALOK KUMAR CHAKRAWAL

This is a matter of absolute gladness that the Department of Mechanical Engineering, School of Studies of Engineering & Technology for publishing their first ever E-Newsletter "THE MASTER STROKE". The newsletter is a testimony to all the activities and research happenings in the Department. This will help in bringing out and enhancing the diverse skills and abilities of faculties & students. It is a worthy effort that will show case the departmental events. Academics is not just about classroom learning. Students must perpetually improve their skills by keeping conversant with the world around. This newsletter will provide the students a platform for exchanging ideas and showcasing their creativity. It will also work as an impetus to motivate faculties and student to organize and contribute in various events with zeal and enthusiasm. In my opinion, it showcase skills, creativity and talent with an all new enthusiasm

I congratulate everyone who has been a part of this wonderful edition of this newsletter.

I wish you all the best for future.

Message from the Registrar



PROF. SHAILENDRA KUMAR

It's a matter of great pride that the Department of Mechanical Engineering, School of Studies of Engineering & Technology is publishing its Electronic Newsletter – "THE MASTER STROKE" that will showcase the events and happening of the Mechanical department at Guru Ghasidas Vishwavidyalaya. The department is developing creative forums and the coordinated efforts for the students and faculty members, which will also bring the essential connect and bonding. I am sure that the newsletter will become a must-read chronicle on happenings around us. It reflects the spirit of the University fraternity in attaining excellence in the pursuit of knowledge. I wish the faculty members, students and staff success in their respective fields and endeavours. I congratulate editorial team of faculty and students for their initiative and wish them success. Best Wishes to the "THE MASTER STROKE" Team.

From HOD's Desk



DR. T.V. ARJUNAN

As Head of Department – Mechanical Engineering, I am grateful to be in this position. It was quite challenging for both the students and faculty to be on one virtual platform and make this happen.

Both the faculty and students' achievement has made me proud this time. We signed the MoU with different esteemed organizations, had the guest talk session, organized AICTE - ATAL sponsored FDPs, webinars as well as workshops, and somehow upgraded the skills of the people engaged. The Department has initiated the starting of the "SAE collegiate club "which is surely going to be an asset for everyone in the long run. We are in the process of formally inaugurating the chapter in the coming semester. Faculty achievements were recognizable as some patents were filed. Simultaneously some Journal papers with good impact factors were published along with some conference papers.

Students were able to mark up with industry expectations and made their place in the placement with an average package. They too performed well in the competitive exams as well as in the sports. This time the performance was up to the level of the organization. I firmly believe that the synergy of the organization will work wonders.

DEPARTMENTAL ACTIVITIES

FDP /Workshop / Seminar Organised

The following faculty development programs (FDP) were organized by the Department of Mechanical Engineering, School of Studies of Engineering and Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur C.G and sponsored by AICTE - Training and Learning (ATAL), Ministry of Higher Education Govt. of India

Slurry Flow in Mineral Processing – Principles and Practice

Date - 06 Dec 2021 to 10 Dec 2021

Faculty co-ordinator - Dr. Pankaj Kumar Gupta (Associate Professor, Department of mech. engineering)

Objective- To help participants learn the major and salient features of slurry flows in mineral processing.

Sponsored Amount- Rs. 93,000/-

Advancement in Manufacturing Technology

Date - 17 Jan 2022 to 21 Jan 2022

Faculty co-ordinator - Mr. Biplab Das (Assistant Professor, Department of Mech. Engineering), Mr. Manish Bhaskar (Assistant Professor, Dept of Mech. Engineering), and Mr. Pradeep Patanwar (Assistant Professor, Dept of Mech. Engineering).

Objective - The program was to help participants to study the scope of manufacturing technology in India.

Sponsored Amount - Rs. 93,000/-



WEBINAR ORGANISED

- **Recent Development in Renewable Energy**

Date - 27th January 2022

Faculty co-ordinator - Mr. Manish Bhaskar, Assistant Professor, Mechanical Engineering.

Objective - The program was to help the participants to learn about the energy industry and employment opportunities in renewable energy sectors.



- **Introduction to SAE Collegiate Clubs**

Date - 16 February 2022

Faculty co-ordinator - Mr. Bhushan Singh Gautam (Assistant Professor, Department of Mechanical Engineering).

Objective - To create awareness among participants about Automotive Engineering.

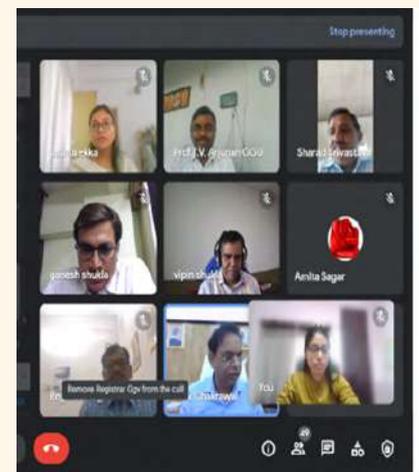


- **Funding Opportunities for Research Innovation and Technology transfer**

Date - 11th March 2022

Faculty co-ordinator - Mrs. Jasinta Poonam Ekka (Assistant Professor, Department of Mechanical Engineering) and Mrs. Disha Dewangan (Assistant Professor, Department of Industrial and Production Engineering).

Objective - To discuss the sources of funding opportunities, carry out innovative research, and innovation, and create an environment for small startups environment among the participants.



MoU SIGNED WITH INDUSTRIES



The MOU signing ceremony was successfully held on 16 December 2021 in the Conference Room of the Administrative building. The following 6 companies were invited to the ceremony:

1. CIPET: IPT, Raipur
2. MSME Technology Centre, Durg
3. A2 Environment Consultant, Raipur
4. PWD National Highway Division, Bilaspur
5. B. Incube Incubation Centre, Bilaspur

Representatives from all companies were physically available except for the Smart Bridge Educational System, which was available through an online



platform. Honorable vice-chancellor Prof. Alok Kumar Chakrawal and Registrar Prof. Shailendra Kumar has joined the ceremony along with all the head of the departments and faculty members

All the delegates were introduced with a brief introduction about their companies. The H'VC and the Registrar interacted with all the representatives about the future plans. Also, he has provided some tips for the parties to get benefits from the MoU. The signing of the MoU started between both the parties and photographs were taken for the same. In addition, the delegates sequentially explained their future views that could be beneficial to GGV and the Company. The program ended with a short speech by Dr. T.V. Arjunan and all were invited for lunch.

UPCOMING EVENTS

Department of Mechanical Engineering is going to organize:

- Interactive session of Industry Ready Engineers on 07th April 2022.
- Industrial Visit for students of the 3rd year in the last week of April at MSME Technology Centre, Durg.

FACULTY ACHIEVEMENTS

Expert Talk/ Guest lecture/ Conference Chair

S. No	Faculty Name	Type of Event	Topic of the Talk / Guest lecture / Key note address	Venue	Date
1	Dr. T V Arjunan	International Conference on Design, Manufacturing & Materials Engineering ICDMME 2021	Session Chair	Dr.N.G.P. Institute of Technology, Coimbatore	11th Mar, 2022
2	Mr. Bhushan Singh Gautam	2 day Online Workshop	Vibration and Noise Control: Latest Trends and Innovations	Mechanical Engineering Department of Don Bosco College of Engineering (DBCE)	25th Feb 2022 to 26th Feb 2022

Patent Filed

S. No	Faculty Name	Designation	Patent Description	Patents Filed	Patents Published	Patents Granted
1	Dr. Anoop Kumar Sahu (CO-PI)	Assistant Professor	Impact On Job Satisfaction In Company/Indus try" on 28th January'2022. (Application No. 202141057716)	✓	✓	⊖



Research Publications

S. No	Faculty Name	Title of the article / Book chapter / Book	Journal / Book Name	Vol, Issue	Indexed in (Scopus /sci/ ugc-Care /others)	Date
1	Dr. T V Arjunan	A case study on thermo-hydraulic performance of jet plate solar air heater using response surface methodology	Case Studies in Thermal Engineering	Vol. 34	SCI-IF-4.724	Published online on 30/3/22
2	Dr. Anoop Kumar Sahu	Factors Affecting the Adoption of Blockchain Technology in the Complex Industrial Systems: Data Modeling	Complexity	⊖	SCI-IF-2.8	Published online on 20nd Dec, 2022
3.	Dr Anoop Kumar Sahu	Economic TEHES-Tube Material Evaluation by Absorbability Index under O-S-Dimensions for Minimizing Global Warming and Air Pollution by Exploring Dominance Theory: Green Management Initiative	Adsorption Science & Technology / 2021 Sage	⊖	SCI-IF:4.23	Published online on 31st Jan, 2022
4.	Dr Anoop Kumar Sahu	Spectrophotometric Determination of Zinc in Food Waste Water Samples in the Presence of Surfactants Using Dithizone Method	International Journal of Social Ecology and Sustainable Development (IJSESD)	Vol. 13(3)	Scopus Index	Published online on 31st Jan, 2022





Participation in workshop

S. No	Faculty Name	Topic	Workshop/FDP	Date
1	Mrs. Shweta Singh Mr. Prashant Kumar Jangde Mr. Manish Bhaskar	Advancement in Manufacturing Technology	AICTE Training And Learning (ATAL) Academy Online Elementary FDP	17th Jan 22 to 21st Jan 22
2	Mr. Pradeep Patanwar	Sustainability Engineering	AICTE Training And Learning (ATAL) Academy Online Elementary FDP	18th Jan 22 to 22nd Jan 22
3.	Mr. Prashant Kumar Jangde	Slurry Flow in Mineral Processing - Principles and Practices	AICTE Training And Learning (ATAL) Academy Online Elementary FDP	06th Dec 21 to 10th Dec 21
4.	Mr. Pradeep Patanwar	Post COVID Green and Sustainable Development Practices in Manufacturing Industries	One Week FDP	17th Jan 22 to 21st Jan'22
5.	Mr. Pradeep Patanwar Mr. Manish Bhaskar	I C Engine : The Future Perspective	Online AICTE-ISTE sponsored Induction Program	17th Feb 22 to 23rd Feb 22
6	Mr. Pradeep Patanwar	Institution of Engineers (India): Its role in the development of students & faculties	One Day workshop	21st Dec 21





Conference Presentation

S. No	Faculty Name	Title of the Paper	Conference Name	Date
1	Mr. Prashant Kumar Jangde	Thermal Performance Assessment of the Coaxial pipe Evacuated Tube Solar Air Heater in Bilaspur Climatic Conditions	International Conference on Thermal Analysis and Energy Systems (ICTAES-2021)	22nd Dec 21 to 24th Dec 21
2	Mrs. Shweta Singh & Dr. Pankaj Kumar Gupta	Effect of fiber orientation on Mechanical Properties of Jute/Carbon/Glass Hybrid Composite	4 th International Conference on Advances in Mechanical Engineering (ICAME 2022)	24th Mar 22 to 26th Mar 22
3.	Mr. Biplab Das & Mr.Prateek Gupta	Fabrication and Mechanical Properties Analyses of Coir, Glass, Carbon Fiber Reinforced Epoxy based Composite	International Conference on Science, Technology, Engineering and Management	09th Feb 22
4.	Mr. Biplab Das & Mr.Prateek Gupta	Effect of Temperature, Humidity and Traffic loads on PZT-5H disk used for Energy Harvesting Application	International Conference on Water, Energy and Environment (WEECON 2021)	23rd Dec 21 to 24th Dec 21

MEMBERSHIP IN PROFESSIONAL BODIES

- Mr. Pradeep Patanwar, Assistant Professor, Mechanical Engineering Department, enrolled as a Member (Membership No: M-1747171) of the Institution of Engineers (India) on 5th January, 2022.
- Mr. Biplab Das, Assistant Professor, Department of Mechanical Engineering, enrolled as a Professional member (Membership ID: 2021120038) of the Institute for Science, Engineering and Technology Research from 27th December, 2021.



STUDENT'S ACHIEVEMENT

COMPETITIVE EXAMS

Six students from the Department of Mechanical Engineering qualified in GATE 2022, conducted by IIT Kharagpur.



ABHISHEK KUMAR
SCORE - 481
RANK - 5828



ADARSH SINGH
SCORE - 433
RANK - 7675



MANIK RAGHUWANSHI
SCORE - 421
RANK - 8163



DILEEP KUMAR BUDUMURU
SCORE - 402
RANK - 9154



VINAY KUMAR
SCORE - 391
RANK - 9624



NIKHIL AHIRWAR
SCORE - 245
RANK - 23821

SPECIAL ACHIEVEMENTS

- Madhav Mishra, Student of B.Tech - Mechanical Engineering, secured AIR 6th rank in All India Inter-University Boxing MW Championship 17th December'21 to 01st January'22.
- Ten students of the Department of Mechanical Engineering got registered themselves in MOOCS Courses in various topics like finite element method, Python 3.4.3, Kinematics of Mechanisms and Machines, Fundamentals of theoretical and experimental, Rocket propulsion, IC engines and Gas turbines, Mechatronics and Design technology and innovation.



MADHAV MISHRA

PLACEMENTS



MEGHA PATHAK

Capgemini - 4 LPA
Infosys - 3.6 LPA



SUSHANT SINGH

Infosys - 3.6 LPA



High Technext

2.6 LPA



UPENDRA KUMAR BAIDH



AAKASH KUMAR BANJARE



ASHISH KUMAR SAHU



ANKIT MONGERIYA



DINESH BAGHEL



LAGUDU BHARGAV



ROHIT KUMAR



ADARSH SINGH



ASHISH KUMAR



SIDDHARTH SINGH



PAWAN KUMAR



PRATEEK YADAV



SHUBHAM SINGH NAURANGE



TEAM MEMBERS

FACULTY CO-ORDINATORS



MR. PRADEEP PATANWAR
(ASSISTANT PROFESSOR)



MRS. SHWETA SINGH
(ASSISTANT PROFESSOR)



MR. BIPLAB DAS
(ASSISTANT PROFESSOR)

STUDENT CO-ORDINATING TEAM



STUDENT CO-ORDINATOR
MS. DIKSHA GUPTA



DESIGN TEAM
MR. AAKASHDEEP SRIVASTAVA



DESIGN TEAM
MR. MANIK RAGHUWANSHI



EDITORIAL TEAM
MR. RAHUL CHANDRA

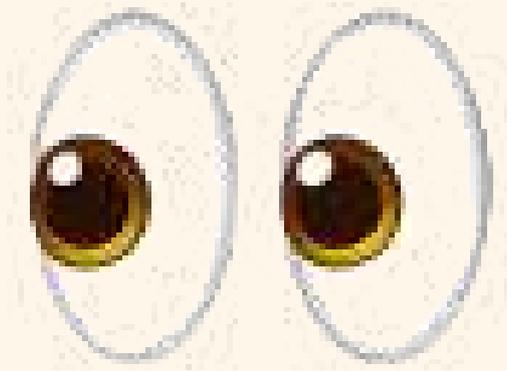


EDITORIAL TEAM
MR. MANTHAN SURYVANSHI





BE READY WE ARE LOOKING!!



The Departmental newsletter will be published every quarter and will be highlighting all the details of the achievements of faculty, as well as students. We would be happy to publish more achievements further.

We expect everyone to be a part of this newsletter with their contributions.



A DREAM IS NOT THAT WHICH
YOU SEE WHILE SLEEPING,
IT IS SOMETHING THAT DOES
NOT LET YOU SLEEP.

DR. A.P.J. KALAM



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