LEELADHAR RAJPUT

Assistant Professor

Centre/School/Special Centre	:	School of Studies, Engineering & Technology, GGV, Bilaspur, C.G. 495009
Department	:	Industrial and Production Engineering
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Google Scholar Link	:	https://scholar.google.com.tw/citations?hl=en&user=KsixRD4AAAAJ
Researchgate Link	:	https://www.researchgate.net/profile/Leeladhar-Rajput/research

Educational Qualifications

- **M.Tech. (Mechanical Engineering)**
  CPI: **9.52**
  Specialization: Mechanical Systems Design
  Institute: Indian Institute of Technology Kharagpur
  University: Indian Institute of Technology Kharagpur
- **B.E. (Mechanical Engineering)**
  CPI: **8.42/10 (Gold medalist)**
  Specialization:: Mechanical Engineering
  Institute: Govt. Engineering College Bilaspur C.G.
  University: Guru Ghasidas University Bilaspur
- **12th Standard (HSSC)**
  Percent: **83.2 %**
  Subject: Maths, Physics, Chemistry, Hindi, English
  Board: CGBSE, Raipur C.G. (May, 2003)
  School: Maharana Pratap Higher Secondary School Jhaphal
- **10th Standard (HSC)**
  Percent: **79.8 %**
  Subject: Hindi, English, Sanskrit, Maths, Social Science, Science
  Board: CGBSE, Raipur C.G. (May, 2001)
  School: Maharana Pratap Higher Secondary School Jhaphal

Area of Interest/Specialization

- Smart Composite Structure
- Advanced Laminated Composite Structure
- Finite Element Analysis

- Vibration Control
- Natural Fiber Reinforced Composite Structure
- Nanotechnology
- Carbon Nano-Tube

Experience

- **School of Studies in Engineering and Technology**, Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur (Teaching Experience)
  Designation: Assistant Professor
  Department: Industrial & Production Engineering
  Period: 19 June to till date

- **Hero Motocorp Pvt. Ltd.** Dharuhera Haryana (Industrial Experience)
  Designation: Deputy Manager
  Department: R&D (Engine Design)
  Period: 01 June 2010 to 08 June 2013

Awards and Honors

1. Gold Medalist Mechanical Engg. at GEC Bilaspur Guru Ghasidas University in 2007.
2. Scored AIR 143 (99.23 Percentile) in GATE 2008 in Mechanical Engineering conducted by IISc Bangalore.
3. Secured 2nd position in M.Tech. Mechanical Systems Design at IIT Kharagpur in 2010.
4. Alumini Award & Certificate in B.E. Second Year in Mechanical Engg at GEC Bilaspur.
5. Nova Award & Certificate in B.E. Third year in Mechanical Engg in GEC Bilaspur.
6. Awarded by Our Chief Minister Dr. Raman Singh in 2008 for Excellency in academics.

Peer Reviewed Publication

- *Leeladhar Rajput and Akash Shrivastava,* "Structural analyses of nano-stitched composite laminates based on FSDT using finite element approach" Mechanics of Materials, 155 (2021), 103771 (ISSN: 0167-6636); https://doi.org/10.1016/j.mechmat.2021.103771

- M.S. Rajput, *Leeladhar Rajput*, V. B. Pandey, D.K. Sharma, "Numerical study of microstructural fatigue crack growth using damage mechanics", Materials Today: Proceedings 44 (2021) 3079–3085, (ISSN:2214-7853); https://doi.org/10.1016/j.matpr.2021.02.449

- Sameer Ahmed and *Leeladhar Rajput*, "Buckling Analysis of Inter-ply Hybrid Composite Plate", Materials Today: Proceedings 21 (2020) 1313– 1319 (ISSN:2214-7853); https://doi.org/10.1016/j.matpr.2020.01.168

- Ajeesh M Kurup and *Leeladhar Rajput*, "Fatigue crack growth analysis and prediction of residual life", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) 10 (2020) 420-426 (ISSN(P): 2249-6890); *www.tjprc.org/conference-archives.php?page=120*

- Sameer Ahmed and *Leeladhar Rajput,* "Bending Analysis of Inter-ply Hybrid Composite Plate". Proceeding of International Conference Proceeding on Advanced Materials 2162 (2019) 020023-1-020023-5 (ISSN: 1551-7616) ; *https://doi.org/10.1063/1.5130233*

- *Raja Dewangan and Leeladhar Rajput,* "Analysis and determination of first ply failure of the composite laminate using different failure criteria"; IOP Conf. Series: Materials Science and Engineering 691 (2019) 012067 (ISSN: 1757-899X); *https://iopscience.iop.org/article/10.1088/1757-899X/691/1/012067*

Book Chapters

1. *Vitthal Khatik and Leeladhar Rajput*, "A study on finding optimal ANN model for rock mass classification"; NextGen Technologies for mining and fuel industries 2017, ISBN 9789385926402; Allied Publishers Pvt. Ltd.

Administrative Responsibilities

Departmental Level

1. Worked as **Time Table Coordinator**
2. Worked as **Internal examination coordinator**
3. Worked as **Coordinator and in-charge** stock verification
4. Worked as **In charge** of different labs
5. Worked as **Project coordinator** at PG level
6. Worked as **NAAC/AQAR** coordinator
7. Worked as an **NBA** Co- coordinator
8. Worked as **Coordinator** departmental monthly report and annual report
9. Worked/working as a mentor for IPE students
10. **Semester & Section In-Charge** for session 2013-14 to 2018-19.
11. **BOS member** of the department at B.Tech. and M.Tech. level

Institute Level

1. Worked as an **Exam Co-coordinator** of SoS E&T in year 2019-20 to 2020-21.
2. Worked **Member, B. Tech. admission committee**.
3. **Member** of the Anti Ragging & Discipline Committee of the Institute.
4. Worked as a **Co-Coordinator** of Tech-Fest (Equilibrio-2018).

University Level:

1. Worked as **member of various recruitment scrutiny** committees in GGVV.
2. Worked as an **Observer** of VET Exam at various centre by GGV Bilaspur.

3. Worked as a **Polling & Counting Officer** in student council election of Guru Ghasidas Vishwavidyalaya.
4. Worked as **Screening Committee member** at Sport tournament

Additional Information

Course Taught (PG Level)

1. Theory Of Vibration
2. Advanced Strength of Material
3. Finite Element Method (FEM)
4. Fatigue, Creep and Fracture
5. Fracture Mechanics

Course Taught (UG Level)

1. Strength of Material (Mechanics of Solid)
2. Theory of Machine
3. Material Science
4. Design of Machine Element
5. Machine Design
6. Engineering Thermodynamics
7. Engineering Mechanics
8. Engineering Graphics
9. Advanced Mechanics of Solid
10. Theory of Vibration

Programme organized

1. **Co-coordinator** of "One week FDP on Writing Effective and Quality Research Papers" dated 25-01-2021 to 29-01-2021
2. **Coordinator** of one day webinar "One day Online Skill up gradation Training program on Computer Added Design using AutoCAD" dated 14 July 2020.

FDP/Workshop /Short Term Course Attended

1. One week online faculty development program (FDP)- Workshop on "**Writing Effective and Quality Research Papers, How to Publish in Scopus, SCI Listed and reputed Journals**?", organized by Department of Industrial & Production Engineering, Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.) during 25 - 29, January, 2022

2. An online one week ATAL FDP on "**Advancement in Manufacturing Technology**" from 17/01/2022 to 21/01/2022 at School of Studies of Engineering and Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur .

3. One day workshop on "**Institution of Engineers (India): Its role in the development of students & faculties"**, organized by School of Studies of Engineering and Technology, Guru Ghasidas Vishwavidyala (A Central University) Bilaspur (C.G.) on December 21, 2021.

4. A one day workshop on **"Multiple Entry/Exit for Professional Courses as a Step towards National Education Policy Implementation"** organized by Guru Ghasidas Vishwavidyalaya Bilaspur on December 18 2021.

5. An Online training for "**NAAC accreditation"** dated 19-21 July 2021.

6. Industrial Training of Two Weeks on "**Internet of Things- A Project Based Learning using Virtual IoT Lab"** Organized jointly by National Institute of Technical Teachers Training& Research Chandigarh and Xtrans Solutions Pvt. Ltd., Bangalore from 08th to 19th July 2020.

7. One week online faculty development program (FDP) **"Industrial Robotics and its Applications"** from 06-07-2020 to 11-07-2020 organized by GMR Institute of Technology Kakinada.

8. An online one week Faculty Development Programme from 2020-06-18 to 2020-06-24 on **"Moodle Learning Management System"** organized by Bhopal Rao Pawar Government Polytechnic, Dhamtari.

9. An online one week FDP on "**Advance Research Methodology and Innovative teaching pedagogy**" organized by Tulsiramji Gaikwad college of Engineering and Technology Nagpur, from 08/06/2020 to 13/06/2020.

10. NPTEL AICTE FDP on "Gear and Gear Unit Design: Theory and Practices" organized by IIT Kharagpur through Swayam Portal from Jan-Apr 2020.

11. A refresher course in the subject **"Research Methodology"** from 16-06-2018 to 06-07-2018 organized by HRDC Guru Ghasidas Vishwavidyalaya, Bilaspur.

12. An AICTE sponsored one week FDP program on **"Nanocomposites for Energy Conversion and Storage Applications with Special Reference to Carbon"** organized by IIT Kanpur from 02-07-2017 to 06-07-2017.

13. A refresher course in the subject **"Advances in Engineering & Technology"** from 05-06-2017 to 24-06-2018 organized by HRDC Guru Ghasidas Vishwavidyalaya, Bilaspur.

14. An "18th Orientation program" organized by HRDC Guru Ghasidas Vishwavidyalaya Bilaspur C.G. from 01-05-2017 to 29-05-2017.

M. Tech. Project Guide

1. "Analysis of carbon nanotube stitched laminated composite plates using third order shear deformation theory" submitted by **Mr. Akash Shrivastava** in May 2014 (M.Tech. 2012-2014 Batch).

2. "Free Vibration analysis of vertically aligned carbon nanotubes stitched composite laminate using FEM" submitted by **Mr. Paleshwar Sahu** in September 2014 (M.Tech. 2012-2014 Batch).

3. "Design, simulation and wear analysis of hip joint prosthesis of UHMWPE/MWCNT composite under the gait loading" submitted by **Mr. Dinesh Kumar Dhiwar** in May 2015 (M.Tech. 2013-2015 Batch).

4. "Active vibration control of carbon nanotubes stitched composite laminate using FEM" submitted by **Ms. Saumya Tiwari** in July 2015 (M.Tech. 2013-2015 Batch).

5. "Analysis of laminated composite plates with embedded carbon nanotubes using finite elemen method" submitted by **Mr. Rahul Kumar Patel** in November 2015 (M.Tech. 2013-2015 Batch).

6. "Design optimization of plain journal bearing to minimize the power loss using genetic algorithm" submitted by **Mr. Vijay Kumar Dewangan** in August 2016 (M.Tech. 2014-2016 Batch).

7. "Optimization of design variable of laminated composite plate for minimizing the maximum deflection using genetic algorithm" submitted by **Mr. Gaurav Kumar Goyal** in August 2016 (M.Tech. 2014-2016 Batch).

8. "Improvement in vibration attenuation of thin laminated composite cylindrical shells using active constrained layered damping treatment and vertical stitching of carbon nanotubes" submitted by **Mr. Arnab Sen** in June 2016 (M.Tech. 2014-2016 Batch).

9. "Formulation of a generic methodology for rock mass classification: Analytical & ANN approaches" submitted by **Mr. Vitthal Manohar Khatik** in June 2017 (M.Tech. 2015-2017 Batch).

10. "Vibration analysis of laminated composite with CNT stitching using third order shear deformation theory" submitted by **Mr. Dipu K N** in July 2017 (M.Tech. 2015-2017 Batch).

11. "Analysis of mechanical behaviour of sisal fiber reinforced epoxy composite" submitted by **Mr. Anit Kumar Jaiswal** in August 2018 (M.Tech. 2016-2018 Batch).

12. “Buckling and bending analysis of interplay hybrid composite plate” submitted by **Mr. Sameer Ahmed** in July 2019 (M.Tech. 2017-2019 Batch).

13. “Analysis of first ply failure of composite laminate” Submitted by **Mr. Raja Dewangan** in July 2019 (M.Tech. 2017-2019 Batch).

14. “Vibration analysis of carbon nanotube boron/epoxy hybrid composite plate” submitted by **Mr. Vinod Yadav** in September 2019 (M.Tech. 2017-2019 Batch).

15. “Fatigue growth analysis of a semielliptical crack at different orientation angles in a solid bar under tension-torsion loading” submitted by **Mr. Ajeesh M Kurup** in October 2020 (M.Tech. 2018-2020 Batch).

16. “Numerical study of micro-structural fatigue crack growth using damage mechanics” submitted by **Mr. Manish Singh Rajput** in October 2020 (M.Tech. 2018-2020 Batch).

17. “A finite element approach to estimate total damage rate due to the effect of wear and creep on tibial insert for total knee arthroplasty (TKA)” submitted by **Ms. Archana Soni** in October 2020 (M.Tech. 2018-2020 Batch).

(LEELADHAR RAJPUT)