Department of Applied Mechanics
Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211004

Curriculum Vitae

Prof. RAMESH PANDEY

(*Graduation, Post-Graduation & Doctorate all from NIT Allahabad*)

PROFESSOR

DEPARTMENT OF APPLIED MECHANICS

MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY

ALLAHABAD, PRAYAGRAJ - 211004

Current Research Areas	:	Structural & Optimization Analysis of Composite & Bio-Composite Materials & Structures
Teaching & Research Experience	:	More than 25 years
E-Mail	:	ramesh@mnnit.ac.in
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Teaching & Research Experience:

Name of Institute	Post Held
MNNIT, Allahabad (U.P.)	Professor (A.G.P. = 10500/-), since August 11, 2023 to till date.
MNNIT, Allahabad (U.P.)	Associate Professor (A.G.P. = 9500/-), since March 28, 2018 to August 10, 2023.
MNNIT, Allahabad (U.P.)	Assistant Professor (A.G.P. = 8000/-), since September 27, 2012 to March 27, 2018.
MNNIT, Allahabad (U.P.)	Assistant Professor (A.G.P. = 7000/-), since May 26, 2009 to September 26, 2012.
MNNIT, Allahabad (U.P.)	Assistant Professor (A.G.P. = 6000/-), May 26, 2006 to May 25, 2009.
NIT Hamirpur (H.P.)	Assistant Professor (A.G.P. = 6000/-), since January 02, 2006 to May 24, 2006.
MNREC, Allahabad (U.P.)	Guest Faculty, since December 1998 to May 2003.
BIT Mesra Ranchi (Ext. Centre) Naini Allahabad (U.P.)	Guest Faculty, since July 2000 to May 2001 (Evening Classes).

Research IDs : 05

ORCID	**:**	**0000-0002-5067-5175**
Scopus Scholar	**:**	**56417062400**
Vidawan	**:**	**104660**
Researcher	**:**	**https://publons.com/researcher/ABF-4109-2020/**
Google Scholar	**:**	**ApZfLYAAAAAJ**

Research & Publications:

Books: 01

1. An Introduction to Strength of Materials, K.K.Shukla, Anuj Jain,& Ramesh Pandey (Narosa Publications, 2014, ISBN: 978-81-8487-101-2)

Book Chapters : 04

1. Mehta, J., Pandey, R., Tewari, R.P.. Light Weighted Model Based on Convolutional Neural Network for Detection of COVID-19 Using Chest X-Ray Images. Communications in Computer and Information Science, vol 1738. Springer, Cham, 2022. https://doi.org/10.1007/978-3-031-23724-9_12.

2. Sajal Kumar Babu Degala., Ramesh Pandey., Ashutosh Mishra., Abhishek Kumar Tiwari., Ravi Prakash Tewari., IoT Based Low-Cost Pulse Oximeter for Remote Health Monitoring. Communications in Computer and Information Science, vol 1738. Springer, Cham. 2022. https://doi.org/10.1007/978-3-031-23724-9_18

3. Buckling and Post-buckling of Composite Plates Under Thermal Loadings, K. K. Shukla and R. Pandey, Encyclopedia of Thermal Stresses, Editor- R. Hetnarski, DOI 10.1007/978-94-007-2739-7, © Springer Science+Business Media Dordrecht , 505-516, (2014).

4. Devi N., Bhar A., Pandey R. (2020) Isogeometric FE Analysis of Laminated Composite Plates. pp 321-331, In: Biswal B., Sarkar B., Mahanta P. (eds); Advances in Mechanical Engineering (Select Proceedings of ICRIDME 2018), Book Series: Lecture Notes in Mechanical Engineering. Feb, 2020, Springer, Singapore. Print ISBN: 978-981-15-0123-4, Online ISBN: 978-981-15-0124-1.

Journals: 19

1. Sajal Kumar Babu Degala, Ravi Prakash Tewari, Pankaj Kamra, Uvanesh Kasiviswanathan and Ramesh Pandey (2024), "Segmentation and Estimation of Fetal Biometric Parameters using an Attention Gate Double U-Net with Guided Decoder Architecture", Computers in Biology and Medicine, Vol. 180, September 2024.

2. Divya Pandey, Ramesh Pandey, Ashutosh Mishra and Ravi Prakash Tewari (2024), "Effect of Printing Temperature on Fatigue and Impact Performance of 3-D Printed Carbon Fiber Reinforced PLA Composites for Ankle Foot Orthotic Device", Mechanics of Composite Materials, 60(3).

3. Dwijendra Dubey, Ashutosh Mishra, Hitesh Chandrakant Shriyan, Tej Pratap and Ramesh Pandey (2024), "Improved Thermal Management of Lithium-Ion Battery Module through Microtexturing of Serpentine Cooling Channels", Energy Technology

4. Dwijendra Dubey, A. Mishra, Subrata Ghosh, M. V. Reddy and Ramesh Pandey (2023), "Geometry-influenced cooling performance of lithium-ion battery", Applied Thermal Engineering, 230.

5. Divya Pandey, Ramesh Pandey and Ravi Prakash Tewari (2023),"Influence of Process Parameters on Mechanical Strengths of 3D-Printed Carbon-PLA based Composites for Orthotics and Prosthetics Applicationa", Composites: Mechanics, Computations, Applications, 14(2).

6. Prakash, Ankit, Nishant Sati, Piyush Pratap Singh, Sajal KB Degala (2021), Anubhav Rawat, Ramesh Pandey, and R. P. Tiwari. "Design of economic PODS to safeguard against contagious diseases using computational fluid dynamics (CFD)", Journal of Physics: Conference Series, vol. 1849, no. 1, p. 012006. IOP Publishing, 2021. (Scopus).

7. Sangharsh Kumar Singh, Ramesh Pandey and A. K. Upadhyay (2020) "A numerical study on combined effects of groove shape and numbers on crashworthiness characteristics of thin-walled tube". Volume 44, Part 6, Pages 4381-4386, Materials Today: Proceeding (Scopus).

8. Sangharsh Kumar Singh, A. K. Upadhyay and Ramesh Pandey (2020) "A numerical analysis of effect of variation of groove on thin-walled tube under quasi-static load". Volume 26, Part 2, Pages 2113-2115, Materials Today: Proceeding (Scopus).

9. Kumar Pankaj, Ramesh Pandey (2014) “Buckling Analysis of Symmetric Cross-Ply Laminated Annular Plates with Carbon Nanotubes”, J. Applied Mechanics and Materials, Vols 592-594, Pages 901-905 (SCI)

10. G. Bhardwaj, A.K. Upadhyay, R. Pandey, K.K. Shukla (2013), “Nonlinear Flexural and Dynamic Response of CNT Reinforced Laminated Composite Plates”, J. Composites-B, 45(1), 89-100 (SCI).

11. Ramesh Pandey, A. K. Upadhyay, K. K. Shukla and Anuj Jain (2012),” Nonlinear Dynamic Response of Elastically Supported Laminated Composite Plates”, J. Mechanics of Advanced Materials and Structures: Taylor & Francis, 19(6), 397-420 (SCI).

12. S. Singh, K. V. Kulkarni, R. Pandey and H. Singh (2012), “Buckling Analysis of Thin Rectangular Plates with Cutouts subjected to Partial Edge Compression using FEM”, Journal of Engineering, Design and Technology (Emerald), 10(1), 128-142 (Scopus).

13. A. K. Upadhyay, Ramesh Pandey and K. K. Shukla (2011), “Nonlinear Dynamic Response of Laminated Composite Plates Subjected to Pulse loading .”, Communications in Nonlinear Science and Numerical Simulation,16(11).,4530-4544 (SCI).

14. Ramesh Pandey, A. K. Upadhyay and K. K. Shukla (2010), “Hygro-Thermo- Elastic Post buckling Response of Laminated Composite Plates”, J. Aerospace Engineering, ASCE, 23(1), 1-13 (SCI).

15. A. K. Upadhyay, Ramesh Pandey and K. K. Shukla (2010), “Nonlinear Flexural Response of Laminated Composite Plates under Hygro-Thermo-Mechanical Loading”, Communications in Nonlinear Sciences and Numerical Simulation, 15(9), 2634-2650 (SCI).

16. R. Pandey, K. K. Shukla and A. Jain (2009), “Thermoelastic Stability Analysis of Laminated Composite Plates: An analytical approach”, Communications in Nonlinear Sciences and Numerical Simulation, 14(4), 1679-1699 (SCI).

17. R. Pandey, K. K. Shukla, and A. Jain (2008), “Nonlinear Flexural Analysis of Laminated Composite Plates”, Int. J. Applied Mechanics & Engineering, 13(3), 707-733 (Scopus).

18. K. K. Shukla, K.V. Ravi Kumar, R. Pandey and Y. Nath (2007), “Post buckling Response of Functionally Graded Rectangular Plates Subjected to Thermo-mechanical Loading”, Int. J. Structural Stability and Dynamics, 7(3), 519-541 (SCI).

19. D. N. Paliwal and Ramesh Pandey (2001), “Free Vibrations of an Orthotropic Thin Cylindrical Shell on a Pasternak Foundation”, AIAA J., 39 (11), 2188-2191 (SCI).

Conferences: 32

1. Mehta J, Pandey R, Tewari RP. Role of Clinical Parameters in Predicting the Survival of COVID-19 Patients Using Machine Learning. In: Advances in Biopolymers and Composites: Health, Environment, and Energy: First International Conference, ABC-HEE 2022, Prayagraj, India, Oct 20-22, 2022.

2. Sajal Kumar Babu Degala, Ramesh Pandey, Ravi Prakash Tewari. A Case Study of Fetus Head Circumference Assessment from Ultrasound Images Using Segmentation-Based vs. Regression-Based Biomarker Estimation. In: Advances in Biopolymers and Composites: Health, Environment, and Energy: First International Conference, ABC-HEE 2022, Prayagraj, India, Oct 20-22, 2022

3. Sajal Kumar Babu Degala, Ramesh Pandey, Ashutosh Mishra, Abhishek Kumar Tiwari & Ravi Prakash Tewari (2022), “IoT based Low-Cost Pulse Oximeter for Remote Health Monitoring”, in International Conference on Advancements in Interdisciplinary Research; Theme: Smart & Sustainable Society (AIR-2022) held on May 06-07, 2022, at MNNIT Allahabad, Prayagraj, India.

4. Jitendra Mehta, Ramesh Pandey & R. P. Tewari (2022), “Light Weighted Model Based on Convolutional Neural Network for Detection of COVID -19 Using Chest X-Ray Images”, in International Conference on Advancements in Interdisciplinary Research; Theme: Smart & Sustainable Society (AIR-2022) held on May 06-07, 2022, at MNNIT Allahabad, Prayagraj, India.

5. Dwijendra Dubey, Ashutosh Mishra, Taufeek Ahmad & Ramesh Pandey (2022), “Influence of geometry changes on the cooling performance of Lithium ion battery”, in International Conference on Advancements in Interdisciplinary Research; Theme: Smart & Sustainable Society (AIR-2022) held on May 06-07, 2022, at MNNIT Allahabad, Prayagraj, India.

6. Divya Pandey, Ramesh Pandey & Ravi Prakash Tewari (2022), “Application of Carbon-PLA based composites for Orthotics and Prosthetics applications”, in International Conference on Advancements in Interdisciplinary Research; Theme: Smart & Sustainable Society (AIR-2022) held on May 06-07, 2022, at MNNIT Allahabad, Prayagraj, India.

7. Kumar V., Pandey R & Kumar S. (2021), “Recent Research of Active Vibration Control Analysis of Functionally Graded Materials using Piezoelectric Materials: A Review”, in International Conference on Sustainable Engineering (ICSE-2021)”, organized by Government Engineering College Bikaner, Rajasthan, heldon February 26-27, 2021.

8. Kumar V., Pandey R & Kumar S. (2021), “A finite Element Methodof Free Vibration Analysis of Functionally Graded Beam”, International Conference onMechanical Engineering (INCOME-2021), November 25-26, 2021, Netaji Subhas University of Technology, New Delhi, India.

9. Ashwin Pandey, Ankit Prakash, Ramesh Pandey, Anubhav Rawat (2021), “Simulation and Analysis of Natural Gas Pipe Network for MNNIT (Allahabad) Staff Colony”, Proceedings of VSAM-2021, 4-5 June, 2021, MNNIT-Allahabad

10. Sangharsh Kumar Singh, A. K. Upadhyay and Ramesh Pandey (2020) “A numerical analysis of effect of variation of groove on thin-walled tube under quasi-static load”. 10th International Conference of Materials Processing and Characterization, GLA Mathura.

11. Sangharsh Kumar Singh, A. K. Upadhyay and Ramesh Pandey (2019) “A numerical investigation of collapse behavior and energy absorption of thin-walled grooved tube with variation of groove depth”. International Conference on Energy, Environment & Material Sciences (ICE2M), MMMTU Gorakhpur.

12. Devi N., Bhar A.* and Pandey R. (2019), “Static Analysis of Skew Laminated Composite Plates using Isogeometric Finite Element Method”, (Paper ID. 141), National Conference on Advances in Structural Technologies (CoAST-2019), NIT Silchar, Shillong, India, February 01-03, 2019.

13. Devi N., Bhar A.* and Pandey R. (2018), “Isogeometric FE Analysis of Laminated Composite Plates”, (Paper No. 252), International Conference on Recent Innovations and Developments in Mechanical Engineering (IC-RIDME18), NIT Meghalaya, Shillong, India, November 8–10

14. Ranjeet Nayak, Sangharsh K.Singh, A.K.Upadhyay, Ramesh Pandey (2018),"A numerical investigation into the collapse behavior of thin walled grooved tubes under axial impact", First Symposium and Workshop for Analytical Youth on Applied Mechanics (SWAYAM 2018), BITS Pilani, KK Birla Goa Capmus,pp.7-8, 07/2018, Published By. Ane Books Pvt. Ltd.

15. Kumar Pankaj and Ramesh Pandey (2014), " Buckling Analysis of Symmetric Cross Ply Laminate Annular Plates with Carbon Nano Tubes", Periodical of Applied Mechanics and Materials, Scientific.Net, 592-594, 901-905

16. G. Bhardwaj, A. K. Upadhyay, R. Pandey and K. K Shukla (2012), "Buckling and Post-buckling Response of CNT Reinforced Multi-Scale Composite Laminated Plates", Proc. 4th International Conference on Structural Stability and Dynamics (ICSSD-2012), January 04 – 06, 2012, held at MNIT Jaipur, India, pp. 56-64, Vol.-I

17. G. Bhardwaj, A. K. Upadhyay, R. Pandey and K. K Shukla (2011), "Effect of CNT Percentage and Aspect Ratio on the Elastic Properties of CNT Reinforced Multi-Scale Composite", Proc. of International Conference on Advances in Materials and Material Processing (ICAMMP-2011), December 09-11, held at Indian Institute of Technology Kharagpur (West Bengal), India.

18. G. Bhardwaj, R. Pandey, K.K. Shukla (2011), "Flexural Response of CNT reinforced multi-scale composite cross ply laminated plates " ISAMPE (Indian Society for advancement of materials and process engineering) National Conference on Composites-INCCOM 10 November 18-19,2011 held at Pune Chapter Research and Development Establishment (Engineers)-Pune

19. S. Singh, K. V. Kulkarni, R. Pandey and J. Singh (2010), "Stability of Rectangular Plates Subjected to Partial Edge Loading" Proc. Advances in Materials and Product Design, November 22-23, held at Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat), India, pp.-330-334

20. S. Singh, H. Singh and R. Pandey (2010), "Design of T-Slotted Type Variable Flange Coupling for Shafts of Different Diameters" Proc. 3rd International Conference on Advances in Mechanical Engineering, January 4-6 held at Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat) India, pp. 367-371.

21. S. Singh, R. Pandey and K. K. Shukla (2010), "Buckling Analysis of Laminated Composite Plates with Eccentric Circular Cutouts using FEM" Proc. 5th International Conference on Theoretical, Computational, Applied and Experimental Mechanics, December 27-29, held at Indian Institute of Technology Kharagpur (West Bengal), India, pp. 95-97.

22. S. Singh, K. V. Kulkarni and R. Pandey (2010), "Design of Low Weight Helical Springs with Isotropic Materials" Souvenir 55th Congress of Indian Society for Theoretical and Applied

Mechanics, IIT Kharagpur, December 18-21, held at National Institute of Technology, Hamirpur (Himachal Pradesh), India.

23. G. Bhardwaj, K.K Shukla and R.Pandey (2010), "An Investigation of Mechanical Properties of Carbon Nanotube Reinforced Multiscale composites" Accepted for 55th congress of the Indian Society of Theoretical and Applied Mechanics, December 18-21, 2010 to be held at National Institute of Technology, Hamirpur (Himachal Pradesh), India.

24. S. Singh, G. Bhardwaj and R. Pandey (2010), "Determination of Stress Correction Factor for Open and Closely Coiled Hollow Helical Springs" Proc. 3rd International Conference on Advances in Mechanical Engineering, January 4-6 held at Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat) India, pp. 453-456

25. Sumit Sharma, Ramesh Pandey, A. K. Upadhyay and K. K. Shukla (2009), "Post buckling Response of Hybrid Plates", ICCMS09, IIT Mumbai, (01-05 December, 2009, pp.-81-82).

26. Sandeep Singh, Ramesh Pandey and Harpreet Singh (2009), "Design and Static Stress Analysis of T- Slotted Type Variable Flange Coupling", ICCMS09, IIT Mumbai, (01-05 December, 2009, pp.-107-108)

27. Gagandeep Bhardwaj, Ramesh Pandey and Amit Kumar Sharma 2009),"Manufacturing and Testing of Al-SiC Composite Material", ICCMS09, IIT Mumbai, (01-05 December, 2009, pp.- 125-126).

28. R. Pandey, A. K. Upadhyay, K. K. Shukla and A. Jain (2007), "Nonlinear Response of Laminated Composite Plates under Hygro-Mechanical Loading", ICTACEM – 07, IIT Kharagpur. (27-29 December, 2007. pp- 402-404)

29. R. Pandey, K. K. Shukla and A. Jain (2006), "Postbuckling Response of Laminated Composite Rectangular Plates", ICCMS- 06, IIT Guwahati. (08-10 December, 2006, pp.- 257-263)

30. V. Anjani Kumar, Ramesh Pandey, K. K. Shukla and Jin H. Huang (2006), "Linear Vibration Analysis of Composite Rectangular Plates: A State Space Approach", ICCMS- 06, IIT Guwahati. (08-10 December, 2006, pp.- 634 - 641)

31. Ramesh Pandey, K. K. Shukla and Anuj Jain (2004), "Nonlinear Static Analysis of Laminated Composite Plates", ICTACEM- 04, IIT Kharagpur. (28-30 December, 2004, pp.- 140-142)

32. K. K. Shukla, Manoj S. Patil, Ramesh Pandey and Anuj Jain (2004) "Thermal Buckling of Functionally Graded Rectangular Plates", 17th Engineering Mechanics Conference, ASCE , USA, 2004.

Seminars / Workshops Organized: 11

1) Organizing Secretary of a three day National Workshop on "Advanced Functional Materials and Structures" (AFMS_2012) in Collaboration with University of Missouri - Columbia, USA organized at MNNIT Allahabad during 12-14 July, 2012.

2) Organized a Workshop on "Personality Development for Human Excellence" based on the Principles of Swami Vivekananda on 12 October, 2012. (Speakers- Swami Nikhilatmananda Jee, Swami Suvyakta Narsimha Das Jee & Sri Raviraj Singh)

3) Organized a Workshop on "Power of Positive Thinking and Way to Success" for Personality Development on 06 February, 2013. (Speaker- Sri Raviraj Singh)

4) Organized a Workshop on "Human Efforts, Destiny and Gods Grace: Way to Success" scheduled on August 23, 2013". (Speakers- Swami Nikhilatmananda Jee, Swami Yudisthiranand Jee & Sri Raviraj Singh)

5) Organized a Workshop on "A Meaningful Life" scheduled on August 29, 2014" . (Speakers- Swami Yudisthiranand Jee & Sri Raviraj Singh)

6) Organized a Workshop on "Secrets of Success in life" scheduled on August 10, 2015. (Speakers- Sri Raviraj Singh, Sri Rajesh Mishra)

7) Organized a Workshop on "Secrets of Personality Development" scheduled on January 21, 2016. (Speakers- Sri Raviraj Singh & Sri Rajesh Mishra)

8) Treasurer of a two day National Workshop on "Inclusive Technical Education in National Context: Challenges and Solutions" organized at MNNIT Allahabad during July 16-17, 2016 by the Applied Mechanics Department & Civil Engineering Department Chairman: Prof. A. K. Singh, Convener: Dr. L. K. Mishra, Coordinator: Dr. R. P. Tewari).

9) Organized a Workshop on "Bring Out The Best in You" for Personality Development on 30 August, 2016. (Speaker- Sri Vivek Bindra)

10) Convener of a one day National Workshop on “Inclusive Technical Education in National Context: Challenges and Solutions-2018” organized at MNNIT Allahabad on September 13, 2018 by the Applied Mechanics Department, Coordinator: Prof. R. P. Tewari).

11) Convener of a one day Debate Programme on “National Education Policy-2019” organized at MNNIT Allahabad and sponsored by TEQIP-III on July 19, 2019 by the Applied Mechanics Department, Coordinator: Prof. R. P. Tewari).

Seminars/Workshops Attended: 14

1) Two days International Conference on "Advancements in Interdisciplinary Research; Theme: Smart & Sustainable Society (AIR-2022)" held on May 06-07, 2022, at MNNIT Allahabad, Prayagraj.

2) Three days “**3rd** Indian Conference on Applied Mechanics (INCAM-2017) organized by Department of Applied Mechanics, MNNIT Allahabad. (July 5-7, 2017 by Prof. K. K. Shukla, Dr. Ashutosh Kumar Upadhyay & Dr. Vivek Kumar Patel)

3) Three days International Conference on “Fluid Mechanics and Fluid Power (FMFP-2016)” organized by Department of Applied Mechanics, MNNIT Allahabad. (December 15-17, 2016 by Prof. A. K. Jain & A R Paul)

4) Three days IEEE International Conference on “Advances in Mechanical, Industrial, Automation and Management Systems (AMIAMS 2017)” organized by Department of Mechanical Engineering, MNNIT Allahabad. (February 3-5, 2017, by Prof. Rakesh Narain & Manish Gupta)

5) Three days International Conference on “Recent Trends & Challenges in Civil Engineering (RTCCE-2014)” organized by Department of Civil Engineering, MNNIT Allahabad. (December 12-14, 2014 by Prof. A. K. Sachan.

6) Seven Days National Workshop on “Optimization Techniques & heir Applications (NWOTA-2013)” organized by Department of Mathematics, MNNIT Allahabad. (June 5-11, 2013 by Dr. Pitam Singh & Dr. Mukesh Kumar)

7) One day Workshop on “Curriculum Development”, on 25 March, 2012, Department of Civil Engineering, MNNIT, Allahabad (Prof. R. P. Tewari)

8) Two days National Seminar on "Managing Inclusive Growth in India: A Re-Look into the Socio – Economic Perspectives", 12 February – 13 February, 2010, Department of Humanities and Social Sciences, MNNIT, Allahabad (Co-ordinators: Dr. Ambalika Sinha, Prof. P. R. Agrawal & Dr. Niroj Banerji)

9) Three days Workshop on "Virtual Instrumentation & Its Applications (WVIA-09)", 18 March – 20 March, 2009, Department of Electrical Engineering, MNNIT, Allahabad (Co-ordinator: Dr. Ramesh Tripathi & Dr. R. Gupta) (18-20 March, 2009)

10) Two days Workshop on "Curriculum Development", 22 August – 23 August, 2009, Department of Civil Engineering, MNNIT, Allahabad (Prof. S. K. Duggal & Prof. R. P. Tewari)

11) Two week Faculty Development Programme on "Entrepreneurship and Innovation", December 22, 2008 to January 03, 2009, School of Management Studies, MNNIT, Allahabad (Co-ordinator: Prof. Geetika)

12) One Day workshop organized by TCS on 19-09-2008 at Indian Institute of Information Technology Allahabad (IIIT Allahabad) in the capacity of departmental representative based on managerial issues.

13) One week Short Term Course on "Finite Element Analysis- Theory & Practice", January 29 – February 03, 2007, Department of Applied Mechanics and Mechanical Engineering, M.N.N.I.T. Allahabad (Coordinators: Prof K. K. Shukla and Dr. Mukul Shukla).

14) Two days "Induction Training Programme on Teaching Methods", 28-29 January, 2006, at NIT Hamirpur.(Co-ordinators: Prof. Rakesh Sehgal & Prof. R.L. Sharma)

Membership of Society/Organization: 02

1. Corporate Member of the Institution of Engineers, India (**M-148545-2**)
2. Life Member of Indian Society for Applied Mechanics - **ISAM** (**LM-00107**)

Reviewer of Journal: 05

1. International Journal of Composite Structures, "A refined five-unknown higher-order model including transverse hygrothermal deformation", COST-D-16-00219, March 18, 2016.

2. Reviewer of International Journal of Aerospace Engineering

3. Reviewer of International Journal of Composite Structures

4. Reviewer of International Conference on "Advances in Mechanical, Industrial, Automation and Management Systems (AMIAMS 2017)"

5. Editor of International Journal of Advanced Research in Applied Mechanics & Computational Fluid Dynamics

Ph. D. Theses Supervised: 03 (03 in Progress)

1. Mr. Dwijendra Dubey (2021RAM07), Co-supervisor: Dr. Ashutosh Mishra- ***Likely to be submitted soon.***

2. Mr. Sajal Kumar Babu Degala (2020RAM06), Co-supervisor: Dr. Uvanesh K.- ***Likely to be submitted soon.***

3. Mr. Jitendra Mehta (2019RAM01), Co-supervisor: Dr. Abhishek Kumar Tiwari- ***Likely to be submitted soon.***

4. Ms. Divya Pandey (2017RAM01), Co-supervisor: Prof. R. P. Tewari - ***Awarded***

5. Ms. Nidhi Devi (2016RAM01), Co-supervisor: Dr. Anindya Bhar – ***Awarded***

6. Mr. Sangharsh Kumar Singh (2016RAM04), Co-supervisor: Dr. A. K. Upadhyay- ***Awarded***

M. Tech Theses Supervised: 45

1. Mr. Ashutosh Kumar Upadhyay, "Hygroscopic Effects on Bending and Stability of Laminated Composite Plates", 2007 (Co-Guide: Prof. K. K. Shukla)

2. Mr. Ch. Ramakrishna, "Linear Static Analysis of Laminated Composite Plates with Integrated Piezoelectric Actuators", 2008.

3. Mr. Amit Sharma, "Nonlinear Static Analysis of Laminated Composite Plates with Integrated Piezoelectric Actuators", 2009.

4. Mr. Sumit Sharma, "Nonlinear Stability Analysis of Laminated Composite Plates with Integrated Piezoelectric Actuators", 2009. (Co-Guide: Prof. A.K Govil)

5. Mr. Shivendra Srivastava, "Nonlinear Dynamic Analysis of Laminated Composite Plates with Integrated Piezoelectric Actuators", 2009.

6. Mr. Sunil Prasad, “Nonlinear Static Analysis of Laminated Composite Plates with Feedback Control”, 2010 (Co-Guide: Prof. A.K Govil)

7. Mr. Sushant Singhg, “Post-Buckling Analysis of Laminated Composite Plates with Feedback Control”, 2010. (Co-Guide: Prof. K.K Shukla)

8. Mr. Sunkulp Goel, “Nonlinear Dynamic Analysis of Laminated Composite Plates with Feedback Control”, 2010

9. Mr. Abhay Kumar Singh, “Finite Element Analysis of Stiffened Plates of Functionally Graded Material”, 2010 (Co-Guide: Er. Anindya Bhar)

10. Mr Sandeep Singh, “ Linear Analysis of Laminated Composite Plates using Meshless Method”, 2011(Co-Guide: Prof. K. K. Shukla)

11. Mr. Gagandeep Bhardwaj, “Static and Dynamic Analysis of CNT Reinforced Multi-Scale Composite Laminated Plates”, 2011(Co-Guide: Prof. K. K. Shukla)

12. Mr. Sanjay Kumar Tiwari, “Buckling Analysis of Rectangular Laminated Composite Plate with Material Nonlinearity”, 2011(Co-Guide: Prof. D. N. Paliwal)

13. Mr.Raj Vardhan, “Static Response of Stiffened Composite Plates bonded with Peizolectric Layers”, 2011(Co-Guide: Er. Anindya Bhar)

14. Mr. Hemant Verma, “Buckling and Free Vibration Analysis of a Composite Plate using Two Variable Refined Plate Theory”, 2012.

15. Mr. Pradeep Kumar Mishra, “Free Vibration and Static Analysis of Stiffened Plate”, 2012.

16. Mr. Gaurav Verma, “Analysis of Laminated Composite Plates using ABAQUS”, 2012.

17. Mr. Bharat Bhushan Sharma, “Post Buckling Analysis of Laminated Composite Skew Plates with Geometric Imperfection”, 2013 (Co-Guide: Dr. Ashutosh Kumar Upadhyay)

18. Mr. Tushar Sharma, “ Evaluation of Mechanical Properties of Single Wall Carbon Nanotube & Multi Wall Carbon Nanotube Using Fe Simulation”, 2013 (Co-Guide: Prof. K. K. Shukla)

19. Mr. Deepak Kumar, “Buckling Analysis of CNT Reinforced Laminated Composite Plates”, 2013 (Co-Guide: Prof. K. K. Shukla)

20. Mr. Abhishek Srivastava, “Some Parametric Study on the Finite Element Analysis of Functionally Graded Stiffened Plates”, 2013 (Co-Guide: Dr. Anindya Bhar)

21. Mr. Shashi Kant Singh, “Some Parametric Studies on Response Behaviour of Laminated Composite Stiffened Plates”, 2013 (Co-Guide: Dr. Anindya Bhar)

22. Mr. Kumar Pankaj, “In- Plane Free Vibration of Symmetrically Laminated Rectangular Composite Plates”, 2014

23. Mr. Abhijeet Kumar, “Vibration Analysis of Stepped Rectangular Plate Using Spectral Finite Element Method”, 2014

24. Ms. Smriti Srivastava, “Static Analysis of Laminated Composite Plates using Random Properties”, 2015

25. Mr. Lavkush Verma, “Dynamic Analysis of Laminated Composite Plates using Random Properties”, 2015

26. Mr. Chandra Mani Gupta, “Free Vibration Analysis of Functionally Graded Materials Plate Using Navier Method”, 2016

27. Mr. Rohit Jain, “Buckling Analysis of Rectangular Laminated Composite Plate with Cut-Outs using FEA”, 2016

28. Mr. Sanjeet Kumar, “Buckling Analysis of Fiber-Composite Laminated Plates with Material Non-Linearity”, 2016

29. Mr. Satya Pal Singh, “Static Analysis of Functionally Graded Material Plate using COMSOL Multiphysics”, 2016

30. Mr. Amit Kumar, “Static Analysis of FGM Plate on Elastic Foundation”, 2017

31. Mr. Prakash Chandra Gautam,” Static Analysis of Sandwich Composite Pate”, 2017

32. Mr. Ankush Dhadwalia, “ Numerical Analysis of Low Velocity Impact on Laminated Composite Plate, 2017

33. Mr. Prashant Shahi, “Selection and Fabrication of Composite Material for Ankle Foot Orthoses”, 2017 (Co-supervisor: Dr. R. P.Tewari)

34. Mr. Mayank Kumar Yadav, " Synthesis of Nanodiopside Powder for coating over metallic implants", 2018 (Co-supervisor: Dr. R. P.Tewari)

35. Mr. Udayshankar Patel, "Preparation of Hydroxyapatite from Biowaste", 2018 (Co-supervisor: Dr. R. P.Tewari)

36. Mr. Amod Kumar, " Optimization of staking sequence of laminated composite plates for Buckling analysis", 2018

37. Mr. Shashi Prakash, "Optimization Analysis of laminated composite plates using lamination parameters", 2018

38. Mr. Shubham Keshari, "Analysis of Composite Laminates using Permutation Search Algorithm", 2019.

39. Mr. Ranjeet Kumar, "Heat Transfer Analysis of Metal Composite Vessel by Finite Difference Method", 2019.

40. Mr. Manoj Kumar, "Static Analysis of Laminated Composite Plate using RBF-FD Method with GLODS Technique", 2019.

41. Mr. Abhimanyu Yadav, "Optimization Analysis of Laminated Composite Grid Plates using Genetic Algorithm", 2019

42. Mr. Praveen Kumar Gaurav (2018EM09), "Prediction of Elastic Parameters of a Composite using Artificial Neural Network", 2020

43. Mr. Saripalli Dinesh Yadav (2018EM13), "Vibration Analysis of Composite Structures using Artificial Intelligence", 2020.

44. Mr. Nishant Gupta (2018EM14), "Optimization Control Analysis of Functionally Graded Composite Structure using Smart Materials", 2020.

45. Mr. Vivek Kumar (2019EM20)," Vibration Control Analysis of Functionally Graded Composite Structure Using Smart Materials", 2021

List of Expert Lectures: 01

1. Expert Lectures delivered for Two Week in a Self-Financed Short Term Internship Programme on, " Evolving Concepts in Design of Reinforced Concrete Buildings (Design-

2019)" organized by CED of MNNIT Allahabad, Prayagraj, June 03- 28, 2019 (Convener- Prof. L. K. Mishra, Co-ordinators- Dr. Goutam Ghosh & Dr. Rama Shanker)

Projects: (03) Awarded

1. DST's NIDHI i-TBI Supported by Government of India, 2024.
2. Startin UP Supported by UP Government, 2024.
3. Project on Training programs in Structural Bioinformatics and Drug Designing, 2024.

Patents: (01 Awarded & 01 Applied)

1. A Smart Temperature Measuring System With Minimal Human Intervention (Patent No.- 538361, Date of Award- 16/05/2024, Application No.- 202111020581A, , Date of filing application: 05/05/2021)
2. A Flame-Retardant Spacer For Battery Module And A Method Of Preparation Thereof (Application No.: 202411076423, Date of filing application: 09/10/2024)

Administrative Experience

(A) Outside the Institute: 04

1. A member of BOS (Board of Scrutineers) for conducting election for sessions 2015-17 & 2017-19.
2. Centre Controller of SEE- UPTU:2007 at IERT Allahabad held on April 22, 2007 appointed by Central Admission Board (CAB)
3. Examiner of UPTU (IERT) Engineering Mechanics Practical since 2008-2011.
4. Director's Nominee as FRP Expert for Purchase of helmets in PHQ Allahabad on 22 December, 2015 and August 17, 2016.

(B) In the Institute: 28

1. Registrar of MNNIT Allahabad Prayagraj since November 30, 2022 - Till date.
2. Central Public Information Officer (CPIO) since 06.04.2022 - Till date.
3. Officer on Special Duty (OSD) since 06.04.2022- Till date.

4. Officer in charge Media Cell since November 30, 2022 - Till date.

5. Head, Department of Applied Mechanics, 2019-21.

6. Secretary, MNNIT Alumni Association, 2013-17.

7. Joint Secretary-I, MNNIT Alumni Association, 2011-13.

8. Executive Committee Member, MNNIT Alumni Association, 2017-19.

9. A member of the committee constituted for Alumni Office Furnishing, 2015-16.

10. Secretary, Allahabad Local Chapter, MNNIT Alumni Association, 2016-18.

11. Secretary, Durga Puja Committee of Institute, 2017-20.

12. Secretary of MNNIT staff club, 2013-14.

13. Executive member of MNNIT staff club, 2012-13.

14. Institute Coordinator of a two-member technical review committee constituted for examining Executive Development Center Building. The committee comprised of Prof. Veerendra Kumar, Civil Engineering Department, IIT BHU, Varanasi and Dr. Samit Ray Chaudhuri, Asst. Professor, Department of Civil Engineering, IIT Kanpur. (First visit on 02-02-2013 & Second Visit on 29-06-2013)

15. Coordinator of Annual Athletic Meets, 2011-2017.

16. Dy. Coordinator Sac Activities (Photography Club), 2008-09.

17. Faculty Co-Ordinator, Community Development Cell (CDC), 2008 -12.

18. Faculty Co-Ordinator, Gnosiomania, 2008 -09

19. Faculty In-Charge, Civil Maintenance, 2012-2021.

20. Departmental Faculty Coordinator (Purchase) at Institute Level, 2016-17.

21. External Member of DDSC for 2015-17 and DMPC for 2011-14 of Biotechnology Department

22. External Member of DDSC for 2015-16, DMPC for 2011-12 & DUGC for 2012-13 of CED.

23. External member of DPGC of Humanities & Social Science Department for 2011-12.

24. A member of the Press & Publicity committee constituted for 11 convocation to be held on 28-03-2015 and member of other convocations.

25. Member of Roving Committee constituted for monitoring of compliance, security, and maintenance and development work 2013-14 (Chairman- Prof. Rakesh Narain- MED).

26. Member of Scrutiny Committee constituted by director for the selection of Engineers in the Institute Works Department (IWD) section 2013-14.

27. Member of core committee for finalization of contract document for selection/empanelment of an architect firm and drafted the final document for Expression of Interest (EOI), 2012-13.

28. Member of TEQIP –I & TEQIP –II core team for since 2009 for academic data/information (MIS)

(C) In the Department of Applied Mechanics: 32

1. A member of Departmental Faculty Advisory Committee (DFAC) from October 2018-Till date.

2. Coordinator PG Programme (EMD), 2021- 23.

3. Coordinator NBA, 2021- 23.

4. Member of departmental DDSC committee, 2016-18.

5. Member of departmental DMSC committee, 2017-18.

6. Member of departmental DDPC committee, 2017-18.

7. President, Applied Mechanics Society, 2019-21.

8. Vice President, Applied Mechanics Society, 2015-18.

9. O/C Structural Analysis Laboratory, 2017-19.

10. O/C Departmental Library, Conference & Seminar Rooms, 2017-19.

11. Member Departmental Purchase Committee, 2017-19.

12. A member of Departmental Board of Academics (BoAc), 2015-16.
13. Coordinator (Training & Placement), 2015-16.
14. A member of DDPC of the department, 2015-16.
15. A member of Departmental Purchase Committee, 2015-16.
16. O/C Strength of materials Laboratory, 2015-17.
17. O/C Departmental Workshop, 2015-17.
18. Convener, DDPC of the department, 2013-15.
19. A member of DMPC committee, 2013-15
20. O/C/ Civil & Electrical Maintenance, 2013-15.
21. Convener, DPGC of the department, 2011-13
22. O/C Engineering Mechanics Laboratory, 2013-2015.
23. O/C Fluid Mechanics & Hydraulics Laboratory, 2012-13.
24. O/C Compressible Fluid Laboratory, 2012-13.
25. O/C Time_Table of the department, 2010 -12
26. O/C Academic- Affairs, 2010 -12.
27. O/C Structure Laboratory, 2008 -13.
28. O/C Departmental Workshop, 2008 -12.
29. O/C P.G. Programmes, 2009 -11.
30. Departmental representative of TEQIP- I core team, 2009 -12.
31. Co-ordinator M.Tech. (Applied Mechanics) Programme, 2009 -10.
32. Convener P.G. admission, 2010-12.