

## DEPARTMENT OF MECHANICAL ENGINEERING

### LIST OF PAPER PUBLICATIONS

#### DR. ANAND KUMAR, PROFESSOR & HEAD

##### Research Publications in International Journals

1. Mohit Katiyar, Mahender Prasad, Kavita Agrawal, R K Singh, **Anand Kumar** & N Eswar Prasad, Development of low density, heat resistant and broadband Microwave absorbing materials (MAMs) for stealth applications, Silicon, Springer Science, **2018** (10:1831-1839).
2. Mohit Katiyar, Mahender Prasad, Kavita Agrawal, R K Singh, **Anand Kumar** & N Eswar Prasad, Study and characterization of EM absorbing properties of EPDM ferrite composite containing manganese zinc ferrite, Journal of Reinforced Plastics and Composites. **2017** (10. 1177/ 0731684417690816).
3. Jitendra Bhaskar, **Anand Kumar** and Bishakh Bhattacharya, *Dynamic response of selected fruits using Laser Doppler Vibrometer*, ELK Asia- Pacific Journal- Special Issue for Proceedings of International Conference ARIMPIE-2015, ITS Engineering College, Greater Noida, April 10-11, **2015** (ISBN 978-81-930411-4-7).
4. **Anand Kumar**, *Tribological performance evaluation of tin bronzes with varying tin percentages*, International Journal of Material Research, Electronics and Electrical Systems, 2(1-2), p1-9, Jan., **2009**, ISSN:0974-6978.
5. A K Jaiswal, **Anand Kumar** and Bishakh Bhattacharya, Structural health monitoring of ribbon reinforced composite laminate using piezoelectric sensory layer, Journal of COMADEM, 11(1), p 9-17, **2008**, ISSN:1363-7681.
6. **Anand Kumar**, and Bishakh Bhattacharya, Delamination sensing of composite laminate using magnetostrictive sensory layer, International Journal of Nano- Systems Technology, Electrical Engineering and Electronics Systems, 1(1), p 49-55, **2008**.

##### Research Publications in National Journals

1. Priyanka Katiyar and **Anand Kumar**, *Characterization of damping behavior of alumina filled nano-composites*, Journal of the Institution of Engineers (India) Part C, **2016** (10. 1007 / s 40032 – 016 – 0241 - 1).

##### Publications in International Conferences

1. Ashish Awasthi, Anand Kumar and S B Yadaw, Impact strength of polymer matrix composites, Proceedings of International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods, 2017 (ISBN: 978-93-86256-70-6).
2. Ankit Singh and **Anand Kumar**, Damage detection in composite laminate with 8 mats using experimental modal analysis, Proceedings of International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods, **2017** (ISBN: 978-93-86256-70-6).
3. Anubhav Shukla and **Anand Kumar**, Comparison of package cushioning materials to protect post harvest vibration damage to apples, Proceedings of International Conference

- on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods, **2017** (ISBN: 978-93-86256-70-6).
4. Mohit Katiyar, Mahender Prasad, Kavita Agrawal, R K Singh, **Anand Kumar** & N Eswar Prasad, Study and characterization of microwave using free space measurement system in x-band, Proceedings of International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods, **2017** (ISBN: 978-93-86256-70-6).
  5. Husna Maqsood and **Anand Kumar**, Study of different reinforcements in aluminum metal matrix composites: A review, Proceedings of International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods, **2017** (ISBN: 978-93-86256-70-6).
  6. Priyanka Katiyar and **Anand Kumar**, A study of characteristics of alumina – filled epoxy nano- composites, Proceedings of SPIE – The International Society for Optical Engineering – 8689, **April, 2013** (10. 1117 / 12. 2012150).
  7. **Anand Kumar** and Priyanka Katiyar, *A study on damping characteristics of alumina filled epoxy nano-composites*, Proceedings of SPIE International Conference on Smart Materials, Nano- and Micro- Smart Systems, San Diego, USA, **2013**. doi:10.1117/12.2012150.
  8. Arpit Kumar Srivastava and **Anand Kumar**, Comparative studies on laminated composite beam using narrow and wide beam criterion, Proceedings of International Conference on Research and Innovation in Mechanical Engineering, GNDREC, Ludhiana, October, **2013**.
  9. Ankit Saini and **Anand Kumar**, Development and performance evaluation of water resistant corrugated board for packaging, Proceedings of International Conference on Research and Innovation in Mechanical Engineering, GNDREC, Ludhiana, October, **2013**.
  10. **Anand Kumar**, Peter J Fleming and Bishakh Bhattacharya, *Vibration suppression and damage detection in smart composite laminate using high precision finite element*, Proceedings of SPIE International Conference on Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring, paper no. 7982-41, San Diego, USA, **2011**, doi: [10.1117/12.880351](https://doi.org/10.1117/12.880351).
  11. **Anand Kumar**, *Structural health monitoring of composite plate using experimental modal analysis on Laser Doppler Vibrometer*, IVth IPS International Collaboration Symposium, Waseda University, Japan, 17-19 Nov., **2010**.
  12. **Anand Kumar** and Bishakh Bhattacharya, *Real time integrity monitoring of composite laminates with magnetostrictive sensory layer*, Proceedings of SPIE International Conference on Smart Materials, Nano- and Micro- Smart Systems, paper no. 7268-24, Melbourne, Australia, **2008**. doi: 10.1117/12.810614.
  13. **Anand Kumar** and Bishakh Bhattacharya, *Delamination sensing in composite laminates using magnetostrictive sensory layer*, International Symposium on Procession and Fabrication of Advanced Materials – XVII, paper no. AC-028, IIT Delhi, pp600-614, **2008**.
  14. **Anand Kumar** and Bishakh Bhattacharya, *Health and usage monitoring of composite structures with smart magnetostrictive sensory layer*, Proceedings of ISRS-2008, IIT. Madras, **2008**.
  15. J Bhaskar, **Anand, Kumar** and Vinay Pratap Singh, *Non-uniform rational B-Spline (NURBS) for object modeling*, ICRDME 2008, pp 644-649, SUSCET, Mohali, Punjab, Jan **2008**.
  16. **Anand Kumar** and Bishakh Bhattacharya, *Studies on effectiveness of magnetostrictive sensors in delamination sensing of laminated composites*, Proceedings of International & INCCOM-6 Conference on Future Trends in Composite Materials and Processing, IIT,

- Kanpur, 2007.
17. Ajai Prasad Nigam and **Anand Kumar**, *Analysis of failure through delamination in composite laminate using Terfenol-D layer*, Proceedings of International & INCCOM-6 Conference on Future Trends in Composite Materials and Processing, IIT, Kanpur, 2007.
  18. **Anand Kumar** and Bishakh Bhattacharya, *Structural health monitoring of composite laminate with embedded smart magnetostrictive sensors*, International Conference on Recent Advances in Composite Materials, India Habitat Centre, New Delhi, pp571-574, Feb., 2007, ISBN: 81-8424-175-5.
  19. **Anand Kumar** and Bishakh Bhattacharya, *Failure prediction of composite laminate with embedded smart magnetostrictive sensors*, Proceedings of International Conference on Advances in Mechanical Engineering, BBSB Engineering College, Punjab, pp227-232, Dec, 2006.
  20. **Anand Kumar**, *Integrity monitoring of composite structures using Terfenol-D*, International Conference on Recent Advances in Composite Materials, IT-BHU, Dec., 2004.
  21. **Anand Kumar** and B. Bhattacharya, *Delamination detection in composite beam using magnetostrictive materials as sensor*, International Conference on Recent Advances in Composite Materials, IT-BHU, Dec., 2004. (Awarded best poster presentation prize).
  22. **Anand Kumar** and B. Bhattacharya, *Delamination sensing of composite laminates using magnetostrictive materials as distributed sensor*, International Symposium on Advanced Materials and Processing, IIT, Kharagpur, vol. 2, pp 1602-1613, Dec., 2004.

#### Publications in National Conferences

1. Ankit Saini, **Anand Kumar** and S B Yadaw, *Development of aluminum foil corrugate board for packaging*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p3-9, 2015, ISBN:978-93-84869-47-2.
2. Ankit Singh and **Anand Kumar**, *Damage detection in composite laminate using experimental modal analysis*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p56-68, 2015, ISBN:978-93-84869-47-2.
3. Ashish Awasthi, **Anand Kumar** and S B Yadaw, *Strength properties of polymer matrix composites and its validation through ANSYS*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p115-133, 2015, ISBN:978-93-84869-47-2.
4. Mohit Katiyar, J N Srivastava, **Anand Kumar** and R K Singh, *Study of mechanical and microwave absorption properties of rubber-ferrite composites*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p181-190, 2015, ISBN:978-93-84869-47-2.
5. Kartikeya Dixit and **Anand Kumar**, *Performance evaluation of aluminum honeycomb sandwich panels with different cell sizes*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p234-244, 2015, ISBN: 978-93-84869-47-2.
6. Varun Kumar Singh and **Anand Kumar**, *Analytical and experimental performance evaluation of glass fiber composite and conventional steel leaf spring*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p255-265, 2015, ISBN: 978-93-84869-47-2.
7. A P Sharma and **Anand Kumar**, *Improvement in wear resistance of M-35 HSS hob cutter by plasma nitriding*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p321-325, 2015, ISBN: 978-93-84869-47-2.
8. Arpit Kumar Srivastava, Arpit Srivastava, Yastuti Rao Gautum and **Anand Kumar**, *Design optimization of recuperator for micro turbine*, Proceedings of National Conference on

Technological Development in Mechanical Engineering, SRM College of Engineering & Technology, April, **2014**.

9. Kartikeya Dixit and **Anand Kumar**, *A review on sandwich and honeycomb panel composites for structural usages*, Proceedings of National Conference on Emerging Frontiers in Mechanical Engineering, HBTI, Kanpur, February, **2014**.
10. Avanindra Nath Yadav and **Anand Kumar**, *Buckling load analysis of laminated composite plates with different fiber orientations*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p191-200, August 24-25, **2012**.
11. Mahipal Singh and **Anand Kumar**, *Improvement in the strength of gun barrel by modified autofrettage regime*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p201-213, August 24-25, **2012**.
12. Anil Kumar Yadav and **Anand Kumar**, *Thermal and mechanical characterization of aero-grade PMMA for cockpit windscreen*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p183-190, August 24-25, **2012**.
13. Rashmi Rani Maheshwari and **Anand Kumar**, *Damage prediction through modal analysis using Laser Doppler Vibrometer*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p231-2238, August 24-25, **2012**.
14. Dinesh Kumar Pandey and **Anand Kumar**, *Experimental modal analysis for health monitoring of composite structures using Laser Doppler Vibrometer*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p50-58, August 24-25, **2012**.
15. **Anand Kumar**, *Structural health monitoring of composite laminate using smart magnetostrictive sensory layer*, National Workshop on Advanced Functional Materials and Structures, MNIT, Allahabad, July 12-14, **2012** (Won second prize in poster presentation).
16. **Anand Kumar**, *Real time structural integrity monitoring using piezo-ceramics*, National Workshop on Appropriate Technologies and Equipments for Non Destructive Testing of Industrial Products, G.B. Pant University, April, **2003**.
17. **Anand Kumar**, *Effect of operating variables on tribological behavior of aluminum and tin bronzes*, Proceedings of 11<sup>th</sup> ISME Conference, IIT, Delhi, **1999**.
18. **Anand Kumar**, *Evaluation of wear performance of commercial brass and muntz metal*, Proceedings of Recent Advances in Mechanical Engineering, REC, Kurukshetra, pp 9-14, **1997**.
19. **Anand Kumar**, *Tin bronzes as bearing materials: A tribological study*, Proceedings of 10<sup>th</sup> ISME Conference, Delhi College of Engineering, pp 1-107-113, **1996**.
20. **Anand Kumar**, *Tribological behavior of tin bronzes against mild steel*, Proceedings of 9<sup>th</sup> ISME Conference, University of Roorkee, vol. 2, pp 1019-1022, **1994**.

## DR. ONKAR SINGH, PROFESSOR

### Research Publications in International Journals

- 1 “Energy and exergy analysis of steam cooled reheat gas – steam combined cycle”, *Applied Thermal Engineering*, Elsevier / Science , U.K., 27(2007) pp 2779-2790. DOI: [ 10.1016/j.applthermaleng.2007.03.011].
- 2 “Influence of different means of turbine blade cooling on the thermodynamic performance of combined cycle”, *Applied Thermal Engineering*, Elsevier / Science , U.K., 28(2008) pp 2315-2326. <http://dx.doi.org/10.1016/j.applthermaleng.2008.01.022>.
- 3 “Thermodynamic modeling and simulation of advanced combined cycle for performance enhancement”, *Journal of Power and Energy, Part A*, Proceedings of the Institution of Mechanical Engineers, U.K., JPE593,2008,Vol.222,pp 541-555.DOI: 10.1243/09576509JPE593.

- 4 “Development of a vaned type novel air turbine”, *Journal of Mechanical Engineering Science, Part - C*, Proceedings of the Institution of Mechanical Engineers, U.K. ,JMES 993,December 2008, Vol. 222, pp 2419-2426.
- 5 “Comparative evaluation of gas turbine power plant performance for different blade cooling means”, *Journal of Power and Energy, Part A*, Proceedings of the Institution of Mechanical Engineers, U.K.,JPE671, 2009, Vol. 223, pp 71-82. DOI: 10.1243/09576509JPE671.
- 6 “Parametric analysis of effect of blade cooling means on gas turbine based cogeneration cycle”, *Journal of the Energy Institute, U.K.* 2008, Vol. 81, No.4, pp 197-204, DOI 10.1179/014426008X371040.
- 7 “Comparative performance analysis of cogeneration gas turbine cycle for different blade cooling means”, *International Journal of Thermal Sciences*,48 (2009) pp. 1432-1440. [doi:10.1016/j.ijthermalsci.2008.11.016](https://doi.org/10.1016/j.ijthermalsci.2008.11.016).
- 8 “Numerical Analysis of Pressure Admission Angle to Vane Angle Ratios on Performance of a Vaned Type Novel Air Turbine”, *International Journal of Natural Sciences and Engineering, World Academy of Science, Engineering and Technology, Paris, France-IJNSE-ISSN-2073-0578, Vol.1 Number1(4) pp 20-27,2009*.
- 9 “Theoretical Investigations on Different Casing and Rotor Diameters Ratio to Optimize Shaft Output of a Vaned Type Air Turbine”, *International Journal of Natural Sciences and Engineering,World Academy of Science, Engineering and Technology, Paris, France-IJNSE-ISSN-2073-0578, Vol.1 Number 1(5) pp 28-35, 2009*.
- 10 “Effect of rotor to casing ratios with different rotor vanes on performance of shaft output of a vane type novel air turbine”, *International Journal of Aerospace and Mechanical Engineering,World Academy of Science, Engineering and Technology, Paris, France-IJNSE-ISSN-2073-0578, Vol.4 Number 8 pp 599-604, 2010*.
- 11 “Parametric Evaluations of Injection Angles and Vane Angles on Performance of a Vaned Type Novel Air Turbine”, *International Journal of Mathematical, Physical and Engineering Sciences,World Academy of Science, Engineering and Technology, Paris, France-IJMPES-ISSN: 2070-3880, Vol.3 Number 4(38) pp 226-233, 2009*.
- 12 “A Comparative evaluation of compression ignition engine performance using preheated Jatropa, Karanja and Neem oils”, *Proc.of the Institution of Mechanical Engineers ,(IMechE) Part A: Journal of Power and Energy*, 2009, 224 (1), 47-57. DOI 10.1243/09576509JPE770.
- 13 “Optimization of Power output of a Vaned Type Novel Air Turbine with respect to different Injection Angles – under ideal adiabatic expansion”, *International Journal of Mechanical Engineering, July-December 2009, Volume 2, Issue 2 , pp. 205-211*.
- 14 “Analytical Investigations on Different Air Injection Angles to Optimize Power Output of a Vaned Type Air Turbine”, *Proceedings of the Institution of Mechanical Engineers, Part A, Journal of Power and Energy, U.K., Vol. 224, Number 3, 2010, pp. 305-312. DOI:10.1243/09576509JPE83*.
- 15 “A reliability assessment model for switched chaining type modular design based software systems”, *International Journal of Conceptual Modelling*, USA, Issue 35, May 2005.
- 16 “A fuzzy logic and expert opinion aggregation based methodology for ranking of software reliability”, *International Journal of Conceptual Modelling*, USA, Issue 36, August 2005.
- 17 “Effect of different vane angle on rotor – casing diameter ratios to optimize the shaft output of a vaned type novel air turbine”, *International Journal of Engineering Science and Technology, , IJSET:ISSN-0975-5462,Vol.2, Number 3(2), 2010, pp 114-121*.
- 18 “Study of effect of injection angle to rotor-casing diameter ratios on performance of vaned type novel air turbine”, *International Journal of Engineering Science and Technology, , IJSET:ISSN-0975-5462,Vol.2, Number 4, 2010, pp 409 – 416*.
- 19 “Critical effect of rotor vanes with different injection angles on performance of a vaned type novel air turbine”, *International Journal of Engineering and Technology, IJET:ISSN-0975-4024, Vol.2(2), 2010, pp 118 – 123*.



- 20 "Study of influence of vane angle on shaft output of a multi vane air turbine", *International Journal of Renewable and sustainable energy* , AIP, New York, USA, 2010 ,Vol 2, Number 3: JRSE-90211, pp 033101-16.
- 21 "Study of effect of rotor vanes to rotor-casing dimensions on performance of a zero pollution vane type novel air turbine", *International Journal of the Physical Sciences*, 570-00200, Nairobi-73023, Vol. 5(5), pp.547-556, May, 2010, Impact Factor:0.366.
- 22 "Palm Fatty Acid Biodiesel: Process Optimization and Study of Reaction Kinetics", *Journal of Oleo Sciences*, Vol.59 No.11, pp 575-580 , ISSN 1345-8957 print/ISSN 1347-3352 online, (2010).
- 23 "Energy estimations for life cycle analysis of Jatropha, Neem and Karanja Bio diesels – A parametric study", *Proceedings of the Institution of Mechanical Engineers, Part A, Journal of Power and Energy*, U.K., Vol. 224, 2010, pp1049-1057, DOI: 10.1243/09576509JPE939.
- 24 "Thermodynamic performance evaluation of gas turbine cycle with transpiration cooling of blades using air vis-à-vis steam", *Proceedings of the Institution of Mechanical Engineers, Part A, Journal of Power and Energy*, U.K., Vol.224, 2010, pp1039-1047, DOI: 10.1243/09576509JPE964.
- 25 "Performance Test of Palm Fatty Acid Biodiesel on Compression Ignition Engine", *Journal of Petroleum Technology and Alternative Fuels (JPTAF)*,2010, JPTAF-0-10-003.
- 26 "Performance Investigations for Power Output of a Vaned Type Novel Air Turbine", *MIT International Journal of Mechanical Engineering Vol. 1, No. 1, Jan 2011, pp 9-16 ISSN No. 2230.*
- 27 "Study of the influence of vane angle on shaft output of a multi vane air turbine II-Different rotor to casing diameter ratios with optimal injection angle", *International Journal of Renewable and sustainable energy* , AIP, New York, USA, Vol.3(3), 2011, pp 033102(17) DOI:10.1063/1.3583647.
- 28 "Analysis of the Effect of Rotor-to-Casing Diameter Ratio on the Power Output of a Vaned-Type Air Turbine-II", *Research Journal of Applied Sciences, Engineering and Technology Vol.3(5)*, pp 415-425, 2011, ISSN: 2040-7467.
- 29 "Study of Performance of Shaft output with Rotor-to-Casing Ratios versus Different Vane Angles Adopting Practical Approach on a Novel Multi-Vane Air Turbine", *Global Journal of Researches in Engineering, USA,GJRE Volume 11 Issue 5 Version 1.0 August/September 2011.*
- 30 "Performance evaluation of a transpiration-cooled gas turbine for different coolants and permissible blade temperatures considering the effect of radiation", *Proceedings of the Institution of Mechanical Engineers, Part A, Journal of Power and Energy, U.K., 0957650911404305, first published on September 29, 2011 as DOI: doi:10.1177/0957650911404305, Vol.225, pp.1156-1165.*
- 31 "Compressed air energy storage system based engine for running light vehicle", *International Journal of Energy and Environment Engineering, ISSN: 2008-9163 e ISSN:2251-6832, Vol.2 / No.4 (pp.33-44) / Fall 2011.*
- 32 "Thermodynamic analysis of advance technology combined cycle power plant employing water/steam closed loop cooling in gas turbines", *International Journal of Energy and Environment Engineering, ISSN: 2008-9163 e ISSN:2251-6832, Vol.2 / No.4 (pp.71-82) / Fall 2011.*
- 33 "Study of compressed air storage system as clean potential energy for 21<sup>st</sup> century", *Global Journal of Researches in Engineering(A),USA,GJRE Volume 12 Issue 1 Version 1.0 January 2012.*
- 34 "Impact of Two Wheeled Vehicle's on Global Warming and its Remedial Design", *International Journal of Mechanic System Engineering, IJMSE Volume 2, Issue 2, May 2012, PP. 12-18* ©World Academic Publishing, <http://www.ijmse.org/paperInfo.aspx?ID=49>.
- 35 "Investigations on diesel engine performance based on jatropha, karanja and neem biodiesels", *Proceedings of the Institution of Mechanical Engineers, Part A, Journal of Power and Energy, U.K., DOI: 10.1177/0957650912445016, Vol.226:pp 674-681 (2012).*
- 36 "A Study of Performance Output of a Multivane Air Engine Applying Optimal Injection and Vane

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- 37 "Power Enhancement of Gas Turbine Plant by Intake Air Fog Cooling", *International Journal of Engineering Innovation & Research*, ISSN:2277-5668, 2012, Vol.1 Issue 4, pp.317-326.
- 38 "Performance evaluation of gas-steam combined cycle having transpiration cooled gas turbine", *Distributed Generation and Alternative Energy Journal*, Taylor and Francis, Vol.28, No.2, 2013, pp. 43-60.
- 39 "Study of Biodiesel as a Fuel for CI Engines and its Environmental Effects: A Research Review", *International Journal of Advances in Engineering & Technology*, ISSN:2231-1963, Vol.5, Issue 2, Jan,2013, pp. 100-107.
- 40 "Influence of rotor to casing ratios with different rotor vanes on performance of shaft output of a multivane type novel air turbine", *International Journal of Research in Engineering & Advanced Technology*, Volume 1, Issue 2, April-May 2013, ISSN:2320-8791, pp.1-8.
- 41 "Performance evaluation of simple aero gas turbine cycle with transpiration cooling of gas turbine blades", *International Journal of Emerging Technology and Advanced Engineering*, Volume 3, Special Issue 3, Feb 2013, pages 416-420.
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- 43 "Exergy Based Parametric Analysis of a Heat Recovery Steam Generator", *Heat Transfer - Asian Research*, Article first published online: 2 JUL 2014, DOI: 10.1002/htj.21148 .
- 44 "Thermodynamic evaluation of Gas/Steam combined cycle performance with active controlled film cooling", *Distributed Generation and Alternative Energy Journal- Taylor & Francis*, ISSN:2156-3306, Winter 2014, Vol.29, No.1 , pp 49-60.
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- 46 "A new case-depth estimation technique for induction hardened plates based on dynamic response studies using laser doppler vibrometer", *Proceedings of the IMeche, Part I: Journal of Systems and Control Engineering*, Sage Publications, U.K., DOI:10.1177/0959651814548302, Online 5 Sep,2014, <http://pil.sagepub.com/content/early/014/09/04/0959651814548302>.
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- 48 "Energy and Exergy analysis of Brayton-Brayton hybrid cycle for power plant applications", *Engineering Letters*,22:4 , EL\_22\_4\_08, pp 215-220, 2014, ISSN: 1816093X, 18160948.
- 49 "Effect of Compressor Inlet Temperature & Relative Humidity on Gas Turbine Cycle Performance", *International Journal of Scientific & Engineering Research*, Vol 5, Issue 5,2014 pp 664-670.
- 50 "Study of causes of non-popularity of biodiesel in vehicular application in India", *International Journal of Advanced Technology & Engineering Research*,2014 pp 76-81.
- 51 "Exergy Analysis of Dual pressure HRSG for Different Dead States and Varying Steam Generation States in Gas/Steam Combined Cycle Power Plant" *Applied Thermal Engineering*, Elsevier Press, Volume 93, 25 January 2016, pp 614-622.
- 52 "Thermodynamic Analysis of Steam Injected Gas Turbine Cycle Power Plant with Inlet Air Cooling", *International Journal of Ambient Energy- Taylor & Francis*, DOI: 10.1080/01430750.2016.1155495, <http://www.tandfonline.com/doi/full/10.1080/01430750.2016.1155495>, 2016.
- 53 "Performance Evaluation of Steam Injected Gas Turbine Based Power Plant with Inlet

- Evaporative Cooling”, *Applied Thermal Engineering, Elsevier Press*, Vol 102, 5<sup>th</sup> June 2016, pp 454-464. DOI: [10.1016/j.applthermaleng.2016.03.136](https://doi.org/10.1016/j.applthermaleng.2016.03.136).
- 54 “Performance Evaluation of Heat Recovery Generator for Ammonia-Water Mixture in Combined Cycle Power Plants”, *International Journal of Ambient Energy – Taylor & Francis*, DOI: 10.1080/01430750.2016.1191041, 22 May 2016.
- 55 “Experimental analysis of performance and emissions of a diesel engine fueled with biodiesels (Mahua and Neem)”, *RIET-International Journal of Science, Engineering and Technology, Vol.4, Issue 1*, 2017 pp 40-54.
- 56 “Evaluation of energy ratios using life cycle analysis for Mahua, Jatropha and Neem Biodiesels”, *RIET-International Journal of Science, Engineering and Technology, Vol.4, Issue 1*, 2017 pp 64-75.
- 57 “Investigations for Performance Enhancement of Dual Pressure HRSG in Gas/Steam Combined Cycle Power Plants”, *International Journal of Ambient Energy- Taylor & Francis*, DOI: 10.1080/01430750.2015.1100680 <http://dx.doi.org/10.1080/01430750.2015.1100680>, Vol.38, Issue 4, 2017.
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- 60 “Thermodynamic Investigation of parameters affecting the Execution of Steam Injected Cooled Gas Turbine based Combined Cycle Power Plant with Vapor Absorption Inlet Air Cooling”, *Applied Thermal Engineering, Elsevier Press*, Volume 122, 25<sup>th</sup> July 2017, Pages 380-388, <https://doi.org/10.1016/j.applthermaleng.2017.05.034>.
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## DR. RAJIVE GUPTA, PROFESSOR

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### **DR. S.K. SINGHAL, PROFESSOR**

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7. Gaurav Tyagi, Jitendra Bhaskar, S K Singhal and G.Bartarya “Experimental Study on Machining of EN24 using Minimum Quantity Lubrication” presented in AIMTDR-2018 held at Anna University, Chennai during December 13-15, 2018.S.K. Singhal, S.K. Rathore, P. Munshi, N.N. Kishore and N.G.R. Iyenger, “Defect Identification by Ultrasonic Tomography in Polymers” in 15th World Conference on Non-Destructive Testing, Oct. 12-15, 2000, Rome, Italy.

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### MR. J. BHASKAR, ASSOCIATE PROFESSOR

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## DR. VINAY PRATAP SINGH, ASSISTANT PROFESSOR

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### MR. R.K. AMBIKESH, ASSISTANT PROFESSOR

### Research Publications in International Journals

- Nikhil Mittal, R.K. Ambikesh, " Numerical Analysis of various types of Disc brake Rotor for Al/Sic MMC material using ANSYS" International Journal of Emerging Technology and Advance Engineering, pp 31-39, Volume 7 Issue 12, December 2017.

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- R.K. Ambikesh, "Facility Layout Optimization using Genetic Algorithm" National conference on innovations in materials Design and Manufacturing, 2015.
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### **DR. SANJEEV KUMAR SINGH YADAV, ASSISTANT PROFESSOR**

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1. S.K.S Yadav and Vinod Yadava, V.L. Narayana, Experimental study and parameter design of electro discharge diamond grinding, International Journal of Advanced Manufacturing Technology, 36, 34-42, (2008). (SCI, Publisher- Springer)
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### **MR. SAURABH SANGAL, ASSISTANT PROFESSOR (NPIU)**

#### **Research Publications in International Journals**

1. Saurabh Sangal, Arpit Garg and Dinesh Kumar. "Review of Optimal Selection of Turbines for Hydroelectric projects". International Journal of Emerging Technology and Advanced Engineering (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 3, Issue 3, March 2013.
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#### **MR. DEEPAK SINGH, ASSISTANT PROFESSOR (NPIU)**

#### **PUBLICATIONS IN NATIONAL CONFERENCES**

- Published a Research Paper on "Modeling and Analysis of Wire Wear Rate in WEDM" in "National Conference on Mechanical Engineering Ideas, Innovations & Initiatives" held at Aligarh Muslim University

#### **MRS. VERSHA NIGAM, CONTRACTUAL FACULTY**

#### **Publications in International Conferences**

- Versha Nigam and S.K.S Yadav "Magnetic Field Assisted Electrical Discharge Machining Processes: A Review" International Conference on Design, Materials & Manufacturing Concerns In Production of Quality Engineering Goods, March 27,28 & 29, 2017, HBTU Kanpur. pp.375-381.