



ONKAR SINGH		
	DESIGNATION	Professor
	QUALIFICATION	Ph.D. , M.E. (Hons.), B.Tech.(Hons.)
	AREA OF INTEREST	Thermal Engineering
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DETAILED PROFILE

ONKAR SINGH			
	Designation	Professor	
	Phone no.	7081300637	
	Email	osingh@hbtu.ac.in	
	Website	https://hbtu.ac.in/mechanical-engineering-2/	
	Google Scholar Address	Dr.onkar singh	
AREA OF INTEREST			
Thermal Engineering			
PROFESSIONAL EXPERIENCE			
Designation	Organization	From	To
Vice Chancellor	Madan Mohan Malaviya University of Technology, Gorakhpur	17 December 2013	28 April 2017
	Uttar Pradesh Technical University, Lucknow	30 April 2015	4 August 2015
Professor	Harcourt Butler Technical University, Kanpur	18 January 2007	Continued
Assistant Professor	Harcourt Butler Technological Institute, Kanpur	20 August 1999	17 January 2007
Additional Controller of Examination	Uttar Pradesh Technical University, Lucknow	3 August 2004	17 January 2007
Lecturer/Senior Lecturer	Institute of Engineering and Technology, Lucknow	1 May 1991	19 August 1999
HONOURS, AWARDS AND FELLOWSHIPS			

Name of Award/Honour / Fellowships	Organization	Year
National Record for development of air turbine engine for running motor bike	LIMCA Book of Records	2014
National Record as First academicians' work in US school text book	LIMCA Book of Records	2015
100 Most Influential Vice Chancellors Award	World Education Congress	2016
Asia's Education Excellence Award – Exemplary Leader award	CMO Asia	2016
AICTE Young Teacher Career Award	AICTE, New Delhi	2000

DETAILS OF SUBJECTS TAUGHT

Names of Subjects at Under Graduate Level	Institution	Names of Subjects taught at Post Graduate Level	Institution
Engineering Thermodynamics, Advanced Fluid Mechanics, Computer Aided Design, Power Plant Engineering	Institute of Engineering and Technology, Lucknow	Finite element methods, Computer Aided Design of Thermal systems	Harcourt Butler Technical University, Kanpur
Mechanical Engineering, Engineering Thermodynamics, Energy Conversion Systems, Applied Thermodynamics, Internal Combustion Engines, Power Plant Engineering, Thermal Turbo machines	Harcourt Butler Technical University, Kanpur		

EDUCATIONAL QUALIFICATION

Degree	University / Institution	Subject	Year
B.Tech.	HBTI, Kanpur / Kanpur University	Mechanical Engineering	1989
M.E.	M.N.R.E.C., Allahabad /University of Allahabad	Mechanical Engg.(Design of Process Machines)	1991
Ph.D.	M.N.R.E.C., Allahabad / University of Allahabad	Mechanical Engineering	2000

ADMINISTRATIVE EXPERIENCE

Designation	Organization	From	To
Vice Chancellor	Madan Mohan Malaviya University of Technology, Gorakhpur (U.P.)	17-12-2013	28-04-2017
Vice Chancellor	Uttar Pradesh Technical University, Lucknow (U.P.)	30-04-2015	04-08-2015
Dean, Academic Affairs	Harcourt Butler Technological Institute, Kanpur	05-05-2007	04-11-2008
		13-02-2009	17-03-2009
		31-08-2009	04-06-2010
		18-05-2012	16-12-2013
Head of Department	Harcourt Butler Technological Institute, Kanpur	21-01-2009	01-03-2011
		29-12-2011	16-12-2013
Controller of Examination	Harcourt Butler Technological Institute, Kanpur	04-11-2008	29-08-2009
Senior Superintendent	Harcourt Butler Technological Institute,	17-06-2010	08-06-2012

of Examination	Kanpur		
Additional Controller of Examination	Uttar Pradesh Technical University, Lucknow	03-08-2004	17-01-2007
Deputy Coordinator	Science and Technology, Entrepreneurship Park HBTI Kanpur	2000	2002
FACULTY INTERACTION WITH OUTSIDE WORLD			
Organization	Position / Assignment	Nature of interaction	Year
All India Council of Technical Education, New Delhi	Member, Northern Regional Committee	Regulation of technical education in North region	2014
National Board of Accreditation, New Delhi	Member, General Council	Overall Governance related	2016
National Board of Accreditation, New Delhi	Member, Finance Committee	Governance of finance related issues	2016
Indian Institute of Technology, Kanpur	Member, Board of Governors	Overall Governance related	2013
Indian Institute of Technology, BHU Varanasi	Member, Board of Governors	Overall Governance related	2014
Gautam Budha University, Gr. Noida	Member, Board of Management		2014
Allahabad State University, Allahabad	Member, Executive Council		2016
Jannayak Chandrashekhar University, Ballia	Member, Executive Council		2017
Kamla Nehru Institute of Technology, Sultanpur	Member, Board of Governors		2013
Institute of Engineering and Technology, DRMLAU, Faizabad	Member, Board of Governors		2018
MEMBERSHIP OF PROFESSIONAL SOCIETIES			
Name of Membership	Organization		Year
Fellow	The Institution of Engineers (India), Kolkata		2009
Fellow	Indian Society of Mechanical Engineers (ISME)		2018
Life Member	Indian Society for Technical Education, New Delhi		
Life Member	Oil Technologists Association of India, Kanpur		2007
Life Member	The Indian Science Congress Association		2018
Member	Indian Society of Heating and Refrigeration Engineers		2013
Member	American Society of Mechanical Engineers, USA		2015
Member	International Society for Energy, Environment and Sustainability, India		2018
SPONSORED RESEARCH PROJECTS			
Number of Projects Completed			07
INDUSTRIAL PROJECTS			
Number of Projects Completed			02
ORGANIZATION OF SEMINARS/CONFERENCES/WORKSHOPS			

Number of Seminars/Conferences/Workshops organized			12
PARTICIPATION IN SEMINARS/CONFERENCES/WORKSHOPS			
Number of Seminars/Conferences/Workshops Participated			25
ORGANIZATION OF SHORT TERM COURSES			
Number of Short Term Courses Organized			02
PARTICIPATION IN SHORT TERM COURSES			
Number of Short Term Courses participated			09
RESEARCH GUIDANCE			
Ph.D. Guidance			
Name of Ph.D. Scholar	Ph.D. Topic	University	Year of Award
Sanjay	<i>Thermodynamic analysis of combined cycle gas/steam cycle and co-generation plants</i>	UPTU, Lucknow	2005
Jagdish Prasad Yadav	<i>Thermodynamic analysis of steam injected gas turbine and combined gas/steam cycle</i>	UPTU, Lucknow	2006
Raghu Raj Singh	<i>Analysis and design of methodologies for software quality/reliability measures</i>	UPTU, Lucknow	2006
Bharat Raj Singh	<i>Design and Analysis of Air Engine</i>	GBTU, Lucknow	2011
Pravin Kumar Singh	<i>Development, characterization and performance evaluation of biodiesel</i>	GBTU, Lucknow	2012
Ashok Yadav	<i>Comparative evaluation of CI engine performance and life cycle analysis for Jatropha, Karanja and Neem biodiesel fuels</i>	GBTU, Lucknow	2012
Sanjay Kumar	<i>Investigation into transpiration cooling of gas turbine blades used in gas/steam combined cycle power plants</i>	GBTU, Lucknow	2013
Meeta Sharma	<i>Thermodynamic analysis and optimization of heat recovery steam generator (HRSG) for gas/steam combined cycle</i>	AKTU, Lucknow	2015
Mohan Krishna Mishra	<i>Modeling adaptive control of layer hardening of steel beams subjected to electromagnetic induction</i>	AKTU, Lucknow	2016
Anoop Kumar Shukla	<i>Thermodynamic analysis of gas/steam combined cycle with different means of inlet air cooling</i>	AKTU, Lucknow	2017
Mukesh Kumar	<i>Investigations on CI engine performance, emission and its limitation using biodiesels from jatropha, mahua and neem oils in Indian conditions</i>	UTU, Dehradun	2018
On going Ph.D. Guidance			
Name of Ph.D. Scholar	Ph.D. Topic	University	Year of Enrolment
Sanjay	<i>Thermodynamic analysis of combined cycle gas/steam cycle and co-generation plants</i>	UPTU, Lucknow	2005
Jagdish Prasad Yadav	<i>Thermodynamic analysis of steam injected gas turbine and combined gas/steam cycle</i>	UPTU, Lucknow	2006
Raghuraj Singh	<i>Analysis and design of methodologies for software quality/reliability measures</i>	UPTU, Lucknow	2006
Bharat Raj Singh	<i>Design and Analysis of Air Engine</i>	GBTU, Lucknow	2011

Pravin Kumar Singh	<i>Development, characterization and performance evaluation of biodiesel</i>	GBTU, Lucknow	2012
Ashok Yadav	<i>Comparative evaluation of CI engine performance and life cycle analysis for Jatropha, Karanja and Neem biodiesel fuels</i>	GBTU, Lucknow	2012
Sanjay Kumar	<i>Investigation into transpiration cooling of gas turbine blades used in gas/steam combined cycle power plants</i>	GBTU, Lucknow	2013
Meeta Sharma	<i>Thermodynamic analysis and optimization of heat recovery steam generator (HRSG) for gas/steam combined cycle</i>	AKTU, Lucknow	2015
Mohan Krishna Mishra	<i>Modeling adaptive control of layer hardening of steel beams subjected to electromagnetic induction</i>	AKTU, Lucknow	2016
Anoop Kumar Shukla	<i>Thermodynamic analysis of gas/steam combined cycle with different means of inlet air cooling</i>	AKTU, Lucknow	2017
Mukesh Kumar	<i>Investigations on CI engine performance, emission and its limitation using biodiesels from jatropha, mahua and neem oils in Indian conditions</i>	UTU, Dehradun	2018
M.Tech. Guided			
Name of M.Tech. Scholar	M.Tech. Dissertation Topic	University	Year of Award
Rajeev Kumar	Computer aided design of heat recovery steam generators	HBTI Kanpur	2002
Girish Kumar Verma	Computer aided design of vapour compression system and its optimization using genetic algorithm	HBTI Kanpur	2003
Sanjay Kumar	Development of software for computer aided design of centrifugal pump “PUMPCAD” and its’ optimization using genetic algorithm	HBTI, Kanpur	2003
Ram Kumar Tyagi	Design and manufacturing of yoke	HBTI, Kanpur	2003
Ramendra Singh Niranjana	Modeling and structural analysis of propellant tank for a space launch vehicle	HBTI, Kanpur	2005
Anoop Kumar Shukla	Computer simulation of thermodynamic analysis of film cooled of gas turbine blade	HBTI, Kanpur	2012
Mragank Bajpai	Simulation studies of flow over gas turbine blade	HBTI, Kanpur	2012
Kunwar Sandip	Computer Aided Analysis of Vane Type Air Turbine	HBTI, Kanpur	2011
Navin Kumar Singh	Development of software for life cycle analysis of jatropha biodiesel	HBTI, Kanpur	2011
Jayant Singh	Exergy analysis of steam injected gas turbine	HBTI, Kanpur	2012
Manish Kumar Pandey	Investigation on performance improvement of diesel engine by use of biodiesel	HBTI, Kanpur	2013
Atul Rai	Modelling and analysis of integrated coal gasification combined cycle	HBTI, Kanpur	2012
Mayank Maheshwari	Thermodynamic analysis of Kalina cycle	HBTI, Kanpur	2013
Sandeep Singh	Computer aided life cycle analysis of biofuel	HBTI, Kanpur	2013
Priyanka Chaturvedi	Computer aided thermodynamic analysis of gas turbine cycle for performance improvement through inlet air	HBTI, Kanpur	2013

	cooling		
Ankur Srivastava	Computer aided design and analysis of casing of medium capacity electrical motor	HBTI, Kanpur	2013
Kalyan Singh	Fabrication and simulation of diffusion absorption refrigeration system	HBTI, Kanpur	2012
Sudhir Kumar Bajpayi	Base line energy audit at M/s Llyods Steel Industries Limited, Wardha –a case study	GBTU, Lucknow	2012
Jatin Sachdeva	Computer Simulation of Solar Integrated Combined Power Cycle for Carbon Free Power and Heating	HBTU, Kanpur	2018
Ragini Singh	Computer Simulation of Solar Oxide Fuel Cell-Gas Turbine Organic Rankine Cycle Combined System	HBTU, Kanpur	2018

BOOKS PUBLISHED

Title of Book	Publisher	Year	ISBN No.
Engineering Thermodynamics	<i>New Age International Publishers, New Delhi</i>	2005	ISBN8122417507
Applied Thermodynamics	<i>New Age International Publishers, New Delhi</i>	2003, 2006, 2009, 2015	ISBN8122414966, ISBN8122417639, ISBN9788122425833, ISBN9788122436860
Introduction to Mechanical Engineering (Thermodynamics & Strength of Materials)	<i>New Age International Publishers, New Delhi</i>	2002	ISBN8122414222
Elements of Mechanical Engineering	<i>New Age International Publishers, New Delhi</i>	2017	ISBN9789386070173
Thermal Turbomachines	Wiley India Ltd., New Delhi	2014, 2019	ISBN9788126546855, eISBN9788126581597 ISBN9788126579235, eISBN9788126588336

BOOK CHAPTERS PUBLISHED

Title of Chapter	Name of Book	Publisher	Year
Quality Assurance and Governance in Indian Higher Education system	Quality, Accreditation and Ranking	Bloomsbury, India,	2019
Influence of the Air Engine on Global Warming Issues - 21st Century Fuel Technology	The Impact of Air Pollution on Health, Agriculture and Technology	InTech Open Access Publisher	2011
Global Trends of Fossil Fuel Reserves and Climate Change in the 21st Century	Fossil Fuel and the Environment	InTech Open Access Publisher	2012
Study of Impacts of Global Warming on Climate Change: Rise in Sea Level and Disaster Frequency	Global Warming - Impacts and Future Perspective	InTech Open Access Publisher	2012
The Melting of Glaciers Cannot Be Reversed with Global Warming	Can Glacier and Ice Melt Be Reversed	GALE Cengage Learning	2014
Study of Impacts on Continuous Shrinkage of Arctic Sea & Sea Level Rise – Can Glaciers be Growing and Creating New Challenges to UK & USA?	Global Warming - Causes, Impacts and Remedies	InTech Open Access Publisher	2015
Dire Consequences on Little Shifting of the Earth's Spinning Angle – An Investigation Whether Polar Ice Shrinkage may be the Cause?	Global Warming - Causes, Impacts and Remedies	InTech Open Access Publisher	2015

Student evaluation and validation	Elements of Teaching Learning Process	Elsevier India	2015
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CONFERENCE PROCEEDINGS EDITED

Name of Conference	Place	Dates with year	ISBN No.
Condition Monitoring & Diagnostics of Mechanical Systems	Lucknow	06-07 March 1998	-
Challenges and Strategies for Sustainable Energy, Efficiency and Environment	Lucknow	2006	ISBN 81-224-1910-0
Advances in Management of Energy Efficiency and Clean Environment	Kanpur	03-04 April 2010	-
Clean Energy Technologies and Energy Efficiency for Sustainable Development	December	27-29 December 2010	
Green Technology in Power Sector	Gorakhpur	27-28 September 2014	ISBN 978-93-83842-83-4
Challenges in Sustainable Development from Energy and Environment perspective	Gorakhpur	24- 25 March 2017	ISBN 978-93-86256-68-3

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](http://dx.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 Jatropa, 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, 2011as 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 21st 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.jomse.org/paperInfo.aspx?ID=49>.*
- 35 "Investigations on diesel engine performance based on jatropa, 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 Angles," *International Journal of Rotating Machinery, vol. 2012, Article ID 578745, 10 pages,*

2012. doi:10.1155/2012/578745, <http://www.hindawi.com/journals/ijrm/2012/578745/> .
- 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.
 - 42 "Effect of coolant injection angle and cooling hole dimensions on transpiration cooled gas turbine cycle performance", *Journal of the Energy Institute, U.K.*, DOI: 10.1179/1743967112Z.00000000054,(ISSN: 17439671), Vol.86, No.3, pp 140-146, 2013.
 - 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/hjt.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.
 - 45 "Enhancement of combined cycle performance using transpiration cooling of gas turbine blades with steam", *Journal of Mechanical Science and Technology*, Springer Press, Manuscript No. MEST-D-13-01155R1, June 2014, Volume 28, Issue 6, pp 2429-2437, DOI: 10.1007/s12206-014-0536-1.
 - 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>.
 - 47 "Parametric evaluation of Heat Recovery Steam Generator (HRSG)", *Heat Transfer - Asian Research*, Paper ID: HTAR-04-2013-OA-0047.R1,2013,Volume 43, Issue 8, December 2014 , Pages 691–705.
 - 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*

- 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, 5th 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.
- 58 “Exergy Analysis of the Dual Pressure HRSG for Varying Physical Parameters”, *Applied Thermal Engineering, Elsevier Press*, Volume 114, 5 March 2017, Pages 993–1001, <http://dx.doi.org/10.1016/j.applthermaleng.2016.12.042>.
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