

## *Curriculum Vitae*

### ***Dr. Rohit Misra***

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Present Office Address: Associate Professor, Deptt. of Mechanical Engineering, Govt. Engineering College, NH-8, Badliya Chouraha, Ajmer, Rajasthan, India

Present Residential Address: 22, Brij Vihar Colony, Naya Ghar, Gulab Bari, Ajmer, Rajasthan, India

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### ***Educational Qualification:***

B. E. (Mechanical Engg.): N.M.University, Jalgaon, 1997

M.E. (Thermal Engg.): M.B.M. Engg. College, J.N.V. University, Jodhpur, 2003

Title of M.E. Thesis: Experimental Investigations of Earth Air Tunnel Heat Exchanger Operating in Hybrid Mode and CFD Simulation

Ph.D. (Energy): Malviya National Institute of Technology, Jaipur, 2013

Title of Ph.D. Thesis: Experimental Investigations of Earth Air Tunnel Heat Exchanger Operating in Hybrid Mode and CFD Simulation

### ***Teaching and Research Experience:*** 18 Years

Assistant Professor: Deptt. of Mech. Engg., Govt. Engineering College, Ajmer, from 7<sup>th</sup> June 1999 to 25<sup>th</sup> Feb. 2007.

Associate Professor: Deptt. of Mech. Engg., Govt. Engineering College, Ajmer, from 26<sup>th</sup> Feb. 2007 till date.

Principal: Government Engineering College, Ajmer from 1<sup>st</sup> Dec. 2016 to 20<sup>th</sup> June 2017.

### ***Personal Details:***

D.O.B.: 29<sup>th</sup> Sept. 1973

Nationality: Indian

Languages Known: English, Hindi

### ***Courses Taken:***

(1) Kinematics of Machines

- (2) Engineering Thermodynamics
- (3) Heat Transfer
- (4) Refrigeration and Air-conditioning
- (5) Gas Turbines and Gas Power Plants

***Research Projects Undertaken:***

[1] Worked as Principal Investigator on a research project funded by All India Council of Technical Education (AICTE), New Delhi, Government of India, under Research Promotional Scheme (RPS).

**Project Title:** Experimental Investigation of Earth Air Tunnel Heat Exchanger Operating in Hybrid Mode with Other Cooling Systems.

**Project Fund Received:** INR 16.02 Lacs.

**Project Duration:** April 2013 to March 2016.

[2] Worked as Co-Principal Investigator on a research project funded by Department of Science and Technology, Government of Rajasthan, India.

**Project Title:** Performance and Exhaust Emission Analysis of Ethanol Fuelled CI Engine.

**Project Fund Received:** INR 4.12 Lacs.

**Project Duration:** April 2013 to April 2013 and Nov. 2016 to Nov. 2017 (2 Years).

***Administrative Experience:***

Position Held	Organization	Period	
		From	To
Co-coordinator, Training & Placement Activities	Engineering College, Ajmer	17/9/1999	15/7/2001
Incharge, Study Circle & Extension Lectures	Engineering College, Ajmer	28/8/2001	30/8/2002
Stores Officer	Engineering College, Ajmer	15/3/2002	21/7/2008
Head of Mech. Engg. Deptt.	Engineering College, Ajmer	30/6/2006 2/1/2007 2/1/2009 14/7/2017	During vacation 21/7/2008 5/11/2011 Till date

Estate Officer (Civil) and Advisor of Estate Section	Engineering College, Ajmer	23/8/2006 02/2/2016	July 2009 Till date
Member of Central Evaluation Committee of University of Rajasthan	Engineering College, Ajmer	25/3/2008	July 2009
Hostel Warden	Engineering College, Ajmer	13/1/2009	July 2009
Coordinator, Examination Cell	Engineering College, Ajmer	5/11/2011	4/3/2013
Coordinator, RTU Grievance Cell	Engineering College, Ajmer	17/2/2012	4/3/2013
Chief Coordinator, Library	Engineering College, Ajmer	4/3/2013	26/11/2014
Coordinator, QEEE Cell	Engineering College, Ajmer	6/12/2014	30/11/2016
Nodal Officer (Procurement), TEQIP-II	Engineering College, Ajmer	19/7/2015	30/11/2016
Member (Purchase Committee), TEQIP-II	Engineering College, Ajmer	24/8/2015	30/11/2016
Principal	Engineering College, Ajmer	01/12/2016	20/06/2017

***Academic Achievements:***

<b>Sr. No.</b>	<b>Academic Achievements</b>
1	Reviewer of International Journal of Energy Conversion and Management, Elsevier (Science Direct)
2	Reviewer of International Journal of Energy and Buildings, Elsevier (Science Direct)
3	Reviewer of International Journal of Low Carbon Economy, Elsevier (Science Direct)
4	Reviewer of book titled "Non Conventional Energy Resources" by B.H. Khan, 2 <sup>nd</sup> Edition, Tata McGraw-Hill Education Private Limited, New Delhi
5	Has acted as External Examiner to conduct M. Tech. Seminar/Dissertation Viva Voce Exams in various Universities
6	Has acted as External Examiner to conduct Ph. D. Thesis Viva Voce Exams in various Universities
7	Is among the panel of paper setters of R.P.S.C and various Universities/Institutions and has set more than 100 papers of Post Graduate and Under Graduate Examinations
8	Recipient of GATE Scholarship

***List of Publications in International Journals:***

<b>Sr. No.</b>	<b>Details (Author(s)/ Year/ Title/ Volume)</b>	<b>Cumulative Impact Factor</b>
1	Karwa R., Karwa N., Misra R., Agarwal P.C., 2007, "Effect of Flow Maldistribution on Thermal Performance of a Solar Air Heater Array With Sub-collectors in Parallel", Int. J. of Energy, Vol. 32, pp. 1260-1270.	5.182
2	Bansal V., Misra R., Mathur J., Agrawal G. D., 2009, "Performance Analysis of Earth-Pipe-Air Heat Exchanger for Winter Heating", Int. J. of Energy and Buildings, Vol. 41, pp. 1151-1154.	4.599
3	Bansal V., Misra R., Mathur J., Agrawal G. D., 2010, "Performance Analysis of Earth-Pipe-Air Heat Exchanger for Summer Cooling ", Int. J. of Energy and Buildings, Vol. 42, pp. 645-648.	4.599
4	Misra R., Aseri T. K., 2011, "Thermal Performance Enhancement of Box-Type Solar Cooker: A New Approach", Int. J. of Sustainable Energy (Taylor & Francis), Vol. 1, pp. 1-12.	2.35
5	Misra R., Bansal V., Mathur J., Agrawal G. D., Aseri T., 2012 "Thermal Performance Investigation of Hybrid Earth Air Tunnel Heat Exchanger", Int. J. of Energy and Buildings, Vol. 49, pp. 531-535.	4.599
6	Misra R., Aseri T. K., Jamuwa D. K., Bansal V., 2012, Assessment of CO <sub>2</sub> Emission Reduction and Identification of CDM Potential in a Township", Int. J. of Energy Efficiency (Springer), Vol. 5, pp. 471-481.	1.016
7	Bansal V., Misra R., Agrawal G. D., Mathur J., 2012, "Performance Evaluation and Economic Analysis of Integrated Earth Air Tunnel Heat Exchanger Evaporative Cooling System", Int. J. of Energy and Buildings, Vol. 55, pp. 102-108.	4.599
8	Bansal V., Misra R., Agrawal G. D., Mathur J., 2012, "Performance Analysis of Integrated Earth Air Tunnel Evaporative Cooling System in Hot and Dry Climate", Int. J. of Energy and Buildings, Vol. 47, pp. 525-532.	4.599
9	Bansal V., Misra R., Mathur J., Agrawal G. D., 2013, Transient effect of soil thermal conductivity and duration of operation on performance of Earth Air Tunnel Heat Exchanger, Applied Energy, Vol. 103, pp. 1-11.	7.50
10	Misra R., Bansal V., Mathur J., Agrawal G. D., Aseri T., 2013, "Evaluating Thermal Performance And Energy Conservation Potential of Hybrid Earth Air Tunnel Heat Exchanger In Hot And Dry Climate - In Situ Measurement", ASME Journal of Thermal Science and Engineering Applications, pp. 1-10.	3.394
11	Bansal V., Misra R., Mathur J., Agrawal G. D., 2013, 'Derating factor' New Concept for Evaluating Thermal Performance of Earth Air Tunnel Heat Exchanger: A Transient CFD Analysis, Int. J. of Applied Energy, Vol. 102, pp. 418-426.	7.50
12	Misra R., Bansal V., Mathur J., Agrawal G. D., Aseri T., 2013, "Transient Analysis Based Determination of Derating Factor for Earth Air Tunnel Heat Exchanger in Winter", Int. J. of Energy and Buildings, Vol. 58, pp. 76-85.	4.599
13	Misra R., Bansal V., Mathur J., Agrawal G. D., Aseri T., 2013,	7.50

	“CFD Analysis Based Parametric Study of Derating Factor for Earth Air Tunnel Heat Exchanger” , Int. J. of Applied Energy, Vol. 103, pp. 266–277.	
14	Misra R., Bansal V., Mathur J., Agrawal G. D., Aseri T., 2013, “Transient Analysis Based Determination of Derating Factor for Earth Air Tunnel Heat Exchanger in Summer”, Int. J. of Energy and Buildings, Vol. 58, pp. 103–110.	4.599
15	Jakhar S., Misra R., Bansal V., 2015, “Thermal Performance Investigation of Earth Air Tunnel Heat Exchanger Coupled With a Solar Air Heating Duct for Northwestern India, Int. J. of Energy and Buildings, Vol. 87, pp. 360-369.	4.599
16	Jakhar S., Misra R., Soni M. S., Gakhhar Nikhil, 2016, “Parametric simulation and experimental analysis of earth air heat exchanger with solar air heating duct”, Int. J. of Engineering Science and Technology, Vol. 19, Issue 2, pp. 1059-1066.	
17	Misra R., Bansal V., Agrawal A., 2016, “Investigation of Thermal Performance Of EATHE System Under Intermittent Operation: A CFD Approach”, International Journal of Engineering Technology, Management and Applied Sciences, Volume 4, Issue 4, Pg. 340-349, ISSN 2394 – 3386.	
18	Sharma G., Bansal V., Agarwal A., 2016, “Advanced Evaporative Cooling System to Save Energy and Environment”, International Journal of Engineering Technology, Management and Applied Sciences, Volume 4, Issue 4, Pg. 320-323, ISSN 2349-4476.	
19	Misra R., Bansal V., Agarwal A., 2016, “CFD Simulation based Investigation on Soil Thermal Saturation and Regeneration of an Earth Air Tunnel Heat Exchanger during Intermittent Operation: Winter Heating Case”, International Journal of Engineering Technology Science and Research, Volume 3, Issue 4, Pg. 220-230, ISSN: 2394 – 3386.	
20	Saini D., Sharma L.M., Agrawal G.D., Misra R., 2016, ‘A Critical Analysis of Design of Earth Air Tunnel Heat Exchanger’, International Journal of Advance Research in Science and Engineering, Vol. 5, Issue 5, Pg. 491-498, ISSN: 2319-8354.	2.83
21	Agarwal A., Sheikh M.Y., Misra R., 2017, Comparative Study of Transient Conditions for Continuous Operation and Intermittent Operation of EATHE System Operated in Winter Season: A CFD Approach, Vol. 4, Issue 7, Pg. 514-518, ISSN: 2395-0056, ISO 9001:2008 Certified Journal	5.181
22	Evaluation of Optical Efficiency of an All-Glass ETC using Ray Tracing Technique", International Journal of Renewable Energy Technology,	

***List of Publications in Conference/Seminar/Workshops:***

<b>Sr. No.</b>	<b>Details (Author(s)/ Year/ Title/ Volume)</b>
1	Misra R., Karwa R., Agrawal P.C., 1999, “Enhanced Performance Artificially Roughened Flat Plate Solar Air Heaters” Seminar on Solar Technologies’ organised

	by The Institution of Electronics & Telecommunication Engineers, Rajasthan Local Centre, Jaipur and sponsored by REDA and RE&IL.
2	Bansal V., Misra R., Agrawal G. D., Mathur J., 2009, "Performance Analysis of Earth Air Tunnel Heat Exchanger for Summer Cooling", International Conference on "Advances in Energy Research (ICAER)" held at I.I.T. Bombay, Dec.9-11.
3	Bansal V., Misra R., Agrawal G. D., Mathur J., 2012, "Hybrid EATHE: An Energy Efficient Method for Thermal Comfort in Buildings" 2 <sup>nd</sup> IBPSA National Convention and Conference on Simulation of Building for Energy Efficiency and Better Build Environment held at MNIT, JAIPUR during Dec 21-22, 2012.
4	Misra R., Bansal V., Aseri T.K., 2015, "CFD Analysis of Thermal Influence Zone of Earth Air Tunnel Heat Exchanger Under Transient Conditions" 14 <sup>th</sup> International Conference of the International Building Performance Simulation Association being organized by IIIT Hyderabad during 7-9 Dec., 2015 at HICC Hyderabad.
5	Misra R., Bansal V., Agarwal A., 2016, "Investigation of Thermal Performance Of EATHE System Under Intermittent Operation: A CFD Approach", International Journal of Engineering Technology, Management and Applied Sciences, Volume 4, Issue 4, Pg. 340-349, ISSN 2394 – 3386.
6	Sharma G., Bansal V., Agarwal A., 2016, "Advanced Evaporative Cooling System to Save Energy and Environment", International Journal of Engineering Technology, Management and Applied Sciences, Volume 4, Issue 4, Pg. 320-323, ISSN 2349-4476.
7	Misra R., Bansal V., Agarwal A., 2016, "CFD Simulation based Investigation on Soil Thermal Saturation and Regeneration of an Earth Air Tunnel Heat Exchanger during Intermittent Operation: Winter Heating Case", International Journal of Engineering Technology Science and Research, Pg. 23-32, ISSN 2394 – 3386.
8	Singh S.K., Misra R., 2015, "Numerical Analysis of Unsteady Flow and Heat Transfer Around a Trapezoidal Cylinder", National Conference on Advances in Mathematical Sciences and Applications in Engineering and Technology, July 25-26, 2015, Organized by Poornima University, Jaipur, Volume 3, Issue 4, Pg. 220-230, ISSN 0972-6306.
9	Sharma D., Misra R., Misra G., 2016, "Shiksha mein Manav Mulya", National Seminar on Human Values in Education organized by Deptt. of Civil Engg., Government Engg. College Ajmer during 29-30 March 2016.
10	Misra R., Saini M., Agrawal G.D., 2016, 'A Critical Analysis of Design of Earth Air Tunnel Heat Exchanger', International Conference on Innovative Trends in Science, Engineering and Management, Volume , Issue , Pg. , ISSN 2394 – 8354.
11	Misra R., Bansal V., Agarwal A., Jamuwa D.K., 2017, "CFD Simulation of Earth Air Tunnel Heat Exchanger System In Continuous And Intermittent Operation Modes During Winter Season, National Conference on Innovation in Science and Technology, Organized by Manipur Institute of Technology, Accepted
12	Misra R., Bansal V., Agarwal A., Jamuwa D.K., 2017, "Investigation of Dynamic Interaction of Earth Air Tunnel Heat Exchanger With Surrounding Soil During Continuous And Intermittent Operation In Winter, National Conference on Innovation in Science and Technology, Organized by Manipur Institute of Technology, Accepted

***Attended STTP/Conferences/ Workshops/Symposiums:***

Sr. No.	Attended STTP/Conferences/ Workshops/Symposiums
1	Attended Q.I.P. short term course on 'Advanced Tribology' conducted at I.I.T. Bombay during June 18-22, 2001
2	Attended Q.I.P. short term course on 'Use of CNG in I.C.

	Engines' Advanced Tribology' conducted at I.I.T. Roorkee from 30/6/2002 to 5/7/2002
3	Attended ISTE and AICTE sponsored short term programme on 'Recent Advances in Solar Energy Technology' conducted at M.B.M. Engg. College, J.N.V. University Jodhpur from 23/12/2002 to 4/1/2003
4	Attended Two Day Training Programme on Energy Simulation of Buildings Organized by Centre for Energy and Environment, Malviya National Institute of Technology, Jaipur from 20-21 March, 2010.
5	Attended AICTE sponsored National Conference on 'Recent Advances in Mathematics with Applications in Engineering' conducted at Govt. Engg. College Ajmer from March 12-13, 2012
6	Participated in a Seminar on 'Technical Terminology in Engineering' organized by Commission for Scientific and Technical Terminology, MHRD, New Delhi conducted at Govt. Engg. College Ajmer from 6/6/2012 TO 7/6/2012
7	Participated in a Seminar on 'Technical Terminology in Engineering' organized by Commission for Scientific and Technical Terminology, MHRD, New Delhi conducted at Govt. Engg. College Ajmer from 5/2/2014 to 6/2/2014
8	Attended Short Course on 'Economics and Financing of Renewable Energy Technologies' conducted at I.I.T. Delhi during 16/7/2014 to 19/7/2014
9	Attended One Week Short Term Course on 'Recent Advancements in Automotive Technologies' organized by NITTR Chandigarh from August 10-14, 2015
10	Attended One Week National Workshop on 'Green Energy and Technology' organized by Department of Electrical and Mechanical Engg. conducted at Govt. Engg. College Ajmer from Feb. 01-05, 2016
11	Attended One Week Residential Training Programme on 'Productivity & Competitiveness Measurement for Organizational Excellence' organized by National Productivity Council at Port Blair from Feb. 15-19, 2016

***Membership of Technical Societies:***

<b>Sr. No.</b>	<b>Society</b>	<b>Membership No.</b>
1	Life Member of Solar Energy Society of India (SESI)	LM/1563/2011
2	Life Member of Indian Society for Technical Education (ISTE)	LM 66296