

Resume



Name : Dr. O. P. Rahi
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Other Profile Links

Research Gate Link :

Personal Web Link :

Google Scholar Link :

Research Profile

Research Interests :

Brief Research Profile :

Qualification

Name of the Degree	Year Of Passing	Institute/University
Ph.D.	2013	NIT Hamirpur HP
M.E.	1997	Punjab Engineering College, Chandigarh (PU Chandigarh)
B.Tech.	1992	REC Hamirpur (HPU Shimla)
3-Years Diploma in Elect. Engg.	1984	Govt. Polytechnic, Sunder Nagar HP (Haryana State Board of Tech. Edu. Chandigarh)
Matriculation (10th Class)	1980	Govt. High School, Jaree (HP Board of School Education Shimla)

Publications

Year	Journal	Publication	Indexed In
2011	International Journal of Soft Computing	Fuzzy Logic Based Approach for Condition Monitoring of Hydro Generator	(SCOPUS)18169503
2011	International Journal of Electrical and Computer Engineering (IJECE)	Design Optimization of High-Frequency Power Transformer by Genetic Algorithm and Simulated Annealing	(SCOPUS) 20888708
2012	International Water Power and Dam Construction	Refurbishment of Indian Hydro Power Plants	(SCOPUS) 29340
2015	Renewable & Sustainable Energy Reviews	Refurbishment and Uprating of Hydro Power Plants - A Literature Review, Vol. 48	(SCI) 13640321
2016	Renewable Energy	Economic Analysis for Refurbishment and Uprating of Hydro Power Plants, Vol. 86	(SCI) 09601481
2017	Renewable & Sustainable Energy Reviews	A Comprehensive Review of Wind Resource Assessment, vol. 72	(SCI) 13640321
2017	Renewable & Sustainable Energy Reviews	A Comprehensive Review on Slip Power Recovery Drives, vol. 73,	(SCI) 13640321
2018	Journal of Science and Technology, Transactions of Electrical Engineering	Load Frequency Control of Multi Area Interconnected System Comprising DFIG Based Wind Turbine Equipped with Coordinated Control, Vol. 42,	SCI
2018	IETE Journal of Research	Comparative Analysis of Induction Motor Drive with Chopper Controlled SPRS Employing Various Inverter Configurations, vol. 73	(SCI) 130012
2016	Renewable Energy	Preliminary Assessment of Wind Power Potential over the Coastal Region of Bheemunipatnam in Northern Andhra Pradesh, India, vol. 99	(SCI) 09601481
2020	International Journal of Power Electronics	Performance Analysis of SPRS based Induction Motor Drive using Multi-level Inverter and Buck-Boost Chopper, Vol.12, No.1, pp.85-100	(SCOPUS) 21100202505
2019	International Journal of Engineering and Advanced Technology	Enhanced performance of modified PID load frequency controller with frequency control techniques of WU for two area interconnected system, Vol. 8 Issue 6, 2019, 8 pp. 431-439.	(SCOPUS)
2020	Wind Engineering	Contribution of Wind Power Plants in Grid Frequency Regulation: Current Perspective and Future Challenges, 2020	(SCOPUS) https://doi.org/10.1177/0309524X19892899
2019	International Journal for Electrical Engineering and Informatics (IJEI)	Analysis using Various Approaches for Residual Life Estimation of Power Transformer, Vol. 11, No. 2, June 2019	(SCOPUS)

Edited Book/Book Chapter

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
YEAR BOOK-2012	Hydro Scenario in India	International Water Power and Dam Construction	O. P. Rahi, A. K. Chandel, and M. G. Sharma	(SCOPUS) 0306400X	2012
Lecture Notes in Engineering and Computer Science	Load estimation of distribution system	Newswood Limited, Kwun Tong, Hong Kong	O. P. Rahi, A. K. Singh, Nitin Gharwar, and Gagnesh Kumar	ISSN: 20780958 ISBN: 9789881925169	2013
Lecture Notes in Engineering and Computer Science	Enhanced performance analysis of optical CDMA based FSO communication system	Newswood Limited, Kwun Tong, Hong Kong	Gagnesh Kumar, A. K. Singh, and O. P. Rahi	SSN: 20780958 ISBN: 9789881925169	2013
Advances in Intelligent Systems and Computing	Wind Power Density Estimation using Rayleigh Probability Distribution Function	Springer	K. S. R. Murthy and O. P. Rahi	ISSN print 2194 - 5357	2018

Research Projects

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
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Research Supervision

Programme Name	Scholar Name	Research Topic	Status	Year	Co-Supervisor
M.Tech	Harish Thakur	Indian Power Sector under Restructured Environment	Awarded	2007	-
M.Tech	Anoop Kumar	Condition Monitoring of Power Transformer by Oil Analysis	Awarded	2007	-
M.Tech	Nirmal Kumar Agarwal	Refurbishment of Aged Hydro Power Plants	Awarded	2008	-
M.Tech	S. Thulasi Nayak	Optimal Location of Facts Devices to Enhance the Power Transfer Capability	Awarded	2008	-
M.Tech	Praveen	Optimal Power Flow Considering Facts Devices	Awarded	2008	-
M.Tech	Manoj Kumar	Application of Extended Relation Function Method for Transformer Fault Diagnosis	Awarded	2009	-
M.Tech	Bhupesh Kumar	Voltage Stability Assessment through Artificial Neural Network	Awarded	2009	-
M.Tech	Nitin Gaharwar	Load Estimation and Service Restoration of Distribution System	Awarded	2009	-
M.Tech	Isasar Ahamad	Adaptive Transmission System Relaying	Awarded	2011	
M.Tech	Amit Kumar Yadav (Roll No. 09M217)	Optimal Placement of Capacitor in Electrical Power Distribution System	Awarded	2011	
M.Tech	Amit Kumar Yadav (Roll No. 09M218)	Optimization of Power Transformer Design	Awarded	2011	
M.Tech	Navneet Kumar	Transformer Diagnosis using Ultraviolet Spectrophotometer	Awarded	2011	
M.Tech	Amit Kumar (Roll No. 09M263)	Ageing Characteristics of Porcelain Insulator	Awarded	2011	
M.Tech	Vaibhav Kumar Gupta	Modeling & Simulation of Electronic Load Controller	Awarded	2012	
M.Tech	Pankaj Kapoor	Control of Micro Hydro Power Plant	Awarded	2012	
M.Tech	Ajay Khatri	Design of Power Transformer	Awarded	2012	
M.Tech	Sanjeev Kumar Gagrai	Modeling and Simulation of Hydraulic Turbine	Awarded	2014	
M.Tech	Shailendra Kumar Rai	Design and Simulation of Micro Hydro Power Controller	Awarded	2015	
M.Tech	Avinash Kumar	Simulation and Control of Small Hydro Power Plants	Awarded	2015	
M.Tech	Sunil Kumar Kushwaha	Economic Dispatch using Artificial Intelligence Techniques	Awarded	2015	
M.Tech	Sunil Kumar	Condition Monitoring of Power Transformer Using Fuzzy Logic	Awarded	2015	
Ph.D	Sreerama Murthy Kella	Wind Power Potential Assessment using Computational Techniques	Awarded	2019	
Ph.D	Preeti Sonkar	Active Power Support from Wind Power Plants	Awarded	2020	
Ph.D	Sita Ram	Performance Analysis of Induction Motor Drive Using Slip Power Recovery Scheme	Awarded	2020	Dr. Veena Sharma
M.Tech	Nitish Bhardwaj	Investigations into Seasonal Influence on the Substation Grounding Grid Performance and Its Optimal Design to Neutralize the Influence	Awarded	2016	
M.Tech	Nimish Bhatt	Protection of Power Transformer using Artificial Intelligence	Awarded	2016	
M.Tech	Ankit Kumar Gautam	Wind Turbine Control for Load Frequency Requirement using Pitch Angle Variation	Awarded	2018	
M.Tech	Ravish Kumar	Reactive Power Pricing & its Impact in Restructured Power System	Awarded	2018	
M.Tech	Deepak Kumar	Study & Design of Controller for Small Hydro Power Plant	Awarded	2018	
M.Tech	Utsav Kumar	MPC Based Temperature Control of CSTR Process	Awarded	2019	Dr. Veena Sharma
M.Tech	Deepak Kanumuri	Analysis of Various Methods for Residual Life Assessment of Paper Insulation in Power transformer	Awarded	2019	Dr. Veena Sharma
M.Tech	Vineet Kumar	Robust Control of Position and Speed of DC Servomotor	Awarded	2019	Dr. Veena Sharma
M.Tech	Arun Kumar Bugaliya	Design & Analysis of Substation Grounding Grid Performance Considering Seasonal Influence	Awarded	2020	
M.Tech	Gourav Vardhan	Slip Power Recovery Scheme For Induction Motor Using Cuk Converter	Awarded	2020	
M.Tech	Saurabh Ranjan Sharma	Modeling and Simulation of Small Hydro Power Plants	Awarded	2020	
M.Tech	Susheel Kumar Das	Design and Analysis of MPPT Controller for Hybrid Solar and Wind Energy System	Awarded	2020	

Patents

Name	Reg./Ref.No.	Date Of Award/Filing	Organization	Status
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Teaching

Programme Name	Subjects Taught	From	To	Credits
Associate Professor	Electrical Engineering, NIT Hamirpur	25/07/2013		7+Years
Assistant Professor	Electrical Engineering, NIT Hamirpur	01/01/2006	24/07/2013	7+Years
Lecturer	Electrical Engineering, NIT Hamirpur	25/07/2000	31/12/2005	5+Years
Lecturer	Electrical Engineering, Govt. Polytechnic, Sunder Nagar HP	15/07/1997	24/07/2000	3+Years

Programme Name	Subjects Taught	From	To	Credits
Demonstrator	Electrical Engineering, Govt. Polytechnic, Sunder Nagar HP	15/01/1986	14/07/1997	11+Years

Administrative Responsibilities

Position Held	Organization	From	To	Remarks
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Expert Talks

Title	Place	Year	Description
Challenges and Opportunities in Hydro Power Development in India	RGGEC, Nagrota Bagwan, Kangra HP	2019	Expert Talk under the Ageis of TEQIP
Renovation Modernization and Uprating of Hydro Power Plants	Mechanical Engineering Department, NIT Hamirpur	2008	Expert Lecture in AICTE Sponsored FDP
Impact of Frequency & Voltage on Power Quality	Electrical Engineering Department, NIT Hamirpur	2014	MHRD Sponsored FDP
Fuzzy Logic & Its Applications	Electrical Engineering Department, NIT Hamirpur	2015	MHRD Sponsored FDP
Challenges for Sustainable Hydropower Development in India	JNGEC, Sunder Nagar HP	2012	MHRD Sponsored Faculty Development Programme for Faculty of NIT's and Engineering Colleges
Transformer Diagnostic Technique Using C & Tan Delta	Electrical Engineering Department, NIT Hamirpur	2011	Expert Lecture in AICTE
Indian Power System: An Overview	RGGEC, Nagrota Bagwan, Kangra HP	2020	Expert Talk under the Ageis of TEQIP-III
Wind Power as Renewable Power: Resource Assessment to Active Power Control	NIT, Jalandhar	2020	MHRD Sponsored Faculty Development Programme for Faculty of NIT's and Engineering Colleges
Magnetic Circuit and Flux Linkages	NIT Hamirpur.	2007	Expert lecture in Refresher Course to the Field Engineers of HPSEB in Transformer Engineering and Practices during 26-28 February, 2007
Electromagnetic Pollution	NIT Hamirpur.	2007	TEQIP Sponsored Faculty Development Programme for Faculty of NIT's and Engineering Colleges
Energy Conservation and Its Importance	NIT Hamirpur.	2008	Expert Lecture to the participants of TEQIP sponsored short term course on "Hands on Practice in Electrical and Electronics Equipment
Safe and Efficient Use of Electricity	NIT Hamirpur.	2007	Expert Lecture to the participants of TEQIP sponsored short term course on "Operation and Routine Maintenance of Electrical Appliances" organised by Electrical Engineering Department of this Institute , w.e.f. 24.12.07 to 28-12-07.
Professional Ethics	. Delivered a special lecture on 19th September 2012, on the topic, "Professional Ethics" for 2nd Year and Ist Year students under the aegis of Electrical Engineering Society (ELSOC) on the eve of Fresher Day for New Comers of Electrical Engineering Department.	2012	Special Lecture on 19th September 2012, for 2nd Year and Ist Year students under the aegis of Electrical Engineering Society (ELSOC) on the eve of Fresher Day for New Comers of Electrical Engineering Department.

Professional Activities

Name of Activity	Role	Duration	Organization
Power Transformer Diagnostics 2007-08	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	1.36 Lakhs
Power Transformer Diagnostics 2008-09	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	0.485 Lakhs
Power Transformer Diagnostics 2009-10	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	7.28Lakhs
Power Transformer Diagnostics 2010-11	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	4.22 Lakhs
Power Transformer Diagnostics 2011-12	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	2.99Lakhs
Power Transformer Diagnostics 2014-15	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	2.79Lakhs
Power Transformer Diagnostics 2015-16	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	3.12Lakhs
Power Transformer Diagnostics 2016-17	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	6.62Lakhs
Power Transformer Diagnostics 2017-18	HPSEB, Private Electric Utilities	Dr Sushil Chauhan ,Dr R N Sharma, Dr Ravinder Nath, Dr Mrs Veena Sharma, Sh O P Rahi	8.0Lakhs

Courses Organized

Category	Type	Title	Venue	From	To	Designation
conference	NATIONAL	National Conference on "Advancements in Electrical Engineering and Energy Sciences (AEEES-2016)"	NIT Hamirpur	24/04/2016	30/12/2015	Coordinator
workshop	NATIONAL	National Workshop on Hydro Power development in Himalayan Region (Hydro - 2010)	NIT Hamirpur	06/12/2010	07/12/2010	Coordinator
stc	NATIONAL	STC on "Energy Conservation & Energy Generation"	NIT Hamirpur	16/05/2011	20/05/2011	Coordinator
stc	-	STC on "Basics of Electrical Engineering & Measuring Instruments"	NIT Hamirpur	10/01/2014	14/01/2014	Coordinator
stc	-	STC on "MATLAB and its Applications in Engineering & Research" (MATLAB -2016)	NIT Hamirpur	17/05/2016	21/05/2016	Coordinator
stc	-	STC on, "MATLAB and its Applications in Engineering & Research" (MATLAB-2015)	NIT Hamirpur	17/08/2015	21/08/2017	Coordinator

Date :

Place :

Signature