

Resume



Name : Dr. (Mrs.) Veena Sharma
Designation : Head of the Department (Associate Professor)
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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.	2006	Punjab Technical University, Jalandhar
M.Tech	1993	Punjab Agricultural University, Ludhiana
B.Tech	1990	REC Hamirpur
HSSC (12th)	1985	HP university Shimla
SSC (10th)	1983	HP Board of School Education

Publications

Year	Journal	Publication	Indexed In
2004	International Journal of Elsevier Science	Optimal multi-reservoir network control by two phase neural network	Scopus:- Source record id: 16044 Web of Science
2004	Water and Energy International	Hopfield Neural Network Approach for Multi-reservoir Network Control	Scopus:- Source record id: 18755
2005	International Journal of Engineering Optimization	Augmented Lagrange Programming Neural Network for Short-term Hydroelectric Generation Scheduling	Scopus:- Source record id: 29114 Web of Science
2006	International Journal of Engineering Intelligent Systems	Quadratic Programming Neural Network Approach for Multi-reservoir Network Control	Scopus:- Source record id: 78090
2007	Applied Soft Computing, Elsevier science	Optimal Multi-reservoir Network Control by Augmented Lagrange Programming Neural Network	Scopus:- Source record id: 18136; Web of Science
2008	IEEE transactions on Power Delivery	An Integrated Neural-Fuzzy Approach for Fault Diagnosis of Transformers	Scopus:- Source record id: 17370 ; Science Citation Index at S. No. 1591; Web of Science
2009	International Journal of Power and Energy Systems	A neural network optimizer for scheduling hydropower generations	Scopus:- Source record id: 26993; Web of Science
2010	Water and Energy International	Stream flow forecasting in long term reservoir operation scheduling	Scopus:- Source record id: 18755
2010	Journal of Applied Engineering Research	Artificial neural network based hydroelectric generation modelling	Scopus:- Source record id: 21100217234
2011	Research Journal of Applied Sciences, Engineering and Technology	Optimal Hydro-Thermal Generation Scheduling using an efficient Feedback Neural Network Optimization Model	Scopus:- Source record id: 19700187706
2012	TERI Information Digest on Energy and Environment	Energy Generation Plan at Hydro Power Plant	Scopus:- Source record id: 74282
2014	Sylwan	Performance analysis and comparison of automatic generation control techniques for four area interconnected system	Scopus:- Source record id: 23731; Science Citation Index Expanded Web of Science
2015	Renewable and Sustainable Energy Reviews	Decision support system for operation, scheduling and optimization of hydro power plant in Jammu and Kashmir region	Scopus:- Source record id: 27567; Science Citation Index at S. No. 3302; Web of Science
2015	Arabian Journal for Science and Engineering	A novel strategy-based hybrid binary artificial bee colony algorithm for unit commitment problem	Scopus:- Source record id: 13951; Web of Science
2015	International Transactions on Electrical Energy Systems	A modified binary artificial bee colony algorithm for ramp rate constrained unit commitment problem	Scopus:- Source record id: 15615
2015	IETE Journal of Research	Hybridized Gravitational Search Algorithm for Short-Term Hydrothermal Scheduling	Scopus:- Source record id: 130012; Web of Science
2015	IET Generation Transmission and Distribution	Binary Fish Swarm Algorithm for Profit-Based Unit Commitment Problem in Competitive Electricity Market with Ramp Rate Constraints	Scopus:- Source record id: 5400152713; Science Citation Index at S. No. 1612; Web of Science
2015	Expert Systems with Applications	Disruption based gravitational search algorithm for short term hydro thermal scheduling	Scopus:- Source record id: 24201; Web of Science

Year	Journal	Publication	Indexed In
2015	IETE Journal of Research	Optimal Generation Control of Interconnected Power System Including DFIG-Based Wind Turbine	Scopus:- Source record id: 130012; Web of Science
2015	Advances in Electrical and Computer Engineering	Solution approach to automatic generation control problem using hybridized gravitational search algorithm optimized PID and FOPID controllers	Scopus:- Source record id: 18000156702; Web of Science
2016	IET Generation Transmission and Distribution	Application of nondominated sorting gravitational search algorithm with disruption operator for stochastic multiobjective short term hydrothermal scheduling	Scopus:- Source record id: 5400152713 ; Science Citation Index at S. No. 1612 ; Web of Science
2016	Electric Power Components and Systems	Non dominated sorting disruption based gravitational search algorithm with mutation scheme for multi-objective short term hydrothermal scheduling	Scopus:- Source record id: 16031; Web of Science
2016	Soft Computing	A solution network based on stud krill herd algorithm for optimal power flow problems	Scopus:- Source record id: 28554; Web of Science
2016	IET Generation, Transmission and Distribution	Automatic generation control using disrupted oppositional based gravitational search algorithm optimized sliding mode controller under deregulated environment	Scopus:- Source record id: 5400152713 ; Science Citation Index at S. No. 1612; Web of Science
2016	International Transactions on Electrical Energy Systems	Application of stud krill herd algorithm for solution of optimal power flow problems	Scopus:- Source record id:15615; Web of Science
2017	Optimal Control Applications and Methods	Hybridized gravitational search algorithm tuned sliding mode controller design for LFC system with DFIG wind turbine	Scopus:- Source record id: 25529; Web of Science
2017	Applied Soft Computing	An enhanced self-adaptive differential evolution based solution methodology for multiobjective optimal power flow	Scopus:- Source record id: 18136; Web of Science
2017	Renewable and Sustainable Energy Reviews	A comprehensive literature review on slip power recovery drives	Scopus:- Source record id: 27567; Science Citation Index at S. No. 3302; Web of Science
2017	Neural Computing and Applications	Optimal sliding mode control for frequency regulation in deregulated power systems with DFIG wind turbine and TCSC-SMES	Scopus:- Source record id: 24800
2018	Recent Advances in Electrical and Electronic Engineering	Model Predictive Based Load Frequency Control of an Interconnected Power Systems	Scopus:- Source record id: 21100324717
2018	IETE Journal of Research	Comparative analysis of induction motor drive with chopper control SPRS employing various inverter configurations	Scopus:- Source record id: 130012 ; SCI, Web of Science
2018	International Journal of Power Electronics	Performance analysis of SPRS-based induction motor drive using multi-level inverter and buck-boost chopper	SCOPUS 21100202505, Print IISN: 1756638X

Edited Book/Book Chapter

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
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Research Projects

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Faculty Mentor	Research Project	Performance analysis of slip power recovery scheme using buck and boost chopper	TEQIP -II Grant	01/03/2015	01/07/2016	1,07,000/-	Completed	-
Faculty Mentor	Research Project	Development of Automatic Wall Painting System	TEQIP -II Grant	01/03/2015	01/07/2016	1,29,954/-	Completed	-
Faculty Mentor (Co-PI)	Research Project	Design and development of an experimental set up for dielectric spectroscopic analysis of composite insulation system	TEQIP -II Grant	13/11/2013	27/05/2014	50,000/-	Completed	Dr. R. N. Sharma (PI)
Faculty Mentor (PI)	Research Project	Optimal Automatic Generation Control of Interconnected Power Systems using Meta-heuristic Approaches	CSIR, New Delhi	18/06/2	30/09/2	10 lac	Completed	Dr. R. N. Sharma (Co-PI)
Faculty Mentor (PI)	Research Project	Investigations using neural network optimizers for scheduling multi-reservoir systems	UGC, New Delhi			1.	Completed	-

Research Supervision

Programme Name	Scholar Name	Research Topic	Status	Year	Co-Supervisor
Ph.D	Deepika Yadav	Optimal Operation and Scheduling of Hydro Power Plant	Awarded	2014	
Ph.D	Prateek Kumar Singhal	Investigations using meta-heuristic based approaches to solve unit commitment problems	Awarded	2016	
Ph.D	Goutham Kumar Nadakuditi	Investigations using meta-heuristic based approaches to solve short-term hydro thermal scheduling problems	Awarded	2017	
Ph.D	Preeti	Optimal automatic generation control of interconnected power systems	Awarded	2017	
Ph.D	Amita Singh	MPC control of interconnected power systems	Pursuing since Aug.2017	2018	
Ph.D	Sita Ram	Slip power recovery schemes using Buck-Boost Chopper	Pursuing since Aug.2014	2018	
M.Tech	B. Subhash	Modified Sliding Mode Control for Inverted Pendulum System	Awarded	2018	
M.Tech	Nazia Aslam	Tracking Trajectory of Moving Object using Kalman Filter	Awarded	2017	
M.Tech	Anushree Das	Uncertainty Modelling in Control System and Design of a Robust Controller using H-infinity Method	Awarded		
M.Tech	Lucky	Implementation of PID Controller for CSTR Process Model using Different Tuning Algorithms	Awarded		
M.Tech	Shivam Gujral	Mathematical formulation and Analysis of Model Predictive Control Algorithms	Awarded		
M.Tech	Pankaj Kumar	Analysis of Dead Time Processes Using Smith Predictor and its Variants	Awarded		
M.Tech	Vyoma Singh	Sliding Mode Controller Design for DC Motor with Non-Linearities	Awarded		

Programme Name	Scholar Name	Research Topic	Status	Year	Co-Supervisor
M.Tech	Deepak Mishra	System Identification and Control of Processes	Awarded		
M.Tech	Amita Singh	Dissolved Gas Analysis of Power Transformer Using K-means and Support Vector Machine	Awarded		
M.Tech	Ruchika Bansal	Transformer Fault Diagnosis Using Fusion Techniques Based on Dissolved Gas Analysis	Awarded		
M.Tech	Amit Singh Bisht	Object Tracking in Real Time Video	Awarded		
M.Tech	Arun Kumar Saini	Control of Magnetic Levitation System Using Intelligent Algorithms	Awarded		
M.Tech	Avinash Kumar	Tuning of PID Controller using Evolutionary Approaches	Awarded		
M.Tech	Khusbhu Thakur	Dielectric Spectroscopic Analysis of Composite Insulation System for Moisture Assessment of Solid Insulation	Awarded		
M.Tech	Abhishek Singh	Auto-Tuning and Implementation of PID Controller in Industrial Processes by Using Soft Techniques	Awarded		
M.Tech	J. Gireesh Kumar	MPC Design for Industrial Processes and its Performance Study Under Disturbances	Awarded		
M.Tech	Ankit Bansal	H-Infinity Approach for Robust Optimal Control	Awarded		
M.Tech	Gaurav Daga	Model Order Reduction for Linear and Nonlinear Dynamical Systems	Awarded		
M.Tech	Uma Shankar	Modeling and Control of Hybrid Dynamical System	Awarded		
M.Tech	Rajat Kamboj	Comparative Study of Control Design Techniques for DC Motor	Awarded		
M.Tech	Shanu Khan	Modeling and Temperature Control of Heat Exchanger Process	Awarded		
M.Tech	Koena Mukherjee	Path Tracking Control of an Autonomous Underwater Vehicle	Awarded		
M.Tech	Varun Sharma	Analysis of Processes with Dead Time	Awarded		
M.Tech	Prakash Dwivedi	Formulation of Model Predictive Control Algorithms for Linear and Non-linear Processes	Awarded		
M.Tech	VenkateshwarluKesari	Optimal Reservoir Operation Using Dynamic Programming	Awarded		
M.Tech	Anuradha Tomar	Design of Earthing System for Substation	Awarded		
M.Tech	Vikas Mohan	State Space Controller Design for Inverted Pendulum System	Awarded		
M.Tech	Vanita Thakur	Optimal Environmental Dispatch Using Evolutionary Approach	Awarded		
M.Tech	Manisha Vashisth	Transformer Diagnostics Under Dissolved Gas Analysis Using Integrated Neural Fuzzy Approach	Awarded		

Patents

Name	Reg./Ref.No.	Date Of Award/Filing	Organization	Status
Automatic Wall Painting System	patent application no. 201611015615	13/01/2017	Awarding Country: India	Name of Inventors: (1) Kamlesh Sharma(student) (2) Ashish Kumar (student) (3) Vishal Rai(student) (4) Dinesh Sharma(student) (5) Dr.Veena Sharma (6) Dr. Rajesh Sharma

Teaching

Programme Name	Subjects Taught	From	To	Credits
Lecturer	Electrical Engineering, REC Jalandhar	07/10/1993	07/10/1994	01 year
Lecturer	Electrical Engineering, REC Hamirpur	08/10/1994	08/10/1999	05 years
Sr. Lecturer	Electrical Engineering, REC Hamirpur	09/10/1999	01/07/2004	05 years
Lecturer (S. Grade)	Electrical Engineering, NIT Hamirpur	02/07/2004	02/07/2007	03 years
Associate Professor	Electrical Engineering, NIT Hamirpur	03/07/2007		11+ years

Administrative Responsibilities

Position Held	Organization	From	To	Remarks
Warden	Parvati Girls Hostel, NIT Hamirpur	05/11/2006	11/02/2010	11
SUGC Chairperson	NIT Hamirpur	11/02/2010	02/04/2012	02
SPGC Chairperson	NIT Hamirpur	24/10/2016	31/10/2018	2010,02
Warden	Parvati Girls Hostel, NIT Hamirpur	08/06/2018	31/10/2018	04
Chairman	Women Cell, NIT Hamirpur	20/11/2012	29/09/2015	2012,31
Coordinator	Student Grievances Redressal Cell, NIT Hamirpur	17/11/2015	02/04/2018	10
DUGC convener	EED, NIT Hamirpur	01/01/2010	01/01/2016	2018,31

Expert Talks

Title	Place	Year	Description
Effect of Moisture on Insulation	Electrical Engineering Department, NIT Hamirpur	2014	Delivered a lecture on "Effect of Moisture on Insulation" during three day workshop on "Power transformer diagnostics" on 29-31 December, 2014 organized by TIFAC CORE of Electrical Engineering Department
Effect of Moisture on Insulation	Electrical Engineering Department, NIT Hamirpur	2013	Delivered a lecture on "Effect of Moisture on Insulation" during one day workshop on "Protection aspects of Power System" on 22nd June, 2013 organized by TIFAC CORE of Electrical Engineering Department
Data Acquisition Systems: Fundamentals	Mechanical Engineering Department, NIT Hamirpur	2013	Delivered a lecture on "Data Acquisition Systems: Fundamentals" during a short term course held during July 24th -28th July, 2013 organized by Mechanical Engineering Department
Hydropower optimization using neural networks	Electrical Engineering Department, NIT Hamirpur	2013	Delivered a lecture on "Hydropower optimization using neural networks" during a short term course on "Power Generation Operation and Control" during July 08th -12th July, 2013 organized by Electrical Engineering Department
Applications of artificial Neural Networks	Civil Engineering Department, NIT Hamirpur	2013	Delivered a lecture on "Applications of artificial Neural Networks" during a short term course on "Computational methods in Engineering" during May 13th -17th, 2013 organized by Civil Engineering Department

Title	Place	Year	Description
Fundamentals of Electric circuits	Electrical Engineering Department, NIT Hamirpur	2012	Delivered a lecture "Fundamentals of Electric circuits" during community development short term course on the topic "Domestic Appliances Repair, Maintenance and Safety, held in EED, during December 19-23, 2012
Transformer Engineering & Practices	Electrical Engineering Department, NIT Hamirpur	2009	Conducted lab session on BDV test on transformer oil during short term training program on "Transformer Engineering & Practices" during 06-08 February,09
Transformer Engineering & Practices	Electrical Engineering Department, NIT Hamirpur	2008	Conducted lab session on BDV test on transformer oil during short term training program on "Transformer Engineering & Practices" during 26-28 Sep,08
Working and applications of electronic systems	Electronics Communication Engineering Department, NIT Hamirpur		Conducted lab session for the STC on working and applications of electronic systems (WAES'08) of E&CE deptt. of NIT Hamirpur

Professional Activities

Name of Activity	Role	Duration	Organization
Development of software package for Hydro operation scheduling and optimization	BHEL Electronics Division Bangalore	Dr. R. N. Sharma (CI), Dr. Narottam (CO-CI(1)), Dr Veena (CO-CI(2)), Sh. Jagdish Verma (CO-CI(3))	10.75 Lac,(including 12% ST)

Courses Organized

Category	Type	Title	Venue	From	To	Designation
conference	National Conference	Electrical Systems and Energy Technologies (ESET-2013)	NIT Hamirpur	28/06/2013	29/06/2013	Joint Secretary
stc	Skill Development	Power Generation Operation and Control	NIT Hamirpur	08/07/2013	12/07/2013	Co-coordinator
workshop	One day workshop in TIFAC CORE Centre for electricity substation employees	Protection Aspects in Power System	NIT Hamirpur	22/06/2013	22/06/2013	Coordinator
workshop	National Workshop	Evolution and Development of Indian Power Market	NIT Hamirpur	08/06/2013	09/06/2013	Co-coordinator
workshop	Skill Development	Curriculum revision workshop	NIT Hamirpur	02/06/2012	02/06/2012	Coordinator
stc	Community Services	Domestic Appliances repair, maintenance and safety	EED, NIT Hamirpur	19/12/2011	23/12/2011	Coordinator
conference	National Conference	Technological Advances and Computational Techniques	EED, NIT Hamirpur	16/03/2009	17/03/2009	Joint Secretary
workshop	Skill Development	Power Transformer Design and Monitoring	EED, NIT Hamirpur	14/03/2009	15/03/2009	Coordinator
stc	Skill Development	Transformer Engineering and Practices	EED, NIT Hamirpur	06/02/2009	08/02/2009	Coordinator
stc	Skill Development	Transformer Engineering and Practices	EED, NIT Hamirpur	26/09/2008	28/09/2008	Coordinator
stc	Community Services	Measuring Instruments and electrical appliances	EED, NIT Hamirpur	08/07/2008	12/07/2008	Coordinator
stc	Community Services	Operation and routine maintenance of Electrical appliances	EED, NIT Hamirpur	24/12/2007	28/12/2007	Coordinator
stc	Skill Development	Signal Processing and Advances in Control	EED, NIT Hamirpur	10/07/2007	14/07/2007	Coordinator
workshop	Skill Development	Hands on training on Domestic Electrical Appliances	EED, NIT Hamirpur	10/03/2007	11/03/2007	Coordinator
workshop	Skill Development	Industrial automation including PLC and drives technology	EED, NIT Hamirpur	16/04/2016	17/04/2016	Coordinator
fdp	Skill Development	Industry- Institute Interaction head of TEQIP-II	EED, NIT Hamirpur	13/02/2016	14/02/2016	Coordinator
stc	Skill Development	Matlab and its Applications in Engineering & Research	EED, NIT Hamirpur	17/08/2015	21/08/2015	Coordinator
workshop	Skill Development	Industrial automation including PLC and drives technology	EED, NIT Hamirpur	21/03/2015	22/03/2015	Coordinator
conference	National Conference	Technological Advances and Computational Techniques	EED, NIT Hamirpur	16/03/2009	17/03/2009	Joint organizing Secretary
conference	National Conference	Electrical Systems and Energy Technologies	EED, NIT Hamirpur	28/06/2013	29/06/2013	Joint organizing Secretary
conference	National Conference	Advancements in Electrical Engineering and Energy Sciences	EED, NIT Hamirpur	24/05/2016	25/05/2016	Coordinator

Date :

Place :

Signature