

Dr. CHINMOY KUMAR PANIGRAHI

Dr. CHINMOY KUMAR PANIGRAHI
Dean school of electrical engineering



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INTERESTED RESEARCH AREAS:

Application of A.I. Techniques for Generation Scheduling, Smart Grid Energy System,
FACTS Controller

ACADAMIC DETAILS :

Sl No	Exam passed	University/ Board/ Institution	Month/ Year of passing
1.	B.Sc. (Engg.)	Sambalpur University, Orissa	July,1990
2.	M.E.	Sambalpur University, Orissa	Nov,1998
3.	Ph.D.(Engg.)	Jadavpur University, Kolkata	September, 2007

Awards / Honours received:

	No. Of Awards/ Honours	Year	Detail
Local	Best Teacher Award	2015	Best Teacher Award Green Forum, Bhubaneswar during Celebration of Engineers' Day,2015
Local	Best Teacher Award	2015	Best Teacher Award by KIIT University during Celebration of Republic Day,2015
National	Rastriya Gaurav Award	2012	Rastriya Gaurav Award on 30/10/12 by India International Friendship Society, New Delhi for Research and Social work .
State	Excellence Award	2012	Excellence Award, on 24/12/12 by All India

			Small & Medium Newspaper Federation, New Delhi & Odisha State Unit Convocation for Social Work..
National	Excellent Services Award	2010	Excellent Services during 15 th National Youth Festival By Ministry of Youth Affairs & Sports, Govt of India

EXPERIENCE:

Research Experience

- (i) Scientific / Engineering Discipline : Electrical Engineering
- (ii) Field of Specialization and present Research area : Power System Engineering, Renewable Energy Systems
- (iii) Length of Experience : 06 Years

Professional Training

Organization	Period		Training Area
	From	To	
UCE, Burla	07/04/90	09/04/90	Entrepreneurship Awareness Camp
Jadavpur University, Kolkata	12/06/06	15/06/06	Performance Testing of Small Hydro plants: Its need & methodology (Short Term Course)
Power Engg Chapter, IEEE Calcutta Section	03/07/06	08/07/06	: Advanced Computational Techniques in Electrical Engg (Short Term Course)
BIT, Mesra, Ranchi	21/04/07	22/04/07	Application of MATLAB & Toolbox for Real Time Solutions (STTP)
BIT, Mesra, Ranchi	06/12/04	18/12/04	Matlab oriented Electrical System Modelling and Real time Control (AICTE-ISTE sponsored sttp)
S.E.C, Mayurbhanj, Orissa	29/03/04	03/04/04	Microwave application and Control (AICTE-ISTE-ITER, Chandipur sponsored sttp)
NIT, Durgapur	16/05/05	27/05/05	Computational Intelligence and its Application (AICTE sponsored sttp)
Jadavpur University, Kolkata	03/01/05	22/01/05	Parallel and distributed technology for high performance computing (UGC-ASC, JU refresher course).
IIT, Kharagpur	02/04/05	03/04/05	Matlab and Neural Network Toolbox (Hands on training programme)
Jadavpur University, Kolkata	27/02/06	03/03/06	Application of Renewable Energy courses (UGC-ASC, JU short term course)
CYSD, Bhubaneswar	20/12/09	24/12/09	Training of Trainers on Social Harmony and National Unity (RJNIYD)

KIIT University	13/12/09		Industry- Institute Interface
OUAT-TOC	27/01/10	31/01/10	NSS Refresher Course
OUAT-TOC	12/10/09	21/10/09	NSS Orientation Course
Ministry of Youth Affairs & Sports, Govt of India	08/01/10	12/01/10	Youth Festival, 2010
SOA University, Bhubaneswar	27/12/11	27/12/11	Smart Grid, Sustainable Energy, Power System and Power Electronics, FACTS Devices (Tutorial)
SIT, , Bhubaneswar	17/02/12	18/02/12	Emerging Technologies in Electric Power Engineering (NWET-2012) (4 th National Workshop).
VNR VJIEET, Hyderabad	18/06/12	30/06/12	Modern Control Techniques for Power System (MCTPS-2012) (AICTE Sponsored Twelve-Day Staff Development Programme (SDP))
SIT, , Bhubaneswar	01/02/13	03/02/13	Emerging Technologies in Electric Power Engineering (NWET-2013) (National Workshop)
SIT, , Bhubaneswar	15/01/10	17/01/10	Emerging Technologies in Electric Power Engineering (NWET-2010) (National Workshop)
Central Power Research Institute, Bangalore	27/06/13	28/06/13	Advanced Power System Protection(Two days tutorials).

RESEARCH PROJECTS:

Sl. No.	Name of the Project	Duration From To	Sponsoring Agency	Name of Co-investigator/co-consultant	Amount sanctioned and received
1.	National Conference on Renewable Energy Sources	2010	NABARD		Rs 50,000/-
2.	National Conference	2011	NABARD SAIL		Rs 50,000/- Rs 20,000/-
3.	National Conference	2012	NABARD		Rs 40,000/-
4.	National Business Meet on Lighting	2012	CSIR		Rs 30,000/-

Professional Body Membership:

- i) Chairman, ISLE, Local Centre, Bhubaneswar.
- ii) Life Member of I.S.T.E., New Delhi Bearing Number 18396
- iii) Member of IE (INDIA) Bearing Number M/124508/7.
- iv) Fellow Life Member of Indian society of lighting engineers bearing no F (L) - 0796 dated 22/03/2013.
- v) Life Member of SESI
- vi) Member of IET (The Institute of Engineering & Technology): 1100186690.

PUBLICATION:

Sl No	Authors	Title of Paper	Journal	Volume/Issue	Pages	Publisher	Publication date/	Cited by
1.	Sreedhar Madichetty, Abhijit Dasgupta, Sambeet Mishra, Chinmoy Kumar Panigrahi, Ghouse Basha	Application of an Advanced Repetitive Controller to Mitigate Harmonics in MMC With APOD Scheme	IEEE Transactions on Power Electronics	31/9	pp6112-6121	IEEE	2016/9	8
2.	Sambeet Mishra, CK Panigrahi, DP Kothari	Design and simulation of a solar-wind-biogas hybrid system architecture using HOMER in India	International Journal of Ambient Energy	37/2	pp184-191	Taylor & Francis	2016/3/3	3
3.	C Jena, M Basu, CK Panigrahi	Differential evolution with Gaussian mutation for combined heat and power economic dispatch	Soft Computing	20/2	pp681-688	Springer Berlin Heidelberg	2016/2/1	3
4.	S Pati, CK Panigrahi, PR Pattanaik	A Superimposed Components based Fault Detector for Power System Applications	Indian Journal of Science and Technology	9/13			2016/4/19	
5.	C Jena, M	Improved	International	17/2	pp151-		2016/	

	Basu, CK Panigrahi	Differential Evolution for Combined Heat and Power Economic Dispatch	Journal of Emerging Electric Power Systems		163		4/1	
6.	Satyaranjan Jena, Bhabasis Mohapatra, Chinmoy Kumar Panigrahi, Subodh Kumar Mohanty	Power quality improvement of 1- ϕ grid integrated pulse width modulated voltage source inverter using hysteresis Current Controller with offset band	Advanced Computing and Communication Systems (ICACCS), 2016 3rd International Conference on	Vol:1	Pp1-7	IEEE	2016/1	
7.	Pratyasha Tripathy, CK Panigrahi, Biswajit Ghosh	A Review on the Analytical Aspects of Biomass Plant	Journal of Biofuels and Bioenergy	2/1	pp36-43	Sardar Swaran Singh National Institute of Bio-Energy	2016	
8.	Arun Kumar Nanda, CK Panigrahi	A state-of-the-art review of solar passive building system for heating or cooling purpose	Frontiers in Energy		pp1-8	Higher Education Press	2016	
9.	BK Prusty, CK Panigrahi, SM Ali	Study of Fault Analysis In a Doubly Fed Induction Generator Wind Energy Conversion System	International Journal of Engineering Sciences & Emerging Technologies,	Volume 9, Issue 1	Pp 9-17		July 2016	
10.	Satyaranjan Jena, Bhabasis Mohapatra, Chinmoy Kumar Panigrahi	Realization of double band hysteresis current controller for single phase grid connected pulse width modulated voltage source inverter	Conference: 2015 International Conference on Man and Machine Interfacing (MAMI)		pp1-6	IEEE	2015/12/17	
11.	M Sreedhar, CK Panigrahi,	A comparative analysis of circulating	2015 IEEE Power, Communication		pp973-978	IEEE	2015/10/15	

	LV Suresh Kumar, M Das	current controllers for modular multilevel converters	n and Information Technology Conference (PCITC)					
12.	Satyaranjan Jena, Pratik Ranjan Behera, Chinmoy Kumar Panigrahi	Modified hysteresis current-controlled PWM strategy for Single phase grid connected inverters	2015 IEEE Power, Communication and Information Technology Conference (PCITC)		pp930-934	IEEE	2015/10/15	
13.	Mrutyunjay Das, CK Panigrahi, MK Moharana	Improvement of the Performance of PV System with CUK Converter by MPPT Technology	International Journal of Computer Applications	127/5	pp33-36		2015/10	
14.	Mousumi Basu, Chitrlekha Jena, Chinmoy Kumar Panigrahi	Differential Evolution with Gaussian Mutation for Economic Dispatch	Journal of The Institution of Engineers (India): Series B		pp1-6	Springer India	2015/5	
15.	M Sreedhar, Chinmoy Kumar Panigrahi, Abhijit Dasgupta, J Pati	A New Advanced Topology for Photo Voltaic Applications	International Journal of Applied Power Engineering (IJAPE)	4/1			2015/4/1	
16.	Sambeet Mishra, CK Panigrahi, Ritesh Dash	A study on the contact technology of nanomaterial and characterization of the ohmic contact layer in Cds-Al junction	Circuit, Power and Computing Technologies (ICCPCT), 2015 International Conference on		Pp1-7	IEEE	2015/3/19	
17.	Rakesh Kumar Dhal, Bulbul Sharma, Chinmoy K Panigrahi	A Comparison Study Between Stereotypical Multilevel-Inverters With Multistring Inverter In Three-Phase Loaded Condition			pp72 (6.)-72 (6.)	IET Digital Library	2015/1/1	
18.	Arun Kumar Nanda, CK	Review on smart home energy	International Journal of Ambient		Pp1-6	Taylor & Francis	2015/2/11	3

	Panigrahi	management	Energy					
19.	Pratyasha Tripathy, B Ghosh, CK Panigrahi, Sambheet Mishra	A study on the choice and potential of biomass in the state of Odisha	Conference: Electrical, Electronics, Signals, Communication and Optimization (EESCO), 2015 International Conference on		Pp1-6	IEEE	2015/1/24	1
20.	Prabhash Nanda, CK Panigrahi, Abhijit Dasgupta	Energy Management System in Smart Grid: An Overview	IJRSI	Volume II, Issue XII,			December 2015	ISSN 2321-2705
21.	S Pati, CK Panigrahi, PR Pattanaik	A Cumulative Sum-Based Fault Classifier for Power System Relaying	I J C T A	8(5),	pp. 2343-2349	International Science Press	2015	
22.	CK Panigrahi, Rupen Bhattacharya	Differential Evolution Algorithm for Generation Scheduling Considering Valve Point Effects	International Journal of Scientific Engineering and Technology		pp2277-1581		2015	
23.	Mrutyunjay Das, CK Panigrahi, MK Moharana	Design Aspects and Different Control Strategy of Stand-Alone PV System by MPPT Technology	JLTEMAS	Volume IV, Issue VIII	Pp 95-103	www.ijltemas.in	August 2015	ISSN 2278-2540
24.	Rupen Bhattacharya, Chinmoy Kumar Panigrahi	Dynamic economic load dispatch using classical and soft computing techniques	Conference: Green Computing Communication and Electrical Engineering (ICGCCEE), 2014 International Conference on		Pp1-6	IEEE	2014/3/6	1
25.	CK Panigrahi, Pradosh Ranjan Parida, M Das, J Pati	<u>Design and modeling of photovoltaic water pumping system</u>		Vol:3	pp2278-2540	IJLTEMAS	2014	1

26.	C Jena, Amruta Das, CK Paniagrahi, M Basu	Modelling and simulation of photovoltaic module with buck-boost converter	Int J Adv Eng Nano Technol	1/3	Pp4		2014	6
27.	Shailaja Rout, Pradosh Ranjan Parida, Chinmoy Kumar Panigrahi, M Basu	Modeling, Control and Implementation of Dc-Dc Converters for Variable Frequency Operation	i-Manager's Journal on Electrical Engineering	7/2	34	iManager Publications	2013/10/1	
28.	Akhilesh A Nimje, Rajendra M Bhome, Chinmoy Kumar Panigrahi	Simulation of Tie Lines in Interconnected Power Systems	International Journal of Application or Innovation in Engineering & Management (IJAIEM)				2013	ISSN 2319-4847
29.	CK Panigrahi, Rupen Bhattacharya	Differential Evolution Algorithm for Generation Scheduling Considering Valve Point Effects	International Journal of Scientific Engineering and Technology	Volume No.2, Issue No.12	pp : 1178-1182		December, 2013	ISSN 2277-1581
30.	Akhilesh A Nimje, Chinmoy Kumar Panigrahi, Ajaya Kumar Mohanty	Interline Power Flow Controller: Review Paper	Int. Electrical Engg journal	2/3			2011	3
31.	Akhilesh A Nimje, Chinmoy K Panigrahi, Ajaya K Mohanty	Enhanced power transfer capability by using SSSC	Journal of Mechanical Engineering Research	Vol:3, Issue: 2,	pp48-56	Academic Journals	2011/2/28	12
32.	Akhilesh A Nimje, Chinmoy Kumar Panigrahi, Ajaya Kumar Mohanty	Energy Function Based Transient Stability Assessment of SSSC and IPFC	International Electrical Engineering Journal (IEEJ) Vol	Vol:2	pp543-549		2011	2
33.	CK Panigrahi, U Prasad, Chattopadhyay PK	Linear Programming Approach for Risk Assessment of Generators Bidding in a		1/4	4		2011	

		Day-Ahead Market						
34.	U Prasad, CK Panigrahi, PK Chattopadhyay	IT approach for energy management in electrical demand	IJM	1/2	pp20-28		2010/7	
35.	CK Panigrahi, PK Chattopadhyay, RN Chakrabarti, M Basu	Simulated annealing technique for dynamic economic dispatch	Electric power components and systems	34/5	pp 577-586	Taylor & Francis Group	2006/5/1	147
36.	R Chakrabarti, PK Chattopadhyay, M Basu, CK Panigrahi	Particle swarm optimization technique for dynamic economic dispatch	Journal-Institution of Engineers India Part El Electrical Engineering Division	Vol: 87	48	INSTITUTE OF ENGINEERS INDIA	2006	36
37.	CK Panigrahi, PK Chattopadhyay, R Chakrabarti	<u>Load despatch and PSO algorithm for DED control</u>	International Journal of Automation and Control	Vol:1/ Issue :2-3	pp 182-194	Inderscience Publishers	2007/1/1	12
38.	Akhilesh A Nimje, Chinmoy Kumar Panigrahi	<u>Transient stability analysis using modified Euler's iterative technique</u>	Conference: Power Systems, 2009. ICPS'09. International Conference on	-	pp1-4	IEEE	2009/12/27	9
39.	CK Panigrahi, R Chakrabarti, PK Chattopadhyay	Economic environmental dispatch by a mode technique	Journal of Circuits, Systems, and Computers	17/3	pp499-512	World Scientific Publishing Company	2008/6	3
40.	CK Panigrahi, PK Chattopadhyay, RN Chakrabarti	FACTS in deregulated market scenario	Conference: 2005 IEEE Power Engineering Society Inaugural Conference and Exposition in Africa		pp267-271	IEEE	2005/7/11	3
41.	CK Panigrahi, PK Chattopadhyay, U Prasad	Linear Programming Approach for Bidding of Generators in Restructured Power Industry	International Electrical Engineering Journal	3/1	pp589-594		2012	1

42.	R Chakrabarti, CK Panigrahi, PK Chattopadhyay	DYNAMIC ECONOMIC DISPATCH BY HEURISTIC OPTIMIZATION TECHNIQUES	Journal of Indian School of Mines	Vol:1	pp51-58		2006	
43.	Satyanarjan Jena, Swagatika Sahoo, Chinmoy Kumar Panigrahi	Interconnection of Renewable to the Utility Grid by three Phase Pulse Width Modulated Voltage Source Inverter without Phase Locked Loop						
44.	Rudra Narayan Dash, Sangeeta Sahu, Chinmoy Ku Panigrahi, Bidyadhar Subudhi	Condition Monitoring of Induction Motors:-A Review						
45.	CK Panigrahi, Chitrakha Jena, Satyapriya Satpathy, Pradosh Ranjan Parida	Design and Performance of Photo Voltaic Pumping System						
46.	U Prasad, PK Amber, CK Panigrahi	Synchronizing Renewable Energy Sources In Distributed Generation Systems						

Ph.D GUIDED:

A. PhD Completed

Sl. No.	Title of Thesis	Awardee	Completed year
1.	Some Studies on Renewable Energy Sources and its Management	Nirmala Soren	2011
2.	Some studies on applications of flexible ac transmission system controllers in power system problems.	A.Nimje	2011
3.	Some Studies on Application of Artificial Intelligent Techniques in Restructured Power Industry	U.Prasad	2012
4.	Some Studies On Computational Intelligent Techniques In Power System Problems.	R.K.Pati	2014
5.	Some Studies On Design Aspects And Experimental Analysis Of Modular Multilevel Converter	Sreedhar Madichetty	2015
6.	Studies on Different Current Control Technique to reduce Harmonic in PV System.	S.R.Jena	2016
7.	A Study on the Energy Security in Rural India	P.Tripathy	2016

B. PhD Submitted

Sl. No.	Title of Thesis	Ph. D	Submitted
1.	Some studies on control strategies for enhancement of output power in solar photo voltaic system.	M.Das	2015
2.	Some Studies on Power Quality Analysis in Hybrid Energy System	B.Prusty	2016
3.	Application of Computational Intelligent Techniques in Electrical System Problems	J.Pati	2016
4.	Analysis and Performance of power converters in photovoltaic system by using different control strategies	N.Swain	2016
5.	Fault Detection in Transmission Line and Adaptive Setting of Distance Relay	S.Pati	2016

M.Tech THESIS GUIDED:

Sl. No.	Name of M. Tech. Student	Roll No/ Regd. No.	Thesis Title	Guide	Year of Completion
1.	Ajitesh Panigrahi	1458003	Technical and Economic Performance Evaluation of Biomass based Systems	Dr. Chinmoy Kumar Panigrahi	2016
2.	Animesh Shaw	1458004	Power Signature Analysis for Tracking Electric Vehicle changing load.	Dr. Chinmoy Kumar Panigrahi	2016
3.	Arya Thakur	1452004	Forecasting of Rising demand for Electric Vehicle	Dr. B.K.Nayak and Dr. C.K.Panigrahi	2016
4.	Bibhu Prasad Choudhury	1458009	Realization of Generator Power and Torque Characteristics of PMSG Based with turbine for a standalone system	Dr. Chinmoy Kumar Panigrahi	2016
5.	Sabyasachi Dash	1458024	Performance Enhancement of Solar Photovoltaic system using MPPT control strategies based technique on Fuzzy Logic.	Prof. Prasnjit Behera and Prof Dr. Chinmoy Kumar Panigrahi	2016
6.	Anindit Bal	1452003	SEPIC Converter & Obtaining high gain for Renewable Applications Using modified SEPIC topology	Prof. Chitrlekha Jena and Dr. C.K.Panigrahi	2016
7.	Bhabasis Mohapatra	1458008	Implementation and Analysis of Different Hysteresis Current controller for Grid Connected Pulse Width Modulated Voltage source Inverter.	Dr. Chinmoy Kumar Panigrahi and Prof. Satya Ranjan Jena	2016
8.	Sushree Sasmita	1358023	Design Aspects of CUK Converter for Incremental Conductance Maximum Power Point Technique in PV System	Prof. (Dr.) Chinmoy Kumar Panigrahi	2015
9.	Rakesh Kumar Dhal	1352009	Analysis and Simulation of Different Multilevel Inverter Topologies with Advanced Modulation Techniques	Prof. (Dr.) Chinmoy Kumar Panigrahi Prof. Tapas Roy	2015
10	S. Devi Prasad	1352011	Control Methods and Analysis of Buck and Synchronous Buck Converter	Prof. (Dr.) Chinmoy Kumar Panigrahi Prof. K.V.V.S.R Chowdary	2015
11	Ipsita Das	1352005	A New Multi-Device Boost Converter Topology with Reduced	Prof. (Dr.) Chinmoy Kumar Panigrahi	2015

			Switching Stress and High Voltage Gain	Prof. Tapas Roy	
12	Rupen Bhattacharya	1258019	Studies on Application of Computational Intelligent Technique for Generation Scheduling	Prof. (Dr.) Chinmoy Kumar Panigrahi Dr. Biswajit Ghosh	2014
13	Deepak Kumar Biswal	12325825399	Study on the Performance Evaluation of a Grid-Connected PV System	Prof. (Dr.) Chinmoy Kumar Panigrahi Prof. B. Ghosh Mr. A.K. Choudhury	2014
14	Shubhra	1258024	Studies on Rooftop Integrated PV System at Hot and Humid Climatic Conditions	Prof. (Dr.) Chinmoy Kumar Panigrahi Prof. B. Ghosh	2014
15	Shailaja Rout	1252024	Modelling, Simulation and Implementation of DC-DC Converters for Variable Frequency Operation	Prof. (Dr.) Chinmoy Kumar Panigrahi	2014
16	Prajnasmita Mohapatra	1158005	Some Studies on Design Aspects of Grid Connected PV System	Prof. (Dr.) Chinmoy Kumar Panigrahi	2013
17	Sambeet Mishra	1158009	Contact Technology of Nanomaterial and Implementation of Sustainable Energy Tool Boxes	Prof. (Dr.) B. Ghosh Prof. (Dr.) Chinmoy Kumar Panigrahi	2013
18	Pratyasha Tripathy	1158007	Studies on Gasification of Biomass in Conjunction with Extraction of Pyrolytic Content	Prof. (Dr.) B. Ghosh Prof. (Dr.) Chinmoy Kumar Panigrahi	2013
19	Prakash Das	1152006	Modeling & Analysis of Unified Power Flow Controller	Prof. (Dr.) Chinmoy Kumar Panigrahi	2013
20	Gayatri Panda	1052005	Some Studies on Power Flow Analysis Using Unified Power Flow Controller	Prof. (Dr.) Chinmoy Kumar Panigrahi	2012
21	Sangeeta Pradhan	1052016	Evolutionary Programming Technique for Ramp Constrained Economic Load Dispatch	Prof. (Dr.) Chinmoy Kumar Panigrahi	2012
22	Pradosh Ranjan Parida	852008	A Study on Intelligent Techniques for Power System Problems	Prof. (Dr.) Chinmoy Kumar Panigrahi	2012
23	Rakesh Kumar	1013015	Voltage Profile Improvement and Loss Reduction using Optimal Allocation of Facts Devices and Distributed Generation	Prof. (Dr.) Chinmoy Kumar Panigrahi Prof. S.R. Ghatak	2012
24	Lopamudra Mitra	852005	Performance & Analysis of Power Factor Correction Converter using Boost Topology.	Prof. (Dr.) Chinmoy Kumar Panigrahi	2010

SUBJECTS TAUGHT:

- i) At the undergraduate level: Basic Electrical Engineering,
Electrical Machines,
Network Theory,
Electrical Power Transmission and Distribution,
Power System Operation and Control,
- (ii) At the postgraduate level:
Computer Aided Power System,
Power System Dynamics,
Soft Computing Techniques