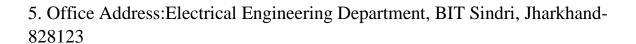
# **Faculty Profile**

1. Name: Nirmala Soren

2. Department: Electrical Engineering

3. Email id:<u>nirmalasoren@gmail.com</u>, nirmalasoren.ee@bitsindri.ac.in

4. Phone Number: 9934369358



#### 6. Qualification:

S. No	Degree(UG, PG, PhD)	Specialization	Institute
1.	B.Sc (Engg.)	Electrical Engineering	RIT (presently NIT) Jamshedpur
2.	M.Tech	Energy Management	SEES, DAAV, Indore
3.	PhD	Renewable Energy	KIITUniversity, Bhubaneswar

- 7. Area of Specialization:Renewable Energy Sources such as Wind , Solar; biomass etc., Electrical Power and Energy Systems; Rural Energy Planning, Solid Waste Management System, Distributed Generation Systems, Demand Side Management.
- 8. PhD (Guided):Awarded-02 (NIT Silchar), Thesis submitted-01(NIT Silchar), Ongoing -01(NIT Silchar)
- 9. Subjects Taught:
- I) UG:-:Measuring Instruments and Measurement, Circuits and Networks, Basic Electrical Engineering, Power System Analysis, Demand Side Management.



# II) PG:- Energy , Ecology & Environment and Energy conservation & management

### 10. Professional Experience:

### I) Teaching Experience:

Sl. No.	Position held	Name of	from	to
		Organization		
1.	Associate Professor	BIT Sindri, Jharkhand	07/06/2021	Till date
2.	Assistant Professor Grade-1	NIT Silchar, Assam	21/11/2019	04/06/2021
3,	Assistant Professor	NIT Silchar, Assam	31/10/2014	20/11/2019
4.	Assistant Professor	BIT Mesra,Patna	01/02/2008	17/10/2014
		Campus, Patna		
5.	Associate Lecturer	BIT Mesra, Ranchi	26/07/2007	31/01/2008
6.	Lecturer	CIT Tatisiwai, Ranchi	06/06/2002	25/07/2007
7.	PTL	Govt. Womens	17/07/1996	05/06/2002
		Poytechnic Ranchi		

### II) Research Experience:

Sl. No.	Position held	Name of Organization	from	to

### III) Industrial Experience:

Sl. No.	Position held	Name of	from	to
		Organization		
1.	Field Supervisor	CP Cell (MHRD),	17/07/2000	05/06/2002
	_	GWP, Ranchi		

#### 11. Publications:

#### I) International Journal:

Sl. No.	Title of the paper	Name of the journal in which publication has been made	Vol/No.	Publi catio n Year	Pages
1.	Improved Grey Wolf assists MPPT Approach for Solar Photovoltaic System under Partially Shaded and Gradually Atmospheric Changing Condition,	0.5	vol. 20, no.1	2020	pp. 87-100

3.	Utilization of Plug-in Electric Vehicles for Frequency Regulation of multi-area Thermal Interconnected Power System Load Frequency Control of Hybrid Power System	IET Energy Systems Integration  Journal of Electrical Engineering &	Online ISSN 2516-8401, doi: 10.1049/ietesi. 2018.0028. doi.org/10.100 7/s42835-019-	2019	doi: 10.1049/ietesi. 2018.0028. doi.org/10.100 7/s42835-019-
	Incorporating Vehicle-to-Grid Technology Considering AC Transmission Links	Technology. (Scopus indexed)	00134-9		00134-9
4.	Impact assessment of incorporating plug-in electric vehicles for frequency regulation of multi-area solar-thermal system	Journal of Advanced Research in Dynamical and Control Systems. (Scopus indexed)	Vol. 10, 15- Special Issue,	2018	ISSN:1943- 023X3
5.	Impact Assessment of Vehicle-to Grid in Frequency Control of Multi-area Hybrid System	International Journal of Engineering & Technology. (Scopus indexed)	ISSN: 2227- 524X	.2018	120-125
6.	Impact Assessment of Vehicle-to-grid Technology in LFC of Multi-area Solar-thermal Power System	International Journal of Renewable Energy Research.(ESCI indexed)	Vol.8, No.3,Online ISSN: 1309- 0127	2018	1580-1590
7.	Secondary Frequency Regulation of Multi-area Interconnected Hybrid Power System with electric vehicle	International Journal on Electrical Engineering and Informatics indexed)	Volume 10, Number 4,Printed ISSN 2085-6830, / online e-ISSN 2087-5886	2018	DOI: 10.15676/ijeei. 2018.10.4.8
8.	An overview of municipal solid waste-to-energy application in Indian scenario		https://doi.org/ 10.1007/s1066 8-018-0235-7	2018.	https://doi.org/ 10.1007/s1066 8-018-0235-7
9.	The Efficacy of an Anaerobic Digester based Biogas Production from various Feedstock	Energy Sources, Part A: Recovery, Utilization and Environmental Effects (Taylor & Francis)	DOI:10.1080/ 15567036.201 7.1336817	2017	1-9
10.	Biomass resources and potential of anaerobic digestion in Indian scenario	Renewable and Sustainable Energy Reviews(Elsevier)	77	2017	718-730
11.	Forecasting and analysis of biogas-based power production using extremal neural network	Energy Sources, Part B: Economics, Planning, and Policy(Taylor &	DOI;10.1080/ 15567249.201 7.1295116	2017	1-10

		Francis),			
12.	The Efficacy of an anaerobic digester-based power Production from various Feedstocks	Energy Sources, Part A: Recovery, Utilization and Environmental Effects(Taylor &Francis),	38, No. 22,	2016	3315-3323
13.	An Overview- Protection of Transmission Line Using Artificial Intelligence Technique	International Journal of Engineering Research & Technology (IJERT)	Vol. 2 Issue 1ISSN: 2278- 0181	2013	1-9
14.	Issues and challenges in Distributed Power Generation System	Global Journal of Engineering and Applied Science (GJEAS), Rising Research Journal Publications	Vol. 1, No. 4.	2011	23-25
15.	Issues and challenges in Captive Power Plants under Deregulated Environment	Global Journal Engineering and Applied Science (GJEAS), Rising Research Journal Publications,	Vol. 1, No: 3	2011	20-26
16.	Steady State Analysis of Interline Power Flow Controller	International Journal of Power System Operation and Energy Management	Vol.1, Issue-2	2011	12-19
17.	Enhancing Power Quality and Reliability in Deregulated Environment	International Journal of Electrical Engineering and Technology (IJEET), International Association for Engineering and Management Education (IAEME),	Vol. 2. Issue 2	2011	1-11
18.	Steady State Analysis of Interline Power Flow Controller	International Journal of power System Operation and Energy Management	Vol.1 Issue-2	2011	12-19
19.	Economic Environmental Dispatch (EED) by Modified Differential Evolution Technique"	International Journal of Computer Applications (IJCA)		2011	

# II) International Conference:

Sl. No.	Title of the paper	Name of the Conference in which publication has been made	Vol/No.	Publica tion Year	Pages
1.	Day ahead demand side management using Firefly Algorithm.	AIP Conference Proceedings 2273, 050068	https://doi.org/1 0.1063/5.00247 86	2020	https://doi.or g/10.1063/5. 0024786
2.	Optimal economical analysis and performance assessment of wind biomass hybrid energy system	IEEE International Conference on Automation, Computational and Technology Management (ICACTM), London,	UKDOI: 10.1109/ICACT M.2019.877685 4	2019	UKDOI: 10.1109/IC ACTM.2019 .8776854
3.	Secondary Frequency Control of a Multi-area Power System Integrated with Plug-in Electric Vehicles and Renewable Energy Sources	IEEE International Conference on Automation, Computational and Technology Management (ICACTM), London	UKDOI: 10.1109/ICACT M.2019.877685 5	2019	UKDOI: 10.1109/IC ACTM.2019 .8776855
4.	Utilization of plug-in electric vehicles for frequency regulation of multi-area hybrid power system"	International Conference on Computational Intelligence & IoT,		2018	
5.	An Efficient HEMS for Demand Response considering TOU Pricing Scheme and Incentives	2nd International Conference on Energy, Power and Environment: Towards Smart technology, ICEPE2018,	DOI: 10.1109/EPET SG.2018.86593 388	2018	DOI: 10.1109/EP ET SG.2018.86 593388
6.	Feasibility study of an off-grid hybrid renewable energy system	Proc. TENCON 2017- 2017 IEEE Region 10 Conference, pp. 2488 - 2493, Penang, Malaysia	.DOI: 10.1109/TENC ON.2017.82282 80	2017	DOI: 10.1109/TE NCON.2017 .8228280
7.	Current Controlled D- STATCOM using Artificial Intelligence Technique	International Conclave on Innovations in Engineering and Management at BIT, Patna.		2013	
8.	Municipal Solid Waste Management System-A Case Study	First international Conference on Energy Engineering and Eco- balance (ICEEE- 2009) at MTTR, Pune		2009.	
9	Optimization of Energy	South Asia Energy		2006	

Loss in Boiler- A case study	Conservation Conclave organized		
	by Institute of Indian		
	Foundry Men, Ranchi,		
	Chapter		

# III) National Journal :

Sl. No.	Title of the paper	Name of the journal	Vol/No.	Publica	Pages
		in which publication		tion	
		has been made		Year	

# IV) National Conference :

Sl. No.	Title of the paper	Name of the Conference in which publication has been made	Vol/No.	Publica tion Year	Pages
1.	Power Saving in Hybrid Renewable Energy	National Conference on "Distributed Generation through Renewable Energy Sources for Rural India" (DGTRES- 2011		2011	
2.	Energy Storage Options for Renewable Energy Systems	National Conference on "Distributed Generation through Renewable Energy Sources for Rural India" (DGTRES-2011		2011	
3.	Power Quality Issues, Problems and Related Standards	National Conference on "Distributed Generation through Renewable Energy Sources for Rural India" (DGTRES- 2011		2011	
4.	Restructuring and Renewable Energy Development	National Conference on "Distributed Generation through Renewable Energy Sources for Rural India" (DGTRES- 2011		2011	
5.	Energy Audit of A Hotel Industry- A Case Study	3rd National Conference on Advances in Energy		2009.	

		Conversion Technology (AECT' 09) at MIT, Manipal,	
6.	Integrated Rural Energy Planning - A Case Study	2nd National	2008.
7.	Rain-Water Harvesting	National Conference (Sponsored by U.G.C.), RanchiWomen's College, Ranchi,	2006
8.	Status and Prospect of Energy Management Program for Conservation of Energy",	National Conference (Sponsored by	2005

### 12. Patents (Filed / Granted)

S. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year	Status (Filed / Granted)

### 13. Conference/ Workshop/Seminar/ Organized

Sl.	Title of	Name of	Funding /	Date of Seminar /	No. of
No.	Seminar / Conferences /	Coordinator	Sponsoring	Conferences / Short	<b>Participants</b>
	Short – term Courses		Agency	- term Courses	
1.	Workshop on Outcome Based Education& Accreditation (WOBEA 2018)	Arnab Nandi and Nirmala Soren	NIT Silchar	30/09/2018 - 01/10/2018	100
2.	International Conclave on Innovations in Engineering and Management .	Nirmala Soren (Joint Secretary)	BIT, Mesra, Patna Campus	22nd-23rd Feb 2013	100

# 14. Symposium/ Workshop/Seminar/ Attended

Sl. No.	Title of Symposium/	Date	Organizing
	Workshop/Seminar/ Short – term		Institute

	Courses		
1.	Workshop on Universal Human Values	19 <sup>th</sup> July-23ed July 2021	AICTE
2.	One week workshop on Effective Online Teaching and Conducting Examinations with Moodle LMS	5 <sup>th</sup> April-10 <sup>th</sup> April2021	NIT Silchar, Assam
3.	4 <sup>th</sup> World Summit on accreditation: Challenges& Opportunities in Outcome Based Accreditation	7 <sup>th</sup> -9 <sup>th</sup> September2018	NBA, New Delhi
4.	North East Workshop on SQC & SIX Sigma Practices	21 <sup>st</sup> -23 <sup>rd</sup> Nov.2016	SMIT, Sikkim & ISI Kolkatta
5.	Important Challenges in Power Sector	24th Nov25 Nov. 2015	ABV-IIITM, Gwalior
6.	IEEE AUTHORSHIP WORKSHOP-2015	15 <sup>th</sup> Feb 2015	NIT, Silchar
7.	Two week ISTE Workshop on Control Systems	2 <sup>nd</sup> Dec12 Dec 2014	IIT, Kharagpur.
8.	Develop of assessment tool for effective implementation of outcome based curriculum	22 <sup>nd</sup> Nov23 Nov.2014	NIT, Silchar
9.	Short Term Course on Smart Grid	7 <sup>th</sup> March -9th March 2013	BIT, MESRA UGC(SAP)
10.	International Workshop on" Challenges in Smart Grid & Renewable Resources"	14 <sup>th</sup> May- 15thMay2011	Infosys Campus, Mysore, IEEE, Bangalore Section
11.	Short term Training Program on Use of MATLAB TOOL BOXES for real time applications in ELECTRICAL ENGINEERING	2ndJune -13 <sup>th</sup> 2008	BIT, MESRA
12.	Undergone six days Industrial Training on "Steel Plant Instrumentation"	31stDec'2007- 5th'Jan'2008	BIT, MESRA
13.	Workshop on "Development in Power	4thNov-5thNov	BIT, MESRA

	Electronics Technology"	2007	
14.	Staff Development Programme on "Environment Management in Hospitality Industry"	4 <sup>th</sup> June- 17th June 2007	ISM, Ranchi,
15.	Staff Development Programme on "Selection of Steels for Engineering Applications"	12 <sup>th</sup> Feb-23rd Feb 2007	N.I.F.F.T, Hatia, Ranchi

### 15. Administrative Position Held:

S. No.	Position Held	From
		(date/month/year)
1.	Associate Warden, NIT Silchar	April 2015-Aug2018
2.	HOD(In-Charge)-BIT Mesra,Patna Campus	June 2009 -Oct 2014
3.	Hostel AssistantSuperintendent/Warden,BIT Mesra, Patna Campus	Aug.2008-Oct.2014
4	Branch Counsellor,	Dec2009-Oct.2014
	IEEE Student Branch Chapter, BIT Patna Campus	

16.Award / Recognition Bestowed on Faculty (State / National / International)

### 17. Members of Professional Bodies:

1. IEEE Member:92414461

2. ISTE Life Member: LM57818