



Prof. Seema Behera

Name : Seema Behera

Designation : Sr.Asst Professor

Department : Department of Electrical & Electronics
(JOINED THE INSTITUTE IN 2005)

Contact : +918260333609-225/250 (O)

Email : seema@silicon.ac.in

RESEARCH INTERESTS

POWER SYSTEM CONTROL & ANALYSIS, RENEWABLE ENERGY SYSTEMS,
APPLIED & COMPUTATIONAL MATHEMATICS

Academic Qualifications

Ph. D. (Contd.), Center for Energy Studies, Indian Institute of Delhi, India

M. Tech. (Energy Studies), Center for Energy Studies, Indian Institute of Delhi, India

Btech.(Electrical Engineering), Utkal University, Odisha, India

Teaching Experience/Industrial Experience/Research Experience

✓ Teaching Experience : IGIT Sarang(2002 july - 2002 Dec)

PUBLICATIONS

JOURNAL & CONFERENCES

- [1]. Seema Behera, T.S.Bhatti, "Comparision of performance indices for tuning AGC controller for interconnected power system" International Conference on "Electrical Power and Energy Systems" (ICEPES 2010), Aug. 2010, Bhopal, India.
- [2]. Seema Behera, T.S.Bhatti, "Automatic Generation Control of Two Area Thermal Reheat System with Fractional Order Integral Derivative Controller", 20th Australasian Universities Power Engineering Conference (AUPEC 2010), Dec 2010 Christchurch, New Zealand .(Accepted)
- [3]. Seema Behera, Swayam Prakash Baral, "Organic waste based bio gas system and power plants are solution to concerns of municipality corporation: A case study on Bhubaneswar Municipality, Odisha Enviroment Congress Proceedings, 2012

FUNDED
PROJECTS/
REPORTS

- [4]. Seema Behera ,An overview of solar thermal power plants, Article in Vertex 2013
- [5]. Performance analysis of biogas based hybrid System, Proceedings, All India seminar in power system operation, control and management, Institute of Engineers (India),2014
- [6]. Seema Behera, Pranoy, T.S.Bhatti Frequency Control Regulation Reserve Analysis with Effect of Smoothing Technique on Frequency Response metric, Proceedings of the IEEE TENCON , October 17 – 20, 2019, Kochi,India: **Ranking: Core-C**

BOOK

- [1]. Feasibility Study of Biogas from Kitchen Waste at Silicon Institute of Technology(2012) (Silicon Research Promotion Scheme, Rs.20,000)
- [2]. Solar Tricycle Project (2012) (Silicon Research Pomotion Scheme, Rs 70,000)
- [3]. Feasibility Report on PV panel spacing and shading at Silicon Rooftop (2014)
- [4]. Solar Tree Installation Project (2016) (Rs. 27,000)
- [5]. Enhancement of Solar Tricycle to Hybrid Vehicle (2017) (Rs. 6000)
- [6]. Report on Energy Audit at Silicon Institute of Technology (2017-18)

ADVISORY/
CONSULTANCY

Seema Behera, Bishnupriya Dash, **Renewable Energy System**, Engineer's Mind Publications, 2012 (first edition)

- [1] **Technical Advisor** , Macphy Solution Pvt Ltd (startup from IIT Bhubaneswar, incubated at Foundation for Innovation & Technology Transfer, IIT Delhi)

RESOURCE
PERSON/CHAIR

- [1] **Visiting Faculty** (2012),KISD , Nonconventional Energy Sources (MTECH)
- [2] **Resource Person**, Summer course on Matlab & Simulink Applications to Engineering (2015)
- [3] **Resource Person**, Summer Course Design ,Sizing, Installation and Modelling of Solar PV System(2016)
- [4]**Resource Person** , Matlab Training , Gurukrupa Technical Institute , Narshingpur , Odisha (2019)
- [5]**Promotion & Publicity Chair**, WIECON-2020, IEEE International Conference held at BBSR, 26-29 Dec.,2020, Odisha

SUMMER COURSE/
WORKSHOPS/
SEMINARS
CONDUCTED

- [1] **Designer & Co-ordinator** , Electrical & Electronics Device Workshop (2006)
- [2] **Co-ordinator**, Collaborative Learning and Creative Thinking Workshop (2007)
- [3] **Co-ordinator**, National Workshop on Emerging Technologies in Electrical Power Engineering (NWET-2015)(focus: Grid Integrated Renewable Energy Systems, Design Considerations and Challenges)
- [4] **Course Co-ordinator** , Summer Course on Matlab & Simulink Applications to Engineering (MSAE- 2015)
- [5] **Course Co-ordinator**, Summer Course on Design ,Sizing, Installation and Modelling of Solar PV System (2016)

PROFESSIONAL
MEMBERSHIP &
ACTIVITIES

- Member**, IEEE
- Life Member**, ISTE
- Branch Counselor**, IEEE student chapter , Silicon Institute of Technology,BBSR (Branch code:04153)
- Office Bearer, Student Activity** , PES chapter, IEEE Bhubaneswar Subsection,(2021)

REVIEWER

SUMMER COURSE/
WORKSHOPS/FDP
SEMINARS/
WEBINARS
ATTENDED

IET generation, transmission, distribution(Wiley)
IET Renewable Power generation (Wiley)
Electric Power Components & Systems (Taylor Francis)

- [1] Workshop on **Excellence in Teaching titled Communicative Competence & Personality Development** ,Silicon Institute of Technology,BBSR,25 Nov-2 Dec2005
- [2] *Summer Course on Matlab & Simulation* , Silicon Institute of Technology,BBSR 1 - 7 May 2006
- [3] *Workshop , Mission 10X Wipro* ,KIIT, BBSR,12-16 Nov 2007
- [4] *Workshop, High Impact Presentation Skills*, Dale Carnegie & Associates,Inc. Trainer,12-13 Nov 2007
- [5] *Summer course, Simulation Based Study of Electrical and Electronic Devices and Systems*, silicon Institute of Technology, BBSR, 14-19 May 2007
- [6] **STTP, Power electronics** ,NITRR, Kolkatta held at BPUT Techno Campus, BBSR 26-30 Mar 2007
- [7] *Seminar, Professional Ethics & Human Values*, Silicon Institute of Technology, 17-18 Dec,2010
- [8] *Workshop, Numerical Optimization & its Engineering Applications*, Silicon Institute of Technology,7-10 July 2011
- [9] *Tutorial, Smart Grid, Sustainable energy, Power systems & Power Electronics, Facts Devices*, ITER,SOA, BBSR,27 Dec 2011
- [10] *AICTE sponsored National Seminar, Dispersed Generation and Smart Grid*, NIST, Berhampur , 29 Nov -1 Dec,2013
- [11] *Summer Course, Matlab Tool Box & Its Application to Intelligent Optimization Techniques*, Silicon Institute of Technology, 5-10 May ,2014
- [12] **MSME Energy Development Programme on Solar Energy Training Program**, KVIC, BBSR ,30 Apr-1 May 2016
- [13] *Workshop, Sustainable Development: From Principles to Implementation*, IIT Kharagpur, 23-28 May 2016
- [14] **STTP, Electric Power System**, IIT Kharagpur,12 June-15 July, 2017
- [15] **ISSE sponsored Short Term Course on PID Control: Teaching, Practice and Research** , Manipal Institute of Technology,MAHE,26-28 Nov 2018
- [16] National Workshop on **Emerging Technologies in Electrical Power engineering** (NWET-2011,2014,2015,2016,2017,2018,2019),Silicon Institute of Technology
- [17] Online Course (4 weeks) on **AI For everyone, Coursera**, Jun 2020
- [18] Online FDP on **AI,ML,DL & it's Applications**,3-12 Jul 2020
- [19] Online FDP on **Outcome Based Education**, SR institute of Management & Technology,16-18 July 2020

- [20] Online Professional Development (4 hours) on **Engineering Education, IEEE Continuing Education Unit**, Jul 2020
- [21] Online FDP on **Applications of Different Control Techniques for Sustainable Energy**, GCE Keonjhar, ICT Mumbai, 8-12 Sep 2020
- [22] Webinar, **The beginning Era Vs the Future Artificial Intelligence**, Mathworks, IEEE India Council, 30 Oct 2020
- [23] **Pedagogy Workshop on Building an Online Signals and Systems Course-I**, TEQIP-III KITE, PPCCLT (IIT Bombay) and Teaching Learning Centre (ICT) under PMMMNMTT, MoE, Govt. of India, 27-30 Nov 2020
- [24] Webinar, **Signal Processing(WWSP-2021)**, Silicon Institute of Technology, 18-22 Jan 2021

