

Name	DR. SANDEEP CHAWDA PhD (Electrical Engg.), ME (Power Systems), BE (Electrical)
Designation	Associate Professor
Department	Electrical Engineering
Date of Joining the Institute	15/02/2021, 04/01/2022, 04/08/2022, 01/07/2023
Education	PhD (Electrical Engg.), Malaviya National Instt. of Tech. Jaipur, 2021 M.E. (Power Systems), Uni of Pune, Pune, 2010 B.E. (Electrical Engg.), RGTU Bhopal, 2006
Areas of Interest	Power Systems Economics, Energy Markets, Risk-based Decision Making, Pricing and Optimization, Renewable Energy and Energy Storage
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Personal Homepage link	



Academic Appointments

Name of the University / Institute/ Industry	Duration	Designation
Finolex Academy of Management and Technology, Ratnagiri	15/02/2021 to 31/12/2021 04/01/2022 to 29/07/2022 04/08/2022 to 30/05/2023 01/07/2023 to date	Associate Professor
JSPM's Bhivarabai Sawant Institute of Technology & Research, Wagholi, Pune	02/07/2009 to 19/01/2016	Assistant Professor
G H Rasoni College of Engineering & Management, Pune	22/12/2007 to 04/07/2008	Lecturer
Nutan Maharashtra Vidya Polytechnic, Talegaon Dabhade, Pune	10/08/2007 to 22/12/2007	Lecturer
Total Experience – 10 Years		

Awards / Honors / Prizes

1. Secured 1st rank in M.E. (Power System) in college and 2nd rank at the University of Pune.

2. Won first prize in a district-level debate competition.
3. Won first, second, and third prizes in drawing, debate, and essay competitions, respectively.
4. Participated in the regional hockey tournament.

Papers Published

Papers Published in National / International Journals - 08

International Journals – 08

1. S. Chawda, P. Mathuria, and R. Bhakar, "Load serving entity profit maximization framework for correlated demand and pool price uncertainties", *Technology and Economics of Smart Grids and Sustainable Energy*, vol. 8, no. 2, Jan 2023. DOI: 10.1007/s40866-022-00158-7. ISSN: 2199-4706
2. S. Chawda, P. Mathuria, and R. Bhakar, "Dynamic sale prices for load serving entity's risk based profit maximization", *Electric Power Systems Research*, vol. 201, 2021. DOI: 10.1016/j.epsr.2021.107544. ISSN: 0378-7796
3. S. Chawda, P. Mathuria, and R. Bhakar, "Bi-Level approach for load serving entity's sale price determination under spot price-uncertainty and renewable availability", *Technology and Economics of Smart Grids and Sustainable Energy*, vol.6, no. 18, 2021. DOI: 10.1007/s40866-021-00112-z. ISSN: 2199-4706
4. S. Chawda, P. Mathuria, and R. Bhakar, "Risk-based retailer profit maximization: Time of Use price setting for elastic demand," *International Transaction on Electrical Energy System*, vol.29, no. 8, Aug. 2019. DOI: 10.1002/2050-7038.12036. ISSN:2050-7038
5. S. Chawda, and S. R. Deshmukh, "Assessment of price risk of power under Indian electricity market," *International Journal of Computer Applications*, vol 59, no.11, pp. 12-17, Dec. 2012.
6. D. Ahirrao, B. Gaware, P. Kakade, and S. Chawda, "Analysis of single phase matrix converter," *International Journal of Engineering Research and Applications*, vol 4, no.3, pp. 856-861, Mar. 2014.
7. T. G. More, P. R. Asabe, and S. Chawda, "Power quality issues and Its mitigation techniques" *International Journal of Engineering Research and Applications*, vol 4, no.4, pp. 170-177, Apr. 2014.
8. L. Soni, S. K. Thorat, and S. Chawda, "PC controlled home appliances," *International Journal of Engineering Research and Applications*, vol 4, no.5, pp. 51-53, Jun. 2014.

Papers Presented/Published in National/ International Conferences - 12

International Conferences – 11

1. S. Chawda, R. Bhakar, and P. Mathuria, "Uncertainty and risk management in electricity market: Challenges and opportunities," 2016 National Power Systems Conference (NPSC), Bhubaneswar, 2016, pp. 1-6.
2. S. Chawda, P. Mathuria, R. Bhakar, S. Sreekumar, V. Prakash, and F. Teotia, "Retailer risk-based trading decision making model under price responsive demand," 2017 6th International Conference on Computer Applications In Electrical Engineering-Recent Advances (CERA), Roorkee, 2017, pp. 169-174.
3. S. Chawda, P. Mathuria, and R. Bhakar, "Dynamic retail pricing for load serving entity under significant renewable energy penetration," 2018 8th IEEE India International Conference on Power Electronics (IICPE), Jaipur, India 2018, pp. 1-5.

4. S. Chawda, P. Mathuria, and R. Bhakar, "Impact of renewable energy availability on load serving entity's sale price and procurement decisions," 2nd International Conference on Large-Scale Grid Integration of Renewable Energy in India, New Delhi, 2019.
5. S. Chawda, P. Mathuria, R. Bhakar, and S. Sreekumar "Dynamic sale price setting for load serving entity's profit maximization", IEEE Power & Energy Society General Meeting, Montreal, Canada, Aug. 2020.
6. F. Teotia, P. Mathuria, R. Bhakar, V. Prakash, and S. Chawda, "Modelling local electricity market over distribution network," 2017 7th International Conference on Power Systems (ICPS), Pune, 2017, pp. 1-6.
7. K. C. Sharma, R. Bhakar, H. P. Tiwari, and S. Chawda, "Scenario based uncertainty modeling of electricity market prices," 2017 6th International Conference on Computer Applications in Electrical Engineering-Recent Advances (CERA), Roorkee, 2017, pp. 164-168.
8. V. Prakash, K. C. Sharma, R. Bhakar, H. P. Tiwari, S. Sreekumar, S. Chawda, and F. Teotia, "Primary frequency response with stochastic scheduling under uncertain photovoltaic generation," 2017 IEEE Power & Energy Society General Meeting, Chicago, IL, 2017, pp. 1-5.
9. S. Sreekumar, R. Bhakar, S. Chawda, A. Jain and V. Prakash, "One Day Ahead Indian Electricity Price Forecasting Using Intelligently Tuned SVR," 2020 IEEE International Power and Renewable Energy Conference, Karunagappally, India.
10. S. Sreekumar, K. C. Sharma, R. Bhakar, S. Chawda, F. Teotia, and V. Prakash, "Deviation charge reduction of aggregated wind power generation using intelligently tuned support vector regression" 2019 8th International Conference on Power Systems, Jaipur, 2019, pp. 1-5.
11. S. Gupta, B. B. Sharma, V. Prakash, S. Chawda, and K. C. Sharma, "Scenarios and modified interval based wind power uncertainty modelling for decision making in electricity market," International Conference on Power, Instrumentation, Energy, and Control (PIECON), Aligarh, India, Feb 2023.

National Conferences – 01

1. S. Chawda "Evaluation of risk in price of power under Indian electricity market," Annual Technical Paper Meets – 2012: The Institution of Engineers (India), Pune Local Centre, Pune, Oct. 2012.

Workshops, Seminars, STTPs, FDPs, Courses Attended/Organized – 30

Summer/Winter School Training Program/Courses Organized/Attended

Summer Research School Attended

1. One-week Summer Research School organized by Department of Management Studies of Malaviya National Institute of Technology Jaipur from 1st – 6th July 2016.
2. Industrial Trainings
3. Two weeks of practical (vacation) training on "Study of Switchgear and Protection Equipment" from 20th June 2005 to 2nd July 2005 at Bharat Heavy Electricals Ltd., Bhopal, MP.
4. Two week vocational summer training on "Study of Power Plant Equipments" from 5th – 19th July 2005 at Sanjay Gandhi Thermal Power Station, Birsinghpur, Distt. Umaria, M.P.

Faculty Development Programme/Academy Training Programme/Short Term Course Attended

1. A one-week refresher course on S.E. Electrical Engineering (2012 course) of University of Pune organized by PVG's College of Engineering & Technology, Pune from 18th – 21st June 2013.
2. Two-week faculty development programme on "Teaching Methodology in Electrical Engineering" organized by JSPM's Jayawantrao Sawant College of Engineering, Pune from 1st to 13th December 2014.
3. One-week Academy Training Programme on "Big Data Analytics in Smart Grid" organized by Malaviya National Institute of Technology Jaipur from 10th to 14th December 2016.
4. One-week Academy Training Programme on "Principles of Control System Engineering: Hands on Experience with MATLAB" organized by Malaviya National Institute of Technology Jaipur from 25th to 29th March 2017.
5. One-week Academy Short-term Training Programme on "Power Electronics for Smart Grid and Renewable Energy Control" organized by Malaviya National Institute of Technology Jaipur from 15th to 19th May 2017.
6. One-week faculty development programme on "Intelligent Algorithm on Deregulated Power System" organized by Malaviya National Institute of Technology Jaipur from 23rd to 27th February 2018.
7. One-week short-term course on "Applied Game Theory for Engineers and Managers" organized by Indian Institute of Technology Kanpur from 27th to 31st March 2018.
8. One-week faculty development programme on "Electric Vehicle Infrastructure" organized by Malaviya National Institute of Technology Jaipur from 16th-20th July 2018.
9. One-week faculty development programme on "Selected Topics in Control System Theory – Fundamentals, Advances, and Future Directions" organized by Malaviya National Institute of Technology Jaipur from 9th to 13th August 2018.
10. One-week faculty development programme on "Energy and Power System Optimization using GAMS" organized by Malaviya National Institute of Technology Jaipur from 8th to 12th January 2019.
11. One-week faculty development programme on "Innovation and Research Trends in Artificial Intelligence" organized by Centre for Artificial Intelligence, Banashthali Vidyapith from 21st to 26th February 2022.
12. TEQIP-II sponsored 2-week online faculty development programme on "Recent Advancements in Sustainable Development through Renewable Energy Systems" organized by Engineering College Bikaner, Rajasthan from 7th to 16th March 2022.
13. One-week faculty development programme on "Artificial Intelligence, Robotics and Automation" organized by School of Automation, Banashthali Vidyapith from 9th to 14th March 2022.

Course

1. Completed a course on Smart Grids: Future Intelligent Electricity Distribution Grids organized by Malaviya National Institute of Technology Jaipur from 4th to 14th February 2022.

Seminar/Conference/Workshop/Webinar

Seminar Attended

1. Two days IEEE DL program on "Design of Industrial Power Distribution Systems" organized by Dept. of Electrical Engineering, PVG's College of Engineering & Technology, Pune, on 30th - 31st Dec 2011.
2. Three days national workshop on "Green Technology: Solar-Wind Hybrid Energy Systems" jointly organized by Zeal's Dnyanganga College of Engineering & Research Pune, in Association with MNRE and MEDA from 29th - 31st Jan 2013.
3. Two days National Level Seminar on "Signal Processing & Communication," organized by JSPM's BSIOTR(W) on 20th - 21st September 2013.
4. Two days State Level Seminar on "Challenges to Indian Power Scenario by 2020", organized by Electrical Engineering Department of G. H. Rasoni Institute of Engineering & Technology, Wagholi, Pune in collaboration with Savitribai Phule Pune University on 30th - 31st October 2014.
5. One day IP Awareness/Training program under National Intellectual Property Awareness Mission organized by Finolex Academy and Management, Ratnagiri on 8th April 2022.

Workshop Attended

1. Three days of intensive workshop on "Technical Report Writing and Authoring of Research Manuscript with LaTeX" organized by Malaviya National Institute of Technology Jaipur from 14th-16th April 2017.
2. A one-week workshop on "Energy Storage: The Future of Energy" organized by AICTE under the aegis of AICTE Training and Learning (ATAL) Academy Workshop at Malaviya National Institute of Technology Jaipur from 11th March 2019 – 15th March 2019.
3. A two-day workshop on "PSS/E" is organized by Malaviya National Institute of Technology Jaipur under the aegis of TEQIP-III, from 8th May 2019 – 9th May 2019.
4. One Day "Industry-Academia Conclave on Energy Storage," organized by the Department of Science & Technology, on 30th November 2019, held at Malaviya National Institute of Technology Jaipur.
5. One Day "Industry-Academia R&D Requirements in 2nd Pan-India Research Network Meet" on 6th January 2020, jointly organized by National Institute of Wind Energy and Malaviya National Institute of Technology Jaipur

Conferences Attended

1. National Power Systems Conference (NPSC), Bhubaneswar, 19 to 21, Dec. 2016.
2. 6th International Conference on Computer Applications in Electrical Engineering-Recent Advances (CERA), Roorkee, 5th to 7th Oct. 2017
3. 8th IEEE India International Conference on Power Electronics (IICPE), Jaipur, 13 to 15 Dec. 2018.
4. 8th International Conference on Power Systems (ICPS), Jaipur 2019.

Faculty Development Programme Conducted

1. Conducted a one-week faculty development programme on "Challenges in Evolving Power Systems" during 22nd November to 27th November 2021 at the Department of Electrical Engineering, Finolex Academy of Management and Technology, Ratnagiri.
2. Coordinated Faculty Development Program for Electrical faculty of JSPM Group from 4th – 9th July 2011

Technical Seminars/ Workshop/ Lecture/ Invited Talks/ Extension / Outreach Programs/ Social Programs As a Resource Person - 04

1. Delivered a talk on "Role of retailer in electricity markets" during a one-week faculty development program on "Techno-Economic Assessment of Flexibility Competency in Deregulated Power System (TEAFCDPS-2021)" organized by Department of Electrical Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur during September 20-24, 2021
2. Delivered a talk on "Retailer's decision making in electricity markets" during a one-week faculty development program on "Advanced Power System Optimization Using General Algebraic Modeling Systems" organized by Department of Electrical Engineering, Rajarambapu Institute of Technology, Sangli, Maharashtra, on January 20, 2021.
3. Delivered a talk on "Load serving entity's decision making in electricity markets" during Five days online short-term training program on "Emerging Trends in Power Sector Planning, Economics, and Regulations" organized by Department of Electrical Engineering, K K Wagh Institute of Engineering Education and Research, Nashik, Maharashtra, during April 6th, 2021 to April 10th 2021.
4. Delivered a talk on "Uncertainty and Risk Management in Electricity Market: Challenges and Opportunities" during a one-week faculty development program on "Restructured Power System: Operation and Planning" organized by RIT-IEEE student branch, RIT-CTL and IEEE Bombay Section, on 23rd to 28th August 2021.

Professional Membership

1. Life Member, Indian Society for Technical Education (ISTE) New Delhi,
2. IEEE USA
3. CIGRE
4. IANEG Hongkong
5. UACEE

Subject Taught

Sr. No.	Name of the Subject	Year/Branch/Semester	Experience
1.	Smart Grid/Microgrid	BE/ Electrical /7 or 8	3 Years
2.	HVDCTS	BE/ Electrical /7	3 Years
3.	Electrical AC Machines	TE/ Electrical /4	3 Years
4.	Electrical Design and Machines	TE/ Electrical /6	4 Years
5.	Power Electronics	TE/ Electrical /5	4 Years
6.	Power Systems-I	SE/Electrical/3	1 Year
7.	Basic Electrical Engineering	FE/All Branches/1 or 2	3 Years