Curriculum Vitae

1. Name: Rajesh Bhikulal Sharma

2. Office address: Assistant Professor Electrical Engineering

Government College of Engineering,

Amravati

444204, Maharashtra, India. Email: <u>drrbs1974@gmail.com</u>

Phone No: (0721) 2531929 Fax: (0721) 2531931

Mobile no: 8668674932

3. Education:

Degree	University/Board	Year
B. E.	Sant Gadge Baba Amrvati University, Amravati	1997
M.E	Sant Gadge Baba Amrvati University, Amravati	2001
Ph.D.	Sant Gadge Baba Amrvati University, Amravati	2018

4. Experience

Post	Organization	From	То	Experience in Years
Lecturer	B.N. College of Engineering Pusad	July99	May2001	1.10
Lecturer	D.N. Patel College of Engineering, Shahada	July 2001	June 2004	2.11
Lecturer	K.J. Somaiya Polytechnic, Vidyavihar, Mumbai	July 2004	Aug.2011	7.1
Assistant Professor (MPSC selection)	Government College of Engineering, Chandrapur	Sept.2011	May 2018	5.9
Assistant Professor	Government College of Engineering Amravati	June 2018	Till Date	6.6

Total Experience = 24.1 years

5. Professional outputs:

Patents:

- 1. S.C. Shende, V.M. Harne and R.B. Sharma, "Solar tracker system", *Patent. Appl. No.* 202321006273, 2023, filled at patent office, Mumbai.
- 2. V.M.Harne, Dr.R.B.Sharma, Sakshi Mathane, Kajal Kuthe, Pranali Junghare, "A system for measuring volume of water", *Patent. Appl. No.* 202321044251, *2023*, filled at patent office, Mumbai.
- 3. V.M.Harne, Dr.R.B.Sharma, Vishal Chavan, Vikram Dhote, Siddhant Gawai, Akanksha Jaiswal "An Automatic side stand lifting and release system", *Patent. Appl. No.* 202321044252, 2023, filled at patent office, Mumbai.
- 4. V.M.Harne, Dr.R.B.Sharma, Ankush Gudpare, Aradhya Tare, Abhishek Selokar, Jayesh Shelke "An IoT Based Monitoring And Controlling Of Irrigation System", *Patent. Appl. No.* 202321044253, 2023, filled at patent office, Mumbai.

International Journal's

- 1) Atul S. Dahane, Rajesh B. Sharma, "Hybrid AC-DC micro grid coordinated control strategies: A systematic review and future prospect", Elsevier Renewable Energy Focus (Q2), Vol. 49, June 2024, 100553.
- 2) S.G. Ghorpade, Rajesh B. Sharma, "A comprehensive review of demand-side management in smart grid operation with electric vehicles", Springer Electrical Engineering (Q2) April 2024.
- **3**) R.B. Sharma and G.M. Dhole, "Analysis of a Simple Effective Frequency Estimator Based on Least Squares New Approach", International Journal on Technical and Physical Problems in Engineering (IJTPE), issue 26, Vol. 8, No.1, March 2016, pp.24-29. (ISSN No.2077- 3528).
- **4)** M.B. Tasre, G.M. Dhole, S.S. Jadhao, R.B. Sharma, "DVR Control for Balanced and Unbalanced Sag Mitigation," International Journal on Technical and Physical Problems in Engineering, issue 27, Vol. 8, No.2, June 2016, pp.24-29. (ISSN No.2077- 3528)
- 5) R.B. Sharma and G.M. Dhole, "Least Error Squares Approach: A Practical Method for Power System Frequency and Amplitude Estimation," Elsevier Science Direct Procedia Technology Volume 25 August 2016, pp. 710- 717. (ISSN No 2212-0173 doi:10.1016/j.protcy.2016.08.164.
- 6) R.B. Sharma and G.M. Dhole, "Wide Area Measurement Technology in Power Systems," Elsevier Science Direct Procedia Technology Volume 25 August 2016 pp.718-725. (ISSN No. 2212-0173) doi:10.1016/j.protcy.2016.08.165.
- 7) R.B. Sharma and G.M. Dhole, "Performance comparison of two real time frequency estimation methods," Springer, Lecture Notes in Electrical Engineering, Book Advances in Power System and Energy Management pp 421-429 ISBN 978-981-10-4394-9.doi/10/1007/978-981-10-4394-9-42
- 8) R.B. Sharma, "Reference Waveform Generation Techniques for Series Compensators Estimation", International Journal of Engineering and Advanced Technology, Volume-9 Issue-1, pp.2000-2004 October 2019 (ISSN: 2249 8958) doi:10.35940/ijeat/19535.109119.
- 9) M.B. Tasre, G.M. Dhole, S.S. Jadhao, R.B. Sharma, "Design and Control of capacitor-Supported Dynamic Voltage Restorer for Mitigation of Power Quality Disturbances," Springer, Lecture Notes in Electrical Engineering, Book Advances in Electrical and Computer Technologies pp 1237-1254 ISBN 978-981-15-5557-2. doi.org/10.1007/978-981-

- 15-5558-9 105 (ISSN No.2077-3528).
- **10**) S.J. Ghorpade R.B. Sharma and G.M. Dhole, "Demand management in Industrial Sector by Improvement of Load Factor: A Strategy Development, "Industrial Engineering Journal Volume XV, Issue no.07, PP 5-11, July 2022.
- **11**) K.A. Wadhonkar, R.B. Sharma and G.A. Dhomane, "Speed Control of Brushless Direct (BLDC) Motor Using Digital Controllers, "Industrial Engineering Journal Volume XV, Issue no.12, PP 5-11, December 2022.
- **12**) S.Y. Warudkar, R.B. Sharma, M.V. Jape, "Inverter Topologies for Grid Connected Photovoltaic Systems: A Review," International Journal of Engineering and Technology Volume-7, Issue-4 May-2020, PP 2975-2980 e-ISSN: 2395-0056
- 13) Nikita Dolas, R.B. Sharma, A.S. Sindekar, "Solar PV Grid Connected System Analysis," International Journal OF Engineering and Technology Volume-7, Issue-5, May-2020, PP 7360-7364 e-ISSN: 2395-0056
- **14)** K.A. Wadhonkar, R.B. Sharma and G.A. Dhomane, "Evaluation and Comparative Analysis of Speed Performance of Brushless DC Motor using Digital Controllers, "International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; Volume 9 Issue X, Oct. 2021.
- **15**) Vivek kumar O. Chotpagar, Dr. G. A. Dhomane, Dr. R. B. Sharma, "Review: State of Charge Estimation of Lithium Ion Battery", International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 08 Issue: 05, May-2021 ISSN: 2395-0072.
- **16**) Prajwal Sontakke and Dr. R. B. Sharma, "Analysis of Various Transmission Line Faults in Matlab/Simulink Environment", International Journal of Current Science (IJCSPUB), ISSN: 2250-1770, Volume.12, Issue 4, pp.277-286, October 2022.
- 17) Prajwal Sontakke and Dr. R. B. Sharma, "Fault Detection and Categorization Methodologies in Power Transmission Sector: A Review", Industrial Engineering Journal Volume XVI, Issue no.10, PP 25-39, October 2023.

International Conferences

- 1) R.B. Sharma and G.M. Dhole, "A Survey on Wide Area Measurement Technology in Electrical Networks," in Proceeding of IEEE International Conference on Computing, Communication, Control and Automation, ICCUBEA 2015, Pune India 26-27 February 2015. Available on IEEE explorer. (Electronic ISBN: 978-1-4799-6892-3 doi: 10.1109/ICCUBEA.2015.107)
- 2) R.B. Sharma and G.M. Dhole, "Design of a Single Phase PMU Prototype", IEEE International Conference on Computing, Communication, Control and Automation, ICCUBEA 2016, Pune India 26-27 February 2016. Available on IEEE explorer. (Electronic ISBN: 978-1-5090-3291-4 DOI: 10.1109/ICCUBEA.2016.7860136)
- 3) R.B. Sharma and G.M. Dhole, "Synchrophasor Measurement Network and Its applications in Indian Grid Electrical Networks", in Proceeding of IEEE International Conference on Emerging Trends in Electrical, Electronics and Sustainable Energy systems, ICETEESES 2016, Sultanpur, India, 11-12 March 2015. Available on IEEE explorer. (Electronic ISBN: 978-1-5090-2118-, doi: 10.1109/ICETEESES.2016.7581347)
- **4)** M.B. Tasre, G.M. Dhole, S.S. Jadhao, R.B. Sharma, "Sag and Unbalance Mitigation using DVR in Three- phase Four-wire Distribution Network," in Proceeding IEEE International Conference on Computing, Communication, Control and Automation, ICCUBEA 2016, Pune India 26-27 February 2016. Available on IEEE explorer. (Electronic ISBN: 978-1-5090-3291-4 DOI: 10.1109/ICCUBEA.2016.7860136)
- **5**) M.B. Tasre, G.M. Dhole, S.S. Jadhao, R.B. Sharma, "A simplified Algorithm for Sag and **3** | Page

- Harmonic Mitigation using DVR," in Proceeding IEEE International Conference on Computing, Communication, Control and Automation, ICCUBEA 2017, Pune India
- 6) Avinash S. Welankiwar, R.B. Sharma, "Matlab GUI Based Partial Discharge Localization in Power Transformers Using UHF Acoustic Method," in Proceeding IEEE International Conference on Energy, Power and Environment, ICEPE 2022, Shilong, India **DOI:** 10.1109/ICEPE55035.2022.9798083

Conferences Attended

- 1) IEEE Conference on Computing, Communication, Control and Automation26-27 February 2015
- **2)** International conference on Encouraging Innovation and Entrepreneurship in Emerging Education, 22-23 January 2016
- **3)** ELSEVIER Conference on Recent Advancements and Effectual Researches in Engineering Science and Technology 22-23 April 2016
- **4)** IEEE Conference on Computing, Communication, Control and Automation 12-13 August 2016
- 5) Springer Conference on Emerging Trends and Advances in Electrical Engineering and Renewable Energy 17-18 December 2016
- **6)** National Conference on Vision Document of Gondwana University, Gadchiroli 04-05 March 2017

6. Student Guidance

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B. Tech projects	16
M. Tech projects	07
Ph.D. Supervision	03 Registered(Ongoing)

Teaching Responsibility:				
Teaching Responsibilities: Technical Areas of Current Interest:				
Power System Analysis, Power System Stability, Renewable Energy, Smart grid, micro grid, Wide Area Measurement Technology, Phasor Measurement Unit.				
Courses Taught at UG Level:				
1) Basic Electrical Engineering 2) Power System Analysis 3) Energy Resources and Generation 4) Non Conventional Energy Sources 5) Electrical Estimation & Costing 6) Power System Modeling 7) High Volta Transmission	ge			
Courses Taught at PG Level:				
1) Smart Grid 2) Renewable Energy Sources 3) Power System Dynamics –I 4) Power System Dynamics and Stability 5) Power System Modeling	d			
Labs conducted at UG/PG Level:				

1. Basic Electrical Engineering 2. Power System Protection 3. Numerical Methods 4. Network Analysis

Computer Skills:

Operating Systems: Windows, Linux, DOS,

Software's: MATLAB, PSCAD/EMTDC, ETAP, PSIM, Power World Simulator.

Additional Responsibility:

Additional Responsibilities: (Administrative/Research):

1. Principal Investigator (PI) Centre of Excellence Digitalization through Simulation 1) EV Lab 2) Engg. Simulation Lab 3) ESDM Lab.

- 2. Ph.D Coordinator Government College of Engineering, Amravati
- 3. Coordinator DTE sponsored one week FDP on Power System Optimization 16-20 Jan. 2024, Government College of Engineering Amravati
- 4.Member secretary Board of Studies Electrical Engineering, Government College of Engineering, Amravati.
- 5. Member secretary RAC Electrical Engineering, Government College of Engineering, Amravati.
- 6. Recognized as Supervisor for Ph.D. program in Electrical Engineering, Government College of Engineering, Amravati.
- 7. Testing and Consultancy In charge Electrical Engineering, Government College of Engineering, Amravati
- 8. E-Cell In charge Government College of Engineering, Amravati
- 9. ROBOTECH FOURM In charge Government College of Engineering, Amravati.
- 10. Annual Social Gathering Zenith-23 In charge Government College of Engineering, Amravati
- 11. Invited to work as Judge for Avishkar-2023 Sant Gadge Baba Amrvati University, Amravati.
- 12. Prajwalan-19 (National Level Techfest) In charge Government College of Engineering, Amravati
- 11.Central Assessment Cell Incharge Government College of Engineering, Amravati
- 12. Electrical Engineering Department In charge for Institute Chapter of Indian Society of Technical Education
- 13. Electrical Engineering Department In charge for Institution of Engineers, India IE(I)
- 14. Electrical Engineering Department In charge for Electrical Engineering Students Association
- 15. Worked as Nodal Officer TEQIP-II Campus Wide Networking (CWN) at Govt. College of Engineering, Chandrapur.
- 16. Worked as Institute Electrical Maintenance In charge at Govt. College of Engineering, Chandrapur.
- 17. Worked as University level Exam. Controller W-2014 at Government college of Engineering, Chandrapur
- 18. Worked as a member of different cells like Industry Institute Interaction, Curriculum Development, Autonomy, NBA and NAAC.
- 19. Coordinator TEQIP-II sponsored one week FDP on Emerging trends in Power System Instrumentation and Control 03-07 Oct. 2016, Government College of Engineering Chandrapur
- 20. Worked as Preciding Officer for MLA and MLC Election.

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Invited Lecturers

1. Resource Person for AICTE sponsored one week STTP "Emerging Introduction to Smart Grid", at PRMCEAM, Amravati on dated 13th Dec 2020.

- 2. Resource Person for AICTE sponsored one week STTP on "Artificial Intelligence in Electrical Signal Analysis", at R.C. Patel College of Engineering, Shirpur on dated 03rd Jan 2021.
- 3. Technical Program Committee (TPC) Advisory Board Member of IEEE International Conference on Recent Trends and Advances in Engineering and Technology" December 20-21, 2019 at S.S.G.M. College of Engineering, Shegaon, Maharashtra, India

STTP/FDP Attended

- 1. AICTE-ISTE sponsored Short term Training Program on ANN and fuzzy Logic Applications to Electrical Engineering from 19/01/2004 to 25/01/2004 At MITS Gwalior. (1 week)
- 2. Short term Training Program on Strategies for Review and Revision of Curriculum and Question Bank Development 22/08/2005 to 26/08/2005 At NITTTR Extension centre, Pune. (1 week)
- 3. MSBTE sponsored Short term Training Program on Digital Protective Relaying for Feeders, Generators and Transformers from 13/02/2006 to 17/02/2006 At K.J. Somaiya Polytechnic Mumbai. (1 week)
- 4. ISTE approved Two week Short term Training Program on Mat lab and its Applications in Electrical and Electronics Engineering from 04/12/2006 to 15/12/2006 At Anjuman college of Engineering Nagpur. (2 week)
- 5. ISTE approved Two week Short term Training Program on Towards Effective Teaching And Stress Management from 05/01/2007 to 16/01/2007 At Datta Meghe college of Engineering Airoli Navi Mumbai. (2 week)
- 6. Two week Short term Training Program on Induction Training Programme Phase- I 07/05/2007 to 18/05/2007 At NITTTR Extension centre, Pune. . (2 week)
- 7. One week Short term Training Program on Advanced Embedded Systems from 24/02/2009 to 01/03/2009 At K.J. Somaiya Polytechnic Mumbai (1 week)
- 8. One week Short term Training Program on Non Conventional Energy from 01/08/2009 to 07/08/2009 At MSBTE, RBTE Pune. (1 week)
- 9. ISTE approved Two week Short term Training Program on Effective Teaching / Learning Of Computer Programming conducted by IIT Bombay from 28/06/2010 to 10/07/2010 At K. J. Somaiya college of Engineering vidyavihar Mumbai. (2 week)
- 10. AICTE sponsored Two week Short term Training Program on Effective Communication A Key To Success from 20/12/2010 to 31/12/2010 At K.J. Somaiya Polytechnic Mumbai. . (2 week)
- 11. ISTE approved Two week Short term Training Program on Entrepreneurship Development from 21/02/2011 to 05/03/2011 At K.J. Somaiya Polytechnic Mumbai. (2 week)
- 12. One week Short term Training Program under TEQIP II on Fundaments of PLC and its industrial Applications from 12/06/12 to 16/06/12 At Government College Of Engineering ,Amravati . (1 week)
- 13. One week Short term Training Program under TEQIP II on Industrial Automation from 03/12/12 to 07/12/12 At Government College Of Engineering , chandrapur (1 week)
- 14. One week Short term Training Program ISTE sponsored Applied mathematics and modeling of engineering systems from 17/12/12 to 22/12/12 At RAJIV GANDHI College Of Engineering ,Chandrapur (1 week)
- 15. One week Short term Training Program under TEQIP II on Object oriented analysis and design from 24/12/12 to 28/12/12 At Government College Of Engineering Chandrapur (1 week)
- 16. One week Short term Training Program under TEQIP II on Finite element analysis and its engineering applications from 14/01/13 to 18/01/13 At Government College Of Engineering Chandrapur (1 week)
- 17. One week Short term Training Program under TEQIP II on Emotional intelligence on from 28/01/13 to 01/2/13 At Government College Of Engineering (1 week)
- 18. AICTE sponsored Two week Short term Training Program on Recent trends in artificial intelligence from 27/5/2013 to 08/06/2013 At Pridarshayani college of Engineering ,Nagpur. (2 week)
- 19. AICTE sponsored Two week Short term Training Program on Wireless Communication And Related Network Security from 10/06/2013 to 22/06/2013 At Pridarshayani college of Engineering ,Nagpur. (2 week)
- 20. TEQIP II sponsored Two week Short term Training Program on Signal and Image Processing using Wavelet from 16/12/2013 to 25/12/2013 At VJTI Mumbai. (2 week)
- 21. AICTE sponsored Two Week Short Term Training Program on Renewable Energy Sources with emphases on Wind and Solar Energy from 07/07/2014 to 18/07/2014 At NITTR Ahmadabad. (2 week)
- 22. AICTE sponsored Two Week Short Term Training Program on RF & microwave communication: Fundamentals, Design and Application from 04/05/2015 to 17/05/2015 At R.C. Patel Institute of

technology, Shirpur. (2 week)

- 23. TEQIP II sponsored one-week Short Term Training Program on Management capacity enhancement from 08/01/2016 to 22/01/2016 At Government College of Engineering, Chandrapur (1 week)
- 24. TEQIP II sponsored one-week Short Term Training Program on Recent trends in Power Systems from 16/05/2016 to 21/05/2016 At VJTI, Mumbai. (1 week)
- 25. TEQIP II sponsored one-week Short Term Training Program on 3D printing and Additive Manufacturing: The 3D industrial Revolution from 26/09/2016 to 30/09/2016 At Government College Of Engineering, Chandrapur (1 week)
- 26. TEQIP II sponsored one-week Short Term Training Program on Emerging trends in Power System, Instrumentation and Control from 03/10/2016 to 07/10/2016 At VRCE, Nagpur (1 week)
- 27. AICTE sponsored Two Week Short Term Training Program on Power Electronics for renewable Energy Systems- Present Trends and Future Scope from 13/11/2017 to 25/11/2017 At Chaitanya Bharti Institute of technology, Hyderabad. (2 week)
- 28. AICTE sponsored Two Week Short Term Training Program on signal Processing for Engineers from 19/11/2018 to 24/11/2018 At Government College of Engineering, Amravati. (01 week)
- 29. AICTE sponsored One Week Short Term Training Program Recent trends in Power System operation protection and Control from 26/11/2018 to 01/12/2018 At Government College of Engineering, Amravati. (01 week)
- 30. Online FDP Managing Online Classes and Co-Creating MOOCS Organized by TLC, Ramanujan College, Delhi 20/04 TO 0 6/05, 2020 (02 week)

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Awards/ Prices/ Rank/Appreciation:

1. Received Certificate of Appreciation from Principal, K.J. Somaiya Polytechnic, Mumbai.

- 2. Received Certificate of Appreciation from Principal, Govt. College of Engg, Chandrapur.
- 3. Received Certificate of Appreciation from HoD Electrical Engg. Govt. College of Engg, Amravati
- 4. Received Certificate of Appreciation from Principal, Govt. College of Engg, Amravati

7. References

• Dr. A. M. Mahalle,

Principal, Government College of Engineering, Amravati

Email: principal@gcoea.ac.in M 9960590210

• Dr. S.S. Dambhare,

Principal, Government College of Engineering, Chatrapati

Sambhaji Nagar, Aurangabad

Email: sanjay_dambhare@gmail.com M 9420697868

• Dr. B.N. Chaudhari,

Principal, Sardar Paptel Institute of Technology Andheri, Mumbai

Email: bnchaudhari13@gmail.com M 9423582027

Amravati Dr. R. B. Sharma