Sri. Ch. Ranga Rao
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Date of Birth: 10-06-1979 **Date of Joining:** 04-07-2008



Educational Qualifications:

- Pursuing Ph.D from Annamalai University,, Chidambaram, Chennai
- M.Tech at R.V.R & J.C. College of Engg, Guntur, Affiliated to A.N.U, 2008.
- B.Tech at S.V.H College of Engineering, Machilipatnam, Affiliated to A.N.U, 2003.
- Qualified National level exam GATE-2008 in Electrical Engineering with 302 score.

Teaching Experience: 15 Years.

Research Interests: Power Systems- power quality improvement

ACADEMIC/ADMINISTRATIVE DUTIES:

- Member in sports Committee, RVR&JC College of Engineering from 2009
- Member in IEEE (students chapter) Committee, EEE Department, RVR&JC College of Engineering from 2020
- In-charge Electrical Measurements lab, EEE Department, RVR&JC College of Engineering from 2012

Patent Published:

- 1. A Patent application published by Govt. of India on the title "Bidirectional DC-DC Power Converter Circuit to Reduce Current Ripples." Application No.202041052197 A, Date of filing of Application: 01/12/2020, Publication Date: 11/12/2020.
- 2. A Patent application published by Govt. of India on the title "Method for automatically upgrading a power tool system integrated with a cloud sever and IOT module", Patent Application No: 202141056444A, Date of Filing: 06-12-2021, Publication Date: 10-12-2021.
- 3. A Patent application published by Govt. of India on the title "Method and system for providing IOT enabled smart electrical meters for predicting electrical power reliability", Patent Application No: 202141056444A, Date of Filing: 28-01-2022, Publication Date: 04-02-2022.

Memberships in Professional Societies:

Member in International association of engineers (IAENG) & Member in IRED

Projects Guided:

- B.Tech:22
- M.Tech:6

Research Work/Research Papers Published:

- G Chaitanya, Ch Ranga Rao "Modified ANFIS based controller based MMC-PV Inverter with Distributed MPPT for Microgrid operation" Science, Technology and Development, Volume IX Issue VI JUNE 2020, Pages 218-226.
- Y. Sushma , Ch.Ranga Rao A Three-level NPC Inverter for Integrating PV and Battery Storage Using Fuzzy with Advanced Control Strategy (IJRAET), Vol.5, Issue3, AUG2016, Pages 273-283.
- T.Lakshmi Prasanna, CH. Ranga Rao, A Comparative Study of SVPWM with the Combined Unipolar and Bipolar PWM for the Power Quality Improvement International Journal of Scientific and Technology Research ISSN 2319-8885 Vol.04,Issue.13, May-2015, Pages:2440-2444
- Ch. Ranga Rao, N. Hari Charan & K. Rajesh Babu, "Modelling and Simulation of DPFC System for Power Quality Improvement Trans" Steller Journal Publication and Research Consultance Electronics Engineering Research (IJEEER) ISSN (P): 2250-155X; ISSN (E): 2278-943X Vol. 5, Issue 3, Jun 2015, 61-66.
- G.RENUKA, CH. RANGARAO, "A Fast and Effective Control Scheme for DVR," International Journal of Advanced Technology and Innovative Research Volume. 06, IssueNo.04, June-2014, Pages:219-222
- Advanced Technology and Innovative Research (International Journal-June-2014).
- A New Converter Topology for Grid Connected PV Application (International Journal -June-2014).
- A 3-Phase Shunt Active Power Filter for Currents Harmonics Reduction (National Journal).

IEEE/International/NationalConferences:

- **1.Dr.K.Chandra Sekhar, P. Suneel Raju, Y. Sumanth, Ch. Ranga Rao** 'A Novel Pulse-Width-Modulation PID Based Quasi-Sliding-Mode Controller for Buck Converters' in International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 National Conference on "Advances in Energy and Power Control Engineering" (AEPCE-2K12) pp. 41-48.
- 2. Ch.RangaRao, Dr.A.RamaKoteswaraRao "Loop Power Controller for Power Control in Distribution Feeders", Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21 (NEC-VICPSPE-2K21), Narasaraopeta

Workshops / Seminars / Courses Participated:

1.Attended Three Day National Workshop on "Computer Applications to Power Systems Using Mi power "conducted by RVR & JC College of Engineering from 4th to 6th December 2008.

- 2.Attended Two Day National Seminar on "Solar Energy Harvesting Through Photovoltaic Cells and Storage" conducted by RVR & JC College of Engineering on 21st&22nd June 2013.
- 3.Attended Two Day National Workshop on "Advanced in Power System" conducted by SVU College of Engineering on 5th& 6th July 2013.
- 4.Attended Two Day National Workshop on 'Model Based Design for Power Electronics & Embedded Systems' conducted by RVR & JC College of Engineering on 12th& 13th December 2013.
- 5.Attended Two Day National Workshop on "Research Issues in Information Retrieval "conducted by Guntur Engineering College on 2nd& 3rd May 2014.
- 6.Attended Three Day National Workshop on "Computer Applications to Power Systems Using Mi power" conducted by V R Siddhartha Engineering College on 12th 14thApril 2015.
- 7.Attended Two Day National Workshop on "Intelligent Control System Design using MATLAB" conducted by VR Siddhartha Engineering College on 9th 10th October 2015.
- 8.Attended Two Day National Workshop on "Applications of Soft Computing Techniques in Engineering Sciences "conducted by Guntur Engineering College on 30th& 31st January 2016.
- 9.Attended Two Day National Seminar on "Deregulated Power Systems" conducted by VR Siddhartha Engineering College on 27th February 2016.
- 10.Participated in Short Term Course on "Artificial Neural Networks & Fuzzy Logic Through ICT. Conducted by National Institute of Technical Teachers Training and research, Chandigarh from 24th to 28th April 2017.
- 11.Participated in Short Term Course on "Electric Power System" Conducted by Indian Institute of Technology ,Kharagpur from 12th June 2017 to 15th July 2017.
- 12.Two week ISTE STTP workshop on "Electric Power System" at RVR&JC College of Engineering(Remote centre, IIT Bombay) conducted by IIT, Kharagpur from 12-06-2017 to 15-07-2017.
- 13. Faculty development program FDP101X on "Foundation programme ICT for education" at RVR&JC College of Engineering(Remote centre, IIT Bombay) conducted by IIT, Bombay from 08-03-2018 to 12-04-2018.
- 14. Faculty development program FDP201X on "Pedagogy for online and blended teaching-learning process" at RVR&JC College of Engineering(Remote centre, IIT Bombay) conducted by IIT, Bombay from 03-05-2018 to 31-05-2018.
- 15. "SOFTWARE TOOLS FOR POWER CONVERTER DESIGN" at NIT ,Tiruchirappalli from 26.04.2021 to 30.04.2021.
- 16. "Simulation Tools for Electrical Engineering & its real time applications" at KHIT ,Chowdavaram from 07.06.2021 to 12.06.2021.

17. "Recent Trends and Developments in Electrical Power Engineering" at College, Tirupathi, from 21.06.2021 to 25.06.2021.	C.R.Engineering
Sponsored Projects • Power quality analysis and enhancement	