

### Dr. PADMANABHA RAJU CHINDA

Professor & HoD Department of Electrical & Electronics Engineering, P.V.P.Siddhartha Institute of Technology, Kanuru, Vijayawada, Andhra Pradesh, India

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### Qualification

Degree	Specialization	University	Year of award
B.E.	EEE	Adhiyamaan College of	2000
		Engineering, Hosur	
		University of Madras, Chennai	
M.Tech.	<b>Electrical Power</b>	College of Engineering, Jawaharlal	2005
	Systems	Nehru Technological University,	
	•	Anantapur	
Ph.D.	EEE	Jawaharlal Nehru Technological	2011
		University, Kakinada	

### Doctoral Thesis (Ph.D) Guided as Supervisor

1	Name of the Scholar	B.Baddu Naik
	Title of Ph.D thesis	Resolving Congestions in Deregulated Power System
		Using FACTS Devices
	University awarded Ph.D Degree	Jawaharlal Nehru Technological University, Kakinada
	Year of Award	2023
	Co-Supervisor	Dr.R.Srinivasa Rao, Professor, JNTUK, Kakinada

2 Name of the Scholar
Title of Ph.D thesis
Security Constrained OPF by Hybrid Algorithms in
Interconnected Power Systems using FACTS devices
Jawaharlal Nehru Technological University,
Anantapuramu
Year of Award
Co-Supervisor
Dr.P.Sujatha, Professor, JNTUA, Anantapuramu

# Patents

1	Invention	Power Flow Control in Transmission Lines using Dynaflow	
		Controller	
	Inventors Publication No.	Dr. Ragaleela Dalapati Rao & Dr.Padmanabha Raju Chinda 40/2020	
	Publication date	02-10-2020	
	Application No.	202041040800A	
	Filed with	Intellectual Property India	
	Field of invention	Engineering and Technology	
	Status of patent	Published	
2	Invention	Optimal Power Flow Analysis using the Particle Movement  Bee Colony Algorithm	
	Inventors	Dr. Padmanabha Raju Chinda & Dr. Ragaleela Dalapati Rao	
	Publication No.	34/2020	
	Publication date	21-08-2020	
	Application No.	202041033635A	
	Filed with	Intellectual Property India	
	Field of invention	Engineering and Technology	
	Status of patent	Published	
3	Invention	Optimal Placement Of Dynaflow Controller using TOPSIS	
		and NBSP method	
	Inventors	Dr. Ragaleela Dalapati Rao & Dr.Padmanabha Raju Chinda	
	Publication No.	47/2023	
	Publication date	24-11-2023	
	Application No.	202341078604A	
Filed with		Intellectual Property India	
	Field of invention	Engineering and Technology	
	Status of patent	Published	
4	Invention	AHP Approach for Optimum Position of Dynaflow Device	
	Inventors	Dr. Ragaleela Dalapati Rao & Dr.Padmanabha Raju Chinda	
	Publication No.	50/2024	
	Publication date	13/12/2024	
	Application No.	202441093143 A	
	Filed with	Intellectual Property India	
	Field of invention	Engineering and Technology	
	Status of patent	Published	
		I .	

### Research Papers Published (Only SCIE & SCOPUS)

#### **Scopus Link**: https://www.scopus.com/authid/detail.uri?authorId=57203392485

- 31 Kumar Cherukupalli, Baddu Naik Bhukya, Padmanabha Raju Chinda, "Enhancing Power System Security with A Hybrid SATS Algorithm for Optimal Power Flow", Journal of Theoretical and Applied Information Technology, ISSN: 1992-8645, Vol.103. No.6, 31<sup>st</sup> March 2025, https://www.jatit.org/volumes/Vol103No6/6Vol103No6.pdf (Scopus)
- Ragaleela Dalapatirao, Padmanabha Raju Chinda, Kumar Cherukupalli, "A Hybrid Lion Pride and Bat Algorithm (HLPBA) for Optimal Spot and Size Of EV Charging Stations in Distribution Networks", Journal of Theoretical and Applied Information Technology, December 2024. Vol.102. No. 23, ISSN: 1992-8645 (Scopus) https://www.jatit.org/volumes/Vol102No23/19Vol102No23.pdf
- 29 Kumar Cherukupalli, Padmanabha Raju Chinda, "A hybrid SATS algorithm based security constrained optimal power flow using FACTS devices", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 35, No. 3, September 2024, pp. 1388~1396 ISSN: 2502-4752, DOI: 10.11591/ijeecs.v35.i3.pp1388-1396 (Scopus)
- Ragaleela Dalapati Rao, Padmanabha Raju Chinda, Kumar Cherukupalli, "Dynaflow Device Optimal Placement Using Artificial Intelligence", Journal Of Theoretical And Applied Information Technology ISSN: 1992-8645, 31st December 2023. Vol.101. No 24, Pp. 8283–8290 (Scopus) https://www.jatit.org/volumes/Vol101No24/28Vol101No24.pdf
- 27 Madupu, H.S., Chinda, P.R. & Kotni, S. "A Novel Tunicate Swarm Algorithm for Optimal Integration of Renewable Distribution Generation in Electrical Distribution Networks Considering Extreme Load Growth", Journal of Electrical Engineering & Technology, ISSN: 1975-0102, Vol.18, No.4, pp.2709–2722, July 2023. https://doi.org/10.1007/s42835-023-01388-0 (SCIE) https://link.springer.com/article/10.1007/s42835-023-01388-0#citeas
- Baddu Naik Bhukya, Padmanabha Raju Chinda, Srinivasa Rao Rayapudi, and Swarupa Rani Bondalapati, "Advanced Control with an Innovative Optimization Algorithm for Congestion Management in Power Transmission Networks", Engineering Letters, Volume 31, Issue 1, March 2023, pp.:194-205, ISSN: 1816- 0948 (online version); 1816-093X (print version), Published by: International Association of Engineers (Scopus) https://www.engineeringletters.com/issues\_v31/issue\_1/EL\_31\_1\_20.pdf
- Ragaleela Dalapati Rao, Padmanabha Raju Chinda, Kumar, Cherukupalli, Srinivasa Rao Mantri, "Security Enhancement And Loss Reduction In Deregulated Power Systems With A Series Facts Device", Journal Of Theoretical And Applied Information Technology ISSN: 1992-8645, 31st May 2021. Vol.100. No 22, Pp. 6694– 6704 (Scopus) https://www.jatit.org/volumes/Vol100No22/24Vol100No22.pdf
- R. D. Rao, P. Raju Chinda and A. N. Kumar, "Artificial Intelligence-Based Optimal Allocation of Dynaflow Device," 2022 International Conference on Smart and Sustainable Technologies in Energy and Power Sectors (SSTEPS), Mahendragarh, India, 2022, pp. 245-250, doi: 10.1109/SSTEPS57475.2022.00068. (Scopus) https://ieeexplore.ieee.org/document/10125418
- Padmanabha Raju Chinda, Ragaleela Dalapati Rao, "Multi-attribute decision making approach for placement of dynaflow controllers in a power system network using particle mobility honey bee algorithm", Ain Shams Engineering Journal, Volume 13, Issue 5, September 2022, 101682, ISSN 2090-4479, https://doi.org/10.1016/j.asej.2021.101682. (SCIE) https://www.sciencedirect.com/science/article/pii/S2090447921004603
- Padmanabha Raju Chinda, Ragaleela Dalapati Rao, "A binary particle swarm optimization approach for power system security enhancement", International Journal of Electrical and Computer Engineering (IJECE), p-ISSN 2088-8708, e-ISSN 2722-2578, Vol 12, No 2, April2022, pp.1929-1936, ISSN: 2088-8708, DOI: 10.11591/ijece.v12i2.pp1929-1936 (Scopus) https://ijece.iaescore.com/index.php/IJECE/article/view/24986/15546
- 21 Baddu Naik Bhukya, Padmanabha Raju Chinda, Srinivasa Rao Rayapudi, "A Novel Approach for Congestion Management in Transmission System with Advanced Control Using Innovative

- Algorithm", International Journal on Electrical Engineering and Informatics Volume 14, Number 1, March 2022, pp.29-54, ISSN 2085-6830/ online e-ISSN 2087-5886(Scopus) https://www.ijeei.org/docs-7299760762610b92029aa.pdf
- 20 Ragaleela Dalapati Rao, Padmanabha Raju Chinda, "Steady state analysis of dynaflow controller", Journal Of Theoretical And Applied Information Technology ISSN: 1992-8645, 31st May 2021. Vol.99. No 19, Pp. 4524–4535 (Scopus) https://www.jatit.org/volumes/Vol99No19/7Vol99No19.pdf
- Padmanabha Raju Chinda, Ragaleela Dalapati Rao, "Artificial intelligence application to maximize social welfare in the electricity market by installing sssc", Journal Of Theoretical And Applied Information Technology ISSN: 1992-8645, 31st May 2021. Vol.99. No 19, Pp. 4511–4523 (Scopus)
  - https://www.jatit.org/volumes/Vol99No19/6Vol99No19.pdf
- Padmanabha Raju Chinda, Ragaleela Dalapati Rao, "Power System Security Evaluation Using Composite Logic Criteria", Journal Of Theoretical And Applied Information Technology ISSN: 1992-8645, 31st May 2021. Vol.99. No 10, Pp. 2434–2444 (Scopus) http://www.jatit.org/volumes/Vol99No10/21Vol99No10.pdf
- B. Baddu Naik, Ch. Padmanabha Raju, R. Srinivasa Rao, "A Novel Approach Of Congestion Management In Transmission Networks Using An Advanced Interline Power Flow Controller With Constriction Factor- Based Particle Swarm Optimization Algorithm", Journal of Theoretical and Applied Information Technology ISSN: 1992-86453, 1st March 2021, Vol.99, No 6, pp. 1280–1295 (Scopus)
  - http://www.jatit.org/volumes/Vol99No6/4Vol99No6.pdf
- 16 Kumar Cherukupalli; Padmanabha Raju Chinda; Sujatha Peddakotla, "A hybrid SATS algorithm-based optimal power flow for security enhancement using SSSC", International Journal of Computer Aided Engineering and Technology, ISSN online:1757-2665, ISSN print: 1757-2657, March 2021 Vol.14 No.3, pp.373 384, DOI: 10.1504/IJCAET.2021.114493 (Scopus)
  - https://www.inderscience.com/info/inarticle.php?artid=114493
- Ragaleela Dalapati Rao, P. R. Chinda, and Meduri Kiran, "Corona and Electric Field Distribution Analysis in 400 kV Line Insulators", Adv. technol. innov., vol. 6, no. 1, pp. 21-30, Jan. 2021. DOI: https://doi.org/10.46604/aiti.2021.5966 (Scopus) https://ojs.imeti.org/index.php/AITI/article/view/5966/1037
- M.V. Satyanarayana, Padmanabha Raju Chinda, Ragaleela Dalapati Rao, Kunapareddy Sai Dikshit, Mohammad Sameer, "Architecture and Formation Of Unmanned Ground Vehicle", Journal of Critical Reviews. Vol.7, Issue.12, June 2020, pp: 451-455. doi:10.31838/jcr.07.12.81 (Scopus)
  - http://www.jcreview.com/fulltext/197-1592487371.pdf?1592908558
- Padmanabha Raju Chinda, B.Varshini, B.Harsha Naga Karthik, Ch.Venkata Rajesh Kumar, G.Manoja, "Energy Management in Smart Grid with Various Load Patterns", International Journal of Advanced Science and Technology, ISSN: 2005-4238, Vol. 29, No. 5, April, 2020, pp. 3257 3265. (Scopus)
  - http://sersc.org/journals/index.php/IJAST/article/view/11999/6287
- N.Vijaya Anand, Ragaleela Dalapati Rao and Padmanabha Raju Chinda, "Hybrid Optimal Approximation of MIMO System", International Journal of Control and Automation, ISSN: 2005-4297, Vol. 13, No. 2, March, 2020, pp. 723 731. (Scopus) http://sersc.org/journals/index.php/IJCA/article/view/11215/5962
- Hemanth sai Madupu, Vijayaanand Nidumolu, Ragaleela Dalapati Rao and Padmanabha Raju Chinda, "Energy Monitoring Using IOT", International Journal of Advanced Science and Technology, ISSN: 2005-4238, Vol. 29, No. 03, March, 2020, pp. 7259 7266. (Scopus) http://sersc.org/journals/index.php/IJAST/article/view/7590/4438
- Ragaleela Dalapati Rao, Padmanabha Raju Chinda, "Application of P-Q Vector Diagram Method for Releiving overloads in Restructured Power Networks", International Journal of Advanced Science and Technology, ISSN: 2005-4238, Vol. 29, No. 03, March, 2020, pp. 4781 4790. (Scopus)
  - http://sersc.org/journals/index.php/IJAST/article/view/5691/3534
- 9 Padmanabha Raju Chinda, "Solar Agro Sprayer", International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-8 Issue-11, September 2019,

- pp.245-249. (Scopus)
- https://www.ijitee.org/wp-content/uploads/papers/v8i11/K13020981119.pdf
- 8 Ch.Padmanabha Raju, Dhanalakshmi D., "Selection of Battery Size by Using Power Flow Decision Program for Microgrids", Smart Intelligent Computing and Applications. Smart Innovation, Systems and Technologies, vol 104. Springer, Singapore, pp.581-590, 2018. (SCIE) https://link.springer.com/chapter/10.1007/978-981-13-1921-1\_57
- 7 Kumar Cherukupalli, Padmanabha Raju Chinda, Sujatha Peddakotla, "Security Constrained Optimal Power Flow by Hybrid SATS Algorithm", Journal of Advanced Research in Dynamical & Control Systems, ISSN 1943-023X, Vol. 10, 09-Special Issue, 2018, pp.942-952. (Scopus) http://jardcs.org/abstract.php?archiveid=4367
- B. Baddu Naik, Ch. Padmanabha Raju, and R. Srinivasa Rao, "A Constriction Factor Based Particle Swarm Optimization for Congestion Management in Transmission Systems", International Journal on Electrical Engineering and Informatics Volume 10, Number 2, June 2018, pp.232-241. (Scopus)
  - http://www.ijeei.org/docs-18261921065b6938d269c94.pdf
- A.Jamalaiah, Dr.CH.Padmanabha Raju, Dr.R.Srinivasarao, "Optimization and operation of a renewable energy based pv-fc- micro grid using homer", International Conference on Inventive Communication and Computational Technologies (IEEE Xplore ISBN:978-1-5090-5297-4), 10th -11th March 2017 held at Ranganathan Engineering College, Coimbatore. (Scopus) https://ieeexplore.ieee.org/document/7975238
- K.Ratna Jyothy, Dr.CH.Padmanabha Raju, Dr.R.Srinivasarao, "Simulation Studies on WTG-FC Battery Hybrid Energy System", International Conference on Innovative Mechanisms for Industry Applications (ICIMIA 2017) (IEEE Xplore ISBN: 978-1-5090-5960-7), on 21-23, February 2017 held at Dayananda Sagar College of Engineering, Bengaluru. (Scopus) https://ieeexplore.ieee.org/document/7975557
- Dulipala Dhanalakshmi, Dr. Ch Padmanabha Raju, "Optimal Designing Of Battery Storage System For Microgrid", Journal of Advanced Research in Dynamical and Control Systems (ISSN 1943-023X), Issue:16, 2017, pp.362-372 (Scopus) http://www.jardcs.org/abstract.php?archiveid=1625#
- A.V.Naresh Babu, S.Sivanagaraju and Ch.Padmanabha Raju, T.Ramana "Multiline Power Flow Control using Interline Power Flow Controller (IPFC) in Power Transmission Systems", International Journal of Electrical and Electronics Engineering (pISSN:2010-3964, eISSN:2010-3972), World Academy of Science, Engineering and Technology, USA, Volume 4, No.7, Autumn 2010, pp.492-496, (Scopus) http://waset.org/publications/7855/multi-line-power-flow-control-using-interline-power-flow-con
  - http://waset.org/publications/7855/multi-line-power-flow-control-using-interline-power-flow-controller-ipfc- in-power-transmission-systems
- A.V. Naresh Babu, S. Sivanagaraju, Ch. Padmanabharaju and T. Ramana "Power Flow Analysis of a Power System in the Presence of Interline Power Flow Controller (IPFC)", ARPN Journal of Engineering and Applied Sciences (ISSN:1819-6608), Asian Research Publishing Network, India, Volume 5, No.10, October 2010, pp.1-4 (Scopus)
  - http://www.arpnjournals.com/jeas/research papers/rp 2010/jeas 1010 392.pdf

#### Academic Experience

Designation	Institute	Period
Professor	Professor EEE Department, P.V.P.Siddhartha	
	Institute of Technology, Vijayawada	Present
Associate	EEE Department, P.V.P.Siddhartha	June, 2006 to March,
Professor	Institute of Technology, Vijayawada	2011
Assistant	EEE Department, Sri Sarathi	February, 2001 to
Professor	Institute of Engineering &	June, 2006
	Technology, Nuzvid	

# Administrative Experience

Position	Place	Period
Head of the Department of Electrical & Electronic		August 2022 to
Department	Engineering, PVPSIT	Present
Head of the	Department of Freshman Engineering,	August 2012 to
Department	PVPSIT	August 2022

## Recognition in Professional Bodies

Secretary, Indian Society of Systems for Science & Engineering, Amaravati Chapter, from 2016 to Present

### Member in various committees

Position	Name of the committee	Period
Chairman	Disciplinary committee, PVPSIT	2009 to present
Member	Academic Council, PVPSIT	2012 to present
Chairman	Board of Studies, EEE, PVPSIT	2022 to present
Member	Performance based appraisal system for faculty, PVPSIT	2018 to present
Member	Best teacher & Best student awards	2018 to present
Member	Board of Studies, EEE, PVPSIT	2012 to 2022
Chairman	Anti-Ragging Squad, PVPSIT	2025 to present
_Member	Anti-Ragging Committee, PVPSIT	2009 to present
Member Secretary	Anti-Ragging Committee, PVPSIT Value Education Cell, PVPSIT	2009 to present 2019 to present

## Membership in professional bodies

Membership Professional Body

Life member Indian Society for Technical Education

Member Institute of Engineers (India)

Member Indian Society of Systems for Science & Engineering

# Funded Projects

Name of the Project	Funding Agency	Amount of Funding	Role	Status
Tender coconut punching machine	MSME Idea Hackathon 3.0, Government of India	15 lakhs	Mentor	Ongoing
Development of an automated coconut breaking Machine	Unnat Bharath Abhiyan under SEG on Rural Energy System, Government of India	0.91 lakhs	Participating Institute Coordinator	Completed
Adopting five villages and conducting villages survey	Unnat Bharath Abhiyan under SEG on Rural Energy System, Government of India	0.5 lakhs	Participating Institute Coordinator	Completed
Design and Development of Canteen Feedback System	Siddhartha Academy of General & Technical Education	1 lakh	Coordinator	Completed
Installation of Dandelion water fountain in front of college garden	Siddhartha Academy of General & Technical Education	3.53 lakhs	Coordinator	Completed
Installation of water fountain at Open Auditorium and at Main door entrance Budda statue	Siddhartha Academy of General & Technical Education	1.3 lakhs	Coordinator	Completed