Prof. Paladuga Satish Rama Chowdary, PhD

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Education

2010-2015 :   PhD in ECE, JNTUK, Kakinada

2007-2009 :   M.Tech in ECE, AUCE (A), Andhra University, Visakhapatnam

Academic Experience: 21+ years

June 2023 – till date	Professor, Dept of ECE, Raghu Engineering College, Visakhapatnam
June 2011 – June 2023	Vice Principal & HoD, Dept of ECE, Raghu Institute of Technology, Visakhapatnam. Also served the institution in various managerial activities.
Sep 2003 - June 2011	Associate Professor, Department of ECE, Raghu Engineering College, Visakhapatnam
June 2001 - Sep 2003	Assistant Professor, Pragati Engineering College, Suram Palem, Rajahmundry

Research Scholars:

S.No	Scholar name	Supervisor/ Co-Sup	PhD Registered University and year of registration	Status
1	**Dr BSSV Ramesh Babu**	**Supervisor**	**Centurion University, 2017. Field: Computational Electromagnetics & Antennas**	**Awarded**
2	**Akash Kumar Patnaik**	**Co-Supervisor**	**Centurion University, 2019. Field: Computational Electromagnetics & Antennas**	**Submitted**
3	PVK Durga Prasad,	Supervisor	Centurion University,2017. Field: Soft Computing & Antennas	Course work Completed
4	Baratam Mohana Krishna	Supervisor	JNTUK Kakinada, 2019-20 Field: Computational Electromagnetics & Antennas	Course work Completed
5	Nagendra Kumar Marripalli	Supervisor	JNTUK Kakinada, 2019-20 Field: Antennas	Course work Completed
6	T Lakshmi Spandana	Supervisor	JNTUK Kakinada, 2021-22 Field: VLSI based signal processing	Course work due
7	B Priyanka	Supervisor	JNTU GV, Vizianagaram 2022-23 Field : Image Processing	Course work due

Subjects Taught:

- Electronic Devices and Circuits
- Microwave Engineering
- Optical Fiber Communications
- Electromagnetic Fields and Transmission Lines
- Analog Communications
- Digital Communications
- Satellite Communication

- Television Engineering
- Radar Engineering
- Switching Theory & Logic Design
- Pulse & Digital Circuits
- IPR
- Antenna and Wave Propagation
- Basic electrical engineering

Research Profile *(Click to access the page)*

ORCID   : 0000-0002-1649-4258   Google Scholar : kiO38-QAAAAJ
Scopus ID   : 56405388500, 57201179975   Vidwan   : 170978
ResearcherID: N-6242-2017

Publications : Total : 53; SCI: 12 ; Scopus: 22; ESCI: 03

Citations: 373 :: H-index – 10, i10 index – 11

A. *Journals:*

1. Gupta, A.K.; Mohanta, H.C.; **Chowdary, P.S.R**.; Krishna, M.V.; Mohamed, H.G. Design and Analysis of Fractal-Shaped High-Impedance Surface Unit Cell Characteristics. *Fractal Fract.* **2023**, 7, 472. https://doi.org/10.3390/fractalfract7060472

   SCI : Impact Factor – 3.541

2. Gupta, A. K., Chowdary, P., & Krishna, M. V. (2023). Planar Antenna Design on The Characteristics of Moore Fractal- Based High Impedance Surface, Applied Computational Electromagnetics Society (ACES) Journal, (In Press).

   SCI : Impact Factor – 0.44

3. Gupta, A. K., Chowdary, P., & Krishna, M. V. (2023). Design of Rectangular Patch Antenna on the Hilbert Fractal-shaped High Impedance Surface. Journal of Scientific & Industrial Research, 82(02), 202-209.

   SCI : Impact Factor – 0.555

4. Hannoon, N. M., Ananth, D. V. N., Hiday, N., **Chowdary, P. S., Chakravarthy, V. S.,** & Satapathy, S. C. (2021). A Common Capacitor Based Three Level STATCOM and Design of DFIG Converter for a Zero-Voltage Fault Ride-Through Capability. *IEEE Access*.

   SCI : Impact Factor - 3.467

5. Chakravarthy, V.V.S.S.S., **Chowdary, P.S.R.,** Dib, N. and Jaume Anguera. Elliptical Antenna Array Synthesis using Evolutionary Computing Tools. *Arab J Sci Eng* (2021).

   SCI : Impact Factor - 2.621

6. Babu, B. S. S. V., **Chowdary, P. S. R.,** & Mishra, S. (2021). *Evolutionary Computing Tools based Design of Elliptical Antenna Array for Amplitude-Position Technique*, Journal of Scientific and Industrial Research (CSIR-NISCAIR), 80 (3), 255-259.

   SCI : Impact Factor – 0.555

7. Anguera, J.; Andújar, A.; Jayasinghe, J.; Chakravarthy, V.V.S.S.S.; **Chowdary, P.S.R**.; Pijoan, J.L.; Ali, T.; Cattani, C. Fractal Antennas: An Historical Perspective. *Fractal Fract* **2020**, *4*, 3.

   SCI : Impact Factor - 3.555

8. **Paladuga SR Chowdary,** Vedula, C. V., Anguera Pros, J., Mishra, R. K., & Andújar Linares, A. (2018). Performance of beamwidth constrained linear array synthesis techniques using novel evolutionary computing tools. *ACES Journal, 2018. Vol. 33, 3 (Març).*

   SCI : Impact Factor – 0.724

9. **P.S.R. Chowdary et al**, "On the linear antenna array synthesis techniques for sum and difference patterns using flower pollination algorithm," Arab Journal of Science and Engineering, Springer Nature, 2017.

   SCI : Impact Factor - 2.621

10. **P.S.R.Chowdary**, AM Prasad, PM Rao and J Anguera, "*Design and performance study of Sierpinski fractal based patch antennas for multiband and miniaturization characteristics*", Wireless Personal Communications, Mar 2015 (online), pp. 1-18, **Springer Science+Business Media New York 2015** .

    SCI : Impact Factor : 1.563

11. **S. R. Chowdary Paladuga** et al, "Synthesis of Circular Array Antenna for Sidelobe Level and Aperture Size Control Using Flower Pollination Algorithm," International Journal of Antennas and Propagation, vol. 2015, Article ID 819712, 9 pages, 2015. doi:10.1155/2015/819712

    SCI : Impact Factor – 1.244

12. Dash, S., Senapati, M. R., Sahu, P. K., & **Chowdary, P. S. R.** (2020). *Illumination normalized based technique for retinal blood vessel segmentation,* International Journal of Imaging Systems and Technology, 31 (1), 351-363.

    SCI : Impact Factor – 2.177

13. Ananth, D. V. N., Hannoon, N., Yunus, M. S. B. M., Jamaludin, M. H. B., Charavarthy, V. V. S. S. S., & Chowdary, P. S. R. (2023). Real-time power quality measurement audit of government building–A case study in compliance with IEEE 1159. Acta IMEKO, 12(1).

    SCOPUS

14. Kaladhar, M., Sameer Chakravarthy, V. S. S., & **Chowdary, P. S. R.** (2021). Prediction of surface roughness using a novel approach. *International Journal of Industrial Engineering & Production Research*, *32*(3), 1-13

   WoS / ESCI / SCOPUS

15. Raju, R. U., Chakravarthy, V. V. S. S. S., & **Chowdary, P. S. R.** (2021). Flower pollination algorithm based reverse mapping methodology to ascertain operating parameters for desired surface roughness. *Evolutionary Intelligence*, 1-6.   ***SCOPUS / ESCI***

16. Sekhar, B. V. D. S., Reddy, P. P., Venkataramana, S., Chakravarthy, V. V., & **Chowdary, P. S. R**. (2019). Image Denoising Using Novel Social Grouping Optimization Algorithm with Transform Domain Technique. *International Journal of Natural Computing Research (IJNCR)*, *8*(4), 28-40.   ***ESCI***

17. Babu, B. R., **Chowdary, P. S. R**., & Mishra, S. (2020). Angular Position-Only Technique Based Design of Elliptical Antenna Arrays Using Evolutionary Computing Tools. *Solid State Technology*, *63*(1s), 2274-2282.   ***SCOPUS***

B. *Conferences:*

1. Akash Kumar Gupta, P. Satish Rama Chowdary, M Vamshi Krishna, Harish Chandra Mohanta, "Design of Bow-tie Antenna over High Impedance Surface for Bluetooth and WLAN Applications", 2nd Wireless Antenna and Microwave Symposium 2023, 6-10 June, pandit Deendayal Energy University, Gandhinagar, Gujarat.   **(IEEE Xplore – In Press)**

2. A. Vijaya Lakshmi, M. Kalpana, R. Ramana Reddy, P Satish Rama Chowdary, "Moore Curve Fractal-Shaped Frequency Selective Surface for Multiband Applications", 2nd Wireless Antenna and Microwave Symposium 2023, 6-10 June, pandit Deendayal Energy University, Gandhinagar, Gujarat.   **(IEEE Xplore – In Press)**

3. Sai Harshini Behara, Akash Kumar Gupta, P Satish Rama Chowdary, Jaume Anguera, S. Srujana Keethana, D. Dinesh, "A Slotted Octagonal Patch Antenna for Multi-Band and High Gain Applications", 2nd Wireless Antenna and Microwave Symposium 2023, 6-10 June, pandit Deendayal Energy University, Gandhinagar, Gujarat. **(IEEE Xplore – In Press)**

4. Dash, S., **Chowdary, P. S. R.,** Chakravarthy, V. V. S. S. S., Raju, C. G., Sahu, G., Charan, K. S., & Umamaheshwar, Y. (2022, August). Real Time Retinal Optic Disc Segmentation via Guided filter and Discrete Wavelet Transform. In *Journal of Physics: Conference Series* (Vol. 2312, No. 1, p. 012007). IOP Publishing.   ***SCOPUS***

5. Hannoon, N. M., Chowdary, P. S. R., Ananth, D. V. N., & Chakravarthy, V. V. S. S. S. (2022, January). DFIG HVDC based wind farms system profile improvement under grid faults. In 2022 International Conference on Computing, Communication and Power Technology (IC3P) (pp. 57-64). IEEE.   ***SCOPUS***

6. Subbarao, M. V., Terlapu, S. K., & **Chowdary, P. S. R**. (2022, January). Emotion Recognition using BiLSTM Classifier. In 2022 International Conference on Computing, Communication and Power Technology (IC3P) (pp. 195-198). IEEE.   ***SCOPUS***

7. Venkata Subbarao, M., Sudheer Kumar, T., **Chowdary, P. S. R**., & Chakravarthy, V. V. S. S. S. (2022). Brain Tumor Classification Using Decision Tree and Neural Network Classifiers. In Data Engineering and Intelligent Computing (pp. 405-412). Springer, Singapore. *SCOPUS*

8. Hannoon, N. M., Ananth, D. V. N., Hiday, N., **Chowdary, P. S. R.,** & Chakravarthy, V. V. S. S. S. (2021, October). Power Quality Conditioning due to Flickering Loads with Shunt Active Power Filter using Fuzzy-Granular Controller Method. In 2021 International Conference in Advances in Power, Signal, and Information Technology (APSIT) (pp. 1-7). IEEE. *SCOPUS*

9. Terlapu, S. K., Rao, M. V. S., **Chowdary, P. S. R.,** & Satapaty, S. C. (2021). Design and Analysis of Koch Fractal Slots for Ultra-Wideband Applications. In *Microelectronics, Electromagnetics and Telecommunications* (pp. 735-744). Springer, Singapore. *SCOPUS*

10. Gupta, A. K., Patnaik, A. K., Suresh, S., **Chowdary, P. S. R.,** & Krishna, M. V. (2021). DGS-Based T-Shaped Patch Antenna for 5G Communication Applications. In *Microelectronics, Electromagnetics and Telecommunications* (pp. 11-19). Springer, Singapore. *SCOPUS*

11. Chakravarthy V.V.S.S.S., **Chowdary P.S.R**., Anguera J., Mokara D., Satapathy S.C. (2021) Pattern Recovery in Linear Arrays Using Grasshopper Optimization Algorithm. In: Chowdary P., Chakravarthy V., Anguera J., Satapathy S., Bhateja V. (eds) Microelectronics, Electromagnetics and Telecommunications. Lecture Notes in Electrical Engineering, vol 655. Springer, Singapore. *SCOPUS*

12. Sekhar B.V.D.S., Venkataramana S., Chakravarthy V.V.S.S.S., **Chowdary P.S.R**., Varma G.P.S. (2019) Image Denoising Using Wavelet Transform Based Flower Pollination Algorithm. In: Satapathy S., Bhateja V., Somanah R., Yang XS., Senkerik R. (eds) Information Systems Design and Intelligent Applications. *Advances in Intelligent Systems and Computing*, vol 862. **Springer, Singapore, (2019)** *SCOPUS*

13. Sudheer Kumar Terlapu, **P. S. R. Chowdary**, Ch Jaya, V. V. S. S. Sameer Chakravarthy and Suresh Chandra Satapathy, **"** *On the Design of Fractal UWB Wide-Slot Antenna with Notch Band Characteristics", International Conference on Microelectronics, Electromagnetics and Telecommunications 2017, Springer Lecture Notes in Electrical Engineering - 471, 907-912, (2018).* *SCOPUS*

14. V. V. S. S. Sameer Chakravarthy**, P. S. R. Chowdary**, Suresh Chandra Satpathy, Sudheer Kumar Terlapuand Jaume Anguera, **"** Antenna Array Synthesis Using Social Group Optimization", International Conference on Microelectronics, Electromagnetics and Telecommunications 2017, Springer Lecture Notes in Electrical Engineering - 471, 895-905, (2018). *SCOPUS*

15. V. V. S. S. Sameer Chakravarthy**, P. S. R. Chowdary**, " Performance of Firefly Algorithm for Null Positioning in Linear Arrays", Int. Conference on Microelectronics, Electromagnetics and Telecommunications 2016, Springer Lecture Notes in Electrical Engineering. *SCOPUS*

16. V V S S Sameer Chakravarthy, Sudheer Kumar Terlapu, P S R Chowdary, T Venkatswara Rao, Suresh Chandra Satpathy, "On the Convergence of Synthesis of Desired Nulls from Circular Arrays using Flower Pollination Algorithm," International Conference on

Microelectronics, Electromagnetics and Telecommunications 2016, Springer Lecture Notes in Electrical Engineering.   *SCOPUS*

17. **PSR Chowdary et al**, "On the Synthesis Techniques for Linear Arrays Using Novel Evolutionary Computing Tools," Indian Antenna Week, Thiagaraja College of Engineering, Madhurai. (IEEE)

18. **PSR Chowdary et.al**, "Linear array optimization using teaching learning based optimization," *SPRINGER-Advances of Intelligent Systems and Computing (AISC) 337*, pp.183-190, Dec. 12, 2014.   *SCOPUS*

19. **PSR Chowdary**, "Performance analysis of mandatory modes of IEEE 802.11g PHY," *Int. Conf. on Statistics, Probability, Operations Research, Computer Science and Allied Areas (IISA-ISPS),* Andhra University, Visakhapatnam, 4-8, January 2010.

20. **PSR Chowdary et.al,** "Discrete wavelet transformation applications in image denoising," *National Conference on Advances in Signal Processing, (NCASP - 09)* , Dept of ECE, Andhra University, 20-21 Oct, 2009.

21. **PSR Chowdary et.al,** "Simulation of V-shaped Cantilever beams", *DEVICES – 2K10*, 13-14 Nov, ANITS, Visakhapatnam, 2010.

22. **PSR Chowdary et.al** , "Transmission of electromagnetic wave through a cylindrical optical fiber - effect of cutoff wavelength," *Recent Advances in Communications & Electronics*, KITS Warangal, Huzurabad, Apr' 2011.

23. **PSR Chowdary et.al,** "Simulation of different shaped Cantilever beams in MATLAB," *ICNB-2*, Raghu Engineering College, Visakhapatnam, Dec'2011.

Patents Published / Granted : 07

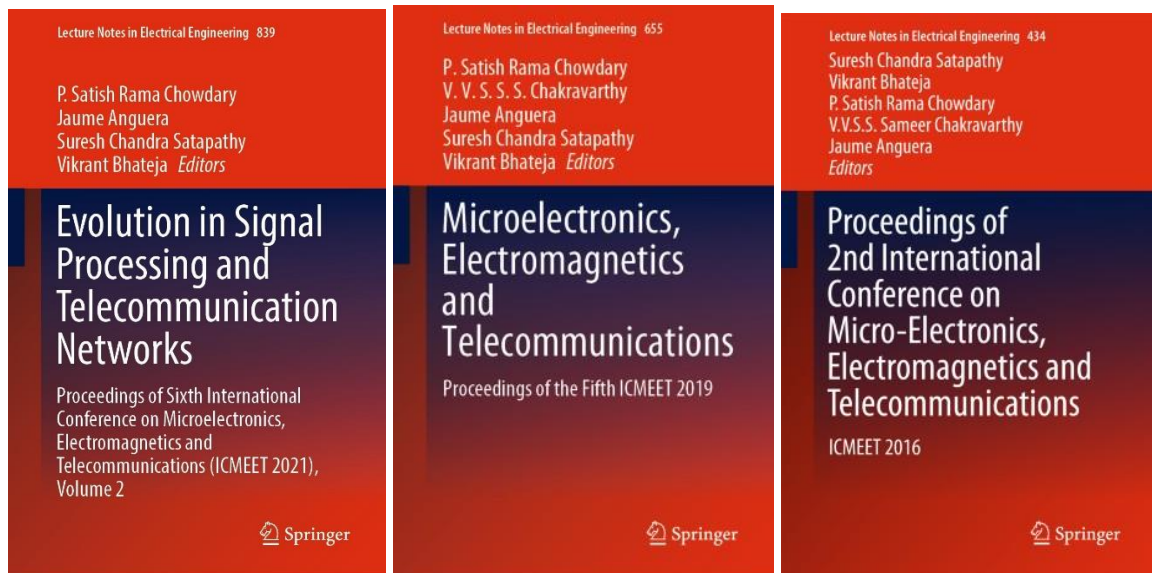| Title	Date	Country	Status	Appl Number
A technique for traffic prediction and congestion control in IoT network using machine learning	11.11.2020	Australia	Granted	2020102637
IOT based plant disease detection using support vector machine algorithm	25.12.2020	India	Published	202021050705
A system and method for analyzing dynamic out-of home advertising based on real-time viewers biometric information	18.06.2021	India	Published	202141023045
Isotropic antenna based on the AI&ML interface having multi-functional guide-wire assemblies	20.08.2021	India	Published	202141036940
System and method for creating & managing mind map for explaining user thoughts using personalized network	03.12.2021	India	Published	202141050903
Smart System for Adaptive Surface Roughness Control of Workpiece and Method Thereof	10.02.2022	Indian	Published	202241007236
Flow Regulating Aerosol Delivery Apparatus with Fault Detection System and Method Thereof	18.11.2022	Indian	Published	202241064815

Funding from AICTE/DST

- Received a grant of Rs.1,00,000 from AICTE under Scheme for Promoting Interests, Creativity and Ethics among Students (SPICES).
- Received Rs.11,00,000 from AICTE towards Modernizaion of Antenna Engineering Laboratory, 2019-20.
- Convener of AICTE funded one week STTP on ICT tools for engineering college teaching and outcome based education.

Editorial / Reviewer

- Lead Editor, Evolution in Signal Processing and Telecommunication Networks, Proceedings of Sixth International Conference on Microelectronics, Electromagnetics and Telecommunications (ICMEET 2021), Volume 2 (**Scopus**) ISBN: 978-981-16-8554-5
- Lead Editor, Lecture Notes in Electrical Engineering series, ICMEET 2019, Springer. (**Scopus**) ISBN: 978-981-15-3828-5
- Co-Editor, Lecture Notes in Electrical Engineering series, ICMEET 2016, Springer. (**Scopus**) ISBN: 978-981-10-4280-5
- Publication Chair, IEEE International Conference on Computing, Communication and Power Technology, Organized in association with IEEE Vizag Bay Section during 7-8 January 2022.
- Reviewer, International Journal of Antenna and Propagation, Hindawi **(Sci Indexed)**.
- Reviewer, AEU, Journal of Electronics & Communication Engineering, Elsevier **(Sci Indexed)**.
- Reviewer, Applied Computational Electromagnetic Society Journal (**Sci Indexed**).

Awards

- Bheeshma Acharya Award, as a part of Bharat Education Excellence Award 2022.
- Excellency Award for dedication and committment in the pursuit of teaching by The Alliance Clubs International, Dist-105
- Research Excellence Award 2020 by Institute of Scholars
- Certificate of Achievement for Startup Ecosystem Enabler for the year 2021 by ATAL Incubation Center, Sri Krishnadevaraya University, Ananthapuram.

IEEE Activities:

- Chair, IEEE Vizag Bay Section Antenna and Propagation Society Chapter
- Served as Executive Committee member, IEEE Vizag Bay Section
- Chapter/Sub Section Coordinator, IEEE Vizag Bay Section
- Served as Student Branch Counsellor, IEEE SB - Raghu Institute of Technology
- Technical support SIGHT Project, MOSATE.
- Organized the IEEE Xtreme Programming 13.0, 14.0, 15.0 & 16.0 from 2019 to 2022
- Organized Professional meet on Nov 9, 2019 at SVECW, Bheemavaram.
- Organized Professional meet on July 27, 2019
- Advisor, IEEE APS student Chapter.

Membership in Professional organizations

- Fellow, Institute of Electronics & Telecommunication Engineers (**FIETE**)
- Life Senior Member, Wireless Antenna and Microwave Symposium Society (**WAMS**)
- Senior Member of Institute of Electrical and Electronics Engineers (**IEEE**).
- Life Member of Instrument Society of India (**ISOI**), IISc Bangalore.
- Member, Applied Computational Electromagnetics Society (**ACES**)
- Life Member of Soft Computing Research Society (**SCRS**).
- International Association of Engineers (**IAEng**).

References

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