

CURRICULUM VITAE

GENERAL INFORMATION AND ACADEMIC BACKGROUND



1. Name (in Block Letters) : Dr. SANDHYA RACHAMALLA
2. a. Father's Name : R. Bal Reddy
b. Mother's Name : R. Gunavathi
3. Place of work (Department & College) : Osmania University, Dept of ECE, UCE
4. Date of appointment as
 - a. Assistant Professor with Academic Level – 10 - : prior to 06.09.2013
[Corresponding to Asst. Professor with AGP Rs. 6000/-
in the Pay Band of Rs. 15600-39100 under UGC RSP 2006]
 - b. Assistant Professor with Academic Level – 11 - : 09.09.2013
[Corresponding to Asst. Professor with AGP Rs. 7000/-
in the Pay Band of Rs. 15600-39100 under UGC RSP 2006]
 - c. Assistant Professor with – Academic Level – 12 - : 09.09.2018
[Corresponding to Asst. Professor with AGP Rs. 8000/-
in the Pay Band of Rs. 15600-39100 under UGC RSP 2006]
 - d. Associate Professor with Academic Level – 13A - : 01.10.2021
5. Date and Place of Birth : 16.12.1979 and Hyderabad
6. Gender : Female
7. Marital Status : Married
8. Nationality : India
9. Category (tick the category) : OC
10. Address for correspondence (with Pin code) : H.No:- 9-21/3/8/C,
Ashok Nagar, Road no 3,
Boduppall, M.M.Dist,
Telangana, 500092
11. Permanent Address (with Pin code) : Same as above

Mobile No. ...9985701533..... Landline No. ...040-27098213.....

Email: reddysandhya28@osmania.ac.in

12. Academic Qualifications :

Examination	Subject(s)	Name of the Board / University	Year of Passing	Percentage of marks obtained	Division / Class / Grade
SSC	SSC	Board of Secondary Education	1995	86.9%	First Divison
Diploma In ECE	ECE	SBTET	1995-98	85.7%	First Class with Distinction
Undergraduate (B.Tech)	ECE	JNTUH	2000-2004	74.38%	First Class with Distinction
Post-Graduate (M.Tech)	DSCE	JNTUA	2006-2009	86.9%	First Class with Distinction
Other examinations, if any (Ph.D)	WSN	JNTUH	2011-2018	-	-

13. Research Degree (s)

Degrees	Title	Date and year of award	University
Ph.D.	Adaptive Routing Protocol for Ad-hoc WSN	25 th May, 2018	JNTUH

14. Appointments held prior to joining the Osmania University service:

Designation	Name of the Employer	Date of joining	Date of leaving	Salary with Grade pay	Reason for Leaving
Assistant Professor	SNIST	21.06.2004	30.6.2005	Rs 8,000 pm (consolidated)	-
Assistant Professor (Ratified)	SNIST	01.07.2005	31.01.2010	8000-275-13500 (DA merged 12000 basic)	-
Associate Professor (Ratified)	SNIST	01.02.2010	06.09.2013	12000-420- 18300 (DA merged 18000 basic)	Got opportunity to work in OU

15. Appointments after joining in the Osmania University:

Designation	Department	Date of actual joining		Grade pay
		From	To	
Assistant Professor	ECE	06.09.2013	08.09.2013	Assistant Professor with AGP Rs.6,000/- (Academic level- 10)
Assistant Professor	ECE	09.09.2013	08.09.2018	Assistant Professor with AGP Rs.7,000/- (Academic level- 11)
Assistant Professor	ECE	09.09.2018	30.09.2021	Assistant Professor with AGP Rs.8,000/- (Academic level- 12)
Associate Professor	ECE	01.10.2021	Till date	Associate Professor with AGP Rs.9,000/- (Academic level- 13A)

16. Teaching experience:

P.G. level : 13 years

U.G. level : 18 years

17. Research Experience excluding years spent in pursuing M.Phil. / Ph. D

: -- Years

18. Fields of Specification under the Subject / Discipline:

- (a) Wireless Communications
- (b) Optical Communications

19. Orientation / Refresher Courses attended at Academic Staff Colleges:

Name of the Course	Academic Staff College / University	Duration	Sponsoring Agency
Orientation Course	ASC, OU, Hyderabad	02.06.2014 to 30.06.2014 (4 weeks)	UGC
FDP in Entrepreneurship	EDC, OU Building No.21	30.12.2013 to 10.01.2014 (2 weeks)	NSTEDB, DST, New Delhi
Refresher Course in 'Soft Skills for Professional Excellence'	UGC-RDC, OU, Hyderabad	19.07.2017 to 08.08.2017 (3 weeks)	UGC
STC on 'Gender Sensitization'	UGC-HRDC, OU, Hyderabad	16.12.2019 to 21.12.2019 (6 days)	UGC

Administrative Positions

- **Examination Coordinator for PG/UG courses of ECE**
- **BoS member in ECE**
- **DC member**
- **Mentor for BE students**

List of Research Publications & Guest Lectures delivered

International Conference Publications

1. Sandhya Rachamalla and Anitha Sheela , “Routing Protocols for Wireless Sensor Networks- A survey”, *Proceedings of 7th International Conference on Communications and Information Technology (CIT’13), Cambridge, MA, USA, Jan 30 – Feb 1, 2013*, pp 96 – 101. ISBN: 978-1-61804-156-2. Cited by 1.
2. Sandhya Rachamalla and Anitha Sheela Kancharla, “Power-control Delay-aware Routing and MAC protocol for Wireless Sensor Networks”, *Proceedings of 2015, IEEE 12th International Conference on Networking, Sensing and Control, Taipei, Taiwan, April 9-11, 2015*, pp 527-532. Cited by 8.
3. Sandhya Rachamalla and Anitha Sheela Kancharla, “Adaptive Routing mechanism for Real-time Wireless Sensor Networks based on Two-hop information”, *Proceedings of ICICCD-2016(International Conference on Intelligent Communications, Control and Devices-2016),UPES, India, April 2-3, 2016*, pp 4.
4. Maneela Kalva, Sandhya Rachamalla, Srujanavahini N, Ramakrishna D, “Design and Analysis of a Planar Substrate Integrated Waveguide Horn Antenna”, *Proceedings of IEEE Indian Conference on Antennas and Propagation (InCAP-2018)*, Hyderabad International Convention Center, Hyderabad, India, Dec 16-19, 2018. Cited by 2.
5. Sarah Sanhitha Vemuri, Sandhya Rachamalla, Srujanavahini N, Ramakrishna D, “Design and Analysis of a Wideband Dual Circularly Polarized Dielectric Resonator Antenna”, *Proceedings of IEEE Indian Conference on Antennas and Propagation (InCAP-2018)*, Hyderabad International Convention Center, Hyderabad, India, Dec 16-19, 2018. Cited by 1.
6. R.Kranthi Kumar, R.Sandhya, R.Laxman, R.Chandrankanth, “LOS Rate estimation using Extended Kalman Filter”, *The First International Conference on Emerging Trends in Engineering (ICETE-2019)*, Springer Publications, March 22-23, 2019 at UCE, OU, pp 115.

7. M.Raju, Sandhya R, Bharath K, Srujana N, D.Ramakrishna, Nagaraju M, “Design of Multiband Slot Antenna using SIW Technology”, *Proceedings of IEEE Indian Conference on Antennas and Propagation (InCAP-2019)*, Dec 19-22, 2019 at Ahmedabad, India. Cited by 2.

National Conference Publications

1. R. Sandhya Reddy, “Implementation of WISPER protocol for Wireless multimedia networks”, *Proceedings of National Conference on Computing & Communications 2008 (NCCC'08)*, GNITS, Hyderabad, India, Nov 28-29, 2008.
2. R. Sandhya Reddy, “Performance Analysis of MAC protocols for Wireless multimedia networks”, *Proceedings of National Conference on Advances in Communication Technologies 2009 (NCACT'09)*, SNIST, Hyderabad, India, July 3-4, 2009, pp 56-61.
3. R. Sandhya Reddy, “Performance Analysis of Spreading codes for DS-CDMA Systems”, *Proceedings of National Conference on Signal Processing and Communication 2009 (SPCOM'09)*, MRCET, Secunderabad, India, Dec 4-5, 2009, pp 189-194.
4. Sandhya Rachamalla and Anitha Sheela Kancharla, “Efficient broadcasting using Network Coding in Adhoc Wireless Networks”, *Proceedings of National Conference on RF Wireless Communication and Signal Processing (NCRFWCSP 2014)*, BEC, Guntur, A.P., Nov 17-18, 2014, pp 1-5.

International Journal Publications

1. Sandhya Rachamalla and Dr. Anitha Sheela Kancharla, “A Survey of Real-Time Routing Protocols for Wireless Sensor Networks”, *IJCSES (International Journal of Computer Science and Engineering Survey)*, Vol 4, Issue 3, June, 2013. pp 35 – 44. Cited by 20. Indexed in Google, Citeseer, ProQuest, Scribd etc.
2. Archana Soman and Sandhya Rachamalla, “FPGA Implementation of (15,k) binary BCH encoder for multiple error correction control using VHDL”, *IJTES (International Journal of Technology and Engineering science)*, Volume 1, August 2013, pp 481-486. Cited by 1. IF 0.962
3. Sandhya Rachamalla and Anitha Sheela Kancharla, “Adaptive Routing Protocol with Power- Control mechanism for Wireless Sensor Networks”, *IJCSNS (International Journal of Computer Science and Network Security)*, Vol 15, Issue 2, Feb 2015, pp 38-45. Indexed in Thomson Reuters- ESCI(Emerging Sources Citation Index)
4. Sandhya Rachamalla and Anitha Sheela Kancharla, “Energy-Efficient Adaptive Routing Mechanism for Real-Time Wireless Sensor Networks”, *Elixir International Journal of*

Electrical Engineering, Vol 91, Feb Issue,2016, pp 38142- 38147. IF 6.865, ISSN: 2229-712X

5. Sandhya Rachamalla and Anitha Sheela Kancharla,“A two-hop based adaptive routing protocol for real-time wireless sensor networks”, Journal: SpringerPlus DOI: 10.1186/s40064-016-2791-3, 2016, Volume 5, Issue 1, pp 1-12. Cited by 4. IF 2.402(Scopus indexed)
6. G. Idur Basha and R.Sandhya, “A C-shaped Microstrip Patch Antenna for 5G Applications”, IJLTES, Vol 7, Issue 2, July, 2019. pp 12-16. IF 5.095 ISSN: 2321-0605
7. N.Ramesh and R.Sandhya, “Performance analysis of Multiband Microstrip Slotted Antenna with Defected ground”, Elixir International Journal, Electrical Engineering, Vol 134, September, 2019, pp 53615-53617. IF 6.865 ISSN: 2229-712X
8. Abbireddyguru Sivanjaneya, Sandhya Rachamalla, K.Sambhasiva Rao, Bharath K, Srujana V N, “Travelling Wave Slotted Waveguide Antenna for Ku band applications using SIW”, Elixir International Journal, Electrical Engineering, Vol 150, January, 2021, pp 55113-55115. IF 6.865 ISSN: 2229-712X
9. Doudu Vamshi Krishna and Dr.R.Sandhya, “Inset-fed Cantor set Fractal Multiband antenna design”, IJLTES, Vol 12 Issue 4, August, 2021, pp 1-7. IF 5.095 ISSN: 2321-0605
10. S V Madhu Sudhan Reddy and Dr.R.Sandhya, “RF amplifier for 5G applications”, IJLTES, Vol 13, Issue 1, October 2021, pp 1-7. IF 5.095 ISSN: 2321-0605

Publications other than journal articles (Chapters in book)

1. Chapter 7 of Book titled “*Proceeding of International Conference on Intelligent Communication, Control and Devices ICICCD 2016*” in AISC (*Advances in Intelligent Syst., Computing*) book series of Springer. Sandhya Rachamalla and Anitha Sheela Kancharla, “Adaptive Routing mechanism for Real-time Wireless Sensor Networks based on Two-hop information”, *Adv in Intelligent Syst., Computing*,(AISC),Vol. 479, pp 59 to 68, 2017, Rajesh Singh and Sushabhan Choudhury (Eds): *Proceeding of International Conference on Intelligent Communication, Control and Devices* , ISSN 978-981-10-1707-0, 393445_1_En, (7). Cited by 1.
2. Chapter 5 of Book titled “*Advances in Decisions Sciences, Image Processing, Security and Computer Vision*”, ICETE 2019, Volume 2, book series of Springer. R.Kranthi Kumar, R.Sandhya, R.Laxman, R.Chandrakanth, “LOS Rate estimation using Extended Kalman Filter”, S. C. Satapathy et al. (Eds.): ICETE 2019, LAIS (Learning and Analytics in Intelligent Systems) Springer book series, Volume 4, pp.36-43, 2020. https://doi.org/10.1007/978-3-030-24318-0_5 ISBN_ 978-3-030-24317-3

Guest Lectures Delivered

1. Delivered a Guest lecture on “**Routing Protocols for Adhoc WSN**” as Resource person on January 27, 2020 at 2:00 pm for **AICTE sponsored STTP on Advance analysis of Wireless Communication and Soft Computing** during 27th Jan to 01 Feb, 2020 at CMR Engineering College, Kandlakoya, Medchal, Hyderabad, T.S.