Profile

Name of the Faculty	Dr. P. Sudhakar
Designation	Associate Professor
Department	ECE
Area of Interest	Lidar Remote Sensing
Subjects Taught	LIC, CT, RS, ADC, DSP, SS
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Educational Qualifications:

S. No.	Degree	Specialization	University/College	Year
1.	B.Tech.	ECE	JNTUH Hyderabad	2001
2.	M.Tech.	ECE	JNTUH Hyderabad	2008
3.	Ph.D.	ECE	JNTUH Hyderabad	2019

List of Research Publications:

S. No.	Publication details
1.	P. Sudhakar; K. Anitha Sheela; M Satyanarayana "Optimisation of cloud seeding criteria using a suite of ground based instruments" International Conference on Communications, Signal Processing and VLSI (IC2SV2019), NIT Warangal, India.
2.	P. Sudhakar; K. Anitha Sheela; M Satyanarayana "Studies on noise and signal to noise ratio improvements for mie Lidar" IJRECE vol. 6 issue 1 Jan.-Mar. 2018, pp. 529-530, ISSN: 2393-9028 (print) | ISSN: 2348-228 (online)
3.	P. Sudhakar, K. Anitha Sheela, M Satyanarayana "Lidar Studies on Atmospheric Aerosols at a Semi-Urban Station Cheeryal (17.51° N, 78.62° E) near Hyderabad, India

	with Range Dependent Lidar Ratio" 38th Asian Conference on Remote Sensing (ACRS 2017), October 23-27, 2017, New Delhi, India.
4.	P. Sudhakar, K. Anitha Sheela, M Satyanarayana "Studies on noise and signal to noise ratio improvements for an in house developed Mie Lidar" 38th Asian Conference on Remote Sensing (ACRS 2017), October 23-27, 2017, New Delhi, India.
5.	P. Sudhakar, K. Anitha Sheela, M Satyanarayana, "Imaging Lidar System for Night Vision and Surveillance Applications" 2017 IEEE International Conference on Advanced Computing and Communication Systems (ICACCS -2017), Jan. 06 – 07, 2017, Coimbatore, INDIA, IEEE ISBN No. 978-1-5090-4558-7
6.	P. Sudhakar, K. Anitha Sheela, M Satyanarayana, "Laser Radar Signal Processing for Measurement of Chemical and Biological Agents" 2017 IEEE International Conference on Advanced Computing and Communication Systems (ICACCS -2017), Jan. 06 – 07, 2017, Coimbatore, IEEE ISBN No. 978-1-5090-4558-7
7.	P. Sudhakar, K. Anitha Sheela, M Satyanarayana "Optimization of Dual Wavelength Optical Radar for Measurement of Aerosols" First International Conference on Recent Innovations in Engineering and Technology (ICRIEAT-2016), ISBN:978-1-5396-2645-9
8.	C.Neha Keren, P.Sudhakar "A High-Capacity Image Data Hiding Scheme using Adaptive LSB Substitution" First International Conference on Recent Innovations in Engineering and Technology (ICRIEAT-2016), ISBN:978-1-5396-2645-9
9.	P. Sudhakar; D. Ramakrishna Rao; K. Anitha Sheela; Malladi Satyanarayana "Lidar studies on atmospheric aerosols at a semi-urban station Cheeryal (17.51° N, 78.62° E) near Hyderabad, India" *Proc.* SPIE. 9879, Lidar Remote Sensing for Environmental Monitoring XV, 98790T. (May 05, 2016) doi: 10.1117/12.2223391
10.	P. Sudhakar; D. Ramakrishna Rao; K. Anitha Sheela; Malladi Satyanarayana "Multi-wavelength dual polarisation lidar for monitoring precipitation process in the cloud seeding technique" *Proc.* SPIE. 9879, Lidar Remote Sensing for Environmental Monitoring XV, 98790I. (May 05, 2016) doi: 10.1117/12.2223043
11.	P. Sudhakar; D. Ramakrishna Rao; K. Anitha Sheela; Malladi Satyanarayana "Experimental investigations on range-resolved refractive index structure parameter C_n^2, by optical measurements over a 2.0 km free space laser path" *Proc.* SPIE. 9879, Lidar Remote Sensing for Environmental Monitoring XV, 987919. (May 05, 2016) doi: 10.1117/12.2223418
12.	P Sudhakar, P. Kalavathi, D. Ramakrishna Rao and M Satyanarayana, "Design of Laser Based Monitoring Systems for Compliance Management of Odorous and Hazardous Air Pollutants in Selected Chemical Industrial Estates at Hyderabad, India" The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-8, 2014 ISPRS Technical Commission VIII Symposium, 09 – 12 December 2014, Hyderabad, India, doi:10.5194/isprsarchives-XL-8-1467-2014.
13.	G. S. Jayeshlal, M. Satyanarayana, G. S. Motty, R. K. Dhaman, V. Krishnakumar, V. P. Mahadevan Pillai, D. Ramakrishnarao, P. Sudhakar, and P. Kalavathi "Lidar Studies on The Optical Characteristics of High Altitude Cirrus Clouds at A Low Latitiude Station,

	Gadanki (13.5 N , 79.2 E) India" The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-8, 2014 ISPRS Technical Commission VIII Symposium, 09 – 12 December 2014, Hyderabad, India, doi:10.5194/isprsarchives-XL-8-253-2014.
14.	Krishnakumar Vasudevan Nair, Malladi Satyanarayana, Reji K Dhaman, Glory Selvan Jayeshlal, Gopinathan Nair S Motty, V.P. Mahadevan Pillai, Karnam Raghunath, M. Venkat Ratnam, Duggirala Ramakrishna Rao, Sudhakar Pillodi "Lidar Investigations on the Optical and Dynamical Properties of the Cirrus Clouds in the UTLS Region at a Tropical Station Gadanki, India (13.5^{O}N, 79.2^{O}E)". J. Appl. Remote Sens. 8(1) 083659 doi: 10.1117/1.JRS.8.083659, 2014.
15.	Krishnakumar Vasudevan Nair, Malladi Satyanarayana, Reji K Dhaman, Glory Selvan Jayeshlal, Gopinathan Nair S Motty, V.P. Mahadevan Pillai, Karnam Raghunath, M. Venkat Ratnam, Duggirala Ramakrishna Rao, Sudhakar Pillodi "Lidar Investigations on the Optical and Dynamical Properties of the Cirrus Clouds in the UTLS Region at a Tropical Station Gadanki, India (13.5^{O}N, 79.2^{O}E)". J. Appl. Remote Sens. 8(1) 083659 doi: 10.1117/1.JRS.8.083659, 2014.
16.	P Sudhakar, P. Kalavathi, D. Ramakrishna Rao and M Satyanarayana "Lidar system for Application to Boundary Layer" International Journal of Systems & Technologies,Vol 6, Issue 2, pp. 21-26 January 2014.
17.	Vasudevannair Krishnakumar, Malladi Satyanarayana, Soman R. Radhakrishnan, Reji K. Dhaman, Vellara P., Mahadevan Pillai, Karnam Raghunath, Madineni Venkat Ratnam, Duggirala Ramakrishna Rao, Pillodi Sudhakar. "Investigations on the Physical and Optical Properties and their role in the nucleation of Cirrus Clouds using Lidar at Gadanki (13.5^{0}N, 79.2^{0}E)", J. Appl. Remote Sens. 5(1), 053567 (November 28, 2011). doi:10.1117/1.3662877
18.	Mahesh Votarikari, Sudhakar Pillodi, "Patient monitoring system using zig-bee and ethernet" International Journal of Reviews on Recent Electronics and Computer Science (IJRRECS), Volume-1, Issue-6 (October 2013), ISSN 2321-5461, pp. 1081-1092
19.	P. Sudhakar, P. Kalavathi and .M. Satyanarayana, "Laser Remote Sensing and Applications", Proceedings of Third National Conference on Latest Trends in Signal Processing, VLSI and Embedded Systems, Hyderabad, ISBN 978-93-83459-63-6 © 2014 Bonfring, pp. 89-92.
20.	P. Kalavathi, P. Sudhakar and D. Ramakrishna Rao, "Lidar Signal Processing – Inversion Technique for Aerosol Profiles" Proceedings of Third National Conference on Latest Trends in Signal Processing, VLSI and Embedded Systems, Hyderabad, ISBN 978-93-83459-63-6 © 2014 Bonfring pp. 93-95
21.	P Sudhakar, D. Ramakrishna Rao, P. Kalavathi, and M. Satyanarayana "Advanced Night Vision Lidar System" Pearl Jubilee International Conference on "Navigation and Communication" (NAVCOM-2012)December 20-21, 2012, Hyderabad.
22.	P Sudhakar, D. Ramakrishna Rao, P. Kalavathi, and M. Satyanarayana "Inversion solution for Lidar Data Processing" International Conference on Innovations in

	Electronics and Communication Engineering (ICIECE 2012).Gurunanak Institute of Technology, Hyderabad, July 20-21, 2012
23.	P Sudhakar, D. Ramakrishna Rao, P. Kalavathi, and M. Satyanarayana "Design and Development of compact aerosols and cloud lidar and simulations on the possible scientific studies". National Space Science Symposium, SV University, Tirupati, February 14-17, 2012
24.	P. Kalavathi, D. Ramakrishna Rao, P Sudhakar, and M. Satyanarayana "Signal Processing for Atmospheric Wind Profiling Radars" II National Conference on Emerging trends in Signal Processing and Embedded Systems, Geethanjali College of Engineering & Technology., Cheeryal (V), Keesara (M), R.R DIST February 9-10, 2012
25.	D. Ramakrishna Rao, P Sudhakar, P. Kalavathi, and M. Satyanarayana"Intricacies of data acquisition and processing systems of atmospheric radars and lidars". National Conference on Role of Radars in Atmospheric ad ionospheric studies, KL University, Vijayawada, January 4 -5, 2012
26.	P Sudhakar, S Ramamohana Rao, D Ramakrishna Rao, "Review of Fractal Image Compression Techniques" I National Conference on Emerging trends in Signal Processing and Embedded Systems, Geethanjali College of Engineering & Technology., Cheeryal (V), Keesara (M), R.R DIST.

Books/Book Chapters Published:

S. No.	Publication details
1	Sudhakar, P., Sheela, K.A., Satyanarayana, M. (2021). Optimisation of Cloud Seeding Criteria Using a Suite of Ground-Based Instruments. In: Laxminidhi, T., Singhai, J., Patri, S.R., Mani, V.V. (eds) Advances in Communications, Signal Processing, and VLSI. Lecture Notes in Electrical Engineering, vol 722. Springer, Singapore. https://doi.org/10.1007/978-981-33-4058-9_33
2	Mohan, D., Sheela, K.A., Sudhakar, P. (2021). COVID-19 Social Distancing with Speech-Enabled Online Market Place for Farmers. In: Shakya, S., Balas, V.E., Haoxiang, W., Baig, Z. (eds) Proceedings of International Conference on Sustainable Expert Systems. Lecture Notes in Networks and Systems, vol 176. Springer, Singapore. https://doi.org/10.1007/978-981-33-4355-9_38

Experience:

Teaching	18
Industry	-
Research	-
Total Experience	18