


1	Name of Faculty	Dr. A D Sarma		
2	Designation	Director R&D and Professor, Department of ECE,		
3	Nature of Job/Appointment	Contract (End Date of Contract: 30-04-2022)		
4	Date of Joining	20 – 11 - 2013		
5	E-mail	adsarma_ece@cbit.ac.in and director_randd@cbit.ac.in		
6	Education Qualifications	Name of the Degree	Class	
	Ph. D	Doctor of Philosophy (Electronic & Electrical Engg), London (U.K)	Awarded	
	PG	M.Sc (Tech)(Electronics)	First Class and 2 nd Rank	
	UG	B.Sc (MPC)	First Class	
7	Work Experience			
	Teaching	Nearly 20 years as secondary duty		
	Research	34 Years as Primary duty		
	Industry	3 Years		
	Others	N/A		
8	Area of Specialization	GPS,IRNSS, SBAS, Green Communications Antenna Analysis using GTD, Radio Wave Propagation, MW, MMW systems and Indoor propagation		
9	Professional Memberships	<ol style="list-style-type: none"> 1. Fellow of IETE, IE and IGU, Senior Member of IEEE(USA), Member of AGU(USA) and SEMCE (India) etc., 2. Member of the advisory committee, 'Centre for Space Science and Technology Education in Asia and the Pacific (Affiliated to the United Nation), A.P, June 2015 onwards. 3. Empanelled as Co-Chairperson for Interview boards by Central Govt., RAC, DRDO, 2014 onwards. 4. Chairman / Member of several prestigious committees including, DRDO, ISRO, MIT etc., 5. DRDO Lab Awards 2012 Committee, DLRL Hyderabad, Nov.2012.. 6. Member of Technical advisory Committee for implementing "TETRA Radio Trunking System for Hyderabad City Police", Directorate General of Police, Hyderabad, August 2010. 7. Member of the Advisory Committee for IETE for the period 2010-2011, IETE/HYD/ADV.com / 2010, Jan 2010 8. Member of Departmental Promotion Committee Meeting, ISRO,SAC, Bangalore, ISAC, Bangalore, November 2009 9. Advisory Committee Member of Project 'M/S Analog Devices Pvt. limited with UCE,OU, Hyd. UCE,OU, Hyd. April 2009 10. Several times Member of Expert Committee to evaluate programmes seeking NBA's accreditation AICTE, New Delhi- 11. Expert member on the selection committee for selection of ECE faculty in JNTU affiliated colleges, JNTU, Hyderabad 12. Member of Academic Advisory Committee, UGC-Academic staff college of JNTU, Hyderabad, JNTU, Hyderabad, 2006-2008 13. Executive member of the Executive Council of the Indian Geophysical Union, Hyderabad, NGRI, Hyderabad, 2005-2007 14. Member of Project Assessment and Review Committee (PARC) for project "HF to mmw antenna", DLRL, Hyderabad, DLRL Hyderabad, July 2005 		

		15. Specialist Committee for the review of dual gridded reflector antenna design for INSAT 4A transponder, SAC, Ahmedabad, Satellite Application Center, ISRO, Ahmedabad, Aug. 2002
		16. PRSG Committee for the Review of Automatic Fleet Management System Project for Delhi Transport Corporation, New Delhi, Ministry of Information Technology, New Delhi, Feb. 2002.
		17. Member of the Editorial Board for the Indian Journal of Radio and Space Physics, New Delhi, CSIR, New Delhi, Feb.2002 – 2013
10	Responsibilities held at Institution Level	Director, R&D from May 2018 to till date
11	Responsibilities held at Department Level	Focal person for an MoU between Space Applications Centre (SAC), ISRO, Ahmedabad and CBIT. Focal person for an MoU between JNTUK and CBIT
12	Research Guidance	Awarded:20 ; Submitted:0; Under guidance:6
13	Awards Received	<ol style="list-style-type: none"> 1. 'Acharya Ratna' A life time Achievement National award for the year 2019 (Indian Servers) 2. IETE Flt. Lt. Tanmaya Singh Dandass Memorial Award (2013) in recognition of outstanding contributions in atmospheric time delays for improving the positional accuracy of GPS and providing training in the area of navigational electronics. 3. A paper entitled "Outage prediction techniques for microwave digital Radio-a review", was selected by the Council of Broadcasting Engineering Society (India) for "Ms. Jayalakshmi Panchapakeshaan Award" in 1999. 4. Commonwealth scholarship by the Govt. of U.K. from 1982 – 1985. 5. National Research Council Research Associateship by the Govt. of USA Agency from 1988 – 1991
14	Courses Handled at Under Graduate / Post Graduate Level.	Global Positioning System, Global Navigation Satellite systems, Selected Topics in Strategic Electronics, Signal Intelligent System Electromagnetic Theory, Radar Systems, Transmission Lines, Antennas and Propagation
15	No. of Papers Published	National Journals – 2 International Journals – 79 National Conference – 46 International Conference – 143
16	Projects Carried out	<ol style="list-style-type: none"> 1. Principal Investigator, 'A local short term model for forecasting ionospheric scintillations for GNSS applications over Indian region', sponsored by Indian Space Research Organisation (ISRO), Dept. of Space, Bangalore under Respond program, ISRO, RESPOND, Bangalore, 11 March 2016- 10 March 2019 (3 Years). 2. Co-Coordinator, 'Multifunction Frequency and Time Domain Signal analyzer for Testing and Performance Evaluation of Cellular and Navigation Components and Systems', Sanctioned the project under MODROBS scheme by AICTE, New Delhi. One Year. 3. Principal Investigator, 'Performance Evaluation of IRNSS in the Context of Position and Velocity', RCI Hyderabad, April 2015 – Dec 2017 (2 Years 9 Months). 4. Co-principal Investigator, 'Data Processing Techniques to Improve Real Time Performance of GNSS Systems' DST, New Delhi, Dec 2012-Nov 2014 (2yrs). 5. Principal Investigator, 'Investigation of Statistical Behavior of Ionosphere over the Indian region using GNSS data for GPS Applications', ISRO HQ, Bangalore, April 2010-March 2013 (3 Yrs). 6. Principal Investigator, 'Investigation of Atmospheric Effects on Future Ground Based Augmentation for GPS Systems', DST, New Delhi, Aug.2010-July.2013(3 Yrs.) 7. Principal Investigator, 'Preliminary Modeling of Pseudolite

Based Tracking System Errors and Optimizations of its Configurations', ITR, Balasore, Feb.2010-Aug.2011(1 Yr. 6 mon)

8. Principal Investigator, 'Analysis and modeling of Indian Ionospheric Electron Content', ISRO, Bangalore, Jan. 2006 –Dec. 2008 (1 years)
9. Principal Investigator, 'A New Approach for Precision Measurement of Ionospheric Total Electron Content from Dual Frequency GPS Data', DST, New Delhi Jul.2005 – Dec 2009 (4Yrs. 9 mon)
10. Principal Investigator, 'Feasibility Study of Pseudolite Based Navigation System', DRDL, Hyderabad, Apr. 2004 – Dec. 2004 (9 months).
11. Principal Investigator, 'Coherent Radio Beacon Experiment (CRABEX) Phase – II' SPL,VSSC, Trivandrum, Apr. 2004 – Mar. 2010 (6 years)
12. Principal Investigator, 'Coherent Radio Beacon Experiment (CRABEX) Phase – I', SPL,VSSC, Trivandrum, Apr. 2003 –Mar. 2004 (1 year)
13. Principal Investigator, 'Development of Grid Based ionospheric model for Indian WAAS (GIMI)', SAC,ISRO, Ahmedabad, Mar. 2003 – Mar. 2005 (1 years)
14. Principal Investigator, 'Development of Algorithms for Conversion of WGS84 datum to National Ellipsoids (DAWN)' ECIL, Hyderabad, Oct. 2001– Apr. 2003 (1 Yr. 6 mon.)
15. Co-Principal Investigator, 'WAAS for India – A Test Bed Approach', MIT, New Delhi, Jul. 1999 –Jun. 2001 (3Yrs. 8 mon.)
16. Principal Investigator, 'Satellite Aided Mobile Communication Systems for Disaster Prone Areas', AICTE, New Delhi, Apr. 1999 – Mar. 2002(3 Yrs)
17. Principal Investigator, 'Analysis and Modeling of Ionospheric Data over India relevant to Communication and Navigation', DST, New Delhi. Jul. 1999 –Mar.2003 (3Yrs.9mon)
18. Principal Investigator, 'Development Ionospheric time delay algorithm from ground to space bound objects (IONC)', RCI, Hyderabad, Dec. 1996 – Apr. 1997 (1Yr. 4 mon.)
19. Principal Investigator, 'Prediction of Radiation pattern of Monopole antenna Mounted on perfectly conducting circular cylinder (PMAC)', ISRO, Trivandrum, Oct. 1996 – Dec. 1997 (1 Yr. 3 mon.)
20. Principal Investigator, 'Prediction of Radiation pattern of antennas Mounted on rocket shaped structure (PRAM)', RCI, Hyderabad, Apr. 1996 – July 1997(1Yr. 4 mon.)
21. Principal Investigator, 'Investigation of BER and outage probabilities of LOS links at microwave frequencies', DRDO, New Delhi, Mar. 1993 – Sep. 1994 (1 Yr. 6 mon.).
22. Principal Investigator, 'Modelling of Antennas Mounted on Transport Aircrafts (MAMTA)', DLRL, Hyderabad, Mar. 1993 –Sep. 1994 (1 Yr. 6 mon.)

17 Patents

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Several Technical Reports were produced which are widely used by the respective sponsoring / Consultancy Agencies.

18 Technology Transfer

1. A.D. Sarma, N.V. Koteswara Rao, N. Alivelu Manga and K.Lakshmana, Final Report on "A Local Short Term Model for Forecasting Ionospheric Scintillations for GNSS Applications over Indian Region", CBIT/ISRO/RESPOND/06, March 2019
2. K Lakshmana, G. Venkateswarlu, N. Alivelu Manga and

- A. D. Sarma, "A Local Scintillation Model for Short Term Forecasting", CBIT/ISRO/RESPOND/05, March 2019.
3. N. Aivelu Manga, K. Lakshmana, A.D. Sarma and N.V. Koteswara Rao, "Analysis of Correlation between ROTI and S4 using GAGAN Data", CBIT/ISRO/RESPOND/04, March 2018.
 4. A.D. Sarma, N.V. Koteswara Rao, N. Aivelu Manga, G. Venkateswarlu and K. Lakshmana, RESPOND Review Report on "A Local Short Term Model for Forecasting Ionospheric Scintillations for GNSS Applications over Indian Region", CBIT/ISRO/RESPOND/03, November 2017.
 5. K. Lakshmana, N. Aivelu Manga, A.D. Sarma and N.V. Koteswara Rao, "Acquisition, Validation and Processing of GNSS Data for Investigating Signal Characteristics", CBIT/ISRO/RESPOND/02, March 2017.
 6. A.D. Sarma, N.V. Koteswara Rao, N. Aivelu Manga and K.Lakshmana, Introduction Report on "A Local Short Term Model for Forecasting Ionospheric Scintillations for GNSS Applications over Indian Region", CBIT/ISRO/RESPOND/01, September 2016.
 7. A.D. Sarma, D. Krishna Reddy and P. Sathish, "A Final Report on Performance Evaluation of IRNSS in the context of Position and Velocity", CBIT/RCI/CARS/07, December 2017, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 8. Mohd Qurram Javeed and A.D. Sarma, "Study of the improvement of IRNSS accuracy with GAGAN Assisted IRNSS Measurements", CBIT/RCI/CARS/06, September 2017, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 9. Quddusa Sultana and A.D. Sarma, "IRNSS Satellite Visibility and DOP", code: CBIT/RCI/CARS/05, November 2016, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 10. Quddusa Sultana and A.D. Sarma, "Earth's Coverage by IRNSS satellites", code: CBIT/RCI/CARS/04, November 2016, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 11. P. Sathish, D. Krishna Reddy and A.D. Sarma, "Comparative study of IRNSS and GPS in terms of Position and Velocity", code: CBIT/RCI/CARS/03, November 2016, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 12. P. Sathish, D. Krishna Reddy and A.D. Sarma, "Assessment of Performance of the IRNSS Receiver in terms of User Position and Velocity in Dynamic Conditions", CBIT/RCI/CARS/02, March 2016, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 13. A.D. Sarma, D. Krishna Reddy, P. Sathish and Mohd Qurram Javeed, "Introduction to Performance Evaluation of IRNSS in the Context of Position and Velocity", CBIT/RCI/CARS/01, March 2016, Navigation and Communication Research Centre (NCRC), ECE Dept., CBIT, Hyderabad.
 14. D. Krishna Reddy and A.D. Sarma, "Project completion report-Data Processing techniques to Improve Real-time Performance of GNSS Systems". (File No. SR/S4/AS:89/2012, dated 25th Sep., 2012) CBIT/DST/DPTRPGNSS/4, November 2014.
 15. D. Krishna Reddy and A.D. Sarma, "Data Processing techniques to Improve Real-time performance of GNSS Systems", CBIT/DST/DPTRPGNSS/03b, September 2014.
 16. D. Krishna Reddy, V. Satya Srinivas and A.D. Sarma, "Data Processing techniques to improve Real-time

17. V. Satya Srinivas, Ayesha Tabassum and A.D.Sarma, "Investigation of Tropospheric Time Delay Effects on LAAS during Atmospheric Turbulence, NERTU/DST/Inatma/06, August 2013, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
18. A. Supraja Reddy, P.Yashasvi and A.D. Sarma, "Analysis of EEJ/EIA behavior over Indian region and its effect on GBAS performance", NERTU/DST/Inatma/05, August 2013, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
19. Quddusa Sultana, Mohd Qurram Javeed and A.D.Sarma, "Analysis of Tropospheric Effects on LAAS", NERTU/DST/Inatma/04, July 2013, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
20. G. Venkateswarlu, K. Madhu Krishna, K.C.T. Swamy and A.D.Sarma, "Probability Distribution of TEC and Space Weather Effects on TEC", NERTU/CAWSES/ADS/03/March 2013, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
21. K.C.T.Swamy, A.D.Sarma and K.Madhu Krishna, "Analysis of Ionospheric Scintillations using GPS and CRABEX Receivers data", NERTU/CAWSES/ADS/02/May 2012, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
22. Quddusa Sultana, K. Madhu Krishan and A.D. Sarma, "Investigations on Latency Effects of Differential Pseudolite Based Tracking System", NERTU/ITR/ADS/08, November 2011, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
23. A.Supraja Reddy, V.Satya Srinivas and A.D.Sarma "Carrier Smoothing Techniques and Ionospheric Threat Model for LAAS" NERTU/DST/Inatma/02,August 2011, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
24. K.C.T .Swamy, D.Venkata Ratnam, V.Satya Srinivas, A.D.Sarma, Shueb Mohammed and G.Venkateswarlu. "Nowcasting and Forecasting Ionospheric Time Delay models", NERTU/CAWSES/ADS/01,May 2011, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
25. V. Satya Srinivas and A.D Sarma, "Ionospheric Effects on Performance of GPS Augmentation Systems", Annual Technical Report, NERTU/CSIR/01, April 2011, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
26. K.J. Silva Lorraine and A.D. Sarma, "Investigation of Various Mitigation Methods for selection of suitable Technique for Near- Far problem in Pseudolite based Tracking System", NERTU/ITR/ADS/07, February 2011, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
27. C.S. Viswanadh, K. Satyanarayana and A.D. Sarma, "Time Synchronization of Pseudolites Co-located with GPS Receivers", NERTU/ITR/ADS/06, January 2011, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
28. A.D. Sarma and A. Supraja Reddy, "Introduction to Inatma project", NERTU/DST/Inatma/01, December 2010, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.

29. V.S. Srinivas, P. Naveen Kumar and A.D.Sarma, "Ionospheric Time Delay Estimation Using IRI-2007 for a Typical Missile Trajectory", NERTU/ITR/ADS/02. August 2010, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
30. Quddusa Sultana, A. Supraja Reddy and A.D. Sarma, "Analysis of Tropospheric Time Delay for Possible Application in Tracking System", NERTU/ITR/ADS /03, August 2010, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
31. K. Yedukondalu and A.D. Sarma, "Analysis of Multipath Error and its Mitigation by Spectral Techniques in Navigation Systems", NERTU/ITR/ADS/04, August 2010, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
32. Quddusa Sultana, A. Supraja Reddy and A.D. Sarma, "DOP Estimation and Optimization of Pseudolite Configuration for a Typical Missile Trajectory", NERTU/ITR/ADS/05, August 2010, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
33. A.D.Sarma, Quddusa Sultana, K. Satyanarayana, V.S. Srinivas, C.S. Viswanadh, " Introduction to Pseudolite Based Tracking System Errors and Optimization of its Configuration" NERTU/ITR/CARS/01, February 2010, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
34. A.D.Sarma, T. Madhu, D.R. Lakshmi and B.M. Reddy, "Analysis and Modeling of Indian Ionospheric Electron Content", NERTU/ISRO/CAWSES/03, November 2009, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
35. A.D.Sarma, V. Satya Srinivas, D.Venkata Ratnam, T. Madhu, D.R. Lakshmi and B.M. Reddy, "Preliminary Results and Analysis of TEC modeling", NERTU/ISRO/CAWSES/01, May 2007, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
36. Dhiraj Sunehra, D.V. Ratnam, B.V. S. Sekhar and A.D. Sarma, "Development of SCORE algorithm to improve TEC estimation", NERTU/DST/NAPTEC/ 03, December 2006, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
37. D. Venkata Ratnam and A.D. Sarma, "Comparison of TEC derived from CRABEX Receiver with GPS data", NERTU/VSSC/SPL/CRABEX/04, December 2006, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
38. Dhiraj Sunehra and A.D. Sarma, "Development of Kalman Filter to improve TEC Estimation", NERTU/DST/NAPTEC/02, August 2006, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
39. Dhiraj Sunehra and A.D. Sarma, "Introduction to NAPTECH (DST) Project", NERTU/NAPTEC/01/94, Sep. 2005, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
40. D. Venkata Ratnam, Y. Ravi Kumar, D. Krishna Reddy and A.D. Sarma, "Preliminary CRABEX Data Analysis", NERTU/VSSC/SPL/CRABEX/03/93, June 2005, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
41. A.D. Sarma, "A Comprehensive Report on Development of Grid Based Ionospheric Models and Results-GAGAN", NERTU/SAC/MIG/04/92, June 2005, Research and

Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.

42. A.D. Sarma, "Feasibility study of Pseudolite Based Navigation System", NERTU/DRDL/PBNS/02/89, Dec., 2004, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
43. A.D. Sarma, G.Sasi Bhushana Rao, Quddusa Sultana and D.Krishna Reddy, "Concepts of pseudolite based navigation system", NERTU/DRDL/PBNS/01/88, Dec., 2004, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
44. A.D. Sarma, K. Chandra Kiran, Niranjana Prasad, D.Venkata Ratnam, B.Shiva Kumar, T. Madhu, D.R. Lakshmi and B.M. Reddy, "Ionospheric data analysis for GAGAN" NERTU/SAC/MIG/3/87, Dec., 2004, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
45. A.D. Sarma, "Brief report on the development of grid based ionospheric models for GAGAN", NERTU/SAC/MIG/86, Dec., 2004, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
46. Niranjana Prasad, A.D. Sarma, T. Madhu, B. Shiva Kumar, D.Venkata Ratnam, K. Chandra Kiran, D.R. Lakshmi and B.M. Reddy, "Development of grid based ionospheric models for Indian WAAS (GAGAN)", NERTU/SAC/MIG/2/84, July 2004, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
47. D.Venkata Ratnam, B. Rama Krishna Rao, Y. Ravi Kumar, D. Krishana Reddy and A.D.Sarma, "Study of various aspects related to CRABEX receiver" NERTU/VSSC/SPL/CRABEX/02/83, June 2004, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
48. D.Venkata Ratnam, Y. Ravi Kumar, B. Rama Krishna Rao, T. Madhu and A.D. Sarma, "Preliminary Studies on CRABEX Experiment at Hyderabad", NERTU/SPL/CRABEX/01, Nov., 2003, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
49. Niranjana Prasad, A.D.Sarma, T. Madhu, B. Shiva Kumar, D.R. Lakshmi and B.M. Reddy, "Development of Grid-based Ionospheric Model for Indian WAAS", NERTU/SAC/MIG/1, Oct., 2003, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
50. A.D.Sarma, T. Madhu, N.S. Murthy Sarma, Paramita Karanjai, R. Annapurna and R.S. Dabas, "A Comprehensive Project Report on Analysis and Modelling of Ionospheric Data Over India Relevant to Communication and Navigation (AMIC)", NERTU/DST/AMIC/06, June, 2003, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
51. A.D.Sarma and Dhiraj Sunehra, "Development of Algorithms for conversion of WGS84 datum to National ellipsoids", NERTU/ECIL/DAWN/2003, May, 2003, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
52. A.D. Sarma, K. Subba Rao and M.V.S.N. Prasad "Satellite Aided Mobile Communication Systems for Disaster Prone Areas", NERTU/AICTE/SAMCSDPA/01 Dec. 2002, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
53. K. Ravindra, R. Annapurna and A.D.Sarma, "Development

- and Validation of Algorithms for GPS Datum Conversion”, NERTU/ECIL/DAWN/01, July 2002, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
54. Paramita Karanjai, T. Madhu, A.D.Sarma, B. Sudha Rani, B.M. Reddy and R.S. Dabas, “Modeling of hmF2 and foF2 using Indian Data”, NERTU/DST/AMIC/05, March 2002, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 55. B. Sudha Rani, T. Madhu, A.D.Sarma, B.M. Reddy, Paramita Karanjai and R.S. Dabas, “Development of Ionospheric Time Delay Algorithm for Indian Subcontinent”, NERTU/DST/AMIC/04, March 2002, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 56. G. Sasibhushan Rao and A.D.Sarma, “Ionospheric Grid Point Analysis due to INWAAS Reference stations”, NERTU/MIT/WAAS/07, March 2002, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 57. T. Madhu, Niranjana Prasad, A.D.Sarma, Paramitha Karanjai and K. Ravindra, “Dual frequency GPS receiver (AOA ICS-4000Z) for ionospheric delay measurements”, NERTU/MIT/WAAS/06, March 2002, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 58. Niranjana Prasad, A.D.Sarma and D.C. Reddy, “Geostationary Satellites Coverage and its Requirements for Indian WAAS”, NERTU/MIT/WAAS/05, August, 2001, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 59. G. Sasi Bhushana Rao, V. Venkata Rao, A.D.Sarma and D.C. Reddy, “Estimation of Ionospheric Correction for INWAAS”, NERTU/IT/WAAS/03, February, 2001, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 60. N.S. Murthy Sarma, T. Madhu, A.D.Sarma, V.V.B. Subrahmanyam, R.S. Dabas and B.M. Reddy, “Modification of IRI-90 model Using Indian hmf2 Data”, NERTU/DST/AMIC/03, January, 2001, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 61. G. Sasi Bhushana Rao, V. Venkata Rao and A.D. Sarma, “Ionospheric Wide Area Reference Stations for Proposed INWAAS”, NERTU/IT/WAAS/01, April, 2000, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
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 63. A.D.Sarma, V. Venkata Rao, N.S. Murthy Sarma and R.S. Dabas, “Introduction to AMIC”, NERTU/DST/AMIC/01, August, 1999, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad – 500 007.
 64. A.D. Sarma, N.S. Murthy Sarma, and Y. Yoganandam, “Ionosphere Compensation Module”, NERTU/RCI/IONC/05, June 1998, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad - 500 007.
 65. N.S. Murthy Sarma and A.D. Sarma “Three dimensional Analysis of Monopole Antenna Mounted on Circular Cylinder”, NERTU/ISRO/PMAC/03, December 1997,

- Research and Training Unit for Navigational Electronics,
Osmania University, Hyderabad - 500 007.
66. A.D. Sarma and N.S. Murthy Sarma "Final report on PMAC" NERTU/ISRO/PMAC/04, December 1997, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad - 500 007.
 67. A.D. Sarma, "Prediction of Radiation Pattern of Antennas mounted on Rocket Shaped Structure", File No: RCI/HRDG/PROJ/R4/95, October 1997, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad - 500 007.
 68. A.M. Rao, A.D. Sarma and Y. Yoganandam, "Study of Various Parameters on Ionospheric Time Delay ", NERTU/RCI/IONC/04, October 1997, Research and Training Unit For Navigational Electronics, Osmania University, Hyderabad - 500 007.
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 70. A.D. Sarma and N.S. Murthy Sarma, "User Manual for the Estimation Of Radiation Pattern Of Antennas Mounted On Rocket Shaped Structure", NERTU/RCI/PRAM/05, May 1997, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad - 500 007.
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Osmania University, Hyderabad, India.

91. A.D. Sarma, S. Srikanth, B. Balakrishna and S. Riyaz Ahmed, "Elevation Plane Analysis of On Aircraft Antennas", NERTU/MAMTA/05, September 1993, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad, India.
 92. S. Riyaz Ahmed and A.D. Sarma, "Roll Plane Analysis of On—Aircraft Antennas", NERTU/MAMTA/04, August 1993, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad, India.
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 95. S. Riyaz Ahmed, M. Chakravarti and A.D. Sarma, "Analysis of Scattering of Plane Wave by a Smooth Convex Cylinder", NERTU/DLRL/03, May 1993, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad, India.
 96. Sameer Shendre and A.D. Sarma, "Performane of 94 GHz MMW Radar in presence of Atmospheric effects", NERTU:Tech.No. 78, January 1993 Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad, India.
 97. A.D. Sarma, Madhimita Chakravarti and S. Riyaz Ahmed, "Implications of propagation effects on Satellite aided Communication Navigation and Surveillance", NERTU:Tech:74, June 1992, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad, India.
 98. A.D. Sarma, "Computer programs for acquisition and analysis of scintillation events for the Olympus propagation experiment (OPEX)", Internal Report, pp: 349, 1989, Eindhoven University of Technology, The Netherlands.
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 100. A.D. Sarma, "Various Aspects of 4-Horn Feed for a Monopulse Receiver (In MM Region)", NERTU:TECH:12, August 1986, Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad - 500 007.
1. A invited lecture on 'Marine Navigation and Communication' on 07 Dec 2020, AICTE Sponsored One-Week Short Term Training Program (Online Mode), organised by Department of ECE on "Current Trends and Emerging Advances in Marine Navigation and Communication" during 07.12.2020 to 12.12.2020.
 2. A invited lecture on 'Overview of Marine Navigation and Communication' on 23 Nov 2020, AICTE Sponsored One-Week Short Term Training Program (Online Mode), organised by Department of ECE on "Current Trends and Emerging Advances in Marine Navigation and Communication" during 23.11.2020 to 28.11.2020.
 3. A invited lecture on "Marine Navigation and Communication: Past, Present and Emerging Trends in

19 Invited Speaker

India”, on 11th Oct 2020, 47th IETE Hyderabad Centre Foundation Day and 16th Memorial Lecture of Prof. K K Nair.

4. An invited lecture on “GNSS: Past, Present and Emerging Demands”, on 25 February 2020, Five Day Short Term Training Programme on “ Recent Research Developments and Challenges in Communication and Navigation Technologies” Dept. ECE, UCE, Osmania University, Hyderabad, TS
5. An Invited lecture on “Salient Features of Research Methodologies” on 25 November 2019, STTP on 'Introduction Research Methodologies and Training Programming for Optimization Techniques, Dept.of EEE, CBIT Hyderabad (25 – 30 Nov 2019).
6. An Invited lecture on "Role of GNSS in Geosciences and Emerging Demands", 2nd FIGA Technical Congress (13-16 October 2019) at Hyderabad, 14 October 2019.
7. An Invited lecture on "Innovation, Design, Thinking and Research Problem Solving", One Day Workshop on Research Problem Solving (MHRD Program) CBIT, Hyderabad, 1 October 2019.
8. A Invited lecture on "Significance of Research in GNSS", 2-Day (Sep 8-9) Symposium on Trends in GNSS Research organized by Research and Training Unit for Navigational Electronics (NERTU), O.U., Hyderabad, 9 September 2019
9. An Invited lecture on "Code and Carrier Phase Measurements", 4-Day (Sep 5-8) Short Course on GNSS Technologies: Fundamentals and Applications organized by Research and Training Unit for Navigational Electronics (NERTU), O.U., Hyderabad, 7 September 2019.
10. A Keynote address on “Satellite Based Navigation: Current Trends and Their Relevance to Ranging Technology”, 3 Days (15-17 February 2019) International Conference on Range Technology (ICORT) organized by Integrated Test Range Defence R&D Organization Chandipur, Odisha, India.
11. An Invited lecture on “Research and Development Activities for Teachers” one-week Faculty Development Programme (26 – 30 Nov 2018), organized by In-House Training Centre CBIT Hyderabad on 27 November 2018.
12. An Invited lecture on “Research Methodologies and Research Formulation” four days Research Methodology Course (14 – 17 Nov 2018) organised by GITAM (Deemed to be University) Hyderabad.
13. A lecture on “Principles and salient features of GNSS” One week FDP on Principles of GNSS, Applications and Research Areas during 04-09 June 2018, organized by University College of Engineering (OUCE) and Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, 04 June 2018.
14. A lecture on “Research Related to GNSS” One week FDP on Principles of GNSS, Applications and Research Areas during 04-09 June 2018, organized by University College of Engineering (OUCE) and Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, 09 June 2018.
15. A lecture on “Code Phase and Carrier Phase Measurements”, One week school on GNSS Signal Processing during 04-09 December 2017, organized by Research and Training Unit for Navigational Electronics (NERTU), O.U., Hyderabad, 09 Dec 2017.
16. A lecture on “GNSS Errors, their Sources and Measurements (carrier and Code Phase) and DGPS Concepts” ,a three day short course on "GNSS

- Technologies and Its Applications(GNSS-17)", during 20-22, October 2017 organized by Research and Training Unit for Navigational Electronics (NERTU), O.U., Hyderabad, 20 Oct 2017
- 20 No. of Books/Chapter Published with details
1. A.D. Sarma and M.H.A.J. Herben, "Data Acquisition and Signal Processing/Analysis of Scintillation Events for the Olympus", Propagation Experiment, EUT Report 89-E-232. ISBN 90-6144-232-X, December 1989.

STTP / FDP / Seminars / Workshops Organized

- 21 Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (Attended and/or Organized).
1. Advisor for Research Day on 23 August 2019 organized by R&E Hub, CBIT
 2. Technical Advisor for One week FDP on Principles of GNSS, Applications and Research Areas during 04-09 June 2018, organized by University College of Engineering (OUCE) and Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, 04 June 2018.

STTP / FDP / Seminars / Workshops Attended

1. Attended, a National Webinar on "Intellectual Property Rights (IPR) for Startups, Academicians and Research Scholars" on 15 & 16 July 2020 organized by Engineering Staff College of India.
2. Attended, a National Webinar on "Unlocking Manufacturing Potential for Micro, Small and Medium Enterprises" on 16 June 2020 organized by ni-msme, Hyderabad.

- 22 Details of Journal Publications/ Conferences (National and International)

International Journals from the year 2017

1. Neelakantham Alivelu Manga, Kuruva Lakshmana, Achanta D. Sarma, and Tarun K. Pant, 'Analysis of Correlation between ROTI and S4 Using GAGAN Data', Progress In Electromagnetics Research M, Volume 99, PP. 23-34, 2021.
2. Q.J. Mohd, D.S. Achanta, V.K.R. Nalam., T.K. Pant., 'Comparison of TEC estimation techniques using S1 and L5 signals of IRNSS', Radioelectronics and Communications Systems, Vol 61 No. 7, pp. 306-316, July 2018, ISSN 1934-8061 (Online), ISSN 0735-2727 (Print). doi: <https://doi.org/10.3103/S0735272718070038>
3. G. Venkateswarlu and A. D. Sarma "A New Technique Based On Grey Model For Forecasting Of Ionospheric GPS Signal Delay Using GAGAN Data" Progress in Electromagnetics Research M (PIERM), Vol. 59, page 33-43, 2017, ISSN: 1937-8726, doi:10.2528/PIERM17041403.

International /National Conferences / Symposiums from the year 2017

1. A.D. Sarma, K. Lakshmana and T. Sridher, 'A Simple Model for Forecasting Confirmed COVID-19 Cases in a Given System', International Conference on Emerging Trends in Circuit-branch Technologies and Applications (ETCTA-2021) 03-04 April 2021
2. Sree Naresh Krishna Chama, Satyanarayana Katukojwala, Supraja Reddy Ammana, Shivank Agarwal, Varun Kumar Reddy and A.D.Sarma "Design and Development of NavIC and GPS based Geolocation System for CO2 Monitoring", International Conference on Innovative Practices in Technology and Management.. 17-19 Feb 2021, Amity University, Noida.
3. Komal Kumar S, Supraja Reddy A, Harichandana R., and A.D.Sarma "Simplistic Spoofing of GPS Enabled Smart Phone" 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 26-27 December, 2020, Bhubaneswar, India.
4. T. Sridher, A.D.Sarma, P.Naveen Kumar and K.Lakshmana, "Results of Indoor Localization using the Optimum Pathloss Model at 2.4 GHz", URSI GASS 2020, Rome, Italy, 29 August-5 September 2020.
5. Challa, N.S.R., Kesari, P., Ammana, S.R., Katukojwala, S., Achanta, D.S. Design and implementation of bluetooth-beacon based indoor positioning system, 2019 5th IEEE International WIE Conference on Electrical and Computer Engineering, WIECON-ECE 2019 – Proceedings 9019997
6. P. Naveen Kumar, R. P. Naraiiah, KSRS. Jyothsna, T. S. N. Murthy and A. D. Sarma, "Preliminary Performance Analysis of IRNSS in Sea Environment", 20th International Beacon Satellite Symposium at

the University of Mazury in Olsztyn, Poland, 19-23 August 2019.

7. K Lakshmana, N. Alivelu Manga and A.D. Sarma, "Forecasting of Ionospheric Scintillations by using Statistical Models" National Space Science Symposium (NSSS), Pune, 29-31 Jan, 2019.
8. K Lakshmana, N. Alivelu Manga and A.D. Sarma, 'Analysis of Ionospheric Delay Effects on IRNSS-GPS Receiver Coordinates', IEEE Indian Conference on Antennas and Propagation (InCAP) Dec 2018.
9. Mohd Qurram Javeed, A.D. Sarma and A. Supraja Reddy, 'Suitability of Ionospheric Coefficients for IRNSS Single Frequency Receivers', IEEE Indian Conference on Antennas and Propagation (InCAP) Dec 2018.
10. T.Sridher, A.D.Sarma, N V koteswara Rao, P.Naveen Kumar and Tarun Kumar Pant have presented a paper on 'Investigation of IRNSS Signals: Preliminary Results', IC4, College of Engineering, Kerala, 5-7 July 2018.
11. Ginkala Venkateswarlu and A D Sarma, 'Analysis of PDFs of Ionospheric Scintillation Index Data due to Low Latitude Station' IEEE ICITE 2018, Osmania University, Hyderabad 11-13 Apr. 2018. (Best Paper Award)
12. Kavitha Devireddy, Naveen Kumar P and A.D. Sarma "Performance Evaluation of IRI-2016 Model Using IRNSS Data over a Low Latitude Station: Preliminary Results" IEEE ICITE 2018, Osmania University, Hyderabad 11-13 Apr. 2018
13. Mohd Qurram Javeed, A.D. Sarma, A. Supraja Reddy, T. Sridher, N.V. Koteswara Rao and Tarun Kumar Pant, 'Multipath and Thermal noise free Relative TEC Estimation using IRNSS L5 and S1 Signals' IEEE ICITE 2018, Osmania University, Hyderabad 11-13 Apr. 2018. (Best Paper Award)
14. Manga N.A., Lakshmana, K., Sarma A.D., Koteswara Rao, N.V. and Pant T.K., "Effect of Amplitude Scintillations on the Tracking Error of IRNSS Receiver for Indoor Navigation Applications" Women In Engineering Conference (WIECON-2017), Women Institute of Technology, Dehradun, 18-19 Dec 2017.
15. Uttama G., Sarma A.D., Javeed, M.Q. and Koteswara Rao N.V., "Selective Suppression of IRNSS S-band Signals for Specific Applications", Women In Engineering Conference (WIECON-2017), Women Institute of Technology, Dehradun, 18-19 Dec 2017 doi: 10.1109/WIECON-ECE.2017.8468869.
16. G. Venkateswarlu and A.D. Sarma, " Performance of Holt-Winter and Exponential Smoothing Methods for Forecasting Ionospheric TEC using IRNSS Data" 2nd IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), 22-24 Feb 2017.