

# Curriculum Vitae

## PERSONAL DETAILS

Name in full: **SOUMYABRATA CHAKRABARTY**  
Nationality: Indian  
Date of Birth: 3<sup>rd</sup> January, 1966  
Marital Status: Married  
Present Post: Scientist/Engineer 'G', Antenna Systems Area  
Space Applications Centre, Ahmedabad  
**Professor of Practice (on deputation from SAC, ISRO, Ahmedabad)**  
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## EDUCATION

1993-1995 Ph.D. degree in Engineering  
Indian Institute of Technology, Kharagpur, India  
1991-1992 M. E. in Electronics & Tele-Communication  
Engineering (Microwave Engineering  
specialization), Jadavpur University, Kolkata, India  
1983-1988 B. E. (Hons.) in Electronics and Telecommunication  
Engineering, National Institute of Technology  
(Previously Regional Engineering College affiliated  
to Gauhati University), Silchar, Dist.: Cachar  
Assam

## AWARDS/RECOGNITION

- **ISRO Team Excellence award** for the successful development of Scatterometer Payload of Oceansat-II.
- **ISRO Team Excellence award** for the successful development of Radar Imaging Satellite
- **INSA visiting fellowship** in the year 1996 to carry out research work in the Department of E and ECE, IIT Kharagpur deputed from NIT, Silchar.
- Short-listed and invited to present research work before the INSA selection committee for **INSA Young Scientist Medal 1997.**

## PROFESSIONAL EMPLOYMENT

July 2024-Till date Professor of Practice, Department of Space, Planetary &  
Astronomical Sciences & Engineering (SPASE), Indian  
Institute of Technology, Kanpur.

July 2021-June 2024	Visiting Professor, Department of Electrical Engineering, IIT Gandhinagar
June 2017- Till date	Scientist/Engineer G, MSAD/ASG/SAC, Space Applications Center (ISRO), Ahmedabad, India
July 2011- June 2017	Scientist/Engineer SG, MSAD/ASG/SAC, Space Applications Center (ISRO), Ahmedabad, India
July 2006 – June 2011	Scientist/Engineer SF, MSAD/ASG/SAC, Space Applications Center (ISRO), Ahmedabad, India
July 2002-June 2006	Scientist/Engineer SE, MSAD/ASG/SAC, Space Applications Center (ISRO), Ahmedabad, India
July 1998-June 2002	Scientist/Engineer SD, MSAD/SAFG/SAC, Space Applications Center (ISRO), Ahmedabad, India
June 1999-February 2000	Deputed from ISRO as Guest Scientist to the Institute of High Frequency, German Aerospace Centre(DLR), Oberpfaffenhofen, Germany for Research and Development in the field of broadband microstrip patch antenna
September 1996- June 1998	Scientist/Engineer SC, MSAD/MSG/SAC, Space Applications Centre(ISRO), Ahmedabad, India
October 1995-August 1996	Lecturer in Electronics and Telecommunication, NIT, Silchar, Assam (Previously REC)
March 1993-September 1995	CSIR Senior Research Fellow, Department of E and ECE, IIT, Kharagpur
August 1988 – June 1991	Lecturer in Electronics and Telecommunication, Government Polytechnic, Silchar, Assam

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### **RESEARCH AND DEVELOPMENT EXPERIENCE**

- i. Space plasma and its interactions with Spacecraft
- ii. Computational Electromagnetics using integral equation method
- iii. Antenna design and development for microwave active and passive sensors, Radio Telescope and Wireless Communication

### **Teaching Experience:**

#### **At under-graduate level**

(i) Space Science and Satellite Technology (ii) Antenna Engineering (iii) Probability and Statistics (iv) Electromagnetics (v) Solid State Devices (vi) Analog/Digital Communication (vii) Network Theory (viii) Control system-I

#### **At postgraduate level**

(i) Analytical methods in Electromagnetics (ii) Satellite Communication (iii) Advanced Microwave Engineering (iv) Wireless Digital Communication.

### **ACADEMIC PROJECT/RESEARCH GUIDANCE**

#### **B. Tech Level**

Guided students from various Engineering Colleges for their B. Tech projects on Antennas, Microwaves and Communication Systems and Computational Electromagnetics under ISRO training programme and internship programme of IIT Gandhinagar for last 28 years.

### **M Tech Level**

Guided students from various Engineering Colleges for their M. Tech projects on Antennas, Microwaves and Computational Electromagnetics under ISRO training programme and Interdependent projects of IIT Gandhinagar for last 28 years.

### **Ph. D Level (3 completed, 1 ongoing)**

I supervised my colleagues Dr. Ranajit Dey at MSAD/ASG/SAC, Ahmedabad registered in IIST, Trivandrun for his Ph.D in the field of conjugate matched feeds for offset parabolic reflector antennas. As external registered guide in Dharmsinh Desai University, Nadiad, I guided two faculty members Dr. Prarthan Mehta and Dr. Rizwan Alad for their Ph. D. in the field of Spacecraft charging analysis. One of my colleagues in SAC, Mr P N V Anil Kumar has taken admission in IIT Mumbai, for Ph. D. with myself as internal supervisor, he is working on superconductor based mixer for sub-millimeter wave frequency bands.

### **Laboratory development**

I was actively involved in the laboratory development for Communication system in NIT Silchar during my service tenure there.

In ISRO, I contributed in the development of laboratory for Computer Aided Design, development and testing of antennas and passive microwave components as well as millimeter wave antenna laboratory and I was involved in the establishment of planar near field measurement facility and upgradation of compact antenna test ranges upto 200 GHz and in the development of on-going THz antenna laboratory. In, IITGN, I established a teaching laboratory for RF and Microwave Engineering experiments and proposed a laboratory for research and development in the field of antenna, RF and Microwave components design, development and testing.

### **Other academic experience**

Worked as a member of the board of studies for dual degree programme in the area of RF and Microwave Engineering in IIST, Trivandrum and in the Department of Electronics and Telecommunication, Nirma University and Dharmsinh Desai University. I had also served as Doctoral Committee member in IIST, Trivandrum and Ph. D. thesis examiners of IIT Kharagpur and IIT Guwahati, DAICT, Gandhinagar. I have delivered special lectures in Antennas and Microwave Engineering and computational methods in various colleges and Universities being deputed from SAC, ISRO. In SAC/ISRO, I delivered lectures on Antennas for ISRO Induction Training Programme. I am also in the panel of faculty members of Centre for Space Science and Technology Education (CSSTEAP).

I am regular reviewer of the technical papers of IEEE transaction on Antennas and propagation, IET Journal on Microwaves, Antenna and Propagation, Science, Measurement and Technology, Journal of Electrostatics, International Journal of RF and Microwave Computer Aided Engineering, the

International Journal for Computation and Mathematics in Electrical and Electronic Engineering, IETE Journal, Indian Journal of Radio and space Physics. I was a member of the Editorial Board of Journal of Radio and Space Physics.

### **Administrative Experience**

Being a senior Scientist/Engineer as well as Head, Microwave Sensors Antenna Division, I was involved in the project management, procurement of various equipment, upgradation of computational facilities, maintenance of computers, planning of budgets for different projects. I worked as joint secretary in International Conference on Antennas (ICAT-2005), 2005, Organizing committee member in IMARC2017 and Chair, Technical Programme Committee in InCAP-2019, Technical Program committee in IEEE MAPCON-2022, IEEE ANTS-2022.

### **REFERENCES:**

1. **Prof Ranganath Navalgund**, former Director, Space Applications Centre, ISRO, Ahmedabad, [navalrr@gmail.com](mailto:navalrr@gmail.com)
2. **Prof. A S Kiran Kumar**, former Chairman, ISRO, member, space commission, **email ID** [kiran@isro.gov.in](mailto:kiran@isro.gov.in)

### **PUBLICATIONS**

#### ***A. Publications in Referred Journals***

1. Mevada P.; Gupta S.; Chakrabarty S. B.; Mahajan M. B., “Design of Beam Steerable Aperiodic Linear Array Antenna with Improved Peak SLL Using Strip-Projection Method”, in IEEE Transactions on Antennas and Propagation, doi: 10.1109/TAP.2022.3146865. (2022).
2. Kumar G.; Mevada P.; Chakrabarty S. B., Mahajan M. B "Ultra Wide Band (UWB) Cage Dipole Antenna for UHF Band Ground Penetrating Radar (GPR) System" published online: 15 March 2022 <https://doi.org/10.1002/mmce.23139> in International Journal of RF and Microwave Computer-Aided Engineering
3. Kumar G.; Ghosh B., Chakrabarty S. B., Mahajan M. B., “Gain and Bandwidth Enhancement Using NZRI – Metasurface”, Published online: 11 Apr 2022 in IETE Journal of Research.
4. Dey R., Chakrabarty S.B., Mahajan M.B., “A novel twin conjugate matched feed for dual-beam offset reflector antennas” Electromagnetics, Volume 41, Year 2021, Pages 142-153, DOI:10.1080/02726343.2021.1879361
5. Singh V.K.; Tyagi Y.; Mevada P.; Chakrabarty S.B.; Mahajan M.B., “6-meter beam waveguide antenna for ground based terahertz telescope”, Progress in Electromagnetics Research Letters, Volume 100, Year 2021, Pages 35-43 DOI:10.2528/PIERL21052601
6. Mevada P.; Gupta S.; Chakrabarty S. B.; Mahajan M. B.,”A novel approach for design of beam steerable aperiodic planar array antenna with reduced number of elements”, Journal of Electromagnetic Waves and Applications, Published online: 01 Oct 2021.
7. Pandey B.K., Mevada P., Chakrabarty S.B., Mahajan M.B, “Dual Band Dual Linear Polarized Equal Cross Track Beam Microstrip Antenna for Airborne SAR” IETE Journal of Research, March 2021, DOI:10.1080/03772063.2021.1900751

8. Gaurav Kumar, Pratik Mevada, Soumyabrata Chakrabarty, Milind B. Mahajan, "Ultra Wide Band (UWB) cage Dipole Antenna for UHF Band Ground Penetrating Radar (GPR) System" Under review in International Journal of RF and Microwave, Computer aided Engineering (2021).
9. B. K. Pandey, S. B. Chakrabarty & Rajeev Jyoti, "Common Aperture Dual-Band Dual-Polarized Planar Microstrip Antenna", IETE Journal Of Research 2018, VOL. 64, NO. 4, 489–496
10. Rizwan H. Alad, Haely Shah, Soumyabrata Chakrabarty, and Dhairya Shah, "Effect of Solar Illumination on ESD for Structure Used in Spacecraft", Progress In Electromagnetics Research , Vol. 55, 25–36, 2017
11. Rizwan H. Alad and Soumyabrata Chakrabarty, Computation of Capacitance Matrix of Orbiting Space-craft Bodies, IETE Journal of Research, vol. 63 no. 1 pp. 3–10, January 2017.
12. Yogesh Tyagi, P Mevada, S. Chakrabarty, Rajeev Jyoti, "High efficiency Broadband Slotted Waveguide Array Antenna," IET, Microwave, Antenna and Propagation, Vo.11, Issue 10, pp. 1401-1408, 2017.
13. P Mehta and S B Chakrabarty, "A Fast Method for the Computation of the Capacitance of the Geometrically Symmetric Dielectric Coated Metallic Bodies Isolated in the Free Space", IETE Journal of Education, 2016
14. Yogesh Tyagi, V K Singh, S. Chakrabarty, Rajeev Jyoti, "Improvement in Side-lobe Performance of Prime Focal Reflector Antenna," Microwave and Optical Technology Letters, Vo. 58, No. 6, June 2016 pp. 1304-1311.
15. R. Dey, S. B. Chakrabarty, Rajeev Jyoti and Thomas Kurian, "Synthesis and Analysis of Multimode Profile Horn using Mode Matching and Evolutionary Algorithm", IET Microwave Antennas and Propagation, Vol. 10, issue 3, 2016, pp 276-282.
16. R. Dey, S. B. Chakrabarty, Rajeev Jyoti, "Analysis and Application of Triple Post Discontinuity in Circular Waveguide", Electromagnetics (Taylor and Francis), Vol 36, No. 2, 2016, pp 67-77.
17. R Dey, S. B. Chakrabarty, Rajeev Jyoti and Thomas Kurian, "Higher Order Mode Analysis of Dual Post Discontinuity in a Circular Waveguide", IETE Journal of Research (Taylor and Francis), Vol 62, issue 1, 2016, pp.55-62.
18. Rizwan H. Alad and Soumyabrata Chakrabarty, "Electrostatic Analysis of an Artificial Orbiting Satellite for Absolute Charging", IEEE Transactions on Plasma Science., VOL. 43, NO. 9, September 2015, pp 2887-2893
19. R. Dey, S. B. Chakrabarty, Rajeev Jyoti, " Broadband Conjugate Matched Feed Horn- A Novel Concept", IEEE Antennas and wireless propagation letters, vol 15, 2015 pp496-499.
20. Rizwan H. Alad and S. B. Chakrabarty, Evaluation of Capacitance Matrix of Artificial Orbiting Satellites, Indian Journal of Radio & Space Physics, vol. 44, no. 4, pp. 199–204, December 2015.
21. Devendra Kumar Sharma, Sanjeev Kulshrestha, S.B. Chakrabarty and Rajeev Jyoti, "Shared Aperture Dual Band Dual Polarization(DBDP) Microstrip Patch Antenna", Microwave and Optical Technology Letters, USA, Vol 55, No.4, April 2013, pp 917-922 .
22. Prarthan Mehta and S. B. Chakrabarty, "Evaluation of Capacitance of Dielectric Coated Metallic Parabolic and Spherical Bowls", Electromagnetics, Vol. 33, No. 6, 2013, pp437-451
23. Devendra Kumar Sharma, B.K.Pandey, Sanjeev Kulshrestha, S.B. Chakrabarty and Rajeev Jyoti, "Design of Wideband Microstrip Antenna Array at L-Band for SAR Applications", Microwave and Optical Technology Letters, USA, Vol 55, No.4, April 2013, pp 903-908 .

24. R Dey, S B Chakrabarty, Rajeev Jyoti, "Analysis of a Coaxial Probe-fed Circular Waveguide" , Microwave and Optical Technology Letters, Vo. 55, No. 11, November 2013, pp. 2652-2655.
25. Rizwan. H. Alad and S. B. Chakrabarty, Electrostatic Modelling of Coupled bodies in the shape of a funnel, Electromagnetics, Taylor & Francis Group, vol. 33, no. 3, pp. 201-220, March 2013. DOI: 10.1080/02726343.2013.769403.
26. Rizwan. H. Alad and S. B. Chakrabarty, Capacitance and Surface Charge Distribution Computations for a Satellite Modeled as a Rectangular Cuboid and Two Plates, Journal of Electrostatics, ELSEVIER publications, vol. 71, no. 6, pp. 1005-1010, October 2013. DOI: 10.1016/j.elstat.2013.09.006.
27. PD Mehta, SB Chakrabarty, 'Electrical capacitance of dielectric coated metallic parallelepiped and closed cylinder isolated in free space', Journal of Electrostatics, Vol. 71, No 4, 2013, pp 756-762.
28. Prarthan Mehta and S. B. Chakrabarty," Method Analysis for Capacitance and Charge Distribution of Dielectric Coated Metallic Disk and Closed Truncated Cone Isolated in Free Space", International Journal of Numerical Modeling: Electronic Network, Devices & Fields, Vol. 26, No. 2, 2012, pp 127-139
29. PD Mehta, SB Chakrabarty, 'Moment method analysis of charge distribution & capacitance for the dielectric coated tilted plates isolated in free space, Journal of Electrostatics, Vol 70 No. 3, 2012, pp 241-248.
30. Dhaval Pujara and S B Chakrabarty, "Cancellation of High Cross-polarization of an Offset Parabolic Reflector Antenna Using a Rectangular Matched Feed", IETE Journal of Research, vol. 58, issue 4, July-Aug 2012, pp 317-321.
31. Rizwan. H. Alad and S. B. Chakrabarty, Investigation of Different Basis and Testing Functions in Method of Moments for Electrostatic Problems, Progress In Electromagnetics Research B, vol. 44, pp. 31-52, September 2012. DOI:10.2528/PIERB12070603.
32. Rizwan H. Alad, S. B. Chakrabarty, Karl E. Lonngren, Electromagnetic Modelling of Metallic Elliptical Plates, Journal of Electromagnetic Analysis and Applications, vol. 4, no. 11, pp. 468-473, November 2012. DOI:10.4236/jemaa.2012.411065.
33. Sanjeev Kulshrestha, Deven J. Chheda, S.B. Chakrabarty, Rajeev Jyoti, S.B. Sharma, "Pole discontinuity removal using artificial neural networks for microstrip antenna design" International Journal of Electronics, Vol. 98, No. 12, December 2011, 1711–1720.
34. Dhaval Pujara, S. B. Sharma and S. B. Chakrabarty, "Historical and Planned Uses of Antenna Technology for Space-Borne Microwave Radiometers," IEEE Antennas and Propagation Magazine, Vol. 53, No.3, June 2011, pp 95-114.
35. D. Mehta Prathan, S B Chakrabarty, "Capacitance of Metallic Plates forming a corner" Journal of Applied Science, Published online ISSN 1812-5654/DOI:10.3923/Jas 2011, January 2011.
36. Prathan D. Mehta, S B Chakrabarty, "Capacitance of Dielectric Coated Metallic Bodies Isolated in Free Space" Electromagnetics (Taylor and Francis), Vol. 31, No. 4 pp. 294–314, 2011.
37. S. B. Sharma, Dhaval Pujara, S. B. Chakrabarty, Ranajit Dey, and V. K. Singh, "Design and Development of a Conjugate Matched Feed for an Offset Parabolic Reflector Antenna," IET Microwaves, Antennas & Propagation, IET Microw. Antennas Propag., vol. 4, pp. 1782–1788, Nov. 2010.
38. S. B. Chakrabarty, V. K. Singh, S. B. Sharma, "Dual frequency coaxial rotary joint with multi-stepped transition", International Journal of Microwave and Wireless Technologies, 2010, 2(2), 219–224.
39. S. B. Chakrabarty, V. K. Singh, S. B. Sharma, "TM<sub>01</sub> Mode Transducer Using Circular and Rectangular Waveguides", International Journal of RF and Microwave Computer-Aided Engineering Vol., 20, issue 3, February 2010, pp 259 – 263.

40. S. B. Sharma, Dhaval Pujara, and S. B. Chakrabarty, "Design and Development of a Dual-mode Corrugated Horn for an Offset Reflector Antenna," *Microwave and Optical Technology Letters*, vol. 52, No.1, pp. 113-116, January 2010.
41. V. K. Singh, S B Chakrabarty, S B Sharma, "Design of Tri-frequency Mode Transducer", *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, Vol. 8, No. 2, December 2009, pp 78-86.
42. S. B Sharma, V K Singh, Ranajit Dey, S B Chakrabarty, "Analysis of post discontinuity in an oversized circular waveguide", *IEEE Transaction on Microwave Theory and Techniques*, vol. 57, No.8, pp. 1989-1995 August 2009.
43. S B Chakrabarty, S B Sharma, B N Das, "Higher-order Modes in Circular Eccentric Waveguides", *Electromagnetics (Taylor and Francis)*, Vol. 29, No.5, May 2009, pp 377-383.
44. S. B. Sharma, Dhaval Pujara, S. B. Chakrabarty, and V. K. Singh, "Improving the Cross-polar Performance of an Offset Parabolic Reflector Antenna using a Rectangular Matched Feed," *IEEE Antennas and Wireless Propagation Letters*, vol. 8, pp. 513-516, 2009.
45. S. B. Sharma, Dhaval Pujara, S. B. Chakrabarty, and Ranajit Dey, "Cross-Polarization Cancellation in Offset Parabolic Reflector Antenna using a Corrugated Matched Feed," *IEEE Antennas and Wireless Propagation Letters*, vol. 8, pp. 861-864, 2009.
46. S. B. Sharma, Dhaval Pujara, S. B. Chakrabarty, and V. K. Singh, "Removal of Beam Squinting Effects in a Circularly Polarized Offset Reflector Antenna using a Matched Feed," *Progress In Electromagnetic Research Letters*, vol. 7, pp. 105-114, 2009.
47. Dhaval Pujara, S. B. Sharma, and S. B. Chakrabarty, "Improving the Beam Efficiency of an Offset Parabolic Reflector Antenna for Spaceborne Radiometric Applications," *Progress In Electromagnetic Research (PIER-C)*, vol. 10, pp. 143-150, 2009.
48. S B Sharma, S C Bera, S B Chakrabarty, "Active Antenna for Improved Efficiency and Reduced Harmonic Radiation," *International Journal of Electronics*, Vol. 95, No. 2, February 2008, 85-98
49. S.B Sharma, S. Kulshrestha, B.K Pandey, D.K Sharma, R. Jyoti, and S.B Chakrabarty "Shaped Beam Printed Antenna with Waveguide Power Divider for Synthetic Aperture Radar Applications", *Microwave and Optical Technological Letters*, Vol-49, No.4, pp.835-838, 2007.
50. B K Pandey, A K Pandey, S B Chakrabarty, S Kulshrestha, A L Solanki and S B Sharma, "Dual Frequency Single Aperture Microstrip Patch Antenna Element for SAR Applications" *IETE Technical Review*, vol 23, No. 6, Nov-Dec 2006, pp 357-366.
51. S. B. Sharma, V. K. Singh, S B Chakrabarty "Multi-frequency Waveguide Orthomode Transducer," *IEEE Transactions on Microwave Theory and Techniques (MTT)*, Vol. 53, No. 8, August 2005, pp. 2604-2609.
52. S. B. Sharma, V. K. Singh, S B Chakrabarty "Multi-frequency Waveguide Orthomode Transducer," *IEEE Transactions on Microwave Theory and Techniques (MTT)*, Vol. 53, No. 8, August 2005, pp. 2604-2609.
53. Anil Kumar Pandey, Kartik Adinarayanan, S.B. Chakrabarty, Arun Kumar & S.B. Sharma, "Higher Order Mode Analysis of Circular Coaxial Waveguides Using Finite Difference" *Indian Journal of Radio & Space Physics*, Vol-35, Aug-2005, pp: 285-288
54. B. N. Das, Arun Gayan, S. B. Chakrabarty, "Analysis of coupling using a transverse slot in the common broadwall between two waveguides" *Electromagnetics (UK)*, vol. 24, No.3, pp. 153-166, April 2004.
55. S. B. Sharma, V. K. Singh, S. B. Chakrabarty, "Parabolic Dish Antenna With Offset-elliptical Multimode feeds for Space-borne remote sensing applications" *Microwave and Optical Technology Letters (USA)*, Vol. 39, No. 2, 20th October 2003, pp. 138-141.

56. S B Chakrabarty and S B Sharma, "Wideband Linear Antenna in C-band for beam-pointing for SAR Applications," *Indian Journal of Radio and Space Physics*, Vol 31, June 2002, pp159-161.
57. S. B. Chakrabarty, F. Klefenz, A. Dreher, S. B. Sharma and A. Schroth, "Dual Polarised Stacked SSFIP Array Antenna in C-band for Beam Pointing", *International Journal of Electronics*, Vol. 90, No. 8, August 2003 pp. 533-541
58. S. B. Sharma, S. B. Chakrabarty, V. K. Singh, "Moment Method Analysis of a Slot Coupled Circular Waveguide Orthomode Transducer", *Microwave and Optical Technology Letters (USA)*, vol. 34, No. 4, August 22, 2002.
59. S B Chakrabarty, Mohit Khanna, S B Sharma, "Wideband Planar Array Antenna in C-band for Synthetic Aperture Radar Applications", *Microwave and Optical Technology Letters (USA)*, Vol. 33, No. 1, April 5, 2002.
60. S. B. Chakrabarty, S. Das, B. N. Das, "Capacitance of Dielectric Coated Cylinder of Finite Axial Length and Truncated Cone Isolated in Free Space", *IEEE Trans. on Electromagnetic Compatibility (USA)*, vol. 44, No.2, May 2002, pp 394-398.
61. S. B. Sharma, S. B. Chakrabarty, V. K. Singh, "Moment Method Analysis of a Slot Coupled Circular Waveguide Orthomode Transducer", *Microwave and Optical Technology Letters (USA)*, vol. 34, No. 4, August 2002.
62. S. B. Sharma, S. B. Chakrabarty, "S-matrix of a slot coupled circular to rectangular waveguide", *International Journal of Electronics*, vol. 87, No. 5, May 2000, pp. 591-603
63. S. B. Sharma, S. B. Chakrabarty, B. N Das, "Analysis of a slot coupled T-junction between circular to rectangular waveguide," *IEEE Trans. on Microwave Theory and Tech.*, vol. 46, No. 8, pp. 1173-1176, August 1998.
64. B. N. Das, S. B. Chakrabarty, "Rigorous analysis of the effect of dielectric coating on metallic bodies isolated in free space", *PINSA-A*, vol. 64, No.2, 1998, pp. 137-148.
65. B. N. Das, S. B. Chakrabarty, "Capacitance of Metallic Structures in the form of paraboloidal and spherical reflectors", *IEEE Trans. on Electromagnetic compatibility*, vol. EMC-39, No.4, November 1997, pp 390-393.
66. B. N. Das, S. B. Chakrabarty, "Calculation of Electrical Capacitance of a Truncated Cone", *IEEE Trans. on Electromagnetic compatibility*, vol. EMC-39, No.4, November 1997, pp. 371-374.
67. B. N. Das, S. B. Chakrabarty,, "Capacitance and Charge Distribution of Two Cylindrical Conductors of Finite Length", *IEE Proceedings-Science, Measurement and Technology*, vol. 144, No.6, November 1997, pp. 280-286.
68. S. B. Chakrabarty, B.N. Das, S. Das , R. Bhattacharjee, "Evaluation of characteristic impedance of a twin-wire transmission line insulated by multilayer dielectric" *International Journal of Electronics*, vol. 83, No. 5, 1997, pp. 615-622.
69. B. N. Das, S. B. Chakrabarty, "Evaluation of capacitance and charge distribution of cylinder of finite length with top and bottom cover plates", *Indian Journal of Radio and Space Physics*, vol.26, April 1997, pp. 112-115.
70. B. N. Das, S. B. Chakrabarty, S. Das, "Cut-off frequencies of transmission line consisting of parallel cylinders" *IEEE Transactions on Microwave Theory and Techniques*, vol. 44, No. 11, November 1996, pp. 2110-2112.
71. B. N. Das, S. B. Chakrabarty, "Electromagnetic Analysis of eccentric co-axial cylinders of finite length", *Journal of IETE*, vol. 42, No. 2, March-April 1996, pp. 63-68.
72. B. N. Das, S. B. Chakrabarty, Comments on 'Capacitance calculation for cable harness using the method of moments', *IEEE Transaction on EMC*, vol. 38, No.1, February 1996.



73. B. N. Das, S. B. Chakrabarty, "Analysis of a Pair of Dielectric coated Cylinders above a dielectric substrate", IEE Proceedings, Microwaves, Antennas and Propagation, vol. 143, No.1, February 1996, pp. 67-72.
74. B. N. Das, S. B. Chakrabarty, "Evaluation of cut-off frequencies of Higher-order modes in Eccentric Co-axial line" IEE Proceedings, Microwaves, Antennas, propagation, vol. 142, No. 4. August 1995, pp. 350-356.
75. B. N. Das, S. B. Chakrabarty, A. K. Mallick, "Electromagnetic Analysis of Transmission Line of parallel cylinders in the Presence of Dielectric Coating", IEE Proceedings on Science, Measurement and Technology, vol. 142, No. 4, July 1995, pp. 288-292.
76. B. N. Das, S. B. Chakrabarty, A. K. Mallick, "Cutoff Frequencies of Guiding structures with Circular and Planar Boundaries" IEEE Microwave and Guided Wave Letters, Vol. No. 6, June 1995, pp. 186-188.
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79. B. N. Das, S. B. Chakrabarty, K. S. Rama Rao, "Effect of Dielectric support on the inner conductor of eccentric line," IEEE Trans. on Electromagnetic compatibility, vol. EMC-37, No.1, February 1995, pp 71-74.
80. B. N. Das, S. B. Chakrabarty, K. S. Rama Rao, "Capacitance of Transmission Line of Parallel Cylinders in Presence of Dielectric coating", IEEE Trans. on Electromagnetic compatibility, vol. EMC-37, No.1, February 1995, pp 94-96.
81. B. N. Das, S. B. Chakrabarty, "Capacitance of dielectric coated Sphere", student Journal of IETE, No. 3 and 4, vol. 3. July-December 1993, pp. 173-176.
82. B. N. Das, K. S. Rama Rao, S. B. Chakrabarty, "Electromagnetic Analysis of Eccentric Coaxial Cylinders", Journal of IETE, vol. 39, No. 4, July-August 1993, pp 251-254.

#### ***B1. Publications in proceedings of seminars/conferences***

1. D K Sharma, S Kulshrestha, S Chakrabarty, M B Mahajan and R Jyoti, "Thinned Array Antenna at L Band", InCAP2019, 2019.
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