

DR. AVISHEK DAS

B.E (ECE), M.TECH (MICROWAVE), MBA (HR), PhD (ECE)

Chotonil pur (Kuchul Pukur)

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1. PROFESSIONAL VISION

To associate myself with an Institute that provides a dynamic environment with an opportunity to prove my skills and diligent work for adding values to the organization that I serve while concurrently upgrading my skills and knowledge.

2. EDUCATIONAL QUALIFICATION

EXAMINATION	SUBJECTS	BOARD/UNIVERSITY	YEAR	MARKS
B.E	ECE	THE UNIVERSITY OF BURDWAN	2008	68.84 %
M.TECH	ECE (Microwaves)	THE UNIVERSITY OF BURDWAN	2010	80.6%
MBA	HR	SIKKIM MANIPAL UNIVERSITY	2014	77.24%
PHD	ECE	NATIONAL INSTITUTE OF TECHNOLOGY , DURGAPUR	2020	NOT APPLICABLE

3. THESIS/DISSERTATION

(a). PhD : Antenna Array Optimization Considering the Mutual Coupling Effect Using Evolutionary Optimization Techniques.

(b). M.Tech : Study of Electromagnetic Bandgap Structure.

(c). B.E : Design and Development of High Stability Oven Controlled Oscillator for Calibration of Laboratory Instrument at Different Spot Frequency.

4. AWARD/FELLOWSHIP

SL. NO	NAME OF AWARD	AWARDING AGENCY	YEAR
1.	PHD FELLOWSHIP OF AMOUNT OF RS. 2.5 LAKHS UNDER VISVESVARAYA PHD SCHEME FOR ELECTRONICS AND IT.	MINISTRY OF ELECTRONICS AND IT, GOVERNMENT OF INDIA. [UNIQUE AWARDEE NUMBER VISPHD-MEITY- 2579]	2021

5. WORKING EXPERIENCES

A. Teaching :

EMPLOYER	UNIVERSITY	DEPARTMENT	DESIGNATION	PAY SCALE	PERIOD OF EMPLOYMENT	NATURE OF WORK
HALDIA INSTITUTE OF TECHNOLOGY, HALDIA, WEST BENGAL. (AN AUTONOMOUS INSTITUTE). NAAC ACCREDITED GRADE 'A' INSTITUTE.	MAKAUT, WB (FORMERLY KNOWN AS WBUT)	ECE (NBA ACCREDITED)	ASSOCIATE PROFESSOR	37,400-67,000; AGP-9000/-	05/01/2011 TILL NOW	FULL TIME

B. Research :

M.Tech : One year full-time project was done in the year 2009-2010 from SAMEER-CENTRE FOR ELECTROMAGNETICS (Taramani, Chennai-600113), Govt. of India, Department of Information Technology, under the supervision of Dr. A.K. Srivastav (Scientist-E).

PhD : Awarded PhD in the year 2020 from NIT, Durgapur Registration No. NITD/PhD/EC/2016/00770, under the Visvesvaraya PhD scheme for Electronics and IT, Government of India, under supervision of Dr. Durbadal Mandal and Dr. Rajib Kar.

Post PhD: Worked as a post PhD researcher in the project entitled “Design and Implementation of Time Modulated Antenna Array with Optimal Radiation Pattern in Both Transmission and Reception” funded by Science and Engineering Research Board, Department of Science and Technology, Government of India (Grant No. EEQ/2017/000519 dated 23/03/2018) from 10/03/2020 to 26/03/2021 at National Institute of Technology, Durgapur.

6. LIST OF PUBLICATIONS

A. INTERNATIONAL JOURNALS (SCI INDEXED):

2017

1. **Avishek Das**, Durbadal Mandal, Sakti Prasad Ghoshal, Rajib Kar, "An Efficient Side Lobe Reduction Technique Considering Mutual Coupling Effect in Linear Array Antenna Using BAT Algorithm", Swarm and Evolutionary Computation, Vol.35, pp. 26-40, 2017. (<https://doi.org/10.1016/j.swevo.2017.02.004>). **(ELSIVIER, IF 8.2)**

2018

2. **Avishek Das**, Durbadal Mandal, Sakti Prasad Ghoshal, Rajib Kar, "Moth flame optimization-based design of linear and circular antenna array for side lobe reduction", International Journal of Numerical Modelling-Electronic Networks, Devices and Fields, Vol. 32, Issue. 1, pp. 1-15, 2018. (<https://doi.org/10.1002/jnm.2486>). **(Wiley, IF 1.6)**
3. **Avishek Das**, Durbadal Mandal, Sakti Prasad Ghoshal, Rajib Kar, "A Heuristic Approach to Design Linear and Circular Antenna Array for Side Lobe Reduction", Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Vol. 43, Issue. 1, pp. 67-76, 2018, (<https://doi.org/10.1007/s40998-018-0147-4>). **(Springer, IF 1.7)**
4. **Avishek Das**, Durbadal Mandal, Sakti Prasad Ghoshal, Rajib Kar, "Concentric circular antenna array synthesis for side lobe suppression using moth flame optimization", International Journal of Electronics and Communication (AEU), Vol. 86, pp. 177-184, 2018. (<https://doi.org/10.1016/j.aeue.2018.01.017>). **(ELSIVIER, IF 3.0)**

2019

5. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Far-Field Radiation Pattern Synthesis of Time Modulated Linear and Concentric Circular Antenna Array", International Journal of Numerical Modelling-Electronic Networks, Devices and Fields, Vol. 32, Issue 6, pp. 1-20, 2019, (<https://doi.org/10.1002/jnm.2658>). **(Wiley, IF 1.6)**
6. **Avishek Das**, Durbadal Mandal, Sakti Prasad Ghoshal, Rajib Kar, "An Optimal Mutually Coupled Concentric Circular Antenna Array Synthesis Using Ant Lion Optimization", Annals of Telecommunication, Vol.74, Issue 11-12, pp. 687-696, 2019. (<https://doi.org/10.1007/s12243-019-00729-3>). **(Springer, IF 1.8)**

2020

7. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Circular Antenna Array Design Considering the Mutual Coupling Employing Ant Lion Optimization", International Journal of Microwave and Wireless Technologies, Vol. 13, Issue-2, pp. 164-172, 2020. (doi.org/10.1017/S1759078720000914). **(Cambridge University Press, IF 1.4)**

8. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Circular Antenna Array Design Considering Mutual Coupling Using Heuristic Approaches", International Journal of RF and Microwave Computer-Aided Engineering, Vol. 30, Issue. 11, pp.1-14, 2020. (doi.org/10.1002/mmce.22391). **(Wiley, IF 0.9)**

2021

9. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An optimal time modulated compact circular antenna array design using a stochastic optimization technique", Journal of Electromagnetic Waves and Application, Vol. 35, Issue. 8, pp. 1025-1045, 2021, (doi.org/10.1080/09205071.2020.1868353). **(Taylor and Francis, IF 1.2)**
10. **Avishek Das**, Duradal Mandal, Rajib Kar, "An optimal compact time-modulated circular antenna array synthesis using krill herd optimization", Annals of Telecommunication, Vol. 76, pp. 467-482, 2021, (doi.org/10.1007/s12243-020-00827-7). **(Springer, IF 1.8)**
11. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Radiation Pattern Synthesis of Mutually Coupled Antenna Array Using an Efficient Compensation Method", IET Microwaves, Antennas and Propagation, Vol. 15, Issue. 9, pp. 1054-1062, 2021 (doi.org/10.1049/mia2.12109). **(IET Digital Library, IF 1.1)**

2022

12. **Avishek Das**, Durbadal Mandal, Rajib Kar, "Side Lobe Suppression of Concentric Circular Antenna Array Using Social Spider Algorithm", IETE Journal of Research, Vol. 68, Issue 6, pp. 4198-4207, 2022. (doi.org/10.1080/03772063.2020.178842). **(Taylor and Francis, IF 1.5)**
13. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Radiation Pattern Synthesis and Correction of Mutually Coupled Circular Dipole Antenna Array", Scientia Iranica, Vol. 29, Issue.3, pp. 1455-1474, 2022. (doi. 10.24200/SCI.2020.53745.3393). **(Sharif University of Technology, IF 1.4)**
14. **Avishek Das**, Durbadal Mandal, Rajib Kar, "An optimal far field radiation pattern synthesis of mutually coupled antenna arrays", International Journal of RF and Microwave Computer-Aided Engineering, Vol. 32, Issue. 7, pp.1-24, 2022. (doi.org/10.1002/mmce.23198). **(Wiley, IF 0.9)**

2023

15. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An optimal linear and elliptical antenna array design using black widow optimisation for 5G communication", International Journal of Communication Systems, Vol. 36, Issue. 17, pp.1-20, 2023. (https://doi.org/10.1002/dac.5597). **(Wiley, IF 1.7)**
16. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Efficient Linear and Elliptical Antenna Array Design Using Sail Fish Optimization", International Journal of Microwave and Wireless Technologies, 2023, pp. 1-24. (doi.10.1017/S1759078723001381). **(Cambridge University Press, IF 1.4)**

2024

17. Hemant Patidar, **Avishek Das**, Rajib Kar, "Small Planar antenna array design using length and spacing through Matlab-HFSS interfacing", International Journal of Communication Systems, Vol. 37, Issue.9, pp.1-20, 2024. (https://doi.org/10.1002/dac.5770). **(Wiley, IF 1.7)**

18. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "Marine Predators Algorithm-based Linear and Elliptical Antenna Array Design for 5G Communication", Journal of Electromagnetic Waves and Application, Vol. 38, Issue 17, pp. 1954-1978, 2023. (<https://doi.org/10.1080/09205071.2024.2412565>) (**Taylor and Francis, IF 1.2**)

B. INTERNATIONAL JOURNALS (SCOPUS/OTHER):

1. R. Barman, S. Sinha, S. Roy, A. Das, "Design of inset feed microstrip patch antenna for bluetooth application", International Research Journal of Engineering and Technology, Vol. 04, Issue 03, March 2017.
2. Amit Bhattacharyya, **Avishek Das**, Kushal Roy, Avisankar Roy, Suman Paul, "Implementation of Non-Sinusoidal Oscillator using Current Conveyor", International Research Journal of Engineering and Technology (IRJET), ISSN 2395-0056, Volume 2, Issue 6, pp 1296-1299, September, 2015.
3. Amit Bhattacharyya, **Avishek Das**, Suman Paul, Dipak Samanta, Somdutta Sinha, "Differential Voltage Current Conveyor Based Non-Sinusoidal Wave Generator", *International Journal of Applied Engineering Research(IJAER)*, ISSN 0973-4562, Volume 10, 2 (2015), pp. 1322-1325, © Research India Publications, 26-27th March 2015.
4. Amit Bhattacharyya, **Avishek Das**, Avisankar Roy, Suman Paul, Dipak Samanta, "Realization of Balanced Current Conveyor Based Voltage mode Universal Filter", *International Journal of Emerging Trends & Technology in Computer Science (IJETTCS)*, ISSN 2278-6856, Volume 3, Issue 6, pp 210-212, November-December 2014.
5. **Avishek Das**, Avisankar Roy, Kushal Roy, Amit Bhattacharyya, Dibyendu Chowdhury, "Design and Analysis of Microwave Planar Band Pass Filter for WiMAX Application", *International Journal of Emerging Trends & Technology in Computer Science (IJETTCS)*, ISSN 2278-6856, Volume 3, Issue 6, pp 185-188, November-December 2014.

C. CONFERENCES:

6. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Efficient Concentric Circular Antenna Array Synthesis Using a Meta-Heuristic Optimisation," International Conference on Microwave, Optical, and Communication Engineering (ICMOCE), IEEE Xplore, pp. 1-5, Bhubaneswar, India, May 26-28, 2023.
7. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Circular and Concentric Circular Antenna Array Design Using a Meta-Heuristic Optimisation," International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI), IEEE Xplore, pp. 1-6, Chennai, India, April 19-21, 2023.
8. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Circular Antenna Array Design for an Efficient 5G Communication System Using Krill Herd Optimization," International Conference on Communication, Devices and Computing (ICCDC-2023), LNEE, pp. 647-655, Vol. 1046, Haldia, India, March 1-3, 2023.
9. **Avishek Das**, "An Efficient Electromagnetic Bandgap Structure Design for Surface Wave Suppression," International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), IEEE Xplore, pp. 1-3, Bhilai, India, April 21-22, 2022.

10. **Avishek Das**, D. Mandal, and R. Kar, "Circular Antenna Array Synthesis Considering the Mutual Coupling Using Opposition based DE", International Conference on Communication, Devices and Computing(ICCDC), Lecture Notes in Electrical Engineering (LNEE), pp. 25-33, Haldia, India, March 14-15, 2019.
11. **Avishek Das**, D. Mandal, and R. Kar, "An Efficient Concentric Circular Antenna Array Synthesis Considering the Mutual Coupling", International Conference on Communication, Devices and Computing (ICCDC), Lecture Notes in Electrical Engineering (LNEE), pp. 45-53, Haldia, India, March 14-15, 2019.
12. **Avishek Das et. al**, "Design and Analysis of Microwave Stepped Impedance Low Pass Filter for Bluetooth Application", IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), IEEE Xplore, pp. 1516 – 1518, ISBN : 978-1-4799-6084-2, Coimbatore, India, March 5-7, 2015.
13. **Avishek Das et. al**, "Current Conveyor Based Non-Sinusoidal Oscillator Implementation", IEEE Global Conference on Communication Technologies (GCCT), IEEE Xplore, pp-1-3; ISBN: 978-1-4799-8553-1; Thuckalay, India, April 23-24, 2015.
14. **Avishek Das et. al**, "Slotted Microstrip Band Pass Filter Design and Analysis for WiMAX Application", National Seminar on Advanced Functional Materials, Technology and its Social Implications (NSAFMTSI 2015); Dept. of Applied Science, Haldia Institute of Technology, January 30-31, 2015.
15. **Avishek Das et. al**, "Compact Dual Band Circular Microstrip Patch Antenna for WiMAX/WLAN Application", National Seminar on Advanced Functional Materials, Technology and its Social Implications (NSAFMTSI –2015); Dept. of Applied Science, Haldia Institute of Technology, January 30-31, 2015.
16. **Avishek Das et. al**, "Differential Voltage Current Conveyor Based Square/ Triangular Wave Generator", National Seminar on Advanced Functional Materials, Technology and its Social Implications (NSAFMTSI –2015), Dept. of Applied Science, Haldia Institute of Technology, January 30-31, 2015.
17. **Avishek Das et. al**, "Surface Wave Suppression of Electromagnetic Bandgap Material with Suspended Microstrip Transmission Line Model", National Conference on Materials, Devices and Circuits in Communication Technology,(MDCCT), IETE Burdwan Sub Centre, The University of Burdwan, February 6-7, 2012.
18. **Avishek Das et. al**, "A novel study on Electromagnetic Band Gap Structure and its Characterization of reflection phase", International Conference on Laser, Materials Science and Communication (ICLMSC), Department of Physics, The University of Burdwan; December, 7-9, 2011.

D. BOOKS:

1. **Avishek Das et. al**, "Advance nano ceramic PZT sensors", Lap Lambert Academic Publishing, Germany, ISBN 978-3-659-66793-0.
2. **Avishek Das et. al**, "J2ME Based Mobile Camera Controller using 802.11b Standards", Lap Lambert Academic Publishing, Germany, ISBN 978-3-659-68286-5.
3. **Avishek Das et. al**, "Design of a Arduino Processor Based Bi-Servo Robotic Walker", Lap Lambert Academic Publishing, Germany, ISBN 978-3-659-68448-7, 2015.

7. RESEARCH AREA

- Antenna Array Optimization
- Evolutionary Optimization Techniques
- Antenna Design

8. PHD SUPERVISOR

NAME OF THE SCHOLAR	UNIVERSITY/INSTITUTION	TITLE OF THE THESIS	DATE OF REGISTRATION	REMARKS (ONGOING/SUBMITTED)
RAJRUP SAHA	NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR	AN OPTIMAL ANTENNA ARRAY DESIGN BY EMPLOYING STOCHASTIC OPTIMIZATION TECHNIQUES FOR 5G COMMUNICATION	20/07/2022	ONGOING

9. MEMBER OF PROFESSIONAL BODIES

Member of International Association of Engineers, HONGKONG (Membership Number: 145456)

10. PROFESSION RELATED ACTIVITIES

- I. Departmental Academic Committee Member.
- II. Question paper, Assignment and Internal marks evolution Committee Member.
- III. Departmental publication committee Member.
- IV. Lab. In Charge Basic Electronics Engineering Laboratory
- V. Sports Committee Member.
- VI. Student mentoring.
- VII. Anti-ragging Hostel Monitoring.
- VIII. Cultural activity Committee Member.
- IX. B.Tech Reunion, Organizing Committee Member.
- X. National Conference NCACD 2011 at HIT, Haldia; Organizing Committee Member.
- XI. National Conference NCACD 2012 at HIT, Haldia; Organizing Committee Member.
- XII. Short term course on Advanced Communication & Signal Processing (ACSP-2015) at HIT, Haldia, Organizing Committee Member.

- XIII.** International Conference ICCDC 2017 at HIT, Haldia; Organizing Committee Member.
- XIV.** International Conference ICCDC 2019 at HIT, Haldia; Organizing Committee Member.
- XV.** International Conference ICCDC 2021 at HIT, Haldia; Publication Chair.
- XVI.** International Conference ICCDC 2023 at HIT, Haldia; Organizing Chair.
- XVII.** Faculty Development Program on “Recent Advancement of Microwave and mmWave Communication -2023” Program Coordinator.
- XVIII.** Faculty Development Program on “Recent Advancement of Microwave and mmWave Communication -2024” Program Coordinator.

11. KNOWLEDGE UPGRADATION PROGRAMME

CONFERENCE/ SEMINAR/ SHORT TERM COURSE/ FDP/WORKSHOP ATTENDED

- Vocational Training Programme, The West Bengal Power Development Corporation Limited (Bandel Thermal Power Station), 25 June 2007- 21 July 2007.
- National Conference on Advance Communication System and Design Techniques (NCACD-2011), Department of ECE, Haldia Institute of Technology, November 5-6, 2011.
- International Conference on Laser, Materials Science and Communication (ICLMSC), Department of Physics, The University of Burdwan; December, 7-9, 2011.
- National Conference on Materials, Devices and Circuits in Communication Technology, (MDCCT), IETE Burdwan Sub Centre, The University of Burdwan, February 6-7, 2012.
- National Conference on Advance Communication System and Design Techniques (NCACD-2012), Department of ECE, Haldia Institute of Technology, September 29-30, 2012.
- Faculty development program on Contemporary Engineering Practices (CEP-2015); School of Engineering, Haldia Institute of Technology, January 5-11, 2015.
- National Seminar on Advanced Functional Materials, Technology and its Social Implications (NSAFMTSI –2015), Dept. of Applied Science, Haldia Institute of Technology, January 30-31, 2015.
- One Week Faculty Development Programme on Bridging gap between Academia & Industry Certificate of participation, IIPC and TPO Cell, Haldia Institute of Technology, February 5-11, 2015.
- IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), SVS College of Engineering, Coimbatore, Tamil Nadu, March 5-7, 2015.
- Short term course on Advanced Communication & Signal Processing (ACSP-2015); Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, June 15-22, 2015.
- International Conference on Communication, Devices and Computing(ICCDC-2017), Haldia Institute of Technology, November 2-3, 2017.

- International Conference on Communication, Devices and Computing (ICCDC-2019), Haldia Institute of Technology, March 14-15, 2019.
- International Conference on Communication, Devices and Computing (ICCDC-2019), Haldia Institute of Technology, March 14-15, 2021.

12. OTHER NOTABLE ACTIVITIES

REVIEWER OF FOLLOWING JOURNALS (SCI INDEXED)

- IET Microwaves, Antennas and Propagation (IET Digital Library)
- IEEE Access (IEEE)
- International Journal of RF And Microwave Computer-Aided Engineering (Wiley)
- Microwave and Optical Technology Letters (Wiley)
- Wireless Personal Communication (Springer)

13. PERSONAL PROFILE

Date of Birth	: 05/03/1985
Father's name	: Late Tapan Kumar Das
Marital Status	: Married
Sex	: Male
Languages Known	: Bengali, English, Hindi.
Nationality	: Indian
Permanent Address	: Dr. Avishek Das S/O – Late Tapan Kumar Das Chotonil Pur (Kuchul Pukur) P.O :- Sripally Dist :- Burdwan (East) PIN- 713103 West Bengal, India.

14. DECLARATION

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Date: 18/02/2025

Place: Haldia



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Signature
(Dr. Avishek Das)