

**Name: Dr Tapas Mondal**

**Department: Electronics & Communication Engineering**

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**Qualifications: PhD in Engineering**

**Designation:** Associate Professor (ECE Department)

**VIDWAN ID:** 184815

**Experience (Teaching/ Research/ Industry, in years):** 18 years (Teaching), 12 years (Research)

**Date of Joining at the Present Institution:** 3<sup>rd</sup> February, 2003

**Examinations Cleared:** GATE

**Qualifications Summary (Reverse chronological order):**

Degree	Institute	From - To	Subjects
PhD in Engineering	IEST, Shibpur	February, 2018	“Studies on Planar Antennas and Arrays for Applications in Multi-Standard Wireless Systems”
ME	BIT, MESRA, RANCHI	2003	Microwave Engineering
BE	DR. B. A. M. University, Aurangabad (Maharashtra)	2001	Electronics & Telecommunication
Higher Secondary Examination	West Bengal Council of Higher Secondary Education	1996	Pure Science
Secondary Examination	West Bengal Board of Secondary Education	1994	

**Experience Summary (In chronological order):**

Designation	Organization	Date From - Date To
Associate Professor	Dr B C Roy Engineering College, Durgapur	01/07/2010 to till date
Assistant Professor	Dr B C Roy Engineering College, Durgapur	01/01/2007 to 30/06/2010
Sr. Lecturer	Dr B C Roy Engineering College, Durgapur	01/10/2004 to 31/12/2006
Lecturer	Dr B C Roy Engineering College, Durgapur	03/02/2003 to 30/09/2004

**Specialization / Research Interest:** Planar Antenna, Microstrip Patch Antenna, Microwave Filters, Microwave Devices, Wireless Communication and Intelligent Transport System Applications.

### **Awards & Recognitions**

**Best paper/ scholarship/Position in university exam/ awards while at industry/ other organizations etc.**

1. Received the grant of Rs 40,000/- from **Indian National Science Academy (INSA)** to attend 2010 IEEE AP-S International Symposium on Antenna & Propagation and 2010 **USNC/CNC/URSI meeting at Ontario, Canada** from 11-17 July 2010.
2. Reviewer of IEEE Transactions, IET, Elsevier, John Wiley and PIER journals.
3. Editorial Board Members of the International Journal of Applied Control, Electrical and Electronics Engineering (IJACEEE).
4. **Single Point of Contact** for Mandatory Additional Requirements (SPOC for MAR), Maulana Abul Kalam Azad University of Technology, West Bengal.
5. We have organized IEEE Conference in the capacity of a Technical Program Chair / Session Chair of **IEEE National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (NCETSTE2020)**.
6. We have organized IEEE Workshop as an Organizing Chair and was a Speaker of **IEEE Microwave Engineering and Applications (IEEE MEA2015)**.

### **Courses taught:**

#### **B.Tech:**

Basic Electronic, Electronic Devices, Analog Electronic Circuits, Digital Electronic, Digital System Design, Signals and Systems, Analog Communication, Microprocessor & Microcontrollers, Digital Communication, Digital Signal Processing, Control System, Microwave Theory and Techniques, Satellite Communication, Antennas and Propagation

#### **M.Tech:**

RF and Microwave Circuit Design, Satellite Communication, Antennas and Radiating Systems.

### **Online Mode of Teaching:**

[https://1drv.ms/p/s!Ah9GTikxJXfvhAPzVAMqcz1fgo\\_1](https://1drv.ms/p/s!Ah9GTikxJXfvhAPzVAMqcz1fgo_1)

<https://1drv.ms/p/s!Ah9GTikxJXfvhCgiVdz9SiH4-859>

<https://1drv.ms/p/s!Ah9GTikxJXfvhC5oNyYpBIGzLYgB>

<https://1drv.ms/p/s!Ah9GTikxJXfvhV7CuYpod3vtPCFH>

<https://1drv.ms/p/s!Ah9GTikxJXfvhF-dXPMk46JaeNXT>

The Faculty member needs to specify the online teaching/ assessment method adopted. (Link to any faculty created resources for Lecture notes / PPT/ Video Lecture etc. in Google Drive / Weblink etc)

## Publications:

### Journal:

- 1) Anjan Bandyopadhyay, Pankaj Sarkar, **Tapas Mondal** and Rowdra Ghatak, “A Dual Function Reconfigurable Bandpass Filter for Wideband and Tri-band Operations,” *IEEE Transactions on Circuits and Systems II: Express Briefs*, Vol. 68, No. 6, pp. 1892—1896, June 2021.  
DOI: 10.1109/TCSII.2020.3047873, Impact Factor: 3.292
- 2) Anjan Bandyopadhyay, Pankaj Sarkar, **Tapas Mondal** and Rowdra Ghatak, “A high selective tri-band bandpass filter with switchable passband states,” *International Journal of Microwave and Wireless Technologies*, Vol. 12, No. 2, pp. 103—108, March 2020.  
DOI: <https://doi.org/10.1017/S1759078719001053>, Impact Factor: 0.939
- 3) **Tapas Mondal**, Sandip Maity, Rowdra Ghatak and Sekhar Ranjan Bhadra Chaudhuri, “Compact Circularly Polarized Wide Beam Width Fern Fractal Shaped Microstrip Antenna for Vehicular Communication,” *IEEE Transactions on Vehicular Technology*, Vol. 67, No. 6, pp. 5126—5134, April 2018.  
DOI: 10.1109/TVT.2018.2824841, Impact Factor: 4.432
- 4) **Tapas Mondal**, Sandip Maity, Rowdra Ghatak and Sekhar Ranjan Bhadra Chaudhuri, “Design and Analysis of a Wideband Circularly Polarized Perturbed Psi - Shaped Antenna,” *IET Microwave, Antennas and Propagation*, Vol. 12, No. 9, pp. 1582—1586, July 2018.  
DOI: 10.1049/iet-map.2017.0569, Impact Factor: 1.739
- 5) A. Chatterjee, **Tapas Mondal**, Deven G. Patanvariya, and Ravi Prasad K. Jagannath, “Fractal-based design and fabrication of low-sidelobe antenna array,” *AEU-International Journal of Electronics and Communications, Elsevier*, Vol. 83, No. 1, pp. 549-557, Jan 2018.  
DOI: 10.1016/j.aeue.2017.11.010, Impact Factor: 2.115
- 6) **Tapas Mondal**, S. Samanta, Rowdra Ghatak and S. R. Bhadra Chaudhuri, “A Novel Hexagonal Wideband Circularly Polarized Stacked Patch Microstrip Antenna,” *Microwave and Optical Technology Letter*, Vol. 57, No. 11, pp. 2548—2554, Nov 2015.  
DOI: <https://doi.org/10.1002/mop.29383>, Impact factor: 0.933
- 7) **Tapas Mondal**, S. Samanta, R. Ghatak, and S. R. Bhadra Chaudhuri, “A Novel Tri-Band Hexagonal Microstrip Patch Antenna Using Modified Sierpinski Fractal For Vehicular Communication” *Progress In Electromagnetics Research C*, Vol. 57, pp. 25—34, 2015.  
DOI:10.2528/PIERC15021105
- 8) D. Mandal, A. Chatterjee, **Tapas Mondal** and A.K. Bhattacharjee, “Shaped beam synthesis of concentric ring array antenna using Differential Evolution Algorithm,” *AEU - International Journal of Electronics and Communications, Elsevier*, Vol. 69, No. 7, pp. 1025-1031, July 2015.  
DOI: <https://doi.org/10.1016/j.aeue.2015.03.009>, Impact Factor: 2.115

- 9) **Tapas Mondal**, Taniya Roy, Rowdra Ghatak and S. R. Bhadra Chaudhuri, “Novel Adaptive Blind Spot Detector Using Square Modified Cantor Fractal Microstrip Antenna Array,” *Microwave and Optical Technology Letter*, Vol. 57, No. 5, pp. 1067—1072, May 2015.  
DOI: <https://doi.org/10.1002/mop.29021>, Impact factor: 0.933
- 10) **Tapas Mondal**, Priyanka Shishodiya, Rowdra Ghatak, Sekhar Ranjan Bhadra Chaudhuri, “Vehicular Radio Scanner Using Phased Array Antenna for Dedicated Short Range Communication Service,” *Journal of Electromagnetic Analysis and Applications*, Vol.4, pp. 362-366, 2012.  
DOI: 10.4236/jemaa.2012.49051, Impact factor: 0.58
- 11) **Tapas Mondal**, Milan Mazumdar, Rowdra Ghatak, S R Bhadra Chaudhuri, “Nmos Based Variable Phase Shifter for Phased Array Antenna Application,” *Journal of Telecommunications*, Vol. 11, No. 2, Dec. 2011.

#### Conference:

- 1) Tapas Mondal, Sanya Suman, and Shibu Singh, “Novel Design of Fern Fractal Based Triangular Patch Antenna,” *IEEE National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (NCETSTEA2020)*, pp. 1–3, Feb, 2020.  
DOI: 10.1109/NCETSTEA48365.2020.9119949
- 2) Tapas Mondal, Trisha Chandra, Prasenjit Kuila, and Sandip Maity, “A Flower-Fractal Based Circularly Polarized Wide Beam-Width Folded Antenna,” *IEEE National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (NCETSTEA2020)*, pp. 1–4, Feb, 2020.  
DOI: 10.1109/NCETSTEA48365.2020.9119918
- 3) Anjan Bandopadhyay, Tapas Mondal and Rowdra Ghatak, “Dual-Band Switchable Tri-Band Bandpass Filter Using Uniform Impedance Resonators,” *National Conference on Materials, Devices and Circuits in Communication Technology (MDCCT 2018)*, pp. 100—103, IETE, June 2018.
- 4) Tapas Mondal, Susamay Samanta, Rowdra Ghatak and S. R. Bhadra Chaudhuri, “A Novel Circularly Polarized DSRC Band Square Microstrip Antenna Using Minkowski Fractal Structure for Vehicular Communication,” *IEEE International Conference on Vehicular Electronics and Safety (ICVES), Hyderabad, India*, pp. 141–146, Dec, 2014.  
DOI: 10.1109/ICVES.2014.7063738
- 5) Tapas Mondal, Milan Mazumdar, Rowdra Ghatak, S R Bhadra Chaudhuri, “Adaptive Phased Array Antenna Based on NMOS Phase Shifter for Intelligent Transport System Application,” *2011 IEEE Applied Electromagnetics Conference (IEEE AEMC), Kolkata, India*, pp. 1-4, December 2011.  
DOI: 10.1109/AEMC.2011.6256828

- 6) Tapas Mondal, Rowdra Ghatak, S R Bhadra Chaudhuri, “A 5.88 GHz Phased Array Antenna for Blind Spot Scanning in Vehicular Radar Application”, *International Symposium on Microwaves (ISM-10), Bangalore, India*, pp. 335 – 337, Dec. 2010.
- 7) Mondal Tapas, Ghatak Rowdra, Chaudhuri S R B, “Design and analysis of a 5.88 GHz microstrip phased array antenna for intelligent transport systems”, *IEEE International Symposium of Antennas and Propagation Society (APSURSI), Toronto, ON*, pp. 1–4, July 2010.  
DOI: 10.1109/APS.2010.5561001.
- 8) Mondal Tapas, Debnath Rahul, Roy J. S, Bhadra Chaudhuri S. R, “Phased Array Antenna Design for Intelligent Transport Systems”, *Antenna Technology, 2009, IWAT 2009, IEEE International Workshop, Santa Monica, CA*, pp 1–4, March 2009.  
DOI: 10.1109/IWAT.2009.4906924
- 9) Tapas Mondal, J S Roy, S R Bhadra Chaudhuri, “Taylor Line Source Powered Phased Array Antenna Design for Intelligent Transport Systems”, *International Symposium on Microwaves and Millimeter waves: Basics and Technology, Bose Institute, Kolkata, India*, pp. 60 – 62, Jan. 2009.

### Supervision of Ph.D/M.Tech / B.Tech Projects:

#### For Ph.D

- 1) Anjan Bandyopadhyay, “Studies on Reconfigurable Multiband and Wideband Microwave Bandpass Filters” Prof. Rowdra Ghatak and Dr Tapas Mondal, 2018, NIT Durgapur (Registered)

#### Projects:

1. **Name of the student/s (with university roll number), Name of the supervisor, “Title of the Project / thesis”, Year (only final year 8<sup>th</sup> Sem Project for B.Tech and Thesis for M.Tech )**

#### Invited Lectures:

Topic of the lecture, Name of the event, organized by, Date

- 1) Two-Days IEEE Workshop on Microwave Engineering & Applications (MEA 2015), organized by Dr. B. C. Roy Engineering College, Durgapur in association with IEEE Antennas and Propagation / Microwave Theory and Techniques Society Joint chapter Calcutta Section, 14<sup>th</sup> and 15<sup>th</sup> March 2015.

### Participation in seminar/conference/symposium/workshop/discussion meeting

Name	Date	Details	Role	Organized by
Integration between Global Navigation Satellite Systems (GNSS) and Wireless Communication and Networking Systems (IGSWN 2018)	17 <sup>th</sup> Feb, 2018	One-Day Seminar	Organizer	Dr. B. C. Roy Engineering College, Durgapur in association with Institution of Engineers (India)

Green Chemistry-Challenges and Technological opportunities in India	9 <sup>th</sup> September, 2016	One-Day National seminar	Participant	Dr. B. C. Roy Engineering College, Durgapur in association with DURGAPUR VISWAGANDHA SCIENCE SOCIETY
Microwave Engineering & Applications (MEA2015)	14 <sup>th</sup> and 15 <sup>th</sup> March 2015	Two-Days IEEE Workshop	Organizing Secretary/ Speaker	Dr. B. C. Roy Engineering College, Durgapur in association with IEEE Antennas and Propagation/ Microwave Theory and Techniques Society Joint chapter Calcutta Section
Recent trends in machine intelligence, data mining and soft computing techniques and its impact on research and development	23 <sup>rd</sup> and 24 <sup>th</sup> Nov, 2013	Two-Days Technical workshop	Organizing Member	R & D center, Dr. B. C. Roy Engineering College, Durgapur
Microwave circuits	8 <sup>th</sup> and 9 <sup>th</sup> September 2012	Two-Days IEEE Workshop	Participant	NSHM Knowledge Campus, Durgapur in Associate with IEEE Antennas and Propagation/ Microwave Theory and Techniques Society Joint chapter Calcutta Section
Antenna and Microwave Teaching: New Thoughts and Challenges	13 <sup>th</sup> to 17 <sup>th</sup> June, 2011	Five-Days Summer Workshop Cum Tutorial	Participant	IEEE AP-MTT Calcutta Chapter & UGC-NRCPs, University of Calcutta
International symposium on microwaves-2010 (ism-10)	11 <sup>th</sup> to 14 <sup>th</sup> December, 2010	Four-Days Microwave School	Participant	Nimhans Centre, Bangalore
Horizons of microwave and millimeter wave engineering and research (HOMMER)	22 <sup>nd</sup> August 2008	One-day Seminar	Participant	The Centre for Research and Training in Microwave & Millimeter Wave Technology in Associate with UCTCU and GCECT
Digital signal processing & embedded systems	10 <sup>th</sup> March, 2007	One-Day Seminar	Participant and Lecturer	Dr. B. C. Roy engineering college, Durgapur
Recent trends in microwaves & antennas	4 <sup>th</sup> April, 2007	One-Day Seminar	Participant	The Department of Electronics and Communication Engineering. Of NIT, Durgapur under Technical Education Quality Improvement Programme (TEQIP)

### Participation in faculty development programmes

Teachers Training Programme on 'Enhancing Pedagogy Skills'	23 <sup>rd</sup> to 27 <sup>th</sup> Feb, 2009	Five-Days Training Programs	Participant (Face to face)	NIT, Durgapur in Collaboration with National Institute of Technical Teacher Training and Research, Calcutta
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### Organization of events (Dr. B. C. Roy Engineering College)

Name of the event	Date	Year
IEEE National Conference on Emerging Trends on Sustainable Technology and Engineering Applications	7 <sup>th</sup> and 8 <sup>th</sup> February	2020

(NCETSTEA2020)		
One-Day Seminar on Integration between Global Navigation Satellite Systems (GNSS) and Wireless Communication and Networking Systems (IGSWN 2018)	17 <sup>th</sup> February	2018
Two-Days IEEE Workshop on Microwave Engineering & Applications (MEA 2015)	14 <sup>th</sup> and 15 <sup>th</sup> March	2015
Two-Days Technical workshop on Recent trends in machine intelligence, data mining and soft computing techniques and its impact on research and development	23 <sup>rd</sup> and 24 <sup>th</sup> November	2013

**Participation in administrative committees (selected)**

Name of the post (Convener/Joint Convener/Member secretary/Co-ordinator etc.),  
Name of the committee, year

Single Point of Contact (SPOC)	Mandatory Additional Requirements (MAR)	2019 to till date
Single Point of Contact (SPOC)	Mentoring	2019 to till date
Program Coordinator	BTech ECE department	2009 to till date
Organizing Secretary	Technical festival (Horizon)	2003 to
Editorial Board Member	BCREC Engineering & Science Transaction (BEST)	2020

**Project Ideas Submitted to Govt. Agencies/ On-going Projects / Research Ideas under preparation & execution**

**Membership of professional bodies: IEEE, ISTE.**