

Name: Mrs. Keka Hajra

Department: ECE

Contact Nos.: 9434535583, 7908896708



Qualifications: M.Tech(Microwaves) , M.Sc(Radio Physics & Electronics)

Designation: Assistant Professor

VIDWAN ID: 184938

Experience (Teaching / Research / Industry, in years):

Teaching: 17 yrs

Research: 9 yrs

Date of Joining at the Present Institution: 12/07/2004

Examinations Cleared: NET-CSIR/GATE : NA

Qualifications Summary (Reverse chronological order):

Degree	Institute	From - To	Subjects
M.Tech	The University of Burdwan	1995-1997	Microwaves
M.Sc	The University of Burdwan	1992-1994	Radio Physics & Electronics

Experience Summary (In chronological order):

Designation,	Organization,	Date From - Date To
Lecturer	BCREC	12/07/2004-14/02/2006
Senior Lecturer	BCREC	14/02/2006-22/07/2008
Assistant Professor	BCREC	22/07/2008- Till date
Assistant Professor(Pay fixation In terms of Sixth Pay Scale Recommendation)	BCREC	07/06/2011

Specialization/Research Interest:

Microwaves, Satellite Communication, Satellite Navigation, Digital Systems, Optoelectronics etc.

Awards & Recognitions: NA

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

Courses taught:

B.Tech: Theory - Basic Electronics and Engineering, Solid state devices, Analog Electronics Circuits, Digital Electronics and Integrated Circuits, Digital System Design, Engineering Physics.

Practical - Basic Electronics and Engineering Lab, Solid state devices Lab, Analog Electronics Circuits Lab, Digital Electronics and Integrated Circuits Lab, Digital System Design Lab, Analog Communication Lab, Engineering Physics Lab, VIRTUAL LAB- Basic Electronics Lab (<http://vlabs.iitkgp.ernet.in/be/>).

M.Tech: Satellite Communication, Photonics and Optical Communication

Online Mode of Teaching:

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)

GOOGLE PLATFORM, ZOOM

<https://bit.ly/2A6glzn> (Lecture Notes)

<https://bit.ly/3dMTOp4> (Assessments)

Publications:

Journal:

1. Pratibha Verma, **Keka Hajra**, P. Banerjee & Anindya Bose. “Evaluating PDOP in Multi-GNSS Environment”, IETE Journal of Research, DOI: 10.1080/03772063.2019.1666750, ISSN: 0377-2063 (Print) 0974-780X (Online) Journal homepage: <https://www.tandfonline.com/loi/tijr20>
To link to this article: <https://doi.org/10.1080/03772063.2019.1666750>
2. Anindya Bose, (Ms) **Keka Hazra** and (Ms) Shreya Sarkar. “A Study on Satellite Geometry Variation for Multi-GNSS from India”, International Journal of Engineering Research, 2014, 3,10, pp. 575-579, ISSN: 2319-6890 (online), 2347-5013(print)
3. Anindya Bose, Shreya Sarkar, **Keka Hajra**, Debipriya Dutta, A Bhattacharya, “ **Studies on Revitalized GLONASS from India**”, Coordinates, Vol XI, Issue 5, pp 37-42.

Conference:

1. Anindya Bose, P Banerjee and **(Ms) Keka Hajra**, “Effect of Satellite Geometry on Navigational Accuracy”, Proc. 7th International Conference on Advances in Metrology (AdMet 09), National Physical Laboratory, New Delhi, India, 18 – 20 February, 2009, pp 218 – 219.
2. Anindya Bose, (Ms) S Sarkar, **(Ms) K Hajra**, “Use of satellite Based Navigation Systems for Disaster Management”, 40th Mid-term symposium of IETE, Information and Communication Technologies for Disaster Management, ICTDM-2009, CSIO, Chandigarh, 17 – 18 April, 2009.
3. Anindya Bose, (Ms) S Sarkar, **(Ms) K Hajra** and D Mondal, “Free L Band signal sources in improved GNSS environment”, International Conference on Radiation Physics and its Applications (ICRPA 2010), Burdwan University, Burdwan, 16 – 17 January, 2010, p-55.
4. Anindya Bose, (Ms)S Sarkar, **(Ms) K Hajra**, “Improved GLONASS: Importance for Ionospheric Research in India”, Proc. National Space Science Symposium 2010 (NSSS-2010), Saurashtra University, Rajkot, 24 – 27 Februray, 2010, p – 87.
5. Anindya Bose, Shreya Sarkar, **Keka Hajra** and P Banerjee, “A review of GLONASS constellation modernization”, Proc. MDCCT 2012, The University of Burdwan, Burdwan, 6 – 7 February, 2012, pp 128 – 131, (ISBN 978-93-80663-36-4).
6. Anindya Bose, Shreya Sarkar, **Keka Hajra**, Avik Mukherjee and Sourav Nandi, “Experiment to Study Revitalized GLONASS Signal Availability from India”, Proc. National Conference on Electronics Technologies (NCET 2K12), Govt Engineering College, Ponda, Goa, 13 – 14 April, 2012, pp 79 – 84.
7. Anindya Bose, S Sarkar, **K Hajra**, P Banerjee, S Nandi, A Mukherjee, G Sateesh Reddy and Manjit Kumar, “Preliminary Results of India-wide availability of GLONASS”, Proc. 8th International Conference on Microwaves, Antenna, Propagation & Remote Sensing ICMARS-2012, Jodhpur, India, Dec. 11 – 15, 2012, pp 197 – 203.
8. Anindya Bose, (Ms) Shreya Sarkar, **(Ms) Keka Hazra**, P Banerjee and G Sateesh Reddy, “A Preliminary Report on the Usefulness of Revitalized GLONASS in India”, Proc. Pearl Jubilee International Conference on “Navigation and Communication” (NAVCOM-2012), Hyderabad, India, 20-21 December, 2012, pp 150 – 153.
9. Anindya Bose, G Sateesh Reddy, Shreya Sarkar, **Keka Hazra** and Manjit Kumar, “GLONASS for a Multi-GNSS Environment: Study from INDIA”, United Nations/Croatia Workshop on the Applications of Global Navigation Satellite Systems, Baska, Krk Island, Croatia, 21 – 25 April, 2013.
10. Anindya BOSE, G Sateesh Reddy, Manjit Kumar, P Banerjee, Shreya Sarkar, **Keka Hazra** and Saikat Das, “Study on GPS-GLONASS interoperability in India”, National Conference on Application and Challenges in Space Based Navigation, ISRO Satellite

Book: NA

Book Chapter: NA

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

For Ph.D: NA

B.Tech Projects:

Year	Name of Project Supervisor	Project Title	Name of Student	University Roll No.
2021	Prof. Keka Hajra	Robotic Hand using UNO R3	Shruti Adhikary	12000318004
			Sanjukta Das	12000318006
			Saheli Sar	1200318008
			Poulami Das	12000318011
			Sayani Hense	12000317047
			Srishti Lala	12000317032
2020	Prof. Keka Hajra	Design of angular bend siw band pass filter Using electromagnetic bandgap structures	Jayeti Mukherjee	12000317007
			Souvik Maji	12000316027
			Upasona Mukherjee	12000316014
			Sreeparna Banerjee	12000316024
			Ranjit Kumar Sasmal	12000316057
			Vicky Kumar Singh	12000316013
2019	Prof. Keka Hajra	HOME SECURITY SYSTEM	Chandan Kumar	12000315031
			Chinmay Barik	12000315032
			Utkarsh Chaurasia	12000315119
			Vikas Kumar	12000315121
			Vikash Kumar	12000315122
			Vishal Kumar	12000315124
2018	Prof. Keka Hajra	SIW BPF using circular ring, split ring and Inductive posts	Abhishek Kumar Pandey	12000314004
			Mamoon Manzoor	12000314045
			Monika Singh	12000314052
			Neha Kumari	12000314054
			Rahul Kumar	12000314073
			Saurav Kumar	12000314082

017	Prof. Keka Hajra	BPF Design using CSIW IRIS Waveguide Structure	Nikhil Nishant	12000313053
			Pranjal Kumar	12000313059
			Supriya Karmakar	12000313107
			Sneha Srivastava	12000313096
			Sneha Dewani	12000313095
			Rohit Kumar	12000313077
2016	Prof. Keka Hajra	Plant Moisture meter	Madhu	12000313125
			Manisha	12000313124
			Ruchi	12000313133
			Kanan Biswas	12000313123
			Priyanjali	12000313131

Invited Lectures: NA

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

Name of the event, duration, Year, Organized by.

1. "Computing, Communication and Sensor Network (CCSN2015)", IEEE(EDS) Kolkata Chapter Sponsored 4th International Conference, December, 24 - 25th, 2015, Kolkata, Forum of CCSN In association with International Association of Science, Technology and Management.
2. "Microwave Engineering & Applications (MEA 2015)", IEEE-AP-MTT Society, Kolkata Chapter Sponsored workshop, 14-15th March 2015, BCREC.
3. "Advances in Nano-Satellite Technology", Seminar on 4th November 2015, BCREC
4. "Microwave Circuits", IEEE Workshop presented by IEEE Antennas and Propagation/Microwave Theory and Techniques Society Joint Chapter Calcutta Section, 8-9th September, 2012, NSHM Knowledge Campus Durgapur.
5. "Materials Devices and Circuits in Communication Technology (MDCCT 2012)", National Conference, 6-7th Feb, 2012, IETE Burdwan Sub Centre.
6. "Materials Devices and Circuits in Communication Technology (MDCCT 2010)", National Conference, 27-28th March, 2010, IETE Burdwan Sub Centre.
7. "Relevance of Physics Education in Present Technological Scenario", Workshop, 18-19th Jan, 2008, Department of Physics, NIT Durgapur.
8. "Global Positioning System (GPS) and Its Applications", Seminar, 5th November, 2008, The Institute of Radio Physics and Electronics, University College of Technology, Calcutta University.
9. "Recent Trends in Microwaves & Antennas", Seminar, 4th April, 2007 under TEQIP, ECE Dept. NIT Durgapur.
10. "Recent Trends in Information and Communication Technology (ICT)", Seminar 1st March, 2008, IETE Burdwan Sub Centre.
11. "Basic Electronic Measurement Techniques", one-day workshop, 31st March, 2008, IETE Burdwan Sub Centre.
12. "Digital Signal Processing & Embedded System", Seminar, 10th March, 2007, BCREC.

Participation in faculty development programmes

Name of the faculty development programmes, Online / Face-to-face/ From Date - To Date, Duration, Year, Organized by.

1. "Teaching and Learning Skill Development", Face-to-face, 22nd August 2019, BCREC.
2. "Full Custom VLSI Design on Mentor Graphics", Face-to-face, 15-17th May 2019, BCREC ECE Department.
3. "Internet of Things: Architectures, Protocols, Applications and Security concerns", Online, 14th - 18th December, 2020, Dept. of Computer Science & Technology, IEST, Shibpr.

Organization of events (Dr. B. C. Roy Engineering College)

Name of the event, Date, Year

Girls' Hostel Night : (Every year, 2006 – 2017)

Saraswati Puja : (Every year, 2006-2017)

Technical Festival : General Quizz (IGNITIA) & ECE Dept Quizz (WIZCOMMBIZ): (2008-2015)

IEEE Sponsored NCETSTE, February 7-8, 2020 : Convenor of Documentation Committee.

IGSWN 2018, one-day Seminar, 17th Feb, 2018, IEI Student Chapter EC division BCREC.

Participation in administrative committees (selected)

1. BCREC Central Library Committee Member : (2007 – 2017), 2019 onwards
2. BCREC Girls' Hostel Superintendent : (2005 - 2017)
3. ECE Dept. Library In-charge : (2005 - 2017) & 2020 onwards
4. ECE Dept.- Digital Electronics Lab Faculty In-charge : (2006-2020)

ECE Departmental Committees:

Name of the Committee	Post	Year
Library Committee	Co-ordinator	2011
Departmental Monitoring committee	Member	2012-2016
Departmental Faculty Council	Member	2012-2016
Departmental Administrative Committee	Member	2012-2016
Student Affairs Committee	Member	2012-2016
Library Monitoring	Convenor	2012-2018

Committee		
Departmental Monitoring committee	Member	2013-2016
Departmental Faculty Council	Member	2013-2016
Departmental Administrative Committee	Member	2013-2016
Student Affairs Committee	Member	2013-2016
Student's Mentor Committee	Convenor	2017-2020
Course Assessment Committee & Course File Preparation Committee	Member	2017-2020
Library Monitoring Committee	Member	2019-2020
Question Paper Moderation Committee	Member	2019-2020

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

Membership of professional bodies: IEEE, IETE, IEL, CSI, MGMI etc.

IETE : ID – M218530

IETE Burdwan Sub-centre : Executive Committee Member

ISTE : ID – LM52797