

Dr. Bimalendu Kalita

Associate Professor,

Department of Mathematics, The Assam Royal Global University, Guwahati, India.

bimalendu.kalita@rgu.edu.in

9707850886



Education

Doctor of Philosophy (Ph.D.) in Mathematical Sciences,

Tezpur University, Assam, India

Thesis Title: Perturbation of Weighted Shift Operators.

Degree awarded: January 8, 2014.

M.Sc. in Mathematics, 2005-2007

Gauhati University, Guwahati, Assam.

B.Sc. in Mathematics, 2002-2005

Bilasipara College, Dhubri

Board: Gauhati University, Assam.

Research Interest

Functional Analysis and Operator Theory, Fuzzy Real Numbers, Complex Fuzzy Numbers and Fuzzy Hilbert Spaces.

Work Experience

- Associate Professor, Department of Mathematics, The Assam Royal Global University, Guwahati-781035, India [2022-02 till date].
- Assistant Professor, Department of Mathematics, The Assam Royal Global University, Guwahati-781035, India [2017-06 to 2022-01].
- Assistant Professor, Department of Applied Sciences (Mathematics), Gyan Sagar Foundation Group of Institutions, Guwahati-781035, India [2010-07 to 2017-05].
- Teaching Assistant, Department of Mathematical Sciences, Tezpur University, Assam [August-December, 2008 and January-June, 2009].

Research Scholars pursuing Doctoral Degree

- Mr. Sinam Rajkishore Singha, Department of Mathematics, Royal School of Applied and Pure Sciences, Roll No.: 207011001, Registration No.: 1200001, Title of Ph.D. work: A study of space of sequences in Fuzzy Inner Product Spaces, Status: ongoing.
- Ms. Khrunielu Lohe. Status: ongoing.

- Ms. Florence Daimari. Status: ongoing.

Research Publications

Sl. No.	Name of the Journals	Title of the papers	Authors name	Year/Volume/No./pages/ISSN
1	Bulletin of Calcutta Mathematical Society (UGC listed)	Back-step extension of weighted shifts	Munmun Hazarika and Bimalendu Kalita	June 2014, Vol. 106, No. 3, Pages 169-188, ISSN: 80659
2	Bulletin of Calcutta Mathematical Society (UGC listed)	Perturbation of 2-variable hyponormal weighted shifts	Munmun Hazarika and Bimalendu Kalita	2013, vol. 105 (4), page 269-284 ISSN: 80659
3	International Journal of Functional Analysis, Operator Theory and its Applications (peer-reviewed international journal)	Convexity of the region of perturbation of a weakly k -hyponormal weighted shift	Munmun Hazarika and Bimalendu Kalita	2013, vol. 5(3), page 141-151, ISSN:0975-2919
4	International Journal of Functional Analysis, Operator Theory and its Applications (peer-reviewed international journal)	Finite rank perturbation of 2-hyponormal weighted shifts	Munmun Hazarika and Bimalendu Kalita	2013, vol.5(1), page.19-35 ISSN:0975-2919
5	International conference on challenges and application of Mathematics in Science and technology	Quadratic hyponormality and positive quadratic hyponormality are not preserved under weighted completion and restriction	Munmun Hazarika and Bimalendu Kalita	2010, January 11-13 ISBN-10 : 023032875X ISBN-13 : 978-0230328754
6	International Journal of Contemporary Mathematical Sciences (peer-reviewed international journal)	On positively quadratically hyponormal weighted shifts	Munmun Hazarika and Bimalendu Kalita	2009, vol.35 (4), Page. 1709-1718. ISSN:1312-7586
7	International Journal of Mathematical Analysis (Scopus listed) (Coverage years 2009-2016)	A Generalized definition of joint Hyponormality	Munmun Hazarika and Bimalendu Kalita	2009, vol. 36(3), page 1795-1802 ISSN: 1312-8876

8	Advances in Mathematics: Scientific Journal (Scopus listed) (Coverage years 2019-present)	On semi weakly (l, m) -hyponormal weighted shifts	Bimalendu Kalita	December 2020, Vol 9, no.12, pages 10797–10805 ISSN: 1857-8365 (printed); 1857-8438 (electronic)
9	Advances in Mathematics: Scientific Journal (Scopus listed) (Coverage years 2019-present)	Impact of Suction or Blowing on Elastico-Viscous Hydromagnetic Fluid Flow Past a Stretching Permeable Sheet	Kamal Debnath, Sankar Singha, and Bimalendu Kalita	January 2021, Vol. 10, no.1, pages 211–221 ISSN: 1857-8365 (printed); 1857-8438 (electronic)
10	Bulletin of Calcutta Mathematical Society (UGC listed)	On Semi m -Hyponormal Weighted Shift Operators	Bimalendu Kalita	November 2022 Vol. 114, No. 5, pages 667–678 ISSN: 80659
11	The Mathematics Student (Scopus listed)	Perturbation of Semi-Weakly m -Hyponormal Weighted Shifts	Bimalendu Kalita	Vol. 92, Nos. 1-2, January-June (2023), 41–52 ISSN: 0025-5742

Awards/ Achievements

- UGC Research Fellowship in Science for Meritorious Students (No. F.4-1/2006(BSR)/11-1/2008 (BSR)).

Subjects teaching at Undergraduate and Post graduate level.

- Undergraduate level: Vector Calculus, Numerical Analysis, Linear Algebra.
- Post graduate level: Linear Algebra, Mathematical Logic, Functional Analysis, Operator Theory.

Membership of Professional Bodies/Societies

- Assam Academy of Mathematics (Life member) **(Worked as a member of academic subcommittee and Co-opted member of AAM for the session 2016-2017.**
- The Indian Society for Technical Education (Life member).
- Indian Mathematical Society (IMS) (Life member).

- Tripura Mathematical Society (Life member).
- Computer Society of India (Member).

List of additional duties and responsibilities

- i) Assistant In-charge of B.E. Compartmental Examination under Gauhati University (August-September, 2013) at Royal Group of Institutions.
- ii) In-charge of B.E. Compartmental Examination under Gauhati University (February-March, 2014) at Royal Group of Institutions.
- iii) Assistant In-charge of B. Tech. End semester Examination under *Assam Science and Technology University* (May-June, 2015) at Royal Group of Institutions.
- iv) ***Assistant Examination Superintendent from 2019 at The Assam Royal Global University.***
- v) Examiner and Scrutinizer at *Assam Science and Technology University* of B. Tech. Examination, at *Gauhati University* of B. E. Examination and at *Institute of Distance and Open Learning (IDOL)* of M.Sc. Examination, Gauhati University.
- vi) **Working as NAAC Steering Committee member at IQAC Cell RGU since 1st February, 2022.**

External Examiner

- External Examiner for the subject Numerical Methods & Computation of BTech 4th semester practical examination on June 17-18, 2015, Department of Electrical Engineering, GIMT Guwahati.
- External Examiner for the subject Numerical Methods & Computation of BTech 4th semester practical examination on 14th July, 2016, Department of Electrical Engineering, GIMT Guwahati.
- External Examiner for the subject Numerical Methods & Computation of BTech 4th semester practical examination on May 16, 2018, Department of Electrical Engineering, GIMT Guwahati.
- External Examiner for the subject Differential Equation Practical (BMA181C212) of BSc (H) 2nd semester practical Examination June-July, 2023 at Girijananda Chowdhury University under ASTU.

Seminar/Conference /Workshop participated and presented

Sl. No.	Name of the event	National/ International	Title of the paper presented	Venue	Duration with date
1	96 th Indian science congress	National	A Generalized definition of joint hyponormality	NEHU, Shillong	January 03-07, 2009
2	Analysis and its Applications	International	Attended	IISc, Bangalore	May 14 -23,2009
3	Workshop on Analysis	National	Attended	Tezpur University	January 3-9, 2012

4	“Use and Deployment of NPTEL Courses” organized by Indian Institute of Technology, Guwahati	National	Attended	Royal Group of Institutions, Guwahati	April 29-30, 2013
5	National Conference on Pure and Applied Mathematics (NCPAM, 2013)	National	Attended	Royal Group of Institutions, Guwahati	May 9-10, 2013
6	“ Frontiers in Nanotechnology” (FNT)	National	Attended	Royal Group of Institutions, Guwahati	November 16, 2013
7	International Workshop on Operator Theory and its Application, 2013 (IWOTA, 2013)	International	Attended	IISc, Bangalore	December 16-20, 2013
8	Recent Trends of Mathematics and its Applications	National	Backward Extension of Multivariable Subnormal Weighted Shift	Rajiv Gandhi University	26 th -27 th May, 2014
9	Enhancing Professionalism: Discover, Learn, Grow	National	Attended	Royal Group of Institutions, Guwahati	June 5-6, 2014
10	Workshop on Mathematics for Engineering Aspirants, 2015	National	Attended	Royal Group of Institutions, Guwahati	June 5-6, 2015
11	National Conference on Mathematical Analysis and Mathematical Modeling	National	Perturbation of semi weakly 3-hyponormal weighted shifts	Calcutta Mathematical Society	December 07-08, 2018
12	International Seminar on Recent Advances in Science and Technology (ISRAST)	International	Semi Weak (l, m)-Hyponormal Weighted Shifts	North East (India) Academy of Science and Technology (NEAST), Mizoram University	16 th –18 th November 2020 (Virtual)
13	National Level workshop on R programming	National	Participated	Rathinam College of arts & science, Coimbatore, Tamilnadu	August 23-26, 2021
14	International Conference on Recent Developments in Mathematics and Mathematical Sciences (ICRDMMS)	International	On Semi m-Hyponormal Weighted Shift Operators	Calcutta Mathematical Society	9-11 December, 2021.

Participation in Advanced Training Programmes

- Faculty Development Programme on “*Entrepreneurship: A journey to the concept*” organized by Royal Group of Institutions, Guwahati from 16th February to 27th February, 2015.
- One Week Online Faculty Development Program (FDP) on “Moodle Learning Management System” organized by Internal Quality Assurance Cell (IQAC), Jagannath Barooah College (Autonomous),

Jorhat, Assam in association with Spoken Tutorial, IIT Bombay (an initiative of the National Mission of Education through ICT, MHRD, Govt. of India) during 25 June - 1 July, 2020.

- One Week Online Faculty Development Programme on LaTeX, from 29th June, 2020 to 3rd July, 2020, conducted by the Department of Information Technology, Mizoram University in association with Spoken Tutorial Project, IIT Bombay, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Govt of India.
- One Week Online Faculty Development Programme on “Importance of Cross-Disciplinary Research in the Post Covid-19 Scenario: Social Perspective” conducted by The Assam Royal Global University from 16th to 23rd June, 2020.
- One Week Online Faculty Development Programme on “Recent Trends in Research and Applied Statistics” conducted by Sunrise University, Alwar from 13th June to 19th June, 2020.
- One Week Online Faculty Development Programme on “Emerging Prospects of Stem Education in Engineering and Technology” conducted by Royal School of Engineering & Technology, RGU from 21st July to 28th July, 2020.
- Two Week International FDP on "Research Perspectives in Mathematics and its Applications" organized by the Department of Mathematics, Sathyabama Institute of Science and Technology, Chennai, from July 4 to July 16, 2022.
- Workshop on “Mathematical Ecology and Epidemiology” organized by the Department of Mathematics, Indian Institute of Technology Indore, INDIA, during 17-18th June, 2022.
- One Week Faculty Development Program on “Scientific Language” organized by the Department of Mathematics, School of Basic Sciences, The Assam Kaziranga University, Jorhat, Assam, India from 26th April - 2nd May, 2023.
- Seven day online FDP on Advanced Latex for Technical Writing organized by department of Career Guidance, College of Science and Humanities, SRM institute of Science and Technology, May 22-28, 2023.
- Faculty Development Program on Research awareness: Publication Database and Journal Selection organized by Gokul Global University June 24-30, 2023.

Conference/Workshop organized

- National Conference on Pure and Applied Mathematics (NCPAM, 2013).

- Frontiers in Nanotechnology (FNT, 2013).
- Workshop on Mathematics for Engineering Aspirants, 2015 (Co-convener).
- Organized Science Conclave (RSAPSSC-2018) as a Convener.
- Organized International conference (virtual), Emerging Areas in Science & Technology (EAST 2021) as a Convener.
- Organized *National Level Workshop on Artificial Intelligence and Machine Learning*, March 7 to March 11, 2022 at The Assam Royal Global University as Convener.
