

LOCUS



OFFICIAL NEWSLETTER FROM DEPT. OF MATHEMATICS, JIST

*Jorhat Institute of Science and
Technology, Jorhat*

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VISION

To strive for excellence in Mathematical Sciences that ignites students for interdisciplinary domains by imparting quality education in Mathematics and inculcating the spirit of research through innovative teaching and research methodologies.




MISSION

 To create an environment where the faculties continue to grow as scholars providing professional and social contribution.

 Develop critical thinking and problem solving skills, content knowledge, and the ability to communicate ideas effectively.

 To provide excellent knowledge of Mathematical Sciences for suitable career and groom them for National recognition.

 To train the students for interdisciplinary applications and research.

 To build life skills through value-based education and service-oriented programs.

About The Department

THE MATHEMATICS DEPARTMENT STARTED ITS FUNCTIONING SINCE THE INCEPTION OF THE COLLEGE KNOWN AS JORHAT SCIENCE COLLEGE IN THE YEAR 1971, WHICH WAS THE ONLY GENERAL DEGREE COLLEGE WITH DEGREE COURSES UNDER GOVT. OF ASSAM WITH A VIEW TO MAKE IT AN INSTITUTE OF SCIENCE IN THE LINE OF INDIAN INSTITUTE OF SCIENCE, BANGLORE. THE COLLEGE IS PRESENTLY KNOWN AS JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY. AT PRESENT THE DEPARTMENT OFFERS ITS SERVICE TO THE FOLLOWING PROGRAMMES:

1. UNDER GRADUATE PROGRAMME IN SCIENCE
2. POST GRADUATE PROGRAMME IN MATHEMATICS
3. UNDER GRADUATE PROGRAMME IN INFORMATION TECHNOLOGY
4. UNDER GRADUATE PROGRAMME IN ENGINEERING
5. PHD PROGRAMME IN MATHEMATICS

APART FROM NORMAL ACADEMICS, THE DEPARTMENT HAS BEEN ORGANIZING YEARLY MATHEMATICAL OLYMPIAD AND MATHEMATICS COMPETITION UNDER ASSAM ACADEMY OF MATHEMATICS.

Message From HOD



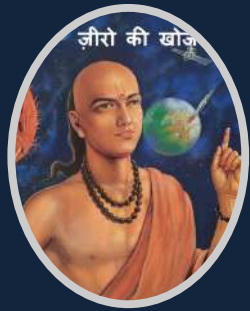
“ It is a moment of great pleasure to announce that the department of Mathematics, JIST is publishing the first issue of the departmental Newsletter “LOCUS”. The Newsletter reflects the academic and co-curricular activities of students, teachers and staff members of the department. According to Galileo “Mathematics is the Mirror of Civilization”. The standard of a civilization is measured by the standard of Mathematics involved therein. I heartily welcome all the stakeholders to this platform and request all to culture their best practices with innovative ideas to draw the Locus of the Manifold of success which will meet the need of the day and also the future endeavour. I would like to

express my thanks to the editors and the members of the editorial board for their collective efforts to bring out this issue into reality for the esteemed readers. I hope "LOCUS" will bloom by covering all points of the knowledge tree in such a continuous manner so that one can define infinite derivatives therein.

”

Chandra Chutia

Associate Professor & HOD



MAJOR EVENTS!

- An online orientation programme for M.Sc first semester students was held on 01/11/2021 along with the Department of Physics and Chemistry
- Department of Mathematics, JIST celebrated National Mathematics Day, 2021 on 22nd December, 2021. Dr. Anil Bora, Regional director at IGNOU Regional Centre, Jorhat was the chief guest of the programme.
- Department of Mathematics has started JAM classes for B.Sc students and CSIR NET for M.Sc. students from the session 2021-22.
- Farewell Ceremony of our former HOD, Dr. Raphel Kumar Saikia had been observed on 30th November, 2021.
- A talk on Career Opportunity was delivered by alumnus Mr. Ghananil Phukan, Senior Software Engineer, Manager, Head of System Engineer, Android OS on 06/01/2021 at JIST, Jorhat.

Faculty Activities



1. DR. CHANDRA CHUTIA

Associate Professor & HOD

- Under his supervision Mrs. Moloya Bhuyan, M.Sc., M.Phil, Associate Professor, Department of Mathematics, DCB Girls' College, Jorhat has been awarded PhD Degree by Dibrugarh University in the year 2021, for her Thesis entitled "Study of Upper Bounds Problem with Reference Some Molecular Groups of Symmetries".
- Under his supervision Mr. Chanchal Boruah, M.Sc., Assistant Professor, Department of Mathematics, Arya Vidyapith College, Guwahati has been awarded PhD Degree by Dibrugarh University in the year 2021, for his Thesis entitled "A Graph Theoretic Approach for Solving Some Problems of Electrical Circuits".
- He has published more than 30 Research Paper in various reputed National/International Journals.
- He has published 17 Books for Undergraduate Students.
- He has completed one Minor Research Project "Mathematical Modeling on Waste Product Management" under TEQIP-III, ASTU in the year 2021.
- He has attended more than 25 National/International Seminar/Workshop/Conference throughout the country and abroad.

ASSOCIATION WITH OTHER ORGANIZATIONS:

- Member of Board of Studies of Mathematics, Dibrugarh University since 2006.
- Member of Board of Studies of Mathematics, ASTU
- Life Member of Assam Academy of Mathematics, Assam.
- Life Member of Assam Science Society, Assam.
- Life Member of Ramanujan Mathematical Society, India.
- Life member of Forum for Inter disciplinary Mathematics.
- Member of Academic Council of ASTU as V.C. nominee
- Coordinator, IGNOU, LSC0409P w.e.f. 27th July 2020 till date
- Member of Ph.D. Admission Committee under Assam Science & Technology University
- Member of Board Studies of Mathematics, Assam Kaziranga University.
- Centre Co-ordinator, Jorhat of Mathematics Olympiad/Mathletics competitions organized by Assam Academy of Mathematics.



2. DR. PRATIBHA BORAH

Assistant Professor



- 1 Completed REFRESHER COURSE IN APPLICABLE MATHEMATICS organized by Teaching Learning Centre, Ramanujan College during 15-29, December 2021 in collaboration with Deshbandhu College, University of Delhi under the aegis of MINISTRY OF EDUCATION, PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING
- 1 Attended National Level Webinar on Spectral Graph Theory: A Brief Introduction organised by the Department of Mathematics, St. Joseph's Institute of Technology, OMR Chennai on 20th July 2020.
- 1 Attended International Conference on Recent Trends in Mathematics and Its Applications to Graphs, Networks and Petri Nets (ICRTMA-GPN-2020) hosted at School of Computational and Integrative Sciences, Jawaharlal Nehru University, New Delhi-110067, India, held online during July 20-24, 2020.
- 1 Attended International Conference on Present Scenario of Mathematical Sciences (ICPSMS-2020) organized by Department of Mathematics, Karnatak University's Karnatak Arts College, Dharwad, Karnataka, India held from 12-09-2020 to 13-09-2020.
- 1 Completed One-Week Online Faculty Development Programme on Mentoring Pedagogy and Teaching for Higher Education organized by E&ICT Academy IIT Guwahati in association with the Department of English, Bapatla Engineering College, Bapatla held from 03 - 10 August, 2020.

1 Completed two - week inter-disciplinary refresher course/ faculty development programme on Advanced Research Methodology Tools And Techniques organized by Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of MINISTRY OF EDUCATION, PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING from 15 - 30 April, 2021.

3. DR. KAMALESH KUMAR PANDIT


Assistant Professor




Completed five day FDP on "Applications of Optimization Techniques in Science and Engineering" Organized by Rajasthan Technical University, Kota and B K Birla Institute of Engineering and Technology, Pilani (Rajasthan) from 23/08/2020 to 27/08/2020.

He has completed Two Minor Research Projects under TEQIP-III, ASTU in the year 2020-21, namely "A STUDY OF SOME MHD CONVECTIVE HEAT AND MASS TRANSFER FLOW PROBLEMS WITH APPLICATIONS" and "MATHEMATICAL MODELLING OF FREE CNVECTIVE FLOW OF MICROPOLAR FLUID WITH HEAT AND MASS TRANSFER: NUMERICAL STUDY".


Presented research work titled "Effect of Heat and Mass transfer on MHD Boundary Layer flow over a moving surface in presence of thermal radiation and heat generation" in an International Conference on "Mathematical Modelling in Applied Sciences ICMMAS2020" Organized by Department of Mathematics Dibrugarh University, Assam from 28th -30th June, 2020




Completed Six Days FDP on "Mathematical Approaches in Mechanics"
Organized by Department of Mathematics, IIT Indore from 24th - 31st
December, 2020.




Completed Short Term Course on "Differential Equations: Solution
Techniques and Applications" conducted by Department of
Mathematics, IIT Guwahati from 7th -12th September, 2020




Attended 3rd National Conference on "Recent Advances in Science and
Technology NCRAS 2020" organized by Assam Science and
Technology University from 17th - 19th August, 2020.




Presented research work titled "Effect of Heat and Mass transfer and
thermal radiation on a steady MHD convective flow over a porous
stretching surface embedded in a porous media in presence of viscous
dissipation and suction/injection" in the 1st International Conference on
"Advances in Mathematics, Science and Technology (ICAMST-2020)"
organized by Department of Mathematics, Rajiv Gandhi University,
Arunachal Pradesh from 1st -3rd September, 2020.



Attended International Webinar on "Recent Trends in mathematics"
organized by Department of Mathematics, Government Arts College,
Udhagamandalam from 10th -11th July, 2020.



Completed Four week Orientation Programme for "Faculty in
Universities/Colleges/Institutes of Higher Education" organized by
Teaching Learning Centre, Ramanujan College, University of Delhi from
September 01- September 30, 2020 and obtained a grade A+.



Completed two week "Refresher Course in Mathematics" organized by
Teaching Learning Centre, Ramanujan College, University of Delhi from
31st August - 14th September, 2021 and obtained a grade A+.



A research paper titled "Effect of HEAT and MASS Transfer and Thermal Radiation on a Steady MHD Convective flow with viscous dissipation and Suction/Injection", published in Latin American Applied Research, 52(1):35-41 (2022).

4. MR. RAJU KUMAR PHUKAN

Assistant Professor



Completed One week workshop on Introduction to Matlab and Its Applications organized by JIST, Jorhat and University of Calcutta, Kolkata from 21-25th January, 2020.



Completed One week workshop on Introduction to Numerical Methods in Engineering Application organized by JIST, Jorhat and University of Calcutta, Kolkata from 02-06th March, 2020.



Completed Faculty Induction Program organized by NITTR, BHOPAL from 14th September 2020 to 9th October 2020.



Completed Advance Training in Mathematics on "Geometry of Complex Functions" organized by National Centre for Mathematics (A joint center of TIFR and IIT Bombay), Indira Gandhi National Tribal University from 14th July to 8th August, 2021.



Completed two week "Refresher Course in Mathematics" organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 31st August - 14th September, 2021 and obtained a grade A+.



Completed One week National Workshop on "Trends in Teaching Learning, Institution Building and Innovations at Higher Educational Institution" organized by Teachers Unit, Nanda Nath Saikia College, Titabor, Assam from 22nd-27th June, 2021.

5. MR. MANOJ BORA

Assistant Professor




- ★ Completed One week Workshop on Introduction to Matlab and Its Applications jointly organized by Jorhat Institute of Science and Technology and University of Calcutta from 21st -25th January ,2020.
- ★ Completed One Week Faculty Development Programme on Numerical Methods in Engineering Application, Jointly organized by Jorhat Institute of Science and Technology and University of Calcutta, 2nd -6th March ,2020.
- ★ Attended an online workshop on "Aligning Engineering and Polytechnic Education in the line of NEP-2020: Creating a roadmap for the state of Assam", on 12th November 2021.
- ★ He has published five research Papers in different reputed National and International Journals.


6. DR. SOUMENDRA GOALA


Assistant Professor





- 🏆 A research paper titled "Intuitionistic Fuzzy Multicriteria Decision Making in Medical Diagnosis Via Novel Distance Measure" Published in an International Journal Of Scientific & Technology Research, ISSN: 2277-8616, Vol-09, Issue-01, 2020, pp. 3343-3350.
- 🏆 A research paper titled "A New Resemblance Measure On Intuitionistic Fuzzy Sets And Its Application in Serial Crime Detection" Published in Advances in Mathematics: Scientific Journal, ISSN: 1857-8365, Vol 9, Issue-12 2020, pp. 11075-11087.


 A research paper titled "Fuzzy Multicriteria Decision Making In Medical Diagnosis Using An Advanced Distance Measure on Linguistic Pythagorean Fuzzy Sets" accepted for Publication in Annals of optimization theory and Practice, ISSN: 2588-3666, doi: 10.22121/aotp.2020.250858.1044

 Published Book Chapter "A Methodology For matching criminals to a crime using Hesitant Fuzzy Linguistic Term Sets Via a new Distance Measure" in Demystifying Research in Mathematical Sciences (2020), pp. 1-13, Dibrugarh University, Department of Statistics. ISBN: 978-8-192-91869-3

 Published Book Chapter "Crime prediction via Fuzzy Multi-Criteria Decision-Making Approach Under Hesitant Fuzzy Environment" in Advanced Applications of Computational Mathematics (2021) pp 171-182, ISBN 978-87-7022-604-2.

 Published Book Chapter "A fuzzy-multi-criteria decision making approach for crime linkage utilizing resemblance function under hesitant fuzzy environment" in Meta-heuristic Optimization Techniques (2021), pp. 129-144, ISBN 978-3-11-071621-4.

 Judge on Block Level competition of Aryabhatta Science Centre, Sissiborgaon Block of ATECE held at Silapathar Science College on 23rd November, 2020.

 Delivered an online talk on "Scope of Mathematics in our Career" as Resource person as a part of Induction Programme of the Department of Mathematics, Duliajan College, Duliajan on 29th September, 2021.



Delivered an online talk on "Applicability of Mathematics in our Career" in "One week state level lecture series in Mathematics and its Applications" organized by the Department of Mathematics, Silapathar College, from 24th December 2021 to 30th December.

7. DR. SHAZIDA BEGUM

Assistant Professor



A research paper titled "On Independence number of Nil Graph of Z_n , for some particular values of n " published in Advances in Mathematics: Scientific Journal 9 (2020), no.11, 9063-9068, <https://doi.org/10.37418/amsj.9.11.11>.



Attended A three day International FDP on "Computational Mathematics for Engineers and researchers" organized by Poornima Institute of Engineering & technology, from 10-12 July, 2020.



Attended One week International FDP on Enhancing Digital proficiency: A Platform for Refining the research and teaching Skills", organized by Trinity College Jalandhar, from 20th-26th July, 2020.



Attended a workshop "Statistical Methods in Biological sciences", organized by Assam Down Town University, from 29th June-5th July, 2021.




Attended Two days online workshop on latex on 14th-15th July, 2021, organized by Department of Mathematics, B. Borooah college, Guwahati.


8. MISS. CHAINI PHUKAN


Assistant Professor





 A research paper titled "A Numerical Approach for the solution of the one parameter Fuzzified Falkner-Skan Equation of Fluid Mechanics", published in Global Journal of Engineering Science and Reserches, 5(11), 2018, doi-10.5281/zenodo.1495297.

Students Achievements

 In 2020 Annual College Week, the students of Mathematics Department performed at its best. Mathematics Department received the Best editorial and Best article award in Wall magazine. In single events student received the 1st prize in Borgeet Instrumental Elocution (Assamese) and in Stand Up Comedy. In group event student got 1st prize in Diha Naam.

 Abhilasha Saikia a student of 2020-21 graduate batch pursuing M.Sc. in Mathematics at Tezpur University. She was mentor in OFCM 2021 held during 19/9/21- 11/10/21 and also participated at MTTS level-1 held during 11/6/21-05/7/2021.

 Ms. Pratikshya Dutta has completed a two month online summer project on "Symmetry of Geometric object" at IISER Bhopal in 2021.

 Abhigyan Kalita, a student of 2020-21 graduate batch, completed Visharad in Bayan (Khul) under Sankari Sangeet Vidyapeth from Bishnujyoti Satriya Kristi Charcha Kendra, in 2019.

🎯 17 students of graduate batch for the session 2020-21 pursuing M.Sc. in Mathematics out of which 13 at Tezpur University, 2 at Dibrugarh University and at Gauhati University.

🎯 Manjista Handique a student of B.Sc. 2019-20 batch selected for DST INSPIRE Scholarship to pursue M.Sc. at Sikkim University.

🎯 Arunabh Gogoi, a student of 2019-20 degree batch pursuing M.Sc at Delhi University.

🎯 The Department received "BEST DEPARTMENT" award for two consecutive years in the annual sports for the sessions 2019-20 and 2020-21.

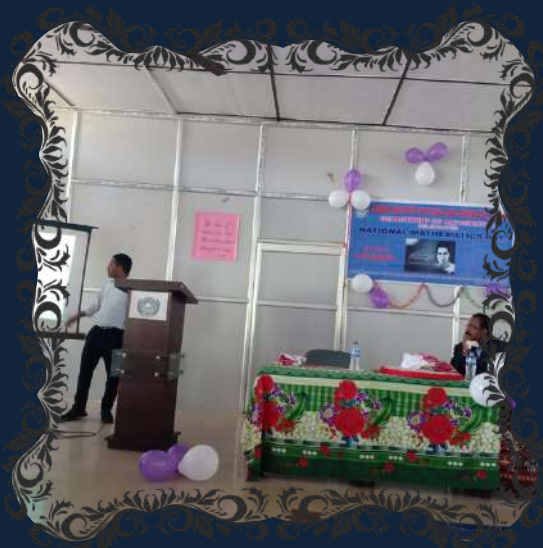
Photo Gallery



Computer Lab-1



Computer Lab-2



*Presentation by Student on
Mathematics Day, 2021*



Farewell of former HOD



Group Photo with our Former HOD



National Mathematics Day, 2021



Group Photo with B.Sc. 5th Sem Students, 2021



Token of Love to Former HOD

EDITORIAL BOARD

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Dr. Kamalesh Kumar Pandit,
Editor in Chief

Dr. Shazida Begum
Dr. Shazida Begum,
Editor

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Ms. Chaini Phukan

STUDENTS

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Mr. Samujjal Dev, B.Sc.
5th Semester
Ms. Rakhi Saikia, B.Sc.
3rd Semester