

NEWS LETTER

The Department of Mathematics of RSET was a part of the Department of Basic Sciences & Humanities till 22nd June 2020. The Department of Mathematics was made an independent department on 22nd June 2020 in order to promote research activities and interdisciplinary projects. The department offers various Mathematics courses in the B.Tech and M.Tech programmes, apart from offering the PhD programme in Mathematics. The Department of Mathematics is recognized as a place of research in Mathematics under APJ Abdul Kalam Technological University, Kerala and has two research supervisors. The Center for Topology and Applications (CETA) established under the department is supported by National Board of Higher Mathematics, Department of Atomic Energy, and Department of Science & Technology, Government of India.

The objective of the courses offered by the department is to create engineers with strong mathematical background, creative thinking and problem solving skills, through systematic training and research and by discovering feasible solutions to challenging real world problems.

PROGRAMS ORGANIZED

- ❖ Department started an online Diploma/ Certificate course on Mathematics for Data Science from October. Diploma course consists of 4 courses, Linear algebra for data science, Topological data analysis, Statistical foundation for data science, testing of hypothesis and regression analysis, and each of these course is also a certificate course.
- ❖ On 20th November, 2021, department conducted a STEP 4-Mathematics Mock Test for Class 12 and 10 (First term CBSE Examination).
- ❖ On 27th November, 2021, department conducted third webinar series on Artificial Intelligence & Data Science as a part of STEP, for students and teacher. The speaker was Dr Jayakrushna Sahoo, Assistant Professor from IIIT Kottayam.
- ❖ On 11th December, 2021, department conducted third webinar series on Artificial Intelligence & Data Science as a part of STEP, for students and teacher. The speaker was Dr. Garima Mishra, senior Research Analyst, Study mode Technologies Pvt Ltd, Bengaluru.

DEPARTMENT SEMINARS

To enhance the teaching-learning process the department conducts a monthly seminar by faculty members of the department and research scholars on Saturdays. The objective is to share knowledge and new ideas in the field of mathematics. Due to the ongoing pandemic, all seminars are conducted online.

- On 17th July 2020, Mr. Manoj KR gave seminar on Introduction to Dynamic operators.
- On 24th July 2020, Ms. Jeeva Jose gave seminar on Introduction to Morse Theory

FACULTY PUBLICATIONS

- Dr. Ramkumar P.B published a paper named Independence Polynomial Of The Sierpinski Gasket Graph And The Tower Of Hanoi Graph in Journal of Mathematical Computational Science, No. 6, 7072-7081
- Dr. Vinod Kumar presented a paper named The nth Iterate of a Map with dense Orbit Topological at International Workshop & Conference On Topology And Applications (IWCTA 2018) and published it in Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics, Volume 350, 177-180
- Mr. Abraham Jacob and Dr. Ramkumar P.B presented a paper named Intuitionistic Fuzzy graph Morphological Topology at International Workshop & Conference On Topology And Applications (IWCTA 2018) and published it in Topological Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics Volume 350, 255-262.
- Dr. Ramkumar P.B. and Dr. Vinod Kumar P.B presented a paper named Julia Sets in Topolglcal Spaces at International Workshop & Conference On Topology And Applications (IWCTA 2018) and published it in Topological Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics Volume 350, 187-192.
- Dr. Ramkumar P.B. presented a paper named Julia Sets of Some graphs using Independence Polynomials at International Workshop & Conference On Topology And Applications (IWCTA 2018) and published it in Topological Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics Volume 350, 193-202.
- Dr. Ramkumar P.B. presented a paper named Some Properties of Bitopological Space Associated with the 3-uniform Semigraphs of Cycle graph at International Workshop & Conference On Topology And Applications (IWCTA 2018) and published it in Topological Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics Volume 350, 263-270.
- Dr. Ramkumar P.B. presented a paper named Hypergraph Topology at International Workshop & Conference On Topology And Applications (IWCTA 2018) and published it in Topological Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics Volume 350, 271-278.
- Dr. Ramkumar P.B. published a book chapter named Determination of Text Summary Using Morphological Filtering of Intuitionistic Fuzzy Hypergraph in the book named Current topics in Mathematics and Computer Science (Volume 2), BP International, UK , India, in the month of September, 2021
- Dr. Binu R published a book chapter named Multi-Attribute Neutrosophic Decision Making in Dosimetric Assessment of Radiotherapy Imaging Techniques in the book named Neutrosophic Operational Research, Springer, in the month of September, 2021

RESEARCH SCHOLAR PUBLICATIONS

- Ms. Asha G Pillai presented a paper named Some Properties of the Bitopological Space Associated With the 3-Uniform Semigraph of Cycle Graph at International Workshop and Conference on Topology and Applications and published it at Springer Proceedings in Mathematics and Statistics, Springer Proceedings in Mathematics and Statistics, October, 2021.
- Ms. K. U. Sreeja presented a paper named Julia Set of Some Graphs Using Independence Polynomials at International Workshop and Conference on Topology and Applications and published it at Springer Proceedings in Mathematics and Statistics, Springer Proceedings in Mathematics and Statistics, 193-202, October, 2021.
- Ms. Deepthi Chandran presented a paper named Hypergraph Topology at International Workshop and Conference on Topology and Applications and published it at Springer Proceedings in Mathematics and Statistics, Springer Proceedings in Mathematics and Statistics, 193-202, October, 2021.

FACULTY ACHIEVEMENTS

- ✧ Dr. Vinod Kumar PB was an editor of Topological Dynamics and Topological Data Analysis, Springer Proceedings in Mathematics and Statistics, Springer, Volume 350 in the month of September, 2021.
- ✧ Dr. Vinod Kumar PB was the resource person of National mathematics day - programme, on 22nd December 2022, conducted by Bharata Mata College, Thrikkakara.

FACULTY JOINED AND RELIEVED

- ✧ Ms. Maria Poulouse, served from 2014 to 2021, relieved our department in the month of August.
- ✧ Ms. Arya MV and Aleena Thomas joined as assistant professor in the month of November.
- ✧ Ms. Vishnupriya KV joined as a teaching assistant in the month of November and she relieved in the month of December to pursue PhD.

PROGRAMS ATTENDED BY FACULTY

S. No	Faculty Name	Webinar	Conference	Course	Workshop	Training /FDP
1	Mr. Abraham Jacob	1			1	
2	Ms. Bindu V. A.			2		
3	Mr. Binu R.					
4	Ms. Eva Cherian					
5	Dr. Jaya Abraham					
6	Ms. Maria Poullose					
7	Ms. Radhika Das	1		2		
8	Dr. Ramkumar P. B.					
9	Ms. Reya Kuruvila					
10	Mr. Shyam Sunder Iyer			1		
11	Ms. Vinmol K. Jesudas					
12	Dr. P. B. Vinod Kumar					

Editor: Mr. Shyam Sunder Iyer