# Achievements of the Department

Since its establishment, the Department of Applied Mathematics has made countless achievements over the years including the following major highlights:

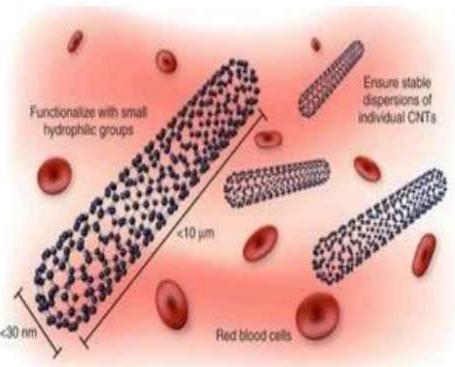
### Research Projects

There are two ongoing Research projects in the Department for which the Department has received 5.09 lakhs (3 lakhs + 2.9 lakhs) grant from U.P. State Govt. under the Research and Development Scheme by G.O.  $47/2021/606/\fraktrule{HTR-4-2021-4(56)/2020}$  and G.O.  $39/2024/242/\fraktrule{U}$   $\fraktrule{U}$   $\fraktru$ 

#### a) Research Project under the supervision of Prof. Madan Lal

The title of the project is "A comprehensive analysis of blood based carbon nano tubes under magneto hydrodynamics" and its duration is 3 years i.e. 2021-24.





The objectives of the approved project are as follows:

- Thermal analysis of blood based CNTS and comparison with other work.
- Study of velocity profile of nanoparticles as a function of volume fraction of nanoparticles.
- 3) Study of trajectory of nanoparticles in blood.
- 4) Study of Brownian motion of nanoparticles in blood.
- Effect of slip under MHD in blood based CNTS.

Prof. Madan Lal, Head of the Department is Principal Investigator of the project and Dr. Rakesh Kumar, Professor, Hindu College, Moradabad is Co-Principal Investigator.



#### b) Research Project under the supervision of Prof. Naveen Kumar

The title of the project is "Mathematical Modeling, Design, Analysis and Simulation of High Precise Control Algorithms for Robotic Systems" and its duration is 3 years i.e. 2024-27.

## Organization of Symposium

The Department has organized a Symposium on "Wavelet and Its applications in Engineering Problems" during 20-21 December. The aim of the Symposium was to provide a national multidisciplinary platform for discussion and debate among health care providers, policy makers, academics, and researchers on contemporary strategies and issues in evidence-informed health care and policy formulation which was successfully achieved.

#### Glimpses of Symposium





#### **Invited Talk**

1) Professor Madan Lal, the esteemed Head of the Department of Applied Mathematics, showcased his expertise and knowledge at the International Conference on "Frontiers in Pure and Applied Science" held on April 5, 2024, at K.C.M.T., Bareilly. His invited talk titled "Mathematics in Action: Applications of Mathematics" captivated the audience, shedding light on the myriad ways mathematics permeates our daily lives and its crucial role in various fields. With his insightful presentation, Professor Madan Lal underscored the practical implications and real-world applications of mathematical concepts, inspiring fellow researchers and academics to delve deeper into the interdisciplinary intersections of mathematics and science.







2) On 25<sup>th</sup> May, 2024, Professor Madan Lal, the esteemed Head of the Department of Applied Mathematics, also delivered an Invited Talk on the topic "Mastering Mathematics: Strategies for Solving Question Papers" in Lotus Institute of Management, Bareilly. He captivated the audience by shedding light on the importance of solving Question paper of Mathematics and explaining methods to attain good marks.





## **Expert Lecture**

1) Mr. Rajendra Dubey, Director, DIPS Academy delivered a lecture on "Mathematics In Different Disciplines" in Seminar Hall of the Applied Mathematics Department on 01<sup>st</sup> March, 2024. His mesmerizing detailing of different books combined with his expertise in the field of Mathematics captivated the attention of students. He motivated students to achieve great heights in the field of Mathematics. He also discussed the importance of CSIR-NET, GATE and other competitive examinations related to Mathematical discipline and explained different strategies to crack these National Level Exams. The Dean of Faculty of Engineering and Technology Prof. Sobhna Singh, Head of the Department, Prof. Madan Lal, other faculty members Prof. Naveen Kumar, Dr. Ram Keval, Mr. Haris Zuberi, Miss Shivangi



Verma, Miss Shrishti Saxena were also a present of this lecture.









2)Dr. Nutan Kumar Tomar, Professor, IIT Patna delivered an Expert Talk on "Functional ODE Observers for DAE Control Systems" on 01<sup>st</sup> December, 2023 in Seminar Hall of the Applied Mathematics Department. He explained the applications of Linear Algebra in Control Theory. His excellent lecture motivated students to explore the research in the field of Pure Mathematics.







## रुवि के गणित विभाग में शोध छात्रों की व्याख्यान माला शुरू

बरेली: महात्मा ज्योतिबा फुले रुहेलखंड विश्वविद्यालय के अनुप्रयुक्त गणित विभाग में शुक्रवार को एक एक्सपर्ट टाक का आयोजन किया गया। जिसमें आइआइटी पटना के गणित विभाग के प्रोफेसर नूतन कुमार तोमर ने कंट्रोल थ्योरी में फंक्शनल ओडीई आब्जर्ट्स फार डीएई कंट्रोल सिस्टम पर व्याख्यान देकर एमएससी, शोध छात्रों एवं शिक्षकों का मार्गदर्शन किया। विभाग अध्यक्ष प्रोफेसर मदन लाल ने छात्रों को शोध के क्षेत्र में अपने करियर के लिए प्रोत्साहित किया। इस दौरान शोध निदेशक प्रोफेसर सुधीर कुमार, प्रोफेसर उपद कुमार, प्रोफेसर नवीन कुमार, डा राम केवल आदि मौजूद रहे।

#### जनस्य प्राप्टेस

रूहेलखण्ड विश्वविद्यालय के अनुप्रयुक्त गणित विभाग में एमएससी एवं शोध छात्रों के लिए व्याख्यान माला का शुभारंभ

□ December 2, 2023 A Lucknow Tribune



बरेली, 02 दिसम्बर। महात्मा ज्योतिबा फूले रुहेलखण्ड विश्वविद्यालय के अनुप्रयुक्त गणित विभाग में कल एक एक्सपर्ट टॉक का आयोजन किया गया जिसमें आईआईटी पटना के गणित विभाग के प्रोफेसर नूतन कुमार तोमर ने कंट्रोल थिअरी में "फंक्शनल ओ. डी. ई. ऑब्जर्क्स फॉर डी. ए. ई. कंट्रोल सिस्टम" पर व्याख्यान देकर एमएससी, शोध छात्रों एवं शिक्षकों का मार्गदर्शन किया | उसके प्रधात विभाग के

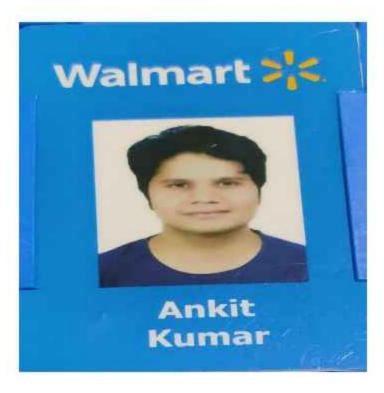
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#### Alumni of the Department placed in reputed organizations

Department of Applied Mathematics, M. J. P. Rohilkhand University, Bareilly has nurtured many young minds who are serving the nation with excellence. Some of the notable Alumni of the Department are:



Dr. Touseef Ahmad
Scientist/Engineer
ISRO



Ankit Kumar

Senior Software Engineer

Walmart



Satyarth Prakash Maurya
Assistant Professor
Janta College, Etawah



Swati Vaish
Probationary Officer
Bank of Baroda



Kapil Gangwar

Lecturer

Govt. Polytechnic



Dr. Shiv Kumar Lecturer Govt. Polytechnic

S. No.	Name of the student	Designation	Employer
1	Shiv Kumar	Lecturer	U.P. Public Service Commission
2	Kapil Gangwar	Lecturer	U.P. Public Service Commission
3	Touseef Ahmad	Scientist	ISRO
4	Ankit Kumar	Senior Software Engineer	Walmart
5	Satyarth Prakash Mourya	Assistant Professor	Janta College, Etawah
6	Swati Vaish	Probationary Officer	Bank of Baroda
7	Yogendra Kumar	T.G.T. (Mathematics)	U. P. Secondary Education Department
8	Uttam Saxena	Mathematics Faculty	Byju's
9	Munendra Kumar	T.G.T. (Mathematics)	U. P. Secondary Education Department
10	Devendra Singh	T.G.T. (Mathematics)	U. P. Secondary Education Department
11	Abhishek Agnihotri	T.G.T. (Mathematics)	U. P. Secondary Education Department
12	Mahendra Kumar Pal	T.G.T. (Mathematics)	U. P. Secondary Education Department
13	Bhupendra Kumar	Assistant Teacher	U.P. Basic Education Department
14	Anushi Agarwal	Assistant Teacher	U.P. Basic Education Department
15	Atul Kumar Pathak	Assistant Teacher	U.P. Basic Education Department
16	Poonam Bharti	Assistant Teacher	U.P. Basic Education Department
17	Sakshi Agarwal	Assistant Teacher	U.P. Basic Education Department
18	Surject Singh	Assistant Teacher	U.P. Basic Education Department
19	Vishek Kumar Sharma	P.G.T. (Mathematics)	U. P. Secondary Education Department
20	Mahendra Kumar Pal	T.G.T. (Science)	U. P. Secondary Education Department

21	Bhupendra Gangwar	P.G.T. (Mathematics)	U. P. Secondary Education Department
22	Vishwadeepak Gangwar	P.G.T. (Mathematics)	U. P. Secondary Education Department
23	Surendra Pal	Police Constable	P.A.C., Bareilly
24	Satyarth Prakash Maurya	Assistant Professor	U. P. Higher Education Department
25	Satyam Kumar Sharma	Assistant Professor	U. P. Higher Education Department
26	Himanshu Gangwar	Police Constable	U. P. Police
27	Saraswati Rathore	Assistant Teacher	U.P. Basic Education Department
28	Jitendra Kumar	P.G.T. (Mathematics)	Navodaya Vidyalaya Samiti
29	Abha Agarwal	Assistant Teacher	U.P. Basic Education Department
30	Rashmi Gangwar	T.G.T. (Mathematics)	U. P. Secondary Education Department
31	Gaganpreet Kaur	Probationary Officer	Baroda Uttar Pradesh Gramin Bank
32	Rakesh Pandey	Assistant Teacher	U.P. Basic Education Department
33	Yantish Dev Jha	Assistant Teacher	U.P. Basic Education Department
34	Bhawna Pandey	Assistant Teacher	U.P. Basic Education Department
35	Dr. Touseef Ahmad	Scientist	Department of Indian Space Research Organization
36	Kumud	Assistant Teacher	U.P. Basic Education Department
37	Anil Kumar	Assistant Professor	KCMT, Bareilly
38	Bharat Veer Gangwar	Assistant Professor	Rajshree Institute of Management & Technology, Bareilly
39	Devendra Singh	T.G.T. (Mathematics)	Little Angels School, Pilibhit
40	Akansha Khandelwal	Assistant Professor	MJPRU Campus
41	Pappu Verma	Assistant Professor	Shri Kalyan Singh Degree College, Kannauj
42	Shivangi Verma	Assistant Professor	MJPRU Campus

43	Anshika Agarwal	Assistant Professor	MJPRU Campus
44	Shrishti Saxena	Assistant Professor	MJPRU Campus
45	Nisha Khanam	Assistant Professor	MJPRU Campus
46	Shrinkhala Gangwar	Assistant Professor	MJPRU Campus
47	Sachin Kumar	Assistant Professor	MJPRU Campus
48	Shifa Khanam	Assistant Professor	MJPRU Campus
49	Swati Dubey	Assistant Professor	MJPRU Campus
50	Sachin Kumar	Assistant Professor	Lotus Institute of Management, Bareilly
51	Rohit Kumar	Assistant Professor	Hari Mangal Degree College, Moradabad
52	Taiyaba Bi	Assistant Professor	SSVIT, Bareilly
53	Pankaj Kumar	Assistant Professor	Abdul Razzak Degree College, Amroha
54	Nakul Kumar	Assistant Professor	Veer Kunwar Degree College, Bijnor
55	Sonali Singh	Assistant Professor	SSVIT, Bareilly
56	Yati Maheshwari	Guest Faculty	MJPRU Campus
57	Chandra Bairola	Assistant Professor	KCMT, Bareilly
58	Aayushi Gangwar	Assistant Professor	Rajshree Institute of Management & Technology, Bareilly
59	Kavita Chaudhary	Assistant Professor	IFTM University
60	Deepak Chauhan	P.G.T. (Mathematics)	Ben-Hur Public School, Pilibhit
51	Gurdeep Singh	T.G.T. (Mathematics)	U. P. Secondary Education Department
52	Pintu Kumar	T.G.T. (Mathematics)	U. P. Secondary Education Department
53	Shivani	T.G.T. (Mathematics)	U. P. Secondary Education Department
54	Deepak Sharma	P.G.T. (Mathematics)	U. P. Secondary Education Department
55	Bhupendra Singh	Assistant Teacher	U.P. Basic Education Department
56	Bhupendra Kumar Gangwar	T.G.T. (Mathematics)	U. P. Secondary Education Department
57	Soumya	Office Assistant	Staff Selection Commission
58	Pragati Singh	Postal Assistant	Superintendent of Posts

# **CSIR NET/JRF Qualified Students**

S. No.	Name	
1.	Roop Kishor	
2.	Manoj Gangwar	
3.	Rishabh Panday	
4.	Paras Varshney	
5.	Munendra Kumar	
6.	Chaman Singh	
7.	Shiv Kumar	
8.	Ved Pal	
9.	Shanawaz Mansoori	
10.	Ankit Kumar	
11.	Touseef Ahmed	
12.	Milan Shrivastava	
13.	Neelam Choudhary	
14.	Mohd. Amir	
15.	Kamal Kishore Pant	
16.	Satyarth Prakash Maurya	
17.	Satyam Kumar Sharma	
18.	Yantish Dev Jha	

# **GATE Qualified Students**

S. No.	Name	
1.	Shivangi Verma	
2.	Anshika Agarwal	
3.	Uttam Saxena	
4.	Munendra Kumar	
5.	Rishabh Panday	
6.	Soumya	
7.	Yati Maheshwari	
8.	Naveen Kumar Singh	
9.	Shifa Khanam	
10.	Chaman Singh	
11.	Shiv Kumar	
12.	Ankit Kumar	
13.	Mohd. Ghayasuddin	
14.	Kamal Kishore Pant	
15.	Milan Shrivastava	

# M.Sc. Toppers of the Department

S. No.	Name of the Topper	Year	Percentage of Marks Secured
1.	Priyanka Agarwal	2006	77.7%
2.	Mohd. Ghayasuddin	2007	79.5%
3.	Neelam Choudhary	2008	79.5%
4.	Touseef Ahmed	2009	81.3%
5.	Princy Verma	2010	81.3%
6.	Jyoti Bharti	2011	86.1%
7.	Akansha Khandelwal	2012	86.4%
8.	Megha Shukla	2013	88.2%
9.	Pankaj Sharma	2014	78.2%
10.	Saraswati Rathore	2015	86.4%
11.	Shikha Gola	2016	88.7%
12.	Sonali Singh	2017	82.6%
13.	Yati Maheshwari	2018	87.7%
14.	Nisha Khanam	2019	85.5%
15.	Nimisha Gangwar	2020	87.9%
16.	Shivangi Verma	2021	90.2%
17.	Anshu	2022	92.2%
18.	Mahima Jaiswal	2023	91.6%