

Curriculum Vitae

Personal Information:

Name: **Dr. Vinod Baniya**

Date of Birth: **17/08/1991**

Place of Birth: **Nautanwa**

Sex: **Male**

Father's Name: **Shri Radhe Baniya**

Mother's Name: **Smt. Godavari Devi**

Marital Status: **Married**

Spouse' Name: **Smt. Pooja Agrahari**

Nationality: **Indian**

Category: **General**



Contact Details:

Address for Correspondence: **Dr. Vinod Baniya, Department of Applied Sciences and Humanities,
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U.P., India-273164.**

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Educational Background:**Academic Qualification(s):**

Examination	Name of the Board/ College/University	Year of Passing	Percentage of Marks obtained	Div./G rade	Subjects
High School/ Metric	U.P. Board	2007	69.83%	1 st	Hindi, English, Science, S. Science Mathematics, Drawing
Intermediate/ +2	U.P. Board	2009	63.20%	1 st	Physics, Chemistry Mathematics, Hindi English.
Graduation	St. Andrews College, Gorakhpur	2012	65.06%	1 st	Physics, Chemistry, Mathematics.
Post- Graduation	D.D.U. Gorakhpur University, Gorakhpur	2014	74.46%	1 st	Mathematics.

Research Degree(s):

Degree	Title	Date of Award	University
Joint CSIR-UGC NET	CSIR-UGC NET in Mathematical Science	09/05/2018	CSIR, New Delhi
Ph.D.	Japanese encephalitis Disease Dynamics: Mathematical Modelling and Analysis	28/02/2022	M.M.M.U.T., Gorakhpur, U.P., India

Extra Activity/Other Course(s):

Examination	Name of the Board/ University	Year of Passing	Percentage of Marks obtained	Div./G rade	Subjects
Diploma (DBMS)	St. Andrews College, Gorakhpur	2010	-	B	Diploma Course in Data Base and Management System
N.S.S.	St. Andrews College, Gorakhpur	2012	-	-	240 (Two hundred forty) hours

Professional Background:

Designation	Department	Date		Pay-Grade
		From	To	
Lecturer	Engineering Mathematics in Diploma, Buddha Institute of Technology CL-1, Sector-7, GIDA, Gorakhpur-273209 (U.P.).	29/08/2016	23/07/2017	As per AICTE Norm
Research Cum Teaching Fellow	Department of Mathematics and Scientific Computing, Madan Mohan Malaviya University of Technology, Gorakhpur-273010 (U.P.).	24/07/2017	24/07/2021	Fellowship
Assistant Professor	Department of Applied Science and Humanities, KIPM College of Engineering and Management, GIDA Gorakhpur-273209 (U.P.).	08/11/2021	To Till Date	As per AICTE Norm

Teaching experience: 7 Years.

List of Books Published:

S.N.	Name of Book	Publisher	ISBN and year	Authors
1	A Text Book of Analytical Geometry	Kanha Publishing House, Gorakhpur	ISBN: 978-81-956677-3-4 Year: 2022	Dr. K. B. Gupta, Dr. Mohd. Sadiq Khan, Dr. K. B. Yadav, Lavkush Pandey, Dr. Triloki Nath, Dr. Vinod Baniya
2	A Text Book of Differential Geometry	Kanha Publishing House, Gorakhpur	ISBN: 978-81-959845-9-6 Year: 2023	Dr. P.N. Singh, Dr. C. S. Singh, Dr. Vinod Baniya, Dr. Kriti Kumar Jaiswal, Dr. Brijesh Kumar Gupta, Dr. Suraj Kumar Shukla

Published Research Papers in Journals:

S. No.	Title of Research Papers	Journal Details	ISSN/ISBN/DOI No.	Whether peer reviewed, impact factor	No. of co-authors and their details	Whether you are the main author
1.	Mathematical modelling and stability analysis of Japanese encephalitis	Advanced Science, Engineering and Medicine.	https://doi.org/10.2164-6627/2019/11/001/009)	Scopus	Dr. Ram Keval	Yes
2.	The influence of vaccination on the control of JE with a standard incidence rate of mosquitoes, pigs and humans	Journal of Applied Mathematics and Computing	https://doi.org/10.1007/s12190-020-01367-y	I.F. 2.20 SCI	Dr. Ram Keval	Yes
3.	Sensitivity and Stability Analysis in the Transmission of Japanese Encephalitis with Logistic Growing Mosquito population	Springer Proceedings in Mathematics & Statistics	https://doi.org/10.1007/978-981-33-4646-8_6	SCI-Mago	Dr. Ram Keval	Yes
4.	A comparative series solutions of Japanese encephalitis model using differential transform method and variational iteration method	Heat Transfer	https://doi.org/10.1002/htj.22154	I.F. 3.60 ESCI	Dr. Ram Keval	Yes
5.	The impact of time delay on the transmission of Japanese encephalitis model without vaccination	Proyecciones Journal of Mathematics	https://doi.org/10.22199/issn.0717-6279-4629	SCI-Mago	Dr. Ram Keval	Yes
6.	Application of optimal controls on dengue dynamics: A Mathematical Study	Springer Proceedings in Mathematics & Statistics	https://doi.org/10.1007/978-981-16-6018-4_1	Scopus	Dr. Ram Keval, & Ananya Dwivedi	No
7.	A mathematical study of a dynamical model for JE-Dengue co-	Int. J. Mathematical Modelling and Numerical	10.1504/IJMMNO.2022.10047693	ESCI	Dr. Ram Keval, & Ananya	No

	infection model with Japanese encephalitis vaccine	Optimisation			Dwivedi	
8.	Mathematical Modelling for Co-infection Dynamics of Japanese encephalitis-Dengue and influence of JE Vaccine on dengue disease	International Journal of Applied and Computational Mathematics	Accepted For Publication	SCImago	Dr. Ram Keval, & Ananya Dwivedi	No
9.	`Optimal Controlled Strategy for Japanese encephalitis with Awareness Programs by Media	Communications of the Korean Mathematical Society	Communicated	ESCI	Dr. Ram Keval,	No
10.	Stability and backward bifurcation analysis of Japanese encephalitis model with the vector-free transmission in reservoir population	Mathematical Methods in the Applied Sciences	Under Review	I.F.3.0 SCI	Dr. Ram Keval,	No

Workshop/Short term course attended:

S.No.	Name of the Course/ Summer School	Institution	Duration	Sponsoring Agency
1.	Advanced Computational Techniques for Differential Equations with Matlab	Department of Mathematics I. I. T. , Roorkee	5 days	CSIR and NBHM, New Delhi
2.	Short-Term Course on Research Methodology & Statistic	Department of Applied science, M.M.M.U.T., Gorakhpur	7 days	TEQIP-III
3.	LaTeX and Its Applications	Department of Computer Science and Engineering, M.M.M.U.T., Gorakhpur	5 days	TEQIP-III
4.	Mathematica As a Teaching Aid	Department of Mathematics I. I. T. , Roorkee	5 days	TEQIP III

5.	Publishing with Scholarly Journals	Department of Mechanical, Engineering, M. M. M.U.T., Gorakhpur	2 days	TEQIP III
6.	Mathematical Tools and Recent Advances in Mathematics	Dept. of Mathematics & Scientific Computing, M.M.M.U.T., Gorakhpur	5 days	TEQIP III
7.	National Webinar on Mathematical modelling and spread of covid 19	Dept. of Mathematics & Scientific Computing, M.M.M.U.T., Gorakhpur	1 day	TEQIP III
8.	Advanced Topic in Mathematics - 2020	Center for applied Mathematics, I.I.I.T., Naya Raipur	5 days	TEQIP III
9.	International Workshop on Sampling and Approximation Theory	Department of Mathematics, SSN College of engineering Chennai, India	2 days	SSN College
10.	Faculty Development Programme on Incorporating Universal Human Values in Education	AICTE New Delhi	5 days	AICTE

Papers presented in National/International Conferences/Seminars:

S.No.	Title of the paper presented	Title of Conference/ Seminar	Organized by	Whether international/ National/State/regional/College or University level
1.	Mathematical modelling and stability analysis of Japanese encephalitis with human, mosquito and pig	Recent Trends in Mathematics with applications	S.R.M. University, Lucknow (Feb. 21-22, 2019)	National
2.	Modelling and Stability Analysis of Japanese encephalitis with Saturated infection rate.	Recent Trends in Differential Equation: Theory, Modelling and Computation	Department of Mathematics, I.I.T. Patna (March 29-30, 19)	National
3.	Stability and Optimal Control Analysis of Japanese encephalitis	Recent Advances in Mathematics and Scientific Computing	Department of Applied science, MMMUT, Gorakhpur (April 05-06, 2019.)	National
4.	The Impact of vaccination on the spreading of Japanese encephalitis in the human population	Recent Advances in Mathematics and Scientific Computing	Department of Applied science, MMMUT, Gorakhpur (April 05-06, 2019)	National
5.	Sensitivity and stability analysis in the	Mathematical Analysis and	Department of Mathematics, SSN	International

	transmission of JE with logistic growing mosquitoes	Computing	College of engineering Chennai, India, (Dec. 23-24, 2019)	
6.	Mathematical modelling and analysis of effects of awareness programs by media on the transmission of JEV	Mathematical Modelling and Intelligence Technique	Department of Mathematics, TGRI Gandhigram Dingigul Tamil Nadu, India, (Feb. 10-12, 2021)	International

Achievement and Award:

1. Obtaining **Research Cum Teaching Fellowship** in M.M.M. University of Technology, Gorakhpur, from 24 July 2017 to 24 July 2021.
2. Awarded **SECOND** position for poster presentation in Research Scholar Day held on December 17, 2018 at Applied Science department (Mathematics), M.M.M. University of Technology, Gorakhpur.
3. The paper titled **"Mathematical modeling and stability analysis of Japanese encephalitis with human, mosquito and pig"** Awarded **FIRST** prize for oral presentation in the National Conference on Recent Trends in Mathematics with Applications held on February 21-22, 2019 at Shri Ramswaroop Memorial University, Lucknow.
4. Qualified **CSIR UGC NET** in Mathematical Science, December 2017.
5. Obtained Degree of **Master of Science** in Mathematics with First Division.

Journal Reviewer:

- (1) International Journal of Applied and Computational Mathematics
- (2) Journal of Applied Mathematics and Computing
- (3) Scientific Reports
- (4) International Journal of Modelling and Simulation
- (5) IJCRT – International Journal of Creative Research Thoughts

Technical Expertise:

Basic Knowledge of MATLAB, MATHMETICA, LATEX, C++, Microsoft Word and Microsoft Excel, Microsoft PowerPoint.

Areas of Interest:

Applied Mathematics, Pure Mathematics, Mathematical Biology and Mathematical Modeling.

References:

1. Prof. (Dr.) Sandeep Banerjee, Professor in Dept. of Mathematics, IIT Roorkee U.K. India. (E-mail: Sandip.banerjee@ma.iitr.ac.in), Mob: +91-9410511782.
2. Dr. Ram Keval, Associate Professor in Dept. of Mathematics, M.J.P. Rohilkhand University Bareilly, U.P., India, (E-mail: ramkeval@gmail.com), Mob: +91-8800716362.

Declaration:

I, solemnly declare that the above details are true to the best of my knowledge and belief if any information given by me found incorrect, disciplinary action may be taken against me.

Date:

Signature

Place: Gorakhpur

(Dr. Vinod Baniya)