Brief Curriculum Vitae (updated on 5 Dec 2025)



RAJ KUMAR

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DOB: July 19, 1975
Contact: 9451160911
Correspondence address: Near Primary school Village and Post- Salempur Rajputan, Roorkee, District- Haridwar, 247667, Uttarakhand
Google Scholar: http://surl.li/czmor
ORCID: 0000-0002-9650-5606,
Web of Science ResearcherID AGJ-2280-2022

Present Position: Professor (AGP-10,000) in Mathematics from Sep 2022 Joined Veer Bahadur Singh Purvanchal Univ., Jaunpur-222003 as a Lecturer in March, 2004.
Pay Scale: 1,44,200 – 2,18,200
Total Experience: 26 Yrs.(22 years)
Details of employment experience: (In chronological order starting with the most recent)

S. No.	Organisation	Designation	Period of Employment		Pay scale and Grade Pay	Nature of duties (Research/ Teaching)
			From	To		
1.	V.B.S. Purvanchal Univ. Jaunpur- 222003	**Professor** (Permanent post)	17/09/2022	Till date	Table 14 (7CPC) ₹1,44,200 - ₹2,18,200	Teaching & research
2.	V.B.S. Purvanchal Univ. Jaunpur- 222003	**Associate Prof.** (Permanent post)	18/05/2018	16/09/2022	Table 13 A(7CPC) ₹ 143600/-	Teaching & research
3.	V.B.S. Purvanchal Univ. Jaunpur- 222003	**Assistant Prof.** (Permanent post)	15/03/2004	17/05/2018	₹ 15600-39100+AGP 8000	Teaching & research
4.	Janta Inter College Kutiyakal Gawani District- Pauri Garhwal	**Lecturer**	21/09/2000	14/03/2004	₹ 8000-13500	Teaching

Educational Qualifications (In chronological from latest to Graduation Level)

Thesis title: *ON SIMILARITY SOLUTIONS OF NONLINEAR FLUID PROBLEMS*

Examinations	Name of the Board/ University	Year of passing	% of marks obtained	Subjects	Distinction
Master Degree	Univ. of Roorkee, Roorkee (Now IIT Roorkee)	1998	**67.50**	Applied Mathematics	5 papers
B. Sc.	C.C.S. Univ. Meerut	1996	**68.60**	Mathematics, Physics, Chemistry	Mathematics
Intermediate	U.P. Board	1992	**69.20**	Mathematics, Physics, Hindi, Chemistry, English	Physics & Mathematics
High School	U.P. Board	1990	**74.89**	Mathematics, Science, Hindi, Social Science, Biology, English	English, Science and Mathematics

Administrative Experience/ Post (s) & responsibilities held at VBSPU Jaunpur

1. Proctor from 16 Jan 2024 to 10/10/2025
2. Member, Executive Council from May 2021-May 2022

3. Member of Academic Council from last 8 years
4. Honorary Librarian Vivekanand Central Library, VBSPU Jaunpur from July 2024 to till date.
5. Chief Warden from 14 Dec 2023 to 15 Jan 2024 and Oct 2017 to Oct 2021
6. Incharge, Media Cell, VBS PU Campus from Jan 2020-Oct 2021
7. Nodal officer, Kaushal Vikas & Prashikshan Kendra at campus from last 3 years
8. Head, Department of Mathematics (2004-2011, 2014-till date)
9. Green Campus Coordinator, from Nov 2023 till date
10. Member, IPR Cell from March 2019 to April 2022
11. Member of Deen Dayal Sodh Peeth
12. Programme Officer: Unit-III of NSS for 2 Yrs (2014-2016)
13. Convener, Board of Studies, Department of Mathematics during last 13 yrs (2004-2011, 2014-till date)
14. Coordinator, Technical cell (Result preparation cell for the whole campus courses)
15. Coordinator, Purvanchal University Combined admission test (PUCAT)-2019,2016, member PUCAT 2017-18
16. Coordinator, B. Tech. OBC Scholarship Cell, for 5 yrs (2005-2010)
17. Dy. Coordinator, UGC Sponsored Remedial Coaching for SC/ST/OBC students, etc. for 2 yrs.
18. Dy. Coordinator, Academic Activities of B. Tech First year from 2014 till date.
19. Assistant Dean of Students Welfare for two Yrs (2014-2016)
20. Assistant Proctor from last 13 years
21. Organising Secretary, Sports meet of campus from 2017 to July 2020
22. Member of internal screening committee for regular teacher's post applications

Scholarly achievements:

A. Contribution to Journalism & Books:

Reviewer in SCI Journals:

1. Qualitative Theory of Dynamical Systems
2. Biomedical Signal Processing & Control
3. Network Modeling Analysis in Health Informatics and Bioinformatics
4. Scientific Reports
5. International Journal of Modelling and Simulation
6. Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (Springer Publisher)
7. The Asian Journal of Mathematics (A Journal by the International Press)
8. Computers & Mathematics with Applications (Elsevier Publisher)
9. Physica A: Statistical Mechanics and its Applications (Elsevier Publisher)
10. Waves in Random and Complex Media (formerly Waves in Random Media)
11. Phys. Scr. (IOPScience)
12. International Journal of Modelling and Simulation

B. Publications:

NUMBER OF ARTICLES IN Q1=12, Q2=10, Q3=7, Q4=1

Publications: Citation Index – range / average **Research Interest Score:** 226.7

Google Scholar h-index 16, Citations 519 (since 2025)

i10 index 20

Google Scholar: **https://scholar.google.com/citations?user=gGdmjSMAAAAJ**

Vidwan id: 60719 AD Scientific Id 3484222 Link http://surl.li/czmow

Research Gate: https://www.researchgate.net/profile/Raj-Kumar-87

2026:

[1]. Dynamic behavior of coupled mKdV-Calogero-Bogoyavlenskii-Schiff equations in fluid dynamics, Raj Kumar, Avneesh Kumar, Anshu Kumar, Differential Equations and Dynamical Systems (Springer) (pages 1-20), Scopus, ESCI, Impact factor **0.9, DOI:** https://doi.org/10.1007/s12591-025-00717-1 Q3 Volume 34, pages 577–596, (2026)

2025:

[2]. Invariant solutions of the Kaup-Boussinesq equations and their applications in fluid, Kripa Shankar Pandey, Raj Kumar, Avneesh Kumar, Modern Physics Letters A (World Scientific Publication Co PTE Ltd.) 40(39) 2550206 (2025) SCIE, Impact factor **1.6**, **DOI: 10.1142/S0217732325502062** Q2

[3]. Invariant solutions and dynamics of soliton to coupled Burgers equations, Dig Vijay Tanwar, Raj Kumar, Nidhi Asthana, Qualitative Theory of Dynamical Systems (Springer) 24, 206 (2025) SCIE, Impact factor **2.1**, **DOI:** https://doi.org/10.1007/s12346-025-01366-z Q2

[4]. Conservation laws and dynamical behavior of new generalized group invariant solutions of (2+1)-dimensional coupled BK equations existing in shallow water, Atul Kumar Tiwary, Raj Kumar, Mukesh Kumar, Anshu Kumar, *Pramana - J Phys* (Indian academy sciences) 99(133), 1-16, (2025) SCIE, Impact factor **2.1, DOI:** https://doi.org/10.1007/s12043-025-02965-w Q2

[5]. Lie symmetries and dynamics of invariant solutions to (3+1)-dimensional KP-BBM equation, Raj Kumar, Ravi Shankar Verma, Atul Kumar Tiwari, Anshu Kumar, Dig Vijay Tanwar*, Canadian Journal of Physics (Canadian Science Publishing) 103(10), 1-10 (2025) SCIE, Impact factor **1.0, DOI:** http://dx.doi.org/10.1139/cjp-2025-0081 Q3

2024:

[6]. A novel class of soliton solutions and conservation laws of the generalised BS equation by Lie symmetry method, Dig Vijay Tanwar and Raj Kumar, *Pramana - J Phys* (Indian academy sciences) 98, 113, 1-19 (2024) SCIE, Impact factor **2.1 DOI:**10.1007/s12043-024-02796-1 **Q2**

[7]. Kinks and soliton solutions to the coupled Burgers equation by Lie symmetry approach, Dig Vijay Tanwar and Raj Kumar, Phys. Scr. (IOP publishing limited) 99(7), 075223

(2024), SCIE, Impact factor **2.6** **DOI:** https://iopscience.iop.org/article/10.1088/1402-4896/ad51b6 Q2 **June 24**

[8]. Dynamics of some new solutions to the coupled DSW equations traveling horizontally on the seabed, **Raj Kumar***, Ravi Shankar Verma, Journal of Ocean Engineering and Science (Elsevier) Volume 9(2), 154-163 (2024) SCIE, Impact factor **11.8, DOI:** https://doi.org/10.1016/j.joes.2022.04.015 Q1

[9]. Some more variety of analytical solutions to (2+1)-Bogoyavlensky-Konopelchenko equation, **Raj Kumar***, Kripa Shankar Pandey, Shiv Kumar Yadav and Avneesh Kumar, Phys. Scr. (IOP publishing limited) 99, 045240, 1-11, (2024) SCIE, Impact factor **2.6 DOI:** https://doi.org/10.1088/1402-4896/ad32fd, Q2

2023:

[10]. A study on analytical solutions and conservation laws of the cgKP occurring in straits, Shitesh Shukla, Mukesh Kumar and Raj Kumar, Phys. Scr. (IOP publishing limited) 98, 125238, 1-15 (2023) SCIE, Impact factor **2.6 DOI:** https://doi.org/10.1088/1402-4896/ad0bbe Q2

[11]. Novel traveling wave solutions of Jaulent-Miodek equations and coupled Konno-Oono systems and their dynamics, **Raj Kumar***, Kripa Shankar Pandey, Avneesh Kumar and Anshu Kumar, CHAOS Theory and Applications (DergiPark), e-ISSN: 2687-4539, 5(4), 281-285, (2023) ESCI, Scopus, *Special Issue* **DOI:** https://doi.org/10.51537/chaos.1322939 Q1

[12]. On similarity solution of (3+1)-dimensional Jimbo-Miwa equations arising in fluids, **Raj Kumar*,** Indian Journal of Natural Sciences (UGC listed 2023), 14 (78), 57745-57751

[13]. On similarity solutions to (2+1)-dispersive long-wave equations, **Raj Kumar***, Ravi Shankar Verma, Atul Kumar Tiwari, Journal of Ocean Engineering and Science (Elsevier), 8(2), 111-123 (2023), SCIE, Impact factor **11.8, DOI:** 10.1016/j.joes.2021.12.005 Q1

2022:

[14]. Dynamical behavior of the solutions of coupled Boussinesq-Burgers equations occurring at the seaside beaches, **Raj Kumar**, Kripa Shanker Pandey and Avneesh Kumar, Brazilian Journal of Physics (Springer), **ISSN** 1678-4448, 52: article No. 201 (pages 1-16) (2022), SCIE, Impact factor **1.7**, **DOI**: https://doi.org/10.1007/s13538-022-01195-4 Q4

[15]. Some invariant solutions of coupled Konno-Oono equations arising in electromagnetic and quantum fields, **Raj Kumar** and Avneesh Kumar, Phys. Scr. (IOP publishing limited) 97

(2022) 075501 (pages 1-11) (2022), SCIE, Impact factor **2.6,** DOI: 10.1088/1402-4896/ac71e1 Q2

[16]. More solutions of coupled equal width wave equations arising in plasma and fluid dynamics, **Raj Kumar** and Avneesh Kumar*, International Journal of Applied and Computational Mathematics (Springer) 8:186, 1-13, 2022, Scopus, DOI: 10.1007/s40819-022-01400-7 Q3

[17]. Dynamics of invariant solutions of mKdV-ZK arising in a homogeneous magnetised plasma, **Raj Kumar**, Ravi Shankar Verma*, Nonlinear Dynamics (Springer), 108, 4081-4092 (2022), SCIE, Impact factor **6**, DOI: 10.1007/s11071-022-07389-4 Q1

[18]. Dynamical behavior of similarity solutions of CKOEs with conservation law, **Raj Kumar** and Avneesh Kumar, Appl. Math. Comput. (Elsevier), 422, 2022, 126976, SCIE, Impact factor **3.4,** DOI: 10.1016/j.amc.2022.126976 Q1

[19]. Optimal subalgebra of GKP by using Killing form, Conservation Law and some more solutions, **Raj Kumar**, Avneesh Kumar*, International Journal of Applied and Computational Mathematics (Springer), ISSN 1819-4966, Journal: 40819 Article No.: 1211, 8(11), 2022, Scopus DOI: 10.1007/s40819-021-01211-2 Q3

2021:

[20]. Dynamics of some more invariant solutions of (3+1)-Burgers system, **Raj Kumar***, Mukesh Kumar, Atul Kumar Tiwari, International Journal for Computational Methods in Engineering Science and Mechanics (Taylor & Francis), ISSN 1550-2287, 22(3): 225-234, ESCI, Scopus, Impact factor **1.4**, DOI: org/10.1080/15502287.2021.1916693 Q3

[21]. Some more invariant solutions of (2+1)-water waves, Mukesh Kumar, **Raj Kumar***, Anshu Kumar, International Journal of Applied and Computational Mathematics (Springer), ISSN 1819-4966, 7 (18): 2021, Scopus DOI: https://doi.org/10.1007/s40819-020-00945-9 Q3

2019:

[22]. More solutions of coupled Whitham-Broer-Kaup equations, Mukesh Kumar, Atul Kumar Tiwari, **Raj Kumar**, Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. (Springer), ISSN 2250-1762, (2019) 89: 747-755, SCIE, **Impact factor 1.2**, DOI:10.1007/s40010-018-0527-1 Total Citations 2 Q3

2018:

[23]. On closed form solutions of (2+1)-breaking soliton system by similarity transformations method, Mukesh Kumar, Dig Vijay Tanwar, **Raj Kumar**, Computers & Mathematics with

Applications (Elsevier), ISSN 0898-1221, 75, 218–234, (2018), SCIE, Impact factor **2.5**, DOI:10.1016/j.camwa.2017.09.005, Total Citations 15 Q1

[24]. On Lie symmetries and soliton solutions of (2+1)-dimensional Bogoyavlenskii equations, Mukesh Kumar, Dig Vijay Tanwar, **Raj Kumar**, Nonlinear Dynamics (Springer), ISSN 1573-269X, 94 (4), 2547-2561, SCIE, Impact factor **6.0**, Total Citations 13, DOI: 10.1080/17455030.2022.2042427 Q1

2017:

[25]. Some More Solutions of Kedomtsev-Petviashvili Equation, Mukesh Kumar, Atul Kumar Tiwari, **Raj Kumar**, Computers & Mathematics with Applications (Elsevier), ISSN 0898-1221, 74, 2599-2607, (2017), SCIE, Impact factor **2.5**, **DOI:** 10.1016/j.camwa.2017.07.034 **Total Citations 12** **Q1**

[26]. Soliton solutions of KD system using similarity transformations method, Mukesh Kumar, **Raj Kumar**, Computers & Mathematics with Applications (Elsevier), ISSN 0898-1221, 73, 701-712, (2017), SCIE, Impact factor **2.5** Total Citations 20, doi.org/10.1016/j.camwa.2016.12.025 Q1

2016:

[27]. Application of Lie-Group Theory for solving Calogero-Bogoyavlenskii-Schiff Equation, Raj Kumar, IOSR Journal of Mathematics (**IOSR-JM**), 12(4), **2016**, 144-147**, Non SCI, Total Citations 9,** DOI: 10.9790/5728-120402144147 issn 2278-5728

[28]. Similarity Solutions of the Konopelchenko-Dubrovsky System Using Lie Group Theory, Mukesh Kumar, Raj Kumar, Anshu Kumar, Computers & Mathematics with Applications (Elsevier), ISSN 0898-1221, 71(10), 2051-2059, (**2016)**, SCIE, Impact factor **2.5 Total Citations 18,** DOI/10.1016/J.CAMWA.2016.03.023 Q1

2015:

[29]. On Exact Solutions of (2+1)-Dissipative ZK Equation, Raj Kumar, International Journal of Science, Environment and Technology, 4(5), 2015, 1430-1437, Non SCI, Total Citations 1 **ISSN:** 2278-3687, 2277-663X

[30]. Some more similarity solutions of the (2 + 1)-dimensional BLP system, Mukesh Kumar, Raj Kumar and Anshu Kumar, Computers & Mathematics with Applications (Elsevier), ISSN 0898-1221, 70, 212-221, (2015), SCIE, Impact factor **2.5** Total Citations 19 DOI: https://doi.org/10.1016/j.camwa.2015.04.008 Q1

[31]. Some More Solutions of Burgers' Equation, with Mukesh Kumar published in an International Conference: (ICMSQUARE-14) proceeding at Madrid, Spain from August

28-31, 2014. Phys.: Conf. Ser. Volume 574 (2015) 012038, IOP Publishing, ISSN: 1742-6588, SCI, doi:10.1088/1742-6596/574/1/012038 Total Citations 5

2014:

[32]. On Similarity Solutions of Zabolotskaya-Khokhlov Equation, Mukesh Kumar, Raj Kumar and Anshu Kumar, Computers & Mathematics with Applications (Elsevier), ISSN 0898-1221, 68, 454-463, (2014), SCIE, Impact factor **2.5** Total Citations 39 https://doi.org/10.1016/j.camwa.2014.06.020 Q1

[33]. On new similarity solutions of the Boiti-Leon-Pempinelli system, Mukesh Kumar, Raj Kumar, Communications in Theoretical Physics (IOP Ltd.), 61(1), 2014, 121-126, Impact factor 1.178, SCI, Total Citations 18 DOI 10.1088/0253-6102/61/1/19 Q2

2013:

[34]. Some soliton solutions of Nonlinear partial differential equations by Tan-Cot Method, with Mukesh Kumar & Anshu Kumar, IOSR–Journal of Mathematics, 6, **2013,** 23-28, **Non-SCI, Total Citations 14**

https://www.iosrjournals.org/iosr-jm/papers/Vol6-issue6/E0662328.pdf

[35]. On some new exact solutions of incompressible steady state Navier-Stokes equations, Mukesh Kumar, **Raj Kumar**, Meccanica (**Springer**), 49, 335-345**, (2014) SCIE, Impact factor 2.1, Total Citations 22 issn 1572-9648** https://doi.org/10.1007/s11012-013-9798-4 Q2

2007:

[36]. Digital video authentication for forensic application, Saurabh Upadhyay, Raj Kumar and Sanjay Singh, Atmbodh, 4(1), 2007, 54-60 UGC listed **Total Citations 0**

[37]. An electrical spinning particle in Einstein's unified field theory, S. N. Pandey, B. K. Sinha, Raj Kumar, https://arxiv.org/abs/gr-qc/0610002 s

Book chapter: https://doi.org/10.1016/B978-0-443-16092-9.00021-7

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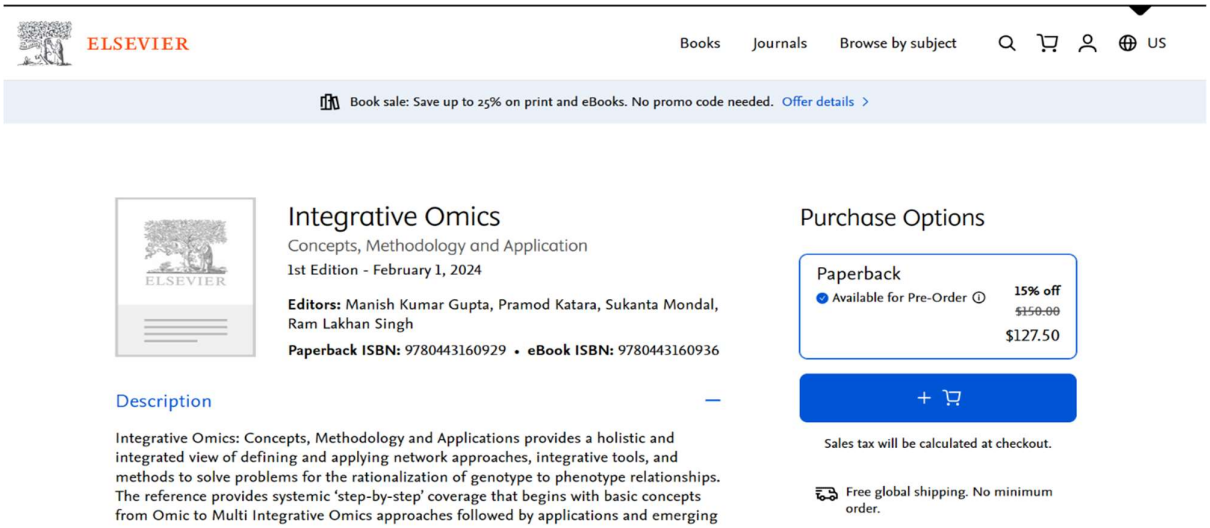
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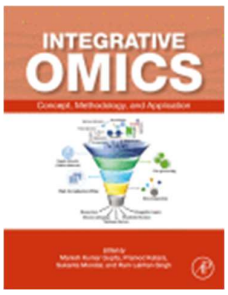
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Chapter 21 - Biomolecular networks

Author links open overlay panel

Shiv Kumar Yadav [1], Atifa Hafeez [2], Raj Kumar [1], Manish Kumar Gupta [2], Ravi Kumar Gutti [3]

https://doi.org/10.1016/B978-0-443-16092-9.00021-7

Book chapter of book entitled "Dynamic Characteristics of Layered Structures: Mathematical Modelling and Numerical Simulations". Edited By Saurabh Kapoor, Anil Negi, Ahmed Kadhim Hussein,
ISBN 9781032747859, 286 Pages 133 B/W Illustrations June 17, 2026 by CRC Press

Novel similarity solutions of (**1** + **1**)-General Boussinesq and (**1** + **1**)-Gilson Pickering equations

Raj Kumar[1], Nidhi Asthana[1], Dig Vijay Tanwar[2] and Saurabh Kapoor[3]

https://www.routledge.com/Dynamic-Characteristics-of-Layered-Structures-Mathematical-Modelling-and-Numerical-Simulations/Kapoor-Negi-Hussein/p/book/9781032747859

Book chapter for book entitled "Trends in Applied Mathematics Applications" Chapter 13 Application of Lie symmetry method to Gardner equation, *Dig Vijay Tanwar, Anukriti, Raj Kumar*

D. Participation and contribution in National/ International For a in the area of your academic and professional expertise.
Invited Lectures /conference papers presented: 36

Research Project: 01
Minor project "Some Novel soliton solutions of (3+1)-dimensional Jimbo-Miwa equations arising in fluids" funded by VBS PU 133/पू वि वि/IQAC/2022 दिनांक 23/03/2022
On exact solutions of (3 + 1)-Burgers equations by using Similarity Transformations method funded by VBS PU 1033/पू वि वि/UGC/2016 दिनांक 5/03/2016

Honors/ Awards & Fellowships for Outstanding Work:

1. Excellence Award by VBS Purvanchal University, Jaunpur for outstanding contribution in the field of Mathematics on 21/02/2023
2. पर्यावरण प्रहरी सम्मान-2022 by भारत विकास परिषद् शाखा, जौनपुर AUGUST 2022
3. Awarded by State Government for designing syllabus of NEP-2020: Course Title: Analytic Ability and Digital Awareness course is developed for National Education Policy-2020 Common Minimum Syllabus for all U.P. State Universities Co-curricular course: Semester-5 Course Title: Analytic Ability and Digital Awareness.
4. Second Prize on Best poster presentation in International Conference on Recent Trends in Electrical, Electronics and Computer Science Engineering-2020 during 10-11 Jan. 2020.
5. Outstanding Reviewer Award 2016 by Computers & Mathematics with Applications (Elsevier).
6. Awarded First position at college level in 10th class.

Number of Research Scholars successfully guided:

02 (ongoing)	Mr. Shiv Kumar Yadav (JRF), Mrs. Nidhi Asthana	
03 (Awarded)	September 2022	Mr. Avneesh Kumar
	May 2023	Mr. Ravi Shanker Verma
	March 2026	Mr. Kripa Shankar Pandey

Current Research Focus: My primary research interest lies in the domain of nonlinear differential equations and getting their physically meaningful solutions utilising by Lie-symmetry analysis. Some of my recent work includes the exact solutions of non-linear evolution equations occurring in fluids like (3 + 1)-dimensional KP-BBM and (2+1)-dimensional modified Korteweg-De Vries-Calogero-Bogoyavlenkskii-Schiff equations etc. The STM is a good technique to solve system of PDE's analytically which is based on invariance property of PDE's that leaves PDE's invariant. The invariance reduces the number of independent variables by one in PDE's.
Thesis title: *ON SIMILARITY SOLUTIONS OF NONLINEAR FLUID PROBLEMS*

Academic Experience: More than 20 years teaching including 2 Yrs. as Professor, 4 Yrs. as Associate Professor and 14Yrs. as Assistant Professor in Department of Mathematics at V.B.S. Purvanchal University, Jaunpur w.e.f. March 15, 2004.

Distinctions & Scholarship:

1. Academic Career **throughout first**
2. Availed **National scholarship** during 1991-92.
3. **Distinction** in English, Science and Mathematics (10th class)
4. **Distinction** in Physics & Mathematics (12th Class)
5. **Distinction** in Mathematics (B.Sc.)
6. **Distinction** in 5 papers (M.Sc.)

Expert in Mathematics of selection boards of the following commissions

1. Uttar Pradesh Maadhymik Shiksha Sewa Chayan Board, Prayagraj
2. Uttrakhand PSC, Haridwar

National Level Achievements:

1. Qualified **JRF (June'2000**), **JRF (Dec'2001**) of National Eligibility Test (CSIR- UGC) in Mathematical Sciences
2. Qualified **GATE-2000** with Percentile score 96.02 and **All India Rank 30** in Mathematics

Conference/workshops/lecture series/ programmes organised etc.:

1. Convener and Co Convener of **'National Science Day (NSD-2017 to 2020)' organized on National Science day** 28 Feb. 2017, 2018, 2029, 2020
2. **Organizing Secretary, Webinar** on "वर्तमान परिप्रेक्ष्य में गाँधी चिंतन की प्रासंगिकता", on 25th Aug, 2020 organized by VBSPU, Jaunpur.
3. **Convener, International Webinar** on Impact of Covid-19 on *Indian Economy: Challenges and Opportunities,* On June 09, 2020 organised by Department of Mathematics and Financial Studies
4. **Member** of Organizing Committee of a national webinar on *Intellectual Property Rights: Protection of Intellectual Property and Way Forward* during 22-23 May, 2020 and organised by Intellectual Property Rights Cell, VBS Purvanchal University Jaunpur.
5. **Convener, International Conference** on *Recent Trends in Electrical, Electronics and Computer Science Engineering-2020* during **10-11 Jan. 2020** organised by UNSIET
6. **Co-chair, an international conference** "*International Conference on Ultrasonics and Materials Science for Advanced Technology*" (ICUMSAT- 2019) during **16-18 November 2019** and jointly organised by Prof. Rajendra Singh Institute of Engineering of Physical Study and Research, VBS PU Jaunpur and Ultrasonics Society of India, New Delhi, India.
7. Co Convener of "**National Youth Day**" celebration on 12th January, 2019 on the occasion of 146th Jubilee of Swami Vivekanand in the campus of V.B.S. Purvanchal Univ. Jaunpur.
8. Co-Convener of **inaugural ceremony** of "कौशल विकास एवं प्रशिक्षण केंद्र" on 16/09/2019.

9. Co-Convener of **one day national seminar** on "**विश्वविद्यालयीय शिक्षा की स्वायत्तता**" on **14 August 2019.**
10. Convener **of National seminar** entitled "*Samsamyik Pridrasya men Ekatm Manavvad*" on 22th September, 2018 on inaugural day of Pt. Deen Dayal Shodh Peeth and organized by V.B.S. Purvanchal Univ. Jaunpur.
11. Convener of a **National seminar** entitled "*Ekatm Manavdarshan ka Yugbodh* (एकात्म मानव दर्शन का युगबोध)" on **25**th September, **2019** in the campus of V.B.S. Purvanchal Univ. Jaunpur.
12. Convener of a **National workshop** entitled "***Growth of Science & Technology in the Campus of Purvanchal University (GSTCPU-2017)***" during 8-10th September, 2017 for discussions on new courses in the campus.
13. Co Convener of "**मतदाता जागरूकता अभियान**" in the V.B.S. Purvanchal University, Jaunpur campus on 18th Feb., 2017
14. Convener **of Workshop** entitled "***Communication Skills***" organized by V.B.S. Purvanchal University, Jaunpur during 17-18th September, 2016 for all students of campus.
15. Convener of Lecture series entitled "**Numerical Techniques and Programming in MATLAB**" during 22-28th July, 2016 for UG students.
16. Convener of Workshop **"Numerical Computation Using MATLAB**" during 26-30 November, 2015 for all CSE/IT students of campus.
17. Convener of Workshop on "**Better Engineer**" during 10-13 November, 2010.

Courses/Summer Institute/Training programme attended:

Name/Nature of the Course	Institute and Place	Dates/Period	Duration	
Orientation Program	BHU, Varanasi	04/06/10 to 1/07/10	4 weeks	14
Refresher Course on Human Rights and Social Inclusion (Interdisciplinary)	Jamia Millia Islamia University, New Delhi	15/04/10 to 5/05/10	3 weeks	15
An **ATM school** "Numerical Methods on PDE's"	Panjab Univ. Chandigarh	18/06/12 to 7/07/12	20 days	16
An **Advanced Instructional school** "PDE's and Computations"	Jaypee Tech. Univ. Solan, Himachal Pradesh	June 4-16, 2012	13 Days	17
A short Term course "Research Skills & Methods in Computational Sciences with Engineering Applications "	Applied Sciences & Engg. Mathematics at the QIP Center, IIT Roorkee	From 12/06/17 to 16/06/17	One week	18
A short term course "Scientific Computing and Applications to Industrial Problems."	Department of Mathematics, IIT Kharagpur.	From 9/11/18 to 23/11/18	One week	19
Professional Development Training under TEQIP III	IIM Trichy	6th-10th August 2018	One week	20
Professional Development Training under TEQIP III	IIM Indore	11th-15th Dec. 2017	One week	21
Training Programme on Academic Leadership	Centre of Academic Leadership and Education Management,	31 Jan. 2018-3rd Feb. 2018	One week	22

	AMU, Aligarh and VBS Purvanchal University, Jaunpur.			
Training Programme on Academic Leadership	Centre of Academic Leadership and Education Management, AMU, Aligarh and VBS Purvanchal University, Jaunpur.	26th-29th March 2019	One week	23
Training Programme on Academic Leadership	Centre of Academic Leadership and Education Management, AMU, Aligarh and VBS Purvanchal University, Jaunpur.	23th-29th April 2019	One week	24
National Workshop "**Trends and Challenges in Higher and Technical Education**"	ESCI Haiderabad **at Port Blair** under the Industry-Institute Interface Programme	19-23th Jan. 2019	One week	25
"Mathematical Analysis and Applications"	Deptt. of Mathematics at the QIP Center, IIT Roorkee	4th-8th July 2016	One week	26
"Mathematical Modelling and Numerical Computation using MATLAB"	Deptt. of Mathematics & CSE at the QIP Center, IIT Roorkee	From 09/02/15 to 13/02/15	One week	27
A **national workshop** "Optimization Techniques & Their Applications **(NWOTA-13)"**	Department of Mathematics at the MNNIT Allahabad.	05/06/13 to 11/06/13	7 Days	28
Inspire Science Camp 2020 "Innovation in Science Pursuit For Inspired Research."	Department of Science and Technology (DST) GOI atVBS Purvanchal University, Jaunpur.	27/0120 to 31/01/20	One week	29
FDP on Cryptography and Cyber Security	Department of CSE & IT Sponsored byTEQIP-III atVBS Purvanchal University, Jaunpur.	14/09/19 to 18/09/19	One week	30
Workshop on "Research Methodology and Ethical Issues in Research."	Sponsored byTEQIP-III atVBS Purvanchal University, Jaunpur.	06/09/19 to 07/09/19	2 Days	
Symposium on Collaborative Research	PES College of Engineering, Mandya with SPIU Karanataka and in association with SJCE Mysuru, NIE Mysuru and MCE Hassan	19/08/19 to 20/08/19	2 Days	
Online FDP on Mathematica Software- "Hands on Experience: Tools & Techniques for Next Generation"	Department of Mathematics, Santhiram Engineering College in association with Wolfram Mathematica, Aaryman Geo Info, Bangalore	28/05/20 to 02/06/20	One week	31
International Webinar on "Impact of Covid-19 on Indian Economy: Challenges and Opportunities."	Department of Mathematics and Department of Financial Studies VBS Purvanchal University, Jaunpur.	09/06/20	1 Day	
National Webinar on "Intellectual Property Rights: Protection of Intellectual Property and Way Forward."	Intellectual Property Rights Cell VBS Purvanchal University Jaunpur.	22/05/20 to 23/05/20	2 Days	

Membership of Professional Bodies/Societies etc.

1. Life Member Ship of Indian Mathematical Society
2. Annual membership of World Physics Association (WPA) From Nov. 2015 to Dec. 2016

Tasks for University campus and social Development

1. "Prerna" Free Coaching Initiative

Launched on February 4, 2014, the "Prerna" initiative provides free coaching to underprivileged children in the villages surrounding V.B.S. Purvanchal University, Jaunpur. Driven by the dedication of our university students who volunteer their time as tutors, the program aims to bridge educational gaps and enhance learning outcomes. To date, approximately 1,900 children have benefited from this community outreach.

👉 **Learn more:** vbspu.ac.in/en/article/prerna-coaching

2. Green Campus & Afforestation Drive

For the past 15 years, I have been deeply committed to transforming our campus into a thriving, lush green space, successfully planting over 3,500 trees. Recently stepping into the role of Green Campus Coordinator three months ago, I have collaborated with my colleagues to successfully complete the geotagging of every tree and plant across the entire campus for better conservation and tracking.

👉 **Watch the initiative in action:** youtube.com/watch?v=S6YhxfYhc9g

3. Skill Development and Training Center

Over the last six years, the university's Skill Development and Training Center has been actively empowering the local workforce. The center has successfully trained 30 batches of students across various vocations, including domestic data entry operators, sewing machine operators, microfinance executives, and domestic help desk attendants, while also ensuring successful job placements for the trainees.

👉 **Explore our programs:** vbspu.ac.in/en/article/skill-development-and-training-center

(Dr. Raj Kumar)

Biography

I did my Ph.D. in 2014 from MNNIT Allahabad and my M.Sc. in 1998 from I.I.T. Roorkee. My academic career has been successful; first, I received a national scholarship in 1991-92 and achieved the first position in my school in the 10th class. I was also honored by the U.P. State Government for designing the syllabus for NEP-2020 and was awarded an Outstanding Reviewer Award in 2016 by Computers & Mathematics with Applications (Elsevier). I am a member of selection boards in UP and Uttarakhand. I also have national-level achievements, like qualifying for LS (Dec '2000, June '2006) and JRF (June '2000, Dec '2001) of the National Eligibility Test (CSIR- UGC) in Mathematical Sciences and qualifying for GATE-2000 with a percentile score of 96.02 and an All India Rank of 30 in Mathematics. I have organized 18 national, international, and university-level conferences, workshops, lecture series, and programs; published 38 research articles in SCI/Scopus/UGC-listed journals; presented 16 papers; and gave more than 22 invited talks at international and national conferences. I have attended more than 40 FDPs, workshops, or training programs.

I successfully performed various responsibilities at V.B.S. Purvanchal University, Jaunpur like Honorary Librarian, Chief Proctor; In charge, Media Cell; Chief Warden; Head of Department of Mathematics; Coordinator of many inquiry committees against affiliated colleges, Flying Team, and Central Vigilance team of Invigilation and Technical Cell; Organizing Secretary of Annual Sports Meet of Campus; Assistant Proctor; Dy. Coordinator of UGC Sponsored Remedial Coaching for SC/ST/OBC students; Dy. Coordinator of Academic activities of B.Tech. First Year; and Coordinator of Internet Maintenance Committee.

Members of various committees like the Executive Council, IPR Cell, Academic Council, Board of Studies of the Department of Mathematics, Sports Council, NIRF committee, Equal Opportunity Cell, Internal screening committee for regular teacher’s post applications, E-tendering committee, Infrastructure committee, Auction of disposable materials committee, and some others.

I am working on some tasks for the university campus and social development, like being a coordinator of a free coaching program called "Prerna," which is running in nearby villages of V.B.S. Purvanchal University, Jaunpur, to upgrade the knowledge of financially weak children and working as a nodal officer of Kaushal Vikas & Prashikshan Kendra. Since Feb. 2014, I have been thoroughly involved in improving the extension activity of the campus. We are constantly working to make the campus lush and green.

Hobbies:

1. Gardening and striving to make lush green the V.B.S. P.U. campus
2. To work for society welfare providing them free coaching/ possible financial support or making them employable through Kaushal Vikas Kendra of P.U.