

Brief Curriculum Vitae



RAJ KUMAR

Ph.D. in 2014 (Motilal Nehru National Institute of Technology Allahabad)

M.Sc. in 1998 (I.I.T. Roorkee formally **University of Roorkee**)

Associate Professor (AGP-9000) in Mathematics from May 2018

Joined VBS Purvanchal Univ. as a **Lecturer** in March, 2004

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 is throughout first, received a national scholarship during 1991-92 and the first position in school in the 10th class. I was also honoured by the UP State Government for designing the syllabus for NEP-2020 and availed an Outstanding Reviewer Award in 2016 by Computers & Mathematics with Applications (Elsevier). I am member of selection boards in UP and Uttrakhand, I also have national level achievements like qualified LS (Dec'2000, June'2006), and JRF (June'2000, Dec'2001) of the National Eligibility Test (CSIR- UGC) in Mathematical Sciences, qualified GATE-2000 with a percentile score of 96.02 and an All India Rank 30 in Mathematics. I have organised 18 national, international, and university level conferences, workshops, lecture series, and programs, published 24 research articles in SCI/Scopus/UGC listed journals, presented 16 papers, and gave more than 20 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 Incharge, Media Cell; Nodal officer of Kaushal Vikas & Prashikshan Kendra; Chief Warden; Head of Department of Mathematics; Coordinator of 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 Executive Council, IPR Cell, Academic Council, Board of Studies of Department of Mathematics Sports Council, NIRF committee, Equal Opportunity Cell, Internal screening committee for regular teacher's post applications, E-tendering committee, E-tendering committee, Infrastructure committee, Auction of disposable materials committee, and some others.

I am working on some tasks for university campus and social development, like as a coordinator of a free coaching programme called "Prerna", which is running in nearby villages of the V.B.S. Purvanchal University, Jaunpur, to upgrade the knowledge of financially weak children. 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 greener.

Research Interests: Similarity transformations method, Similarity reductions and closed form solutions of nonlinear differential Equations, Biomathematics, Fluid dynamics

Hobbies:

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

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, (2+1)-Date-Jimbo-Kashiwara-Miwa equation (DJKME), and (2+1)-dimensional modified Korteweg-De Vries-Calogero-Bogoyavlenskii-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 18 years teaching including 4 Yrs. as Associate Professor and 14Yrs as Assistant Professor in Department of Mathematics at V.B.S. Purvanchal University with effective from 15 March, 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.)

Awards & Honours:

1. 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.
2. पर्यावरण प्रहरी सम्मान-2022, भारत विकास परिषद् शाखा, जौनपुर द्वारा
3. **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.
4. **Outstanding Reviewer Award 2016** by Computers & Mathematics with Applications (**Elsevier**).
5. Awarded **first position** at college level in 10th class.

Member of selection boards of commission

Uttar Pradesh Maadhymik Shiksha Sewa Chayan Board, Pryagraj,
Uttrakhand PSC, Haridwar

National Level Achievements:

3. Qualified **LS (Dec'2000)**, **JRF (June'2000)**, **JRF (Dec'2001)** and **LS (June'2006)** of National Eligibility Test (CSIR- UGC) in Mathematical Sciences
4. Qualified **GATE-2000** with Percentile score 96.02 and **All India Rank 30** in Mathematics
5. Qualified **GATE-2001** with Percentile score 86.61 and **All India Rank 117** in Mathematics.

Academic Qualifications (from Metric to post graduation):

| Examinations | Name of the Board/ University | Year of passing | % of marks obtained | Subjects |
|-----------------|---|-----------------|---------------------|---|
| High School | UP Board | 1990 | 74.89 | Mathematics, Science, Hindi, Social Science, Biology, English |
| Intermediate | UP Board | 1992 | 69.20 | Mathematics, Physics, Hindi, Chemistry, English |
| B. Sc. | C.C.S. Univ. Meerut | 1996 | 68.60 | Mathematics, Physics, Chemistry |
| Master's Degree | Univ. of Roorkee, Roorkee (Now IIT Roorkee) | 1998 | 67.50 | Applied Mathematics |

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

1. **Convener and Co Convener** of ‘**National Science Day (NSD-2017 to 2020)**’ organized on the occasion of **National Science day** 28 Feb. 2017, 2018, 2019, 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 the occasion of 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 25th September, 2019 in the campus of V.B.S. Purvanchal Univ. Jaunpur.
12. **Co Convener** of “**मतदाता जागरूकता अभियान**” in the V.B.S. Purvanchal University, Jaunpur campus on 18th Feb., 2017
13. **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.
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.

- [1]. 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, SCI, Impact factor **1.31**, doi.org/10.1080/15502287.2021.1916693
- [2]. 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: 10.1007/s40819-020-00945-9. Total Citations 1

2019:

- [1]. 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, **Impact factor 1.544**, SCI, DOI:10.1007/s40010-018-0527-1 Total Citations 2

2018:

- [1]. 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), Impact factor **3.476**, SCI, ISSN 0898-1221, 75 (2018), 218–234, DOI:10.1016/j.camwa.2017.09.005, Total Citations 15
- [2]. On Lie symmetries and soliton solutions of (2+1)-dimensional Bogoyavlenskii equations, Mukesh Kumar, Dig Vijay Tanwar, **Raj Kumar**, Nonlinear Dynamics (Springer), Impact factor **5.741**, SCI, ISSN 1573-269X, 94 (4), 2547-2561, Total Citations 13, DOI: 10.1080/17455030.2022.2042427

2017:

- [1]. Some More Solutions of Kedomtsev-Petviashvili Equation, Mukesh Kumar, Atul Kumar Tiwari, **Raj Kumar**, Computers & Mathematics with Applications (Elsevier), **Impact factor 3.476**, SCI, 74 (2017), 2599–2607, **DOI:10.1016/j.camwa.2017.07.034**
Total Citations 12
- [2]. Soliton solutions of KD system using similarity transformations method, Mukesh Kumar, **Raj Kumar**, Computers & Mathematics with Applications (Elsevier), Impact factor **3.476**, SCI, 73, 2017, 701-712, Total Citations 20, doi.org/10.1016/j.camwa.2016.12.025

2016:

1. 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

2. Similarity Solutions of the Konopelchenko-Dubrovsky System Using Lie Group Theory, with Mukesh Kumar, Anshu Kumar, Computers & Mathematics with Applications (Elsevier), Impact factor 3.476, SCI, **Total Citations 18**, 71(10), **2016**, 2051-2059 , DOI/10.1016/J.CAMWA.2016.03.023

2015:

- [1]. 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
- [2]. Some more similarity solutions of the (2 + 1)-dimensional BLP system, Mukesh Kumar, Raj Kumar and Anshu Kumar, Computers & Mathematics with Applications (Elsevier), Impact factor 3.476, SCI, 70, 2015, 212-221, Total Citations 19
- [3]. 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:

- [1]. On Similarity Solutions of Zabolotskaya-Khokhlov Equation, Mukesh Kumar, Raj Kumar and Anshu Kumar, Computers & Mathematics with Applications (Elsevier), Impact factor 3.476, SCI, 68, 2014, 454-463. Citations 30, Total Citations 39
- [2]. 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

2013:

- [1]. 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**
- [2]. On some new exact solutions of incompressible steady state Navier-Stokes equations, Mukesh Kumar, **Raj Kumar**, Meccanica (**Springer**), 49, **2014**, 335-345, **Impact factor 2.211, SCI Total Citations 22**

2007:

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

Research Guidance:

04 (ongoing) Mr. Shiv Kumar Yadav (JRF), Mr. Ravi Shanker Verma
Mr. Kripa Shankar Pandey, Mr. Saurabh Kumar Singh,

01 (Submitted) on June 2022 Mr. Avneesh Kumar

Current Sponsored Projects: 01 Minor project by VBS PU

Member of Editorial boards as Reviewer in SCI Journals:

1. Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (Springer Publisher)
2. The Asian Journal of Mathematics (A Journal by the **International Press**)
3. Computers & Mathematics with Applications (**Elsevier** Publisher)
4. Physica A: Statistical Mechanics and its Applications (Elsevier Publisher)
5. *Waves in Random and Complex Media* (formerly **Waves in Random Media**)
6. Phys. Scr. (IOPScience)

Invited Lectures /conference papers presented:

| S. No. | Title of the Paper / talk presented | Title of Conference / Seminar With date | Organized by | Level |
|--------|---|--|---|--------------------------|
| 1. | Paper: Some More Travelling Wave Solutions of the Rosenau Equation | 87 th Annual Conference of the Indian Mathematical Society | Jawaharlal Nehru Engineering College, MGM University, Aurangabad | International |
| 2. | Paper: Some more invariant solutions of Coupled Equal Width Wave Equation | An International Meet (Online Conference) | Page 82-83 http://www.mgmu.ac.in/ims/documents/abstract%20book.pdf | |
| 3. | Paper: Soliton solutions of the (2+1)-Coupled DLW equations | 1 - 4 Dec., 2021 | | |
| 4. | Paper: More analytical solutions of (2+1)-Gardner-Kadomtsev-Petviashvili equation | Online - International Conference on Advances in Applied Sciences & Advances in Sustainable Development 2021 during Nov. 24 th & 25 th , 2021 | RBVRR Women's College, Narayanguda, Hyderabad & IMRF Institute of Higher Education & Research, India. | International |
| 5. | Paper: Exact solutions of mKdV-ZK in (3+1)-dimensional spaces' | a National Conference, "37th Annual National Conference of The Mathematical Society-Banaras Hindu University (MS-BHU) on Modern Mathematics and its Applications," January 29–30, 2022 | Department of Mathematics, Institute of Science, Banaras Hindu University, Varanasi. | National |
| 6. | Paper: Some Invariant Solutions of Konopelchenko-Dubrovsky System | International Conference on Recent Trends in Electrical, Electronics and Computer Science Engineering-2020 during 10-11 Jan. 2020 | UNSIET, VBS PU Jaunpur | International |
| 7. | Paper: Application of similarity transformations method to solve Kedomtsev-Petviashvili equation | International Conference on Recent Trends in Electrical, Electronics and Computer Science Engineering-2020 during 10-11 Jan. 2020 | UNSIET, VBS PU Jaunpur | International Conference |
| 8. | Talk, "Basics and applications of Game Theory and Assignment Problems" | TEQIP-III 15-16 March 2019 | Atal Bihary Vajpyee Govt. College of Engg. & Tech Himachal Pradesh | National |

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| 9. | 2 Invited lectures on Basics on Finite Groups & Ring theory with Applications | FDP on Cryptography and Cyber Security during 14-18 September, 2019 | sponsored by TEQIP-III at UNSIET | National |
| 10. | Invited Talk “ Introduction to LaTeX: A typing tool ” November 08-10, 2019 | National Conference on “ Number Theory, Special Functions and Their Applications in Computer Science. ” November 08-10, 2019 | Ramanujan Society of Mathematics and Mathematical Sciences & Department of Mathematics, TDPG College, Jaunpur-222002 (UP), India | National |
| 11. | Invited Talk “ Introduction to Congruence modulo, Sylow theory and their applications ” November 08-10, 2019 | National Conference on “ Number Theory, Special Functions and Their Applications in Computer Science. ” November 08-10, 2019 | Ramanujan Society of Mathematics and Mathematical Sciences & Department of Mathematics, TDPG College, Jaunpur-222002 (UP), India | National |
| 12. | Paper: “Similarity Solutions of Breaking Soliton Equation” November 08-10, 2019 | National Conference on “ Number Theory, Special Functions and Their Applications in Computer Science. ” November 08-10, 2019 | Ramanujan Society of Mathematics and Mathematical Sciences & Department of Mathematics, TDPG College, Jaunpur-222002 (UP), India | National |
| 13. | Paper: Some Exact Solutions of (3+1)-Burgers system. | International Conference on Applied and Computational Mathematics. Nov 23-25, 2018. | IIT Kharagpur | International |
| 14. | An invited talk “Concluding Lectures on Latex”, on 24 March 2017 | One Week STTP “Latex for Academic writing” (20-24 th March, 2017) | Government Engineering College, Patan, Gujarat | National |
| 15. | An invited talk “ Tips to Crack GATE Examination. ” | Government Engineering College, Patan, Gujarat (on 25 March 2017) | | National |
| 16. | An invited talk “Similarity Transformation Method: A tool for solving Nonlinear PDEs.” | National Conference on “Discrete Mathematics, Theoretical Computer Science, Computer Engineering and Applications.” November 28-29, 2017 | Ramanujan Society of Mathematics and Mathematical Sciences & Department of Mathematics, TDPG College, Jaunpur, India. | National |
| 17. | Paper: Similarity Transformations to Solve (2+1)-Burgers’ Equation. | Silver Jubilee of ISIAM. 29-31Jan, 2016 | Sharda University, Greater Noida (UP). | International |
| 18. | Talk: Similarity Transformations Method: Theory and Applications. | STTP on “Computational Techniques for Differential Equations (CTDE-2016)” May 2-6, 2016 | Department of Applied Maths. & Humanities, SVNIT Surat-Gujarat | National |
| 19. | An invited talk “Career Counselling.” | National workshop “Computational Techniques for | Department of Applied Mathematics and Humanities, SVNIT Surat. | National |

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| | | Differential equations.” May 4, 2016 | | |
| 20. | Paper: “On Similarity Solutions of Coupled Whitham-Broer-Kaup Equation.” | Recent Trends of Research in Mathematics and Applications in Diverse Fields. November 3-5, 2016 | Department of Mathematics, TDPG College, Jaunpur, India. | National |
| 21. | An invited talk “Application of Similarity Transformation method for solving nonlinear PDEs.” | Workshop on “Treasures of Great Indian Mathematician Srinivasa Ramanujan.” November 3-7, 2016 | Department of Mathematics, TDPG College, Jaunpur, India. | National |
| 22. | Paper: More Solutions of KD Equation. | Condensed Matter & Applied Physics. October 30-31, 2015 | Govt. Engineering College, Bikaner-334004, Rajasthan, India | International |
| 23. | A talk: Finite Element Method. | Govt. Engineering College, Bikaner. 31 Oct. 2015 | | National |
| 24. | Paper: Similarity Solution of the CBS Equation. | 18 th International Conference of Academy of Physical Sciences (CONIAPS XVIII). December 22-24, 2015 | University of Allahabad, India | International |
| 25. | On Similarity Transformation Methods and Some Applications, | On Role of Mathematics In Sustainable Development. October 17–18, 2014 | Govt. Deg. College, Karanprayag (Chamoli), Uttrakhand, India | National |
| 26. | On Some Invariant Solutions of (2+1)-dimensional ZK dissipative Equation. | Applications of Mathematics in Engineering and Sciences (AMES–2014). November 29-30, 2014 | MNNIT Allahabad, India | National |
| 27. | Tan-Cot method for Soliton Solutions of BBM type Equations. | Mathematical Modelling and Applications In Sciences & Engineering. March 9-10, 2013 | Department of Mathematics, NIT Patna | National |
| 28. | Paper: New exact solutions of the (2+1)-dimensional Boiti-Leon-Pempinelli system. | Mathematical Modelling and Numerical Simulation (ICMMANS-2013). July 1-3, 2013 | Babasaheb Bhimrao Ambedkar University, Lucknow (UP). | International |
| 29. | Paper: On Similarity Solutions of Burgers’ Equation. | Advances in Mathematical Sciences (AMS–2012). October 5-7, 2012 | MNNIT Allahabad | National |
| 30. | Paper: On Invariant Solutions of Steady–State Navier–Stokes Equations. | South Eastern Atlantic Regional Conference on Differential Equations (SEARCDE–2012). October 19–20, 2012 | Wake Forest University, Winston Salem, North Carolina, USA. | International |
| 31. | Paper: Some Invariant solutions of Burgers’ Equation. | Emerging Mathematical Methods, Models & Algorithms for Science and Technology” December 15–16, 2012 | Gautam Buddha University, Greater Noida (NCR), India. | International |
| 32. | Paper: Behaviour of Magnetic Tubes in Neutron star’s Interior. | 23rd Conference of IAGRG. December 7-10, 2004 | University of Rajasthan, Jaipur, India | national |

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 |
| Refresher Course on Human Rights and Social Inclusion (Interdisciplinary) | Jamia Millia Islamia University, New Delhi | 15/04/10 to 5/05/10 | 3 weeks |
| An ATM school “Numerical Methods on PDE’s” | Panjab Univ. Chandigarh | 18/06/12 to 7/07/12 | 20 days |
| An Advanced Instructional school “PDE’s and Computations” | Jaypee Tech. Univ. Solan, Himachal Pradesh | June 4-16, 2012 | 13 Days |
| 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 |
| 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 |
| Professional Development Training under TEQIP III | IIM Trichy | 6 th -10 th August 2018 | One week |
| Professional Development Training under TEQIP III | IIM Indore | 11 th -15 th Dec. 2017 | One week |
| Training Programme on Academic Leadership | Centre of Academic Leadership and Education Management, AMU, Aligarh and VBS Purvanchal University, Jaunpur. | 31 th Jan. 2018-3 rd Feb. 2018 | One week |
| Training Programme on Academic Leadership | Centre of Academic Leadership and Education Management, AMU, Aligarh and VBS Purvanchal University, Jaunpur. | 26 th -29 th March 2019 | One week |
| Training Programme on Academic Leadership | Centre of Academic Leadership and Education Management, AMU, Aligarh and VBS Purvanchal University, Jaunpur. | 23 th -29 th April 2019 | One week |
| National Workshop, “ Trends and Challenges in Higher and Technical Education ” | ESCI Haiderabad at Port Blair under the Industry-Institute Interface Programme | 19-23 th Jan. 2019 | One week |
| “Mathematical Analysis and Applications” | Deptt. of Mathematics at the QIP Center, IIT Roorkee | 4 th -8 th July 2016 | One week |
| “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 |
| 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 |
| Inspire Science Camp 2020 “Innovation in Science Pursuit For Inspired Research.” | Department of Science and Technology (DST) GOI at VBS Purvanchal University, Jaunpur. | 27/01/20 to 31/01/20 | One week |
| FDP on Cryptography and Cyber Security | Department of CSE & IT Sponsored by TEQIP-III at VBS Purvanchal University, Jaunpur. | 14/09/19 to 18/09/19 | One week |
| Workshop on “Research Methodology and Ethical Issues in Research.” | Sponsored by TEQIP-III at VBS 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 | 19/08/19 to 20/08/19 | 2 Days |

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| | Hassan | | |
| 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 | 28/0/5/20 to 02/06/20 | One week |
| 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

Portfolio at V.B.S. Purvanchal University, Jaunpur

1. **Member**, Executive Council from May 2021-May 2022
2. **Incharge**, Media Cell, VBS PU Campus from Jan 2020-Oct 2021
3. **Member**, IPR Cell from March 2019 to April 2022
4. **Nodal officer**, Kaushal Vikas & Prashikshan Kendra at campus from last 2 years
5. **Chief Warden** from Oct 2017 to Oct 2021.
6. **Member of Academic Council** from last two years
7. **Head, Department of Mathematics** during last 13 yrs (2004-2011, 2014-till date)
8. **Coordinator**, Purvanchal University Combined admission test (PUCAT)-2019,2016, member PUCAT 2017-18
9. **Assistant Dean of Students Welfare** for two Yrs (2014-2016)
10. **Programme Officer**: Unit-III of NSS for 2 Yrs (2014-2016)
11. **Convener, Board of Studies**, Department of Mathematics during last 13 yrs (2004-2011, 2014-till date)
12. **Coordinator, Technical cell** (Result preparation cell for the whole campus courses),
13. **Coordinator, B. Tech. OBC Scholarship Cell**, for 5 yrs (2005-2010)
14. **Organising Secretary, Sports meet of campus** from 2017 to July 2020.
15. **Assistant Proctor from last 13 years**
16. **Member of internal screening committee** for regular teacher’s post applications.
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. **Coordinator, Internet maintenance committee**
20. **Member of E-tendering committee, Infrastructure committee, Auction of disposable materials committee**, and some others

Tasks for University campus and social Development

1. As a Coordinator of a Free Coaching "**Prerna**" which is running in nearby villages of the V.B.S. Purvanchal University, Jaunpur to upgrade the knowledge of financially weak

children w.e.f. Sept. 2014, I have been thoroughly involved there to improve extension activity of the campus.

2. Continuously striving to make lush green the campus and planted more than 2500 in the campus.
3. I actively participated as Deputy Coordinator of a committee constituted for making proposal and implementation for “स्वच्छ भारत अभियान” of Govt. of India in the locality of the VBS Purvanchal University, Jaunpur from 29/05/2015 to April 2016.

(Dr. Raj Kumar)