

## CURRICULUM VITAE

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1. **Name:** Dr. Jivan Singh (Garia)
2. **Designation / Subject:** Assistant Professor / Physics
3. **Father's Name:** Dr. Pratap Singh Garia
4. **Date of Birth:** 30-06-1975
5. **Permanent Address:** Village & Post-Gadera District-Bageshwar (Uttarakhand)
6. **Correspondence Address:** Department of Physics  
I. P Govt. Girls P. G. College, Haldwani (U.K).
7. **Contact Number:** 94123744737, 8171408265
8. **Mail ID:** jgaria14@gmail.com
9. **Educational Qualification:** M.Sc (Physics), NET, Ph.D
10. **Qualified Tests:**
  - CSIR UGC-NET (Lectureship) June, 2000.
  - Graduate Aptitude Test (GATE) 2000, Percentile 94.07 (AIR-85).

### 11. Details of Scholarships / Awards received:

S.No.	Name of Award / Scholarship	Awarded by	Year
1.	Akeekrat Scholarship	UP State Govt.	1988-1990
2.	National Scholarship	UP State Govt.	1990-1992
3.	Silver Medal	Shia Int. College, Lucknow	1990

### 12. Teaching Experience:

- Graduate Level: **22** Years.
- Post Graduate Level: **17** Years.

### 13. Service Record

S.N.	Post	Nature of Post	Duration	College Name
1.	Visiting Faculty/ Visiting Lecturer	Contractual	23-08-2001 to 31-05-2005	Pt. B.D Pandey Govt. P.G College, Bageshwar.
2.	Visiting Lecturer	Contractual	22-08-2005 to 31-05-2006	M.B Govt. P.G College, Haldwani.
3.	Visiting Lecturer/ Samvida Pravkta	Contractual	04-09-2006 to 17-03-2013	L.S.M Govt. P.G. College, Pithoragarh.
4.	Assistant Professor	Regular	18-03-2013 to 02-08-2022	L.S.M Govt. P.G. College, Pithoragarh.
5.	Assistant Professor	Regular	03-08-2022 to Continue	I.P Govt. Girls P.G.College, Haldwani

### 14. Conference/Seminars/ Training Programmes and Workshops Attended

- Paper "*Maxwell's equations in subluminal and superluminal Lorentz transformation*", presented in **23<sup>rd</sup> Conference of the IAGR**. Organized by Dept. of Mathematics, Rajasthan University, Jaipur (Dec 7-10, 2004).
- Paper "*Quaternion analysis of electromagnetic fields in presence of electric and magnetic sources*," presented in **15<sup>th</sup> Annual conference of Purvanchal Academy of Sciences (PAS)** Held at -T.D.P.G College, Jaunpur (Nov 19-20, 2005).
- Paper "*Quaternion analysis of superluminal electromagnetic fields of dyons*", presented in **1<sup>st</sup> Uttaranchal Science Congress**. Organized by UCOST (Nov 10-11, 2006) held at DIT, Dehradun (Uttaranchal).

- “*Dyonic fields in Isotropic Medium*”, Abstract book on “**IXth Conference of International Academy of Physical Science**, Department of Mathematics, Institute of Basic Science, Agra from Feb. 03-05, 2007 [P-87].
- “*Quaternion form of Dyons in Isotropic Medium*”, Abstract book on “**IXth Conference of International Academy of Physical Science**, Department of Mathematics, Institute of Basic Science, Agra from Feb. 03-05, 2007 [P-92].
- Paper “*Quaternionic Analysis and Formulation of Generalized Electromagnetic fields in Chiral Media*”, presented in “**International Workshop on High Energy Physics**” Department of Physics, **IIT Roorkee** from March 15 - 20, 2007.
- Participation in **State level seminar** on “Opportunities and Scope for research in Government colleges” (March 16-17, 2007) Organized by Government Postgraduate college, Pithoragarh (Uttarakhand).
- Paper “*Quaternionic Electrodynamics and dual Electrodynamics*” presented in **2nd Uttarakhand Science Congress**. Organized by Department of Geology, Kumaun University; Nainital (Nov 15-17, 2006) held at ATI, Nainital.
- Participation in the Regional seminar on “*Intellectual Property and Innovation Management in Knowledge Era*” Organized by **NRDC**, New Delhi (Jan 28-29, 2008) held at Almora (Uttarakhand).
- Paper “*Generalized Quaternionic Maxwell’s Equations for Dyons in Isotropic and Chiral Media*” presented in **USSTC 3<sup>rd</sup> Uttarakhand Science Congress**. Organized by I.I.T, Roorkee, (Nov 15-17, 2007) held at I.I.T, Roorkee.
- Paper “*Generalized Quaternionic Maxwell’s Equations for Dyons in Isotropic and Chiral Media*” accepted for oral presentation in **PIERS 2009**, Beijing (China).
- Paper “*Quaternion Analysis for Generalized Maxwell’s Equations of Dyons in Chiral Media*” presented in **State level, Annual conference of Academica**. Organized by L.S.M.Govt. P.G.College, Pithoragarh (U.K)
- Paper “*Student Participation in Internal Quality Assurance System*” presented in **State level NAAC Workshop** (March 16-17, 2009). **Organized by L.S.M Govt. P College, Pithoragarh (UK)**
- Participation in the Regional seminar on “*Intellectual Property and Innovation Management in Knowledge Era*” Organized by **NRDC**, New Delhi (Jul 11, 2009) held at Pithoragarh (Uttarakhand).
- Participation as a **Subject Expert in College of Teacher Education, State level Workshop** (Sep. 08-11, 2009) by SCERT, Uttarakhand at L.S.M Govt. P.G College, Pithoragarh (U.K).
- Paper “*Quaternion Analysis of Time-Harmonic Field Equations for Dyons in Homogeneous Media*” presented in **USSTC 4<sup>th</sup> Uttarakhand Science and Technology Congress**. Organized by G.B Pant University of Agriculture and technology (Nov. 10-12, 2009), Pantnagar (U.K).
- Selected as **State Level Evaluation Committee Member in National Children Science Congress, Uttarkhand-2009**. At Gen. B. C. Joshi army public school (Dec. 01-02, 2009), Pithoragarh (U.K).
- Participation in **State Level Workshop** by **USAC** (Uttarakhand Space and Application Centre). At L.S.M Govt. P.G College, (Dec. 03, 2009) Pithoragarh (U.K).
- Paper “*The Aspects of Water Pollution in Kumaun Hilly Terrain*” presented in **National Workshop on LEDHT**. Organized by Department of Geology, (Jun. 04-06, 2010) at L.S.M.Govt. P.G.College, Pithoragarh (U.K)

- Paper “*India’s Vital National Interests*” presented in **National Seminar**. Organized by Department of Military Science, (Jun. 08-09, 2010) at L.S.M. Govt. P.G.College, Pithoragarh (U.K)
- Paper “*Sources of water pollutions in Kumaun Himalaya of Uttarakhand*” presented in **State level Conference**. Organized by Department of Physics (25-26 Oct. 2010) at Govt. P.G College, Bageshwar (U.K)
- Paper “*Generalized Quaternion Maxwell’s-Dirac Equations of dyons in Inhomogeneous and slowly changing Media*” Presented in **USSTC 5<sup>th</sup> Uttarakhand Science Congress**, Organized by Doon University (10-12 Nov, 2010), Dehradun.
- Paper “*The effect of Intellectual Property Rights on Biodiversity*” presented in **National Seminar**. Organized by Department of Commerce, (06-07 March, 2011) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Participation in **National workshop** on “*Advances in Physics & Role of Experiments in Physics Teaching*”. Organized by Department of Physics Gurukula Kangri Vishwavidyalaya, Haridwar (05 Nov, 2011) held at Gurukula Kangri Vishwavidyalaya, Haridwar (U.K)
- Paper “*Nuclear Terrorism as a Threat to India’s National Security*” presented in **National workshop/Seminar**. Organized by Department of Military Science, (March. 17-18, 2012) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Participation in the **regional seminar** on “सूक्ष्म एवं लघु उद्योगों हेतु बौद्धिक सम्पदा की उपयोगिता”. Organized by at L.S.M.Govt. P.G.College, Pithoragarh (March 21, 2012) at Pithoragarh (U.K).
- Paper “उत्तराखण्ड में पर्यावरण प्रदूषण के परिणाम” presented in **National Seminar** . Organized by department of geology, (Oct 14-15, 2012) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Poster “*Quaternion analysis of generalized Maxwell’s-Dirac equations of dyons in inhomogeneous and slowly changing media*” presented in **National Conference**. Organized by Department of Physics, (Nov. 03-04, 2012) at M.B.Govt. P.G.College, Haldwani Uttarakhand.
- Poster “*The environmental impacts of nanotechnology*” presented in **National Conference**. Organized by Department of Zoology, (March. 01-03, 2013) at Pithoragarh (U.K).
- Paper “*Traditional knowledge-based systems of water management in Kumaun Himalaya of Uttarakhand*” presented in **National Seminar**. Organized by Department of Zoology, (March. 20-22, 2013) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*The environmental impacts of Biodiversity in the Kumaun region*” presented in **Regional workshop** on Land Degradation and Biodiversity. Organized by department of geology, (July 19, 2013) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Mineral Resources and effects of Soapstone Mining in Kumaun Lesser Himalaya*” presented in **(IGC) National workshop**. Organized by department of geology, (Nov 11-12, 2013) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Participate as a **Subject Expert** in teacher training programme. Organized by College of Teacher Education (Oct 03 to 07 and Oct 08 to 12, 2013) at L.S.M Govt. P.G College, Pithoragarh (U.K).
- Participation in **National Seminar** on National Integration. Organized by Aligarh Muslim University, Aligarh & MHA, Govt. of India, New Delhi (Dec 15, 2013) at UGC ASC, AMU, Aligarh.

- Participation in the “*Poetry and Song Composition*”. In **National Seminar** on National Integration. Organized by Aligarh Muslim University, Aligarh & MHA, Govt. of India, New Delhi (Dec 15, 2013) at UGC ASC, AMU, Aligarh.
- Participation in the “*Slogan Writing Competition*”. In **National Environment Awareness Campaign**. Organized by at UGC ASC (Dec 15, 2013), AMU, Aligarh.
- Participation in UGC Sponsored **Orientation Programme (OP)**. Organized by UGC Academic Staff College (Dec 03-26, 2013) at Aligarh Muslim University, Aligarh.
- Delivered lectures in 7 days science workshop jointly organized by School of Science, Uttarakhand Open University Haldwani and L. S.M. G. P.G.C. Pithoragarh (June 25- 01 July 2014).
- Paper “*उत्तराखण्ड में खड़िया खनन का सामाजिक, आर्थिक एवं पर्यावरणीय प्रभाव*” presented in **National Seminar**. Organized by Department of Sociology, (Dec. 02-03, 2014) at S. B. S. Govt. P.G.College, Rudrapur (U.S.Nagar), Uttarakhand.
- Delivered lectures in 6 days science workshop jointly organized by School of Science, Uttarakhand Open University Haldwani and L. S.M. G. P.G.C. Pithoragarh (July 17- 22, 2015).
- Participation in **National Seminar** on Nature, Culture and Biodiversity. Organized by Department of Zoology, (March. 03-05, 2016) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Impact of Intellectual Property Rights on Indigenous Knowledge in India*” presented in **Regional Seminar**. Organized by department of geology, (March. 09, 2016) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Geographical Indication-the Intellectual Property Rights in Kumaun Region*” presented in **National workshop**. Organized by department of geology, (March. 17, 2016) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Delivered lectures in 7 days science workshop jointly organized by School of Science, Uttarakhand Open University Haldwani and L. S.M. G. P.G.C. Pithoragarh (June 08- 14 July 2016).
- Paper “*Quaternion Generalized Maxwell’s Equations of Dyons in Chiral Media*” presented in **National Conference**. Organized by Seemant Institute of Technology, (August. 29-30, 2016) at Seemant Institute of Technology, Pithoragarh (U.K).
- Participation in UGC HRDC Sponsored **Refresher Course (RC)**. Organized by UGC Academic Staff College (Nov 08-28, 2016) at Kumaun University, Nainital.
- Paper “*उत्तराखण्ड के कुमायूँ क्षेत्र में खड़िया खनन के पर्यावरणीय प्रभाव*” presented in **National workshop**. Organized by department of Geology, (January. 03, 2017) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Impacts of Disaster in Kumaun Region*” presented in **Regional workshop**. Organized by department of Geology, (April. 22, 2017) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Quaternion Electrodynamics*” presented in **National Conference**. Organized by Seemant Institute of Technology, (November.11-12, 2017) at Seemant Institute of Technology, Pithoragarh (U.K).
- Participation in CTE, Pithoragarh sponsored 7 day **Workshop** on “*Online and Digital Learning*”. Organized by B.Ed. Department (March 09-16, 2018) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Customs and Rituals of Water Management in Kumaun Himalaya Region*” in **International Seminar**. Organized by Department of History (17-18 March, 2018) at Kumaun University, S.S.J Campus, Almora (U.K)

- Paper “*Impact of Intellectual Property Rights on Indigenous Knowledge in India*” presented in **National Workshop**. Organized by department of Geology, (April, 2018) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Quaternion Analyticity of time harmonic field equations of dyon in homogenous media*” presented in **International Conference**. Organized by Seemant Institute of Technology, (June 08-10, 2018) at Seemant Institute of Technology, Pithoragarh (U.K).
- Paper “*उत्तराखण्ड में खड़िया खनन के पर्यावरणीय प्रभाव*” Presented in **International conference**. Organized by B.Ed. Department (November 17-18, 2019) at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Paper “*Copy Right in Intellectual Property Rights*” presented in **Regional Workshop** Organized on February 13, 2020 at L.S.M.Govt. P.G.College, Pithoragarh (U.K).
- Participation in **International webinar** on “*COVID 19 Pandemic: Emerging Challenges and Persecutions in e-learning*”. Organized by Harsh Vidhya Mandir PG College, Raisi Haridwar on May 29, 2020.
- Participation in **International E-Conference** on recent advances in Physics: A promises to society. Organized by Govt. P G College, Bazpur from June 20-25, 2020.
- Participation n in **online short term course** on *Learn to design your Solar home system*. Organized by Energy Swaraj foundation in association with Mizoram University from Aug 10-14, 2020’
- Participation in **National webinar** on *Recent Trends in Physics*. Organized by NSIT, Pithoragarh on Aug 18-19, 2020.
- Participation in UGC Sponsored **Online Refresher Course- “Women Studies”** (Open to all) Organized by UGC Academic Staff College (Sept. 03-18, 2020) at Aligarh Muslim University, Aligarh.
- Participation in **one week FDP** on “*Open Sources Tools for Research*”. Organized by Ramanujan College, University of Delhi from 03-09 April, 2021..
- Participation in FDP on *Recent Pedagogy and ICT Tools in Teaching and Research*. Organized by Vindhya Institute of Technology and Science, Satna and Research Foundation of India from 26-30 April, 2021.
- Participation in **one week FDP** on “*Qualitative Data Analysis*”. Organized by Ramanujan College, University of Delhi from 27 April -03 May, 2021.
- Participation in Online Two week Inter-Disciplinary **Refresher course** on “*Managing Online Classes & Co-creating MOOCS 5.0*” Organized by Ramanujan College, University of Delhi from May 11-25, 2021.
- Participation in an **International webinar** on *Role of Yoga in Holistic Health during COVID 19 world Pandemic*. Organized by Yogic Science Department, SSJ University, Almora from 26-27 June, 2021.
- Participation in **State level workshop** on *NEP 2020 admission Guidelines in Universities of Uttarakhand..* Organized by Government Degree College, Haldwani City on 13 Aug, 2022.
- Participation in **National webinar** on *Various Dimensions of NEP 2020 on Globalization of Higher Education*. Organized by Department of Education M.B Govt. P.G College, Haldwani on 10 Sept, 2022.
- Participation in **International Faculty Development Programme** on *Gandhi in the present Context-A Social Discourse*. Organized by Government Degree College, Bhatronjkan-Almora (Uttarakhand) on 02 Oct, 2022.

- Participation in **UGC Short Term Professional Development Programme on Implementation of NEP 2020 for University and College Teachers**. Organized by IGNOU, New Delhi from 27Oct-Nov 05, 2022.

## 15. Research Publications

- **Singh, Jivan;** Bisht, P.S and Negi, O.P.S, “Quaternionic Reformulation of Generalized Superluminal Electromagnetic fields of dyons”  
i) **arXiv: hep-th/0607212.**  
ii) **Communication in Physics**, vol.18, (2008) pp.27- 42.
- **Singh, Jivan;** Bisht, P.S and Negi, O.P.S, “Generalized Electromagnetic fields of dyons in isotropic medium  
i) **arXiv: hep-th/0611208.**  
ii) **Communication in Physics**, Vol.17, No.2 (2007), pp. 83-90. **ISSN 0868-3166**
- **Singh, Jivan;** Bisht, P.S and Negi, O.P.S, “*Quaternion analysis of Generalized Electromagnetic fields of dyons in isotropic medium*”.  
i) **arXiv: hep-th/07033083.**  
ii) **J. Phys. A: Math. Theor.** 40 (2007) 9137-9147.
- **Singh, Jivan;** Bisht, P.S and Negi, O.P.S, “*Quaternion analyticity for time-harmonic dyon field equations*’.  
i) **arXiv: hep-th/0703109.**  
ii) **Communication in Physics**, Vol.17, No.3 (2007), pp.163-168. **ISSN 0868-3166**
- **Singh, Jivan;** Bisht, P.S and Negi, O.P.S, “*Generalized Electromagnetic fields in Chiral Medium*”,  
i) **arXiv: hep-th/0703107.**  
ii) **J. Phys. A: Math. Theor.** 40 (2007)11395-11402.
- **Singh, Jivan;** Bisht, P. S. and Negi, O. P. S, “*Generalized Electromagnetic fields of dyons in Inhomogeneous Media*”.  
i) **arXiv: 07060301v1 [hep-th]** 3 June 2007.
- **Singh, Jivan;** “*Student Participation in Internal Quality Assurance System*” Published in the **Proceeding of the State level NAAC Workshop**, ISBN No. **978-93-80280-22-6** (2011), pp. 20-29.
- **Singh, Jivan;** “*Sources of water pollutions in Kumaun Himalaya of Uttarakhand*” Published in **Advancement in Science and Technology**. Proceeding of the **State Level Conference**, ISBN No. **978-93 80280-30-1** (2010), pp.268-275.
- **Singh, Jivan;** Garia, P. S; Singh, Y. P, “आज़ादी के बाद गाँव में विकास के चरण (उत्तराखण्ड के एक गाँव का विशिष्ट अध्ययन) ” Working Paper Published by **Giri Institute of Development Studies**, Lucknow ; No. 204 (2011).
- **Singh, Jivan;** “उत्तराखण्ड में पर्यावरण प्रदूषण के परिणाम”. In Press under the proceeding of the **National Seminar**. Organized by department of Geology, (Oct 14-15, 2012) at L. S. M. Govt. P. G. College, Pithoragarh.
- **Singh, Jivan;** “*Quaternion analysis of generalized Maxwell’s-Dirac equations of dyons in inhomogeneous and slowly changing media*” In Press under the proceeding of the National Conference on **Recent trends in interdisciplinary research and astrophysics space science** (2012).
- **Singh, Jivan;** “*The Aspects of Water Pollution in Kumaun Hilly Terrain*” Published in **Landslides and Environmental Degradation**. Proceeding of the **National Workshop on LEDHT**, ISBN No: 81-85097-90-9 (2013), pp.313-322.
- **Singh, Jivan;** “*Nuclear Terrorism as a Threat to India’s National Security*” Published in the proceeding “**Terrorism and India’s Security in 21st Century**” of the **National Workshop/Seminar** ISBN No. **978-93-82171-11-9** (2013), pp. 76-85.

- **Singh, Jivan;** “*The Challenge of Nuclear and Radiological Threat in India*” Published in the proceeding “India’s Internal Security Challenges” of the **National Seminar** ISBN No. **978-81-7445-669-4** (2014), pp. 88-97.
- **Singh, Jivan;** “उत्तराखण्ड में खड़िया खनन का सामाजिक, आर्थिक एवं पर्यावरणीय प्रभाव” Published in the proceeding “Globalization, Environment and Quality of life” of the **National Seminar** ISBN No. **978-81-7004-321-8** (2015), pp. 399-415.
- **Singh, Jivan;** “*Traditional Knowledge-based systems of water management in Kumaun Himalaya of Uttarakhand*” Published in the proceeding “Nature, Culture, Biodiversity” of the **National Seminar** ISBN No. **978-93-82830-08-5** (2016), pp. 179-185.
- **Singh, Jivan;** “*Quaternion Generalized Maxwell’s Equations of Dyons in Chiral Media*” Published in the proceeding “Recent Advances in Sciences and Technology” of the **National Conference** ISBN No. **978-93-85-777-96-7** (2016), pp. 112-115.
- **Garia, Jivan Singh** “*Dyonic Quaternion Electrodynamics*” Published in the proceeding “Recent Advances in Sciences and Technology” of the **National Conference** ISBN No. **978-93-86724-77-7** (2017), pp. 48-55.
- **Joshi, Ila; Garia, Jivan Singh** “*Microscopic and Macroscopic Maxwell’s Field Equations of Dyon*” Published in the proceeding “Recent Advances in Sciences and Technology” of the **National Conference** ISBN No. **978-93-86724-77-7** (2017), pp.56-60.
- **Joshi, Ila; Garia, Jivan Singh** “*Discrete Symmetries in Dyonic Fields*” Published in IJR Journal, Volume 7, Issue VII, July-2018, ISSN No. ISBN No2236-6124 (2019), pp. 749-752.
- **Joshi, Ila; Garia, Jivan Singh** “*Classical Approach of Dyonic Energy Momentum Tensor*” Published in Invertis Journal of Renewable Energy Vol.8, No.3, July-September 2018, pp-123-127.
- **Joshi, Ila; Garia, Jivan Singh** “*Local Gauge Invariance of Dyon*” Published in Proceedings of the DAR Symp. on Nuci. Phys. 63 (2018), pp 194-196.
- **Garia, Jivan Singh** “*Quaternion Analyticity of Time Harmonic Field Equations for Dyon in Inhomogeneous Media*” Published in IJR Journal, Volume VIII, Issue I, January-2019, ISSN No. ISBN No2236-6124 (2019), pp. **153-161**.
- **Joshi, Ila; Garia, Jivan Singh** “*Dyonic Field Equations in Arbitrary Media*” Published in J. Mountain Res. ISSN; 0974-3030 Vol.14 (1), (2019) 39-41.
- **Joshi, Ila; Garia, Jivan Singh** “*Dyonic Solutions of Maxwell field equations in arbitrary media*” Published in Indian Journal of Physics, ISSN; 0973-1458 (2019) 39-41.
- **Joshi, Ila; Garia, Jivan Singh** “*Electromagnetic Wave Equations of Dyon in Arbitrary Media*” Published in J. Sci. Res. ISSN; 2070-0237 12 (2) 161-167 (2020).
- **Joshi, Ila; Garia, Jivan Singh** Book “*Electrodynamics of dyons*” ISBN: 978-620-5-51302-6. Published in Lambert Academic Publishing (LAP) on 27 Oct, 2022.