

## **RESEARCH PUBLICATIONS (Dr. R.K. Joshi)**

### **PATENTS**

1. **R.K. Joshi**, B.S. Rawat, M.K. Khanna, S.M. Nanoti, Guru Prasad, B.R. Nautiyal, Dharam Paul, M.O. Garg and V.K. Kapoor, "An improved process for the production of Cyclopentane from light petroleum fraction", **IN231040 (Granted)**.

### **RESEARCH PAPERS IN INTERNATIONAL JOURNALS**

1. **R.K. Joshi**, D. Prasad, M.S.M. Rawat and G. Pant, "Allelopathic effect of aqueous extracts of leaves of *Fraxinus micrantha* on crops", **Allelopathy Journal**, 3(2), 255-259 (1996) (Impact Factor: 0.846) (ISSN- 0971-4693/94).
2. D. Prasad, **R.K. Joshi**, G. Pant and M.S.M. Rawat, "Ephedrannin A from *Prunus armeniaca* root", **Fitoterapia**, LXVIII (3), 275-276 (1997) (ISSN- 0367-326X).
3. **R.K. Joshi**, D. Prasad, C.B. Pande, M.S.M. Rawat and G. Pant, "Allelopathic effect of root and bark extracts of *Prunus jacquemontii* on *Raphanus sativus*", **Allelopathy Journal**, 4 (2), 329-334 (1997) (ISSN- 0971-4693/94).
4. M.S.M. Rawat, G. Pant, D. Prasad, **R.K. Joshi** and C.B. Pande, "Plant growth inhibitors (Proanthocyanidins) from *Prunus armeniaca*", **Biochemical Systematic and Ecology**, 26, 13-23 (1998) (ISSN- 0305-1978/98) [https://doi.org/10.1016/S0305-1978\(97\)00080-X](https://doi.org/10.1016/S0305-1978(97)00080-X).
5. D. Prasad, **R.K. Joshi**, G. Pant, M.S.M. Rawat, K. Inoue, T. Shingu and Z.D. He, "An A-type Proanthocyanidin from *Prunus armeniaca*", **Journal of Natural Products**, 61 (9), 1123-1125 (1998) (ISSN- 0163-3864) <https://doi.org/10.1021/np970383n>
6. **R.K. Joshi**, D. Prasad, M.S.M. Rawat and G. Pant, "Constituents of *Fraxinus micrantha*", **Fitoterapia**, LXIX (3), 275 (1998) (ISSN- 0367-326X).
7. **R.K. Joshi**, D. Prasad, R. Nautiyal, C.B. Pande, G. Pant and M.S.M. Rawat, "Phytotoxicity of *Cassia fistula* on *Triticum aestivum* seedlings", **Hill Research**, 11, 43 (1998) (ISSN- 0970-7050).
8. **R.K. Joshi**, D. Prasad, G. Pant and M.S.M. Rawat, "Abieslactone from *Abies pindrow*", **Fitoterapia**, LXIX (1), 93 (1998) (ISSN- 0367-326X).
9. C.B. Pande, D. Prasad, **R.K. Joshi**, M.S.M. Rawat and G. Pant, "Allelopathic potential of *Prunus amygdalus* and identification of allelochemicals", **Allelopathy Journal**, 5 (1), 83-88 (1998) (ISSN- 0971-4693/94).
10. M.S.M. Rawat, D. Prasad, **R.K. Joshi** and G. Pant, "Proanthocyanidins from *Prunus armeniaca*", **Phytochemistry**, 50 (2), 321-324 (1999) (ISSN- 0031-0422) [https://doi.org/10.1016/S0031-0422\(98\)00541-X](https://doi.org/10.1016/S0031-0422(98)00541-X)
11. B.R. Nautiyal & **R.K. Joshi**, Fuel Cell: Fuel for the 21<sup>st</sup> Century & beyond, **Chemical weekly**, p.167, April 9, 2002 (ISSN- 0045-6500).

12. **R.K. Joshi**, P.P. Deorari, M.C. Purohit and S.P. Sati, Phytochemicals at a glance, Part-I Flavonoids, **Chemical weekly**, p.201-203, Nov. 2005 (ISSN- 0045-6500).
13. **R.K. Joshi**, P.P. Deorari, M.C. Purohit and S.P. Sati, Phytochemicals at a glance, part-II Xanthoness, **Chemical weekly**, 193-195, Nov. 2005 (ISSN- 0045-6500).
14. **R.K. Joshi**, Shanti P. Joshi and M.C. Purohit, Phytochemicals at a glance-Xanthoness, **Chemical weekly**, 209-211, October, 2007 (ISSN- 0045-6500).
15. M.C. Purohit, U.C. Maithani and **R.K. Joshi**, Qualitative and quantitative variation in anthraquinone derivatives and quercetin glycoside of Rheum species from Garhwal Himalaya, **Oriental Journal of Chemistry**, 23(2), 629-634 (2007) (ISSN- 2231-5031).
16. Kiran Dobhal, **R.K. Joshi** and S.C. Sati,  $\alpha$ -L-arabinopyranosyl (1-3)-  $\beta$ -hydroxy-oleane-12-ene-28-methyl acetate from seeds of *Trichosanthis tricuspidata*", **Acta Ciencia Indica**, Vol. XXXIV C, No. 3, 443 (2008) (ISSN- 0253-7338).
17. **R.K. Joshi**, New Iridoid glycosides from *Wendlandia puberula*, **Journal of Applicable Chemistry**, 2(3), 567-572 (2013) (ISSN- 2278-1862).
18. **R.K. Joshi**, M.C. Purohit and Shanti P. Joshi, Improvement of the traditional system of dyeing on wool fiber using eco-friendly natural dye, **Journal of Applicable Chemistry**, 2 (4):841-849 (2013) (ISSN- 2278-1862).
19. **R.K. Joshi**, M.S. Panwar and Arvind Singh, Three new chemical constituents from *Wendlandia puberula* roots, **International Journal of Innovation in Engineering Research and Management**, 1(1), 1-4, 2014 (ISSN-2348-4918).
20. Jyoti Kundal, Pranjal Purohit, **R.K. Joshi** and M.C. Purohit, Optimization of procedure for dyeing cotton and wool fabric with natural dye extracted from *Myrica esculenta* using different mordants, **J. Mountain Res.**, 9, 83-92 (2014) (ISSN-0974-3030).
21. **R.K. Joshi**, Allelopathic Potential of Some Prunus Species and Identification of Allelochemicals, **Journal of Applicable Chemistry**, 3 (4):1782-1788 (2014) (ISSN- 2278-1862).
22. M.S. Panwar and **R.K. Joshi**, Study of some eco-friendly natural dye on wool fibers, **International Journal of Innovation in Engineering Research and Management**, 2(6), 1-7, 2015 (ISSN-2348-4918).
23. **R.K. Joshi**, Revitalizing traditional healthcare practices, **Chemical Weekly**, 186-188, January, 2016 (ISSN- 0045-6500).
24. **R.K. Joshi**, Application of *Erythrina suberosa* flower dye on wool fibers using combination of mordants, **Journal of Applicable Chemistry**, 5(5): 1105-1112 (2016) (ISSN-2278-1862).
25. **R.K. Joshi** and M.S. Panwar, Liquid-liquid equilibrium studies on model hydrocarbons representing heart cut for cyclohexane using industrial solvents, **Accent Journal of Economics Ecology and Engineering**, 1(1): 1-4 (2016) (ISSN- 2456-1037).

26. **R.K. Joshi**, A new glycopyranoside from *Scutellaria scandens* Bark, **International Journal of Chemical Studies**, 4(5), 121-122, (2016) (ISSN-2321-4902, 2349-8528).
27. **R.K. Joshi**, Traditional Healthcare Practices among the Villages of Khirshu, Pauri, Uttarakhand, India, **Social Science Review**, 2(1), 105-116 (2016) (ISSN 2518-6825).
28. **R.K. Joshi**, Dyeing on wool using eco-friendly natural dyes, **Proceeding of International seminar on sustainable development: Challenges and Strategies**, 2016 (ISSN 978-93-8283018-4).
29. **R.K. Joshi**, Liquid-liquid extraction of alkylated (C<sub>4</sub>-, C<sub>6</sub>- and C<sub>8</sub>-) benzene with cetane using industrial solvents, **International Journal of Creative Research Thoughts**, 6(1), 145-150, 2018 (ISSN: 2320-2882).
30. **R.K. Joshi**, Extraction methods of phytochemicals, **Chemical Weekly**, 203-206, (2018) (ISSN-0045-6500).
31. **R.K. Joshi**, Separation of cyclopentane from close boiling paraffins using selective solvents in extractive distillation step, **Journal of Emerging Technologies and Innovative Research**, 5(5), 486-490 (2018) (ISSN: 2349-5162).
32. A. Kandwal, M.C. Purohit, A.K. Khajuria and **R.K. Joshi**, Green synthesis and antimicrobial activity of silver nanoparticles using leaf extract of *Ajuga parviflora* BENTH IN WALL” **Plant Archives**, 19(2), 943-949 (2019) (ISSN 0972-5210).
33. Seema Baniwal and **R.K. Joshi**, New Hexaaza Macro Cyclic Complexes: Synthesis, Characterization and their Antimicrobial Activities, **Wutan Huatan Jisuan Jishu**, XVII (VII), 259-269 (2021). [doi.org/10.37896/whjj17.7/741](https://doi.org/10.37896/whjj17.7/741)
34. M.C. Purohit, R. Rawat, A. Kandwal, A.R. Semwal and **R.K. Joshi**, Biosynthesis of Silver Nanoparticles Using *Terminalia bellirica* fruit extract and their characterization, **J. Mountain Res.**, 16(1), 267-273 (2021). DOI: <https://doi.org/10.51220/jmr.v16i1.2>
35. **R.K. Joshi** and S.K. Kuriyal, Dyeing textile with eco friendly natural dyes: A brief review, **International Journal of Global Science Research**, 10(1), 2052-2060 (2023) <https://doi.org/10.26540/ijgsr.v10.i1.2023.237>
36. **R.K. Joshi** and S.K. Kuriyal, Ethno-medicinal plants used by the traditional healers (Vaidyas) in Pindar Valley, Chamoli, Uttarakhand, India, **Journal Global Values**, XIV (Special issue), 337-343 (2023)
37. **R.K. Joshi** and S.K. Kuriyal, Dyeing of wool fibres with some natural dyes and environmental impact, Edited Book “**Environment and Human Health: Global Issue**”, published by Gurukul Kangri Deemed to be University, Haridwar, 224-255 (2023).
38. **R.K. Joshi**, Allelopathic effects of *Cassia fistula* L on germination and seedling growth of *Raphanus sativus* L., **Allelopathy Journal**, Accepted for publication (2023).

## RESEARCH REPORTS PUBLISHED

1. **R.K. Joshi**, D. Prasad and R. Bahuguna, M.S.M. Rawat, and G. Pant, **“Study of allelopathic effect on field crops by social and agro-forestry tress in Garhwal Himalaya”**, Reports No. GBP/IERP/92-93/73-504, 5<sup>th</sup> October, 1993 HNB Garhwal University, Srinagar, Submitted to GB Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora.
2. P. Gupta, A. Masohan, G. Prasad, **R.K. Joshi**, M.K. Khanna, B.S. Rawat and M.O.Garg, **“Studies on liquid-liquid extraction of C<sub>10</sub> -C<sub>20</sub> model hydrocarbons using industrial solvents”**, Report No. SPA: 5:00, April, 2000, Indian Institute of Petroleum, Dehradun.
3. **R.K. Joshi** & B.S. Rawat, **“Separation on naphthenes from close boiling paraffins using selective solvents in extractive distillation step”**, IIP, Dehradun, Submitted to Council of Scientific and Industrial Research (CSIR), New Delhi.
4. R.K. Joshi, **Jaivik Kachre ka Nistaran avam Jaivik Khad banana ki Vidhiyan**, Society for Rural & Entrepreneurship Development, Pauri.

## BOOKS PUBLISHED

1. **“Organic & Physical Chemistry-I”**, Pragati Prakashan, Meerut, 2018 (ISBN: 978-93-88151-52-8).
2. **“Fundamentals of Chemistry-I”**, Pragati Prakashan, Meerut, 2022 (ISBN: 978-93-5531-702-5).

## RESEARCH PAPERS PRESENTED IN SEMINAR/SYMPOSIUM

1. **R.K. Joshi**, C.B. Pande, D. Prasad, G. Pant and M.S.M. Rawat, Characterization of allomones from Prunus species, Proceeding of National Seminar on Seed Technology, 20-21<sup>st</sup> Feb., 1996. Department of Botany, HNB Garhwal University, Srinagar (Garhwal).
2. B.R. Nautiyal, **R.K. Joshi**, G. Prasad, D. Paul, M.K. Khanna, S.M. Nanoti and B.S. Rawat, “Aliphatic and aromatic specialty solvents”, Proceeding of LAWPAASP Symposium, February, 2,3,4, 2001, IIT, Bombay, Mumbai.
3. B.R. Nautiyal, M.K. Khanna, **R.K. Joshi**, B.S. Rawat, S.M. Nanoti, G. Prasad, D. Paul & M.O. Garg, Separation of cyclopentane from light naphtha fraction, Proceedings of Petrotech-2003, January 9-12, 2003, New Delhi.
4. **R.K. Joshi**, M.C. Purohit & S.P. Sati, “Plant growth inhibitors from Prunus Species. An allelopathic effect”, **Symposium on conservation of Natural Resources: A social & scientific approach**, January 5-6, 2006, Govt. P.G. College, Gopeshwar.
5. S.C. Sati, **R.K. Joshi** and M.C. Purohit, “Optimization of procedure for dyeing of wool and cotton fibres with different plant extracts as a source of natural dyes”, **Symposium on**

**conservation of Natural Resources: A social & scientific approach**, January 5-6, 2006, Govt. P.G. College, Gopeshwar.

6. P.P. Deorari, **R.K. Joshi**, S.P. Sati, M.C. Purohit and N.K. Singh, "Jatropha: A real money plant", **Symposium on conservation of Natural Resources: A social & scientific approach**, January 5-6, 2006, Govt. P.G. College, Gopeshwar.
7. M.C. Purohit and **R.K. Joshi**, "Conservation and cultivation strategy of medicinal and aromatic plants in Uttarakhand", **Souvenir of Symposium on conservation of Natural Resources: A social & scientific approach**, January 5-6, 2006, Govt. P.G. College, Gopeshwar.
8. **R.K. Joshi** and M.C. Purohit, "Allelopathic potential of some Prunus species and identification of allelochemicals", **1<sup>st</sup> Uttarakhand State Science and Technology Congress**, November 10-11, 2006, DIT, Dehradun.
9. M.C. Purohit and **R.K. Joshi**, "Natural Dyes: Procedure optimization of dyeing of wool and cotton fibres using different mordants", **1<sup>st</sup> Uttarakhand State Science and Technology Congress**, November 10- 11, 2006, DIT, Dehradun.
10. **R.K. Joshi**, M.C. Purohit and B.S. Rawat, "Eco-refrigeration: Cyclopentane foam blowing", **4<sup>th</sup> Uttarakhand State Science and Technology Congress**, November 10-11, 2009, GBPUA&T, Pantnagar, Page-158.
11. Shanti Purohit Joshi, **R.K. Joshi** and M.C. Purohit, "Screening of Dye-yielding plants and effect of dyeing variables on wool fibre", **4<sup>th</sup> Uttarakhand State Science and Technology Congress**, November 10-11, 2009, GBPUA&T, Pantnagar, Page-162.
12. **R.K. Joshi** and S.S. Rawat, The role of tourism in Uttarakhand Economy, **National Seminar on Tourism Industry: Its nature and Possibilities**, 26-27 February, 2011, ONS Degree College, Devprayag, Uttarakhand.
13. S.P. Sati, **R.K. Joshi** and Kiran Joshi, Phytochemicals and pharmacological studies of some medicinal plants of Chamoli district, **Academica Conference-2012**, 14-16 March, 2012, Govt. P.G. College, Gopeshwar.
14. **R.K. Joshi**, "An improved process for the production of Cyclopentane from light petroleum fraction, **Academica Conference-2012**, 14-16 March, 2012, Govt. P.G. College, Gopeshwar.
15. P. Kothari, P. Durgapal and **R.K. Joshi**, Absorption spectra and Judd-Ofelt analysis, **Academica Conference-2012**, 14-16 March, 2012, Govt. P.G. College, Gopeshwar.
16. S.P. Sati, **R.K. Joshi** and Kiran Joshi, Phytochemicals and pharmacological studies of some medicinal plants of Chamoli district, **Academica Conference-2012**, 14-16 March, 2012, Govt. P.G. College, Gopeshwar.
17. **R.K. Joshi**, Phytochemistry of important medicinal plants in Chamoli district, invited talk delivered in **Workshop on National Environmental Awareness Campaign (NEAC) 2012-13: Biodiversity Conservation**, 13-14 August, 2013, Govt. P.G. College, Gopeshwar, Chamoli.

18. **R.K. Joshi** & S. S. Rawat, Chamoli avam Rudraprayag Janpad main Apda se prabhawit shikshan pratishathanon ke punersthapna ka vagyanik vishlashan, **National seminar on Challenges of Livelihood Restoration in Disaster-hit Region of Uttarakhand**, 28-29 November, 2014, HNB, Garhwal University, Srinagar.
19. **R.K. Joshi**, Impact value-based education in higher education and use of ICT, **A two days International Conference MAG/I/C 2014 Methods, Aesthetics & Genres in English Communication**, 4-5 April, 2014, University of Petroleum & Energy Studies, Dehradun
20. **R.K. Joshi** Higher education and quality improvement, **National Seminar on National and Regional Perspectives for quality teacher education: Ways and Means**, 07-08 February, 2015, Dr. PDBH Govt. P.G. College, Kotdwara, Garhwal.
21. **R.K. Joshi**, Dyeing on wool fiber using eco-friendly natural dye, **International Seminar on Sustainable Development: Challenges and Strategies**, 21-22 October, 2016, Govt. P.G. College, Gopeshwar, Chamoli, Uttarakhand.
22. **R.K. Joshi**, An improved process for the production of cyclopentane from light petroleum fraction, **National Conference on Science & Technology for National Development**, November 20-22, 2016, ISCA: Haridwar Chapter, Gurukul Kangri Vishwavidyalaya, Haridwar.
23. **R.K. Joshi**, Development of a low-cost technique for improvement of the traditional system of dyeing on wool fiber, **International seminar on the Himalayan challenge: towards interdisciplinary dialogues for sustainability and development**, 29<sup>th</sup> November to 01<sup>st</sup> December 2017, Doon University, Dehradun.
24. **R.K. Joshi**, Separation of naphthenes from close boiling paraffins using selective solvents in extractive distillation step, 8<sup>th</sup> **Conference of ISCA (Haridwar Chapter)**, “Reaching the unreached through science and technology”, October 14-15, 2017, DSB Campus, Kumaun University, Nainital.
25. **R.K. Joshi**, Separation of cyclopentane from close boiling paraffins using selective solvents in extractive distillation step, **National conference on recent frontiers in chemistry (NCRFC-2018)**, 27-28 April, 2018, HNB Garhwal (Central) University, Srinagar.
26. **R.K. Joshi**, Separation of cyclopentane from close boiling paraffins using selective solvents in extractive distillation step, **National Conference on Recent Advances in Chemical and Nano Science**, 29-30 October, 2018, HNB Garhwal (Central) University, BGR Campus, Pauri.
27. **R.K. Joshi**, Development of a low-cost technique for improvement of the traditional system of dyeing, **2<sup>nd</sup> National Conference on Science and Technology for Rural Development**, October 14-15, 2019, M.D. University, Rohtak.
28. **R.K. Joshi**, M.S. Panwar and Virendra Joshi, Advancement in extraction techniques for herbal medicines, **National Conference on promoting the advancement of applied sciences**, October 22-23, 2019, HNB Garhwal (Central) University, SRT Campus, Tehri Garhwal.

29. **R.K. Joshi**, M.S. Panwar and Virendra Joshi, Chemical characterization and effect of forest fire on germination of *Morchella esculenta*, **National seminar on Forest fire and climate change: challenges and solutions**, February 14-15, 2020, HMV PG College, Raisi, Haridwar.
30. **R.K. Joshi**, Uttarakhand ki nadiyon ka sarakshan avam shanvardhan, **National conference on Namami Gange**, 24 March, 2021, VSKC Govt. P.G. College, Dakpathar, Dehradun
31. **R.K. Joshi**, “Advancement in extraction techniques for herbal medicines”, **National Seminar on Youth Empowerment through Entrepreneurship and skill Development**, 25-26 November, 2022, Dharmanand Uniyal Government Degree College, Narendra Nagar, Uttarakhand
32. **R.K. Joshi**, “Dyeing of wool fibers with some natural dyes and environmental impact”, **International Conference on Environment and Human Health: Global Issues**, 7-8 December, 2022, Gurukul Kangri (Deemed to be University), Haridwar, Uttarakhand.
33. **R.K. Joshi**, Participated as Speaker in the technical session on “Workshop cum training program on solar green house hydroponics and mobile app for rural farmers and urban users”, Rural Science Congress (17<sup>th</sup> Uttarakhand State Science & Technology Congress 2023) on 10 to 12 February, 2023, Vigyan Dham, Dehradun.

#### **ORIENTATION/REFRESHER/FDP/SHORT TERM PROGRAMME ATTENDED**

1. **95<sup>th</sup> Orientation programme** held on 18.01.2014 to 14.02.2014, Academic Staff College, DDU Gorakhpur University, Gorakhpur, U.P. (Obtained Grade-A).
2. **Refresher course in Chemistry (RC-289)** held on 23.11.2015 to 12.12.2015, Human Resource Development Centre, HP University, Shimla, H.P. (Obtained Grade-A).
3. **Refresher course in Ethics, Spirituality and Yoga** held on 10.03.2018 to 30.03.2018, Human Resource Development Centre, Kumaun University, Nainital, UK (Obtained Grade-A).
4. **IYPT 2019 International Short-term course** organized by IARC, Centre for United Nations with UNESCO & 2019 IYPT, 2019.
5. **Two weeks Faculty Development Programme** on “Managing Online Classes and Co-creating MOOCs: 2.0” from May 18- June 03, 2020, TLC, Ramanujan College, University of Delhi (PMMMNMST).
6. **One week Online Faculty Development Programme** on CRISP- Creative Research and Innovation in Spectroscopy from 08<sup>th</sup> to 13<sup>th</sup> June, 2020, Hindu College of Pharmacy, Guntur, AP.
7. **Online course on ACS Reviewer Lab**, May 10, 2020, ACS Publications, American Chemical Society, Washington, DC USA.

8. **Three weeks webinar series** on Water challenges during and post COVID-19, 7-28 May, 2020, International Centre for Clean Water (ICCW) and IIT, Madras.
9. **One week e-Faculty Development Programme** on Teaching, Learning and Evaluation from 15<sup>th</sup> to 19<sup>th</sup> June, 2021, Hindu College of Pharmacy, Guntur, AP.

### **WORKSHOP/SEMINAR ATTENDED**

1. VIIIth National Users Workshop, Application of High-Resolution NMR, Mass Spectroscopy and Electron Microscopy, 4<sup>th</sup> to 6<sup>th</sup> January, 1995, CDRI, Lucknow.
2. Workshop on applications of NMR in petroleum and petrochemical industries and 5<sup>th</sup> national symposium on magnetic resonance, Feb.,23-26,1999, IIP, Dehradun.
3. International Conference in Petroleum Technology, Petrotech-2003, January 9-12, 2003, Vigyan Bhawan, New Delhi.
4. 50<sup>th</sup> BRNS-IANCAS national workshop on radiochemistry and application on radioisotopes, April 29-May 7, 2003, HNB Garhwal University Srinagar.
5. Workshop on IPR Awareness, 16<sup>th</sup> September, 2005, Patent Information Centre, Pantnagar and TIFAC, New Delhi, Govt. P.G. College, Gopeshwar.
6. National Seminar on “The role of Journalism in popularization of science, 13-14 October, 2007, Govt. P.G. College, Gopeshwar.
7. State level workshop on “Formation of Red Ribbon Clubs, 26<sup>th</sup> September, 2008, USAC, Dehradun,
8. National Seminar on biodiversity conservation and its environmental implication in Himalayan perspective, 12-13rd October, 2008, Govt. P.G. College, Gopeshwar.
9. State level workshop on role of the space technology in the development, management and conservation of natural resources, 22 May, 2008, Govt. P.G. College, Gopeshwar and USAC Dehradun.
10. Workshop on Science and Development, Science Forum Chamoli, March 18-20, 2010, Govt. P.G. College. Gopeshwar.
11. Workshop on Concept of Physics: Popular Lectures, Demons and Low-Cost Experiments, 17-18 February, 2013, Govt. P.G. College, Gopeshwar, Chamoli.
12. Workshop on National Environmental Awareness Campaign (NEAC) 2012-13: Biodiversity Conservation, 13-14 August, 2013, Govt. P.G. College, Gopeshwar, Chamoli.
13. NAAC Sponsored National Seminar on Role in IQAC in enhancing quality of teaching, learning and evaluation process, 9-10 October, 2015, SGRR (PG) College, Dehradun, Uttarakhnd.



14. National Seminar on Access and benefit sharing (ABS), Biodiversity Conservation and Sustainable Development, February 3, 2018, Graphic Era University, Dehradun.
15. National Workshop on Computer interfaced low-cost science experiments & study of basics of plasma, its characteristics and applications, March 1-2, 2019, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
16. Two-days International E-Seminar on Chemistry, Biology and COVID-19, June 25-26, 2020, Department of Chemistry, University of Lucknow, UP.
17. National virtual conference on Recent Advances in Analytical Techniques-2020, August 16-17, 2020, RH Govt. P.G. College, Kashipur, CBMR, Lucknow, IIT, Delhi, USERC, Dehradun.
18. National webinar on paradigm shifting in education: class room to virtual mode, 02 June, 2020, Bareilly College, Bareilly, U.P.
19. National Webinar on Issues and Solutions for saving Biodiversity in Himalayan Region, 5 June, 2020, UCOST, Dehradun and NAS, Prayagraj, UP.
20. International webinar on COVID-19: Policy measures for preventing current and future fallout, 2<sup>nd</sup> and 3<sup>rd</sup> June, 2020, SBS Govt. PG College, Rudrapur, Uttarakhand.
21. National Seminar on Social Tolerance in Indian Literature and Tradition, 23-24 March, 2020, SDM Govt. PG College, Doiwala, Dehradun.
22. International webinar, Context based pedagogy and assessment in higher education, 03 June, 2020, Central University of Haryana, Mahendragarh, Haryana.
23. NAAC sponsored National Conference on Best practices and their success stories in higher educational institutions, 25<sup>th</sup> -26<sup>th</sup> June, 2021, Rathinam College of Arts & Science.
24. International Virtual Conference on Frontiers in Chemical Sciences (IVCFCS-2021), 25<sup>th</sup> June, 2021, MLSU, Udaipur, Rajasthan.
25. ACS India Virtual Classroom on Resume Development: Marketing Your Brand for an Industrial Position, 22<sup>nd</sup> June, 2021, ACS, Washington DC.
26. National Virtual Conference on Reverse Migration: An effort to rebloom the villages in the wake of the pandemic, 28<sup>th</sup>-29<sup>th</sup> July 2021, Govt. P.G. College, Bageshwar and Govt. Degree College, Tyuni, Dehradun.

## **POSITION AND RESPONSIBILITIES**

1. **Resource person** in computer training programme for staff of College, Organised by Computer Application Department, Govt. P.G. College, Gopeshwar, Chamoli, 6-14 May, 2004.
2. **Co-organizing Secretary** in National Seminar on biodiversity conservation and its environmental implication in Himalayan perspective, 12-13<sup>rd</sup> October, 2008, Govt. P.G. College, Gopeshwar (Sponsored by UGC, New Delhi).

3. **Convener**, AISHE, Govt. P.G. College, Gopeshwar.
4. **Convener**, UGC Cell/UGC Networking, Govt. P.G. College, Gopeshwar.
5. **Nodal Officer**, RUSA, Govt. P.G. College, Gopeshwar.
6. **Convener**, Annual Maintenance Committee, Govt. P.G. College, Gopeshwar.
7. **Member**, Exam Committee, Govt. P.G. College, Gopeshwar.
8. **Member**, NAAC Steering Committee, Govt. P.G. College, Gopeshwar.
9. **Member Editorial Board** in State level workshop on role of the space technology in the development, management and conservation of natural resources, 22 May, 2008, Govt. P.G. College, Gopeshwar and USAC Dehradun.
10. **Editor, Endeavor**, Monthly Magazine published by Indian Institute of Petroleum, CSIR, Dehradun (1999-2000).
11. **Member Organizing Committee**, District Science Exhibition on Science and Development, March 18-20, 2010, Govt. P.G. College, Gopeshwar, Chamoli.
12. **Member Organizing Committee**, Workshop on IPR, March 8-9, 2011, Govt. P.G. College, Gopeshwar, Chamoli.
13. **Member Organizing Committee**, Academica conference-2012 on recent trends in research fields of science, social science, humanities and application of space technology for enhancement of quality of higher education, March 14-16, 2012, Govt. P.G. College, Gopeshwar, Chamoli.
14. **Member Editorial Board**, "MADHURI" (2012-13, 2013-14 and 2014-15), College magazine published by Govt. P.G. College, Gopeshwar, Chamoli.
15. **Coordinator**, IQAC-NAAC, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
16. **Convener**, AISHE, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
17. **Convener**, College Website, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
18. **Convener**, Student Welfare and Skill Development, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
19. **Member**, Examination Committee, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
20. **Organizing Secretary**, NAAC sponsored National workshop on Continuous evaluation of quality education & role of IQAC in higher education, 19-20 February, 2019, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.

21. **Co-Convener**, National Workshop on Computer Interfaced Low-Cost Science Experiments, 1-2 March, 2019, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
22. **Convener**, National Level Quiz on Awareness towards COVID-19 Pandemic, 5<sup>th</sup> June, 2020, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
23. **Member**- Advisory committee, National Seminar on Social Tolerance in Indian Literature and Traditions, 23-24 March 2021, SDM Govt. P.G. College, Doiwala
24. **Convener**, Online Special Lecture Series under Azadi ka Amrit Mahotsav, July 2021 onwards, IQAC, VSKC Rajkiya Snatkottar Mahavidyalaya, Dakpathar, Dehradun.
25. **Member**, Board of Studies, Chemistry, SDS Uttarakhand University
26. **Member**, IQAC, SDS Uttarakhand University
27. **Member**, NEP 2020, SDS Uttarakhand University

#### **TRAINING PROGRAMME ATTENDED**

1. Training programme on operation and use of electronic and analytical instruments, 13<sup>th</sup> to 25<sup>th</sup> May, 1996, organized by HNB Garhwal University, Western Regional Instrumentation Centre (WRIC), Bombay University, Mumbai.
2. Training programme in GLC, HPLC and NMR, 14<sup>th</sup> June to 9<sup>th</sup> July, 1996, RSIC, Central Drug Research Institute (CDRI), Lucknow.
3. Three weeks computer awareness Training programme from Computer Age, Dehradun, 1998.
4. Training on First Aids and lifesaving system, 01-02 December, 2013, District Disaster Management Authority Chamoli, Gopeshwar.

#### **MEMBER SCIENTIFIC ORGANIZATION**

1. Life Member, **Scientific and Technical Research Association**, (Membership ID: STRA-M19244), 2019.
2. Life Member, **Teaching and Education Research Association**, (Membership ID: TERA-M19626), 2019.
3. Annual Member, **American Chemical Society** (Membership ID: 32186578), 2019.
4. Regular member, **International Chemical Biology Society**, (Membership ID: 300001439), 2019.
5. Regular Member, **International Association of Advanced Material** (Membership ID: 7211111914829), 2019.

#### **AWARDS/SCIENTIFIC AFFILIATION**

1. **‘Teacher of the Year 2021’** Award by Shri Pushkar Singh Dhami, Hon’ble Chief Minister of Uttarakhand on 05 September, 2021, organized by Uttarakhand Technical University, Uttarakhand Science and Technology Council, Divya Himgiri.
2. Assistant Editor, **“International Journal of Chemical Studies”**, ISSN No. 2321-4902 (Online), 2349-8528(Print).

3. Best Electoral Award, Uttarakhand legislative assembly election 2022, District Election Officer/District Magistrate, Dehradun.
4. Editor, Natural Products Chemistry & Research (ISSN-2329-6836), International Online Medical Council (IOMC) Chaussee de la Hulpe 181, Box 25, 1170 Watermael-Boitsfort, Brussels, Belgium