RESUME

Dr. B. B. CHATURVEDI M.Sc., NET(JRF), Ph. D.

Assistant Professor (Level-12) Department of Pure and Applied Mathematics Guru Ghasidas Vishwavidyalaya Bilaspur(C.G.) Email: <u>brajbhushan25@gmail.com</u> Mob. No. 09479037787

CAREER PROFILE

- > Ph. D., University of Allahabad, Allahabad (U.P.), India.
- > Title of the Thesis: Some Problems on complex Manifolds
- Passed Junior Research Fellowship (JRF) and eligibility for Lecturer National Eligibility Test (NET) June, 2003.
- M. Sc., Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur(U.P.), India
- B. Sc., Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur(U.P.), India

RESEARCH EXPERIENCE

Fourteen years (14years)

RESEARCH GUIDANCE

➤ (04 Students) Two students have completed and other two are working

RESEARCH AREAS

Manifolds and Cosmology

BOOK PUBLISHED

BRAJ BHUSHAN CHATURVEDI: SEMI-SYMMETRIC CONNECTIONS ON COMPLEX MANIFOLD, LAMBERT ACADEMIC PUBLISHING HOUSE, GERMANY.

RESEARCH PAPER PUBLISHED (55)

 B. B. Chaturvedi, Prabhawati Bhagat, Mohammad Nazrul Islam Khan, Tazeen Rana, Ratnesh Kumar Mishra: Proposed Theorems on a Lorentzian Kaehler Space-time Manifold Admitting Bochner Curvature Tensor, Results in Nonlinear Analysis(RNA), 6(4) 2023, 140-148

- B. B. Chaturvedi, Prabhawati Bhagat and Mohammad Nazrul Islam Khan: Novel theorems for a Bochner flat Lorentzian Kaehler space-time manifold with η-Ricci-Yamabe solitons, Chaos, Solitons & Fractals: X, 11 (2023), ISSN: 2590-0544, https://doi.org/10.1016/j.csfx.2023.100097. (INDEXED IN SCOPUS, ESCI)
- **3. B. B. Chaturvedi** and Kunj Bihari Kaushik: On Ricci pseudo-symmetric super quasi-Einstein nearly Kaehler manifold, PALESTINE JOURNAL OF MATHEMATICS 12(1)(2023), 892– 899 ISSN: 2219-5688. (INDEXED IN SCOPUS)
- B. K. Gupta and B. B. Chaturvedi: ON RICCI SEMI-SYMMETRIC SUPER QUASI-EINSTEIN HERMITIAN MANIFOLD, Facta Universitatis' Series Mathematics and Informatics 38(4) 2023, 793-803. ISSN: 0352-9665 doi.org/10.22190/FUMI230611051C.
- 5. B. K. Gupta and B. B. Chaturvedi: On Mixed Generalised Quasi-Einstein Hermitian manifolds, Bull. Call. Math. Soc., 115(4) 2023, 495-508. (UGC LISTED)
- B. B. Chaturvedi and Kunj Bihari Kaushik: Study of a Projective Ricci Semi-symmetric Nearly Kaehler Manifold, Asian Journal of Mathematics and Computer Research, 30(3) (2023), 19-29. ISSN: 2456-477X.
- 7. B. K. Gupta and B. B. Chaturvedi: On a slant submanifold of a Kaehler-Norden manifold, Journal of Tensor Society of India, 16(2022), 71-80. ISSN: 0974-5428.
- 8. B. K. Gupta and B. B. Chaturvedi: E-BOCHNER CURVATURE TENSOR ON ALMOST $C(\lambda)$ MANIFOLDS, Facta Universitatis' Series Mathematics and Informatics 37(4) 2022, 739-750. ISSN: 0352-9665.
- **9.** Kunj Bihari Kaushik, **B. B. Chaturvedi**, Prabhawati Bhagat, J P Jaiswal and M. K. Gupta: Nearly Kaehler manifold satisfying certain curvature conditions, Chhattisgarh Journal of Science and Technology, 19(1) 2022, 46-51.
- **10. B. B. Chaturvedi** and Kunj Bihari Kaushik: On Ricci Semi-Symmetric Mixed Super Quasi-Einstein Nearly Kaehler Manifold, J. Internat. Acad. Phy. Sci., 26(1) (2022), 17-27.
- B. K. Gupta, B. B. Chaturvedi, Prabjawati Bhagat, M. K. Gupta and J. P. Jaiswal: On Bochner Ricci pseudo-symmetric mixed super quasi-Einstein Hermitian manifolds, Chhattisgarh Journal of Science and Technology, 19(2) 2022, 36-42.
- Nishant Kumar, J. P. Jaiswal, B. B. Chaturvedi and M. K. Gupta: Construction of Bi-Accelerator Two-Step Iterative Scheme with Memory for Solving Nonlinear Equations, Chhattisgarh Journal of Science and Technology, 19(2) 2022, 51-57.
- **13.** M K Gupta, Suman Sharma, **B B Chaturvedi and** J P Jaiswal: On Subspaces Of A Finsler Space With H-Randers Exponential Change, Chhattisgarh Journal of Science and Technology, 19(3) 2022, 101-104.

- 14. B. B. Chaturvedi and B. K. Gupta: On Ricci Pseudo-Symmetric Mixed Generalised Quasi-Einstein Hermitian Manifolds, Proceedings of the National Academy of Sciences, India Sect A, 91(1) 2021 ISSN: 0369-8203, https://doi.org/10.1007/s40010-020-00728-3. (INDEXED IN SCOPUS, SCI, Impact factor = 1.291).
- **15. B. B. Chaturvedi** and Kunj Bihari Kaushik: On Ricci semi-symmetric mixed quasi-Einstein nearly Kaehler manifolds, Chhattisgarh Journal of Science and Technology, 18(3) 2021, 61-64.
- **16. B. B. Chaturvedi**, Kunj Bihari Kaushik and M. K. Gupta: Solitons on pseudo quasi-Einstein Nearly Kaehler manifold, Chhattisgarh Journal of Science and Technology, 18(4) 2021, 100-104.
- B. B. Chaturvedi and Pankaj Pandey: A Note on Semi-Symmetric Metric Connection in Riemannian manifold, *Thai Journal of Mathematics*, 19(4) 2021, 1199-1207(Scopus), ESCI. (INDEXED IN (SCOPUS, ESCI)
- **18. B. B. Chaturvedi** and B. K. Gupta: ON AN ANTI-KAEHLER CODAZZI MANIFOLD, PALESTINE JOURNAL OF MATHEMATICS 9(2), (2020) 874-879. ISSN: 2219-5688. (INDEXED IN SCOPUS)
- B. B. Chaturvedi and B. K. Gupta: ON RICCI PSEUDO-SYMMETRIC SUPER QUASI-EINSTEIN HERMITIAN MANIFOLDS, Communications Faculty of Sciences University of Ankara Series A1 Mathematics and Statistics 69(2020) 172-182, ISSN NO-1303-5991, (UGC CARE LIST-B)
- B. B. Chaturvedi and B. K. Gupta: On Bochner curvature tensor on Kaehler-Norden manifolds, South East Asian Journal of Mathematics and Mathematical Sciences, 16(3), 2020, 339-346 ISSN: 0972-7752. (UGC Care list-II).
- **21.** Pankaj Pandey, **B. B. Chaturvedi** and Mona Jasrotia: Some Results on Ricci Yamabe Soliton equipped with *f*-Kenmotsu Manifold, Chhattisgarh Journal of Science and Technology, 17(4) 2020, 33-36.
- 22. B. B. Chaturvedi and B. K. Gupta: Quasi-conformal Curvature Tensor of Generalized Sasakian-Space-Forms, Facta Universitatis' Series Mathematics and Informatics 35(1) 2020, 89-99. ISSN: 0352-9665.
- **23. B. B. Chaturvedi** and B. K. Gupta: ON BOCHNER RICCI PSEUDO-SYMMETRIC HERMITIAN MANIFOLDS, Southeast Asian Bulletin of Mathematics (2020) 44: 479–490. ISSN: 0129-2021 (UGC CARE LIST-B)
- 24. B. B. Chaturvedi and Pankaj Pandey: Study of Hypersurface of semi-almost Hermitian manifold equipped with quarter-symmetric non-metric connection, Journal of Physics, 1531 (2020) doi:10.1088/1742-6596/1531/1/012051(INDEXED IN SCOPUS)

- 25. B. B. Chaturvedi and Pankaj Pandey: On a Lorentzian complex space form, National Academy of Science Letters, 43 (4) (2020), 351-353. (INDEXED IN SCOPUS, SCI, Impact factor =1.33)
- **26. B. B. Chaturvedi** and B. K. Gupta: C-BOCHNER CURVATURE TENSOR ON ALMOST C(Λ) MANIFOLDS, PALESTINE JOURNAL OF MATHEMATICS, Vol. 8(2) (2019) 258–265. ISSN: 2219-5688. (INDEXED IN SCOPUS)
- **27. B. B. Chaturvedi** and B. K. Gupta: ON BOCHNER RICCI SEMI-SYMMETRIC HERMITIAN MANIFOLD, ACTA MATH. UNIV. COMENIANAE VOL. LXXXVII, 1 (2018), 25-34 ISSN: 0862-9544. (INDEXED IN SCOPUS)
- 28. B. K. Gupta, B. B. Chaturvedi and M. A. Lone: ON RICCI SEMI-SYMMETRIC MIXED SUPER QUASI-EINSTEIN HERMITIAN MANIFOLD, DIFFERENTIAL GEOMETRY- DYNAMICAL SYSTEMS, VOL. 20 (2018), 72-82. ISSN: 1454-511X (UGC CARE LIST-D)
- **29.** B. K. Gupta and **B. B. Chaturvedi:** A NEW TYPE OF GENERALIZED QUASI-EINSTEIN MANIFOLD, NEW TRENDS IN MATHEMATICAL SCIENCES, 6 (2), (2018), 159-165 ISSN:2147-5520
- **30. B. B. Chaturvedi** and Pankaj Pandey: On a Kaehler manifold equipped with lift of quarter symmetric non-metric connection, *Facta Universitatis (NIS)*, Series: Mathematics and Informatics, 33(4) 2018, 539-546.
- 31. B. B. Chaturvedi and Pankaj Pandey: Existence of Generalized Mixed Super Quasiconstant Curvature, *Differential Geometry-Dynamical System*, 20 (2018), 15-25. (UGC CARE LIST-D)
- **32. B. B. Chaturvedi** and B. K. Gupta: SIX-DIMENSIONAL BULK VISCOUS FLUID COSMOLOGICAL MODEL IN F(R, T) GRAVITY THEORY, BULG. J. PHYS. 44 (3) (2017) 288–298 ISSN: 1310-0157. (**UGC CARE LIST-D**).
- **33. B. B. Chaturvedi** and B. K. Gupta: ON A HYPERBOLIC KAEHLERIAN SPACE, ACTA MATHEMATICA ACADEMIAE PAEDAGOGICAE NYÍREGYHÁZIENSIS 33 (2017), 207-213 ISSN: 1786-0091 (INDEXED IN SCOPUS)
- **34. B. B. Chaturvedi** and Pankaj Pandey: On a mixed super quasi-Einstein manifold, *Asian Journal of Mathematics and Computer Research*, 18(2) (2017), 76-80.
- 35. B. B. Chaturvedi and Pankaj Pandey: Weak Symmetric Manifolds Equipped with Semi-Symmetric Metric Connection, *Palestine Journal of Mathematics*, 6(2) (2017), 507-514.
 (INDEXED IN SCOPUS)
- **36. B. B. Chaturvedi** and Pankaj Pandey: Study of Kaehler Manifolds Endowed with Lift of Symmetric Non-Metric Connection, *Acta Mathematica Academie Paedagogiace Nyiregyhaziensis*, 33, 2017, 61-66. (**INDEXED IN SCOPUS**)

- **37. B. B. Chaturvedi** and B. K. Gupta: STUDY OF A SEMI-SYMMETRIC SPACE WITH A NON-RECURRENT TORSION TENSOR, J. INTERNAT ACAD. PHY. SCI. 20(3)(2016), 155-163 ISSN:0974-9373.
- 38. B. B. Chaturvedi and B. K. Gupta: STUDY OF TIME DEPENDENT COSMOLOGICAL TERM Λ IN A SIX DIMENSIONAL COSMOLOGICAL MODEL, GEN. MATH. NOTES, 37(1), (2016), 32-41. ISSN: 2219-7184
- **39. B. B. Chaturvedi** and B. K. Gupta: SOME INVESTIGATION ON COSMOLOGICAL MODEL BALKAN JOURNAL OF APPLIED SCIENCES, 18(1), (2016), 18-29 ISSN:1454-5101(**INDEXED IN SCOPUS**)
- 40. B. B. Chaturvedi and Pankaj Pandey: Conformal Transformation in an Almost Hermitian Manifold, *Novi Sad Journal of Mathematics*, 46(1) (2016), 217-226. (INDEXED IN SCOPUS)
- **41. B. B. Chaturvedi** and B. K. Gupta: STUDY OF A HYPERBOLIC KAEHLERIAN MANIFOLDS EQUIPPED WITH A QUARTER- SYMMETRIC METRIC CONNECTION, FACTA UNIVERSITATIS (NIS), SER.MATH. INFORM. 30, (1), 2015, 115-127 ISSN: 0352-9665.
- **42. B. B. Chaturvedi** and Pankaj Pandey: Study of a New Type of Metric Connection in an Almost Hermitian Manifold, *Facta Universitatis (NIS)*, Series: Mathematics and Informatics, 30(2) (2015), 217-224.
- 43. B. B. Chaturvedi and Pankaj Pandey: Study on Special type of a Weakly Symmetric Kaehler manifold, *Differential Geometry-Dynamical System*, 17 (2015), 32-37. (UGC CARE LIST-D)
- **44. B. B. Chaturvedi** and Pankaj Pandey: Some Examples on Weak Symmetries, *General Mathematics Notes*, 29(1) (2015), 61-66.
- **45. B. B. Chaturvedi** and Pankaj Pandey: On the Flatness of Weak Symmetric Manifolds, *Journal of International Academy of Physical Sciences*, 18(4) (2014), 79-84.
- **46. B. B. Chaturvedi** and B. K. Gupta, STUDY OF CONHARMONIC RECURRENT SYMMETRIC KAEHLER MANIFOLD WITH SEMI-SYMMETRIC METRIC CONNECTION, J. INTERNAT ACAD. PHY. SCI. 18 (1) (2014), 11-18. ISSN:0974-9373
- **47. B. B. Chaturvedi** and B. K. Gupta: STUDY ON SEMI-SYMMETRIC METRIC SPACES, NOVI SAD J.MATH. 44 (2), (2014), 183-194 ISSN:1450-5444 (INDEXED IN SCOPUS)
- **48. B. B. Chaturvedi** and P. N. Pandey: Kaehler manifold with a special type of semisymmetric non-metric connection, Global Journal of Mathematical Sciences 7 (1) (2015), 17–24.

- **49. B. B. Chaturvedi** and P. N. Pandey: Some results in a Kähler manifold equipped with a semi-symmetric non-metric connection, Jour. Pure Math.29 &30 (2013), 14-20.
- **50. B. B. Chaturvedi** and P. N. Pandey: Riemannian manifold with a special type of semisymmetric non-metric connection, J. Internat. Acad. Phy. Sci., 13-3 (2009), 253-259.
- **51. B. B. Chaturvedi** and P. N. Pandey: Semi-symmetric non-metric connections on a Kähler manifold, Differential Geometry Dynamical Systems, 10 (2008), 86-90.
- **52.** P. N. Pandey and **B. B. Chaturvedi**: emi-symmetric metric connection on a 4dimensional almost Hermitian manifold of pointwise constant anti-holomorphic sectional curvature, Bull. Call. Math. Soc., 100-4(2008), 401-410. (**INDEXED IN SCOPUS**)
- 53. P. N. Pandey and B. B. Chaturvedi :Recurrences with respect to a semi-symmetric metric connection on an almost Hermite manifold, Proceedings of the National Academy of Sciences, India Sect. A, 78 (2008), 137-143. (INDEXED IN SCOPUS, SCI, Impact factor =1.291)
- **54.** P. N. Pandey and **B. B. Chaturvedi**: Semi-symmetric metric Connection on a Kähler manifold, Bull. Alld. Math. Soc., 22(2007), 51-57.
- **55.** P. N. Pandey and **B. B. Chaturvedi** Almost Hermitian manifold with semi-symmetric recurrent connection, J. Internat. Acad. Phy. Sci., 10 (2006), 69-74.

CONFERENCES: INVITED TALK/PRESENTED PAPER

- 1. National Seminar on Contribution of Ancient Indian Mathematicians & its uses in present Age on 22-23 january at Dongargaon, Chhattisgarh.
- **2.** 18th International conference of the International Academy of Physical Sciences (CONIAPS-XVIII) during Dec. 22-24, 2015 at Allahabad.
- **3.** 18th International conference of the International Academy of Physical Sciences (CONIAPS-XVIII) during Dec. 22-24, 2015 at Allahabad.
- National Seminar on Value and importance on Mathematical Physics on 5th Dec. 2015 at Rajim, Chhattisgarh.
- **5.** 17th International conference of the International Academy of Physical Sciences (CONIAPS-XVII) during Jan. 16-18, 2015 at Jaipur.
- **6.** 3rd International Conference on Recent trends in Science and Technology (IC-RTST-2015) Feb. 27-28, 2015 at Sagar.
- **7.** International conference on Algebra, Geometry, Analysis and their Applications (ACAGAA-2014) November 27-29, 2014 at JAMIA, New Delhi.

- **8.** National Conferences on Engineering a Science (AMES-2014), November 29-30, 2014 at MNNIT, Allahabad.
- **9.** National conference on Differential Geometry and its Applications (DGACON2014), Dec. 27-28, 2014 at University of Allahabad, Allahabad.
- **10.** 11th conference of the International Academy of Physical Sciences (CONIAPS-XI) during February 20-22, 2010 at Allahabad.
- **11.** 96th Indian Science Congress during January 3-7, 2009 at Shillong.
- **12.** National Symposium on Modern Trends in Differential Geometry and Mathematical Modelling in Bio-Sciences during December 24-25, 2008 at Lucknow.
- **13.** 95th Indian Science Congress during January 3-7, 2008 at Vishakhapatnam.
- **14.** 10th conference of the International Academy of Physical Sciences (CONIAPS-X) during January 12-15, 2008 at Bilaspur.
- **15.** International conference on Emerging Chalenges in Science & Technology, during November13-14, 2008 at Allahabad.
- 16. 78th Annual session of National Academy of Sciences, India during November 21-23, 2008 at Chandigarh.
- 9th conference of the International Academy of Physical Sciences (CONIAPS-IX) during February 2-5, 2007 at Agra.
- **18.** 8th conference of the International Academy of Physical Sciences (CONIAPS-VIII) during December 29-31, 2005 at Meerut.
- **19.** 7th conference of the International Academy of Physical Sciences (CONIAPS-VII) during December 21-23, 2004 at Allahabad.

Research Project

UGC Start up grant (six lacks)

MEMBERSHIP

- Life Member of Indian Science Congress.
- Life Member of International Academy of Physical Sciences.

ACADEMIC/ ADMINISTRATIVE RESPONSIBILITIES

- Hostel warden of Dr. B R Ambedkar Hostel, GGV, Bilaspur
- Member of Departmental research committee 2022
- Working as School coordinator in NAAC preparation committee
- Working as member of a committee of Incubation Center
- Working as a member Proctorial board from 2020

- Worked as a election officer in Student Council Elections in GGV
- Worked as School Cultural Coordinator session 2013-14
- ➢ Worked as a election officer in Student Council Elections in GGV session 2013-14
- Worked as School Cultural Coordinator session 2014-15
- ➢ Worked as a election officer in Student Council Elections in GGV session 2014-15
- ▶ Worked as a election officer in Student Council Elections in GGV session 2015-6
- Worked as School Cultural Coordinator session 2015-16
- ▶ Worked as member of CBCS implemented committee session 2015-16
- Member of Departmental Purchase Committee session 2012-13
- Member of Departmental Research Committee session 2013-16
- Member of Departmental Admission Committee session 2012-13
- Member of Departmental Admission Committee session 2013-14
- Member of Departmental Admission Committee session 2014-15
- ▶ Worked as Assistant centre superintendent for the conduction of Exam session 2015-16
- Member of BoS session 2015-18
- Member of Ordinance preparation Committee session 2016-17