### **BIO-DATA**

- NAME: PROF. GHANSHYAM SINGH RATHORE
- FATHER'S NAME : Sh. Narendra Singh Rathore
- DATE OF BIRTH : 27 January 1964
- PRESENT POSITION : Professor Department of Mathematics & Statistics, Mohanlal Sukhadia University, Udaipur



**TEACHING EXPERIENCE:** More than 33 Years in Mohanlal Sukhadia University

Udaipur (Raj.)

- PARMANENT ADDRESS: Hamirpur House Near Teejki Police Chowki Nohra Mehetab Singh Alwar (Raj.)
- LOCAL ADDRESS: 7, Ganpati Nagar-A, Bohra Ganesh Main Road, Udaipur(Rajasthan)-301001 Mob: 9414352604 Ph.No (Res.) 0294-2491604 E-Mail: (1) icpam2017@gmail.com (2) ghanshyamsrathore@yahoo.co.in

EDUCATIONAL

| QUALIFICATION:       | <b>B.Sc. :</b> Year of award : 1983 from University of Rajasthan, Jaipur. |
|----------------------|---|
| Subjects Offered:    | Physics, Chemistry and Mathematics.                                       |
| M.Sc. Mathematics:   | Year of award: 1985 form Department of Mathematics, University of         |
|                      | Rajasthan, Jaipur (Rajasthan).  |
| Ph.D. (Mathematics): | Year of award: 1988 from Department of Mathematics, University of         |
|                      | Rajasthan, Jaipur.  |
| Topic of Thesis:     | Study of Some Inhomogeneous Cosmological Models in General Relativity.    |

## PAPERS TAUGHT:General Relativity and Cosmology, Real Analysis,<br/>(P.G. level) Differential Equations & Calculus of Variation.

**RESEARCH CONTRIBUTION:**Ph.D. Supervision: 26 year experiencePh. D. Awarded:15 Students

**RESEARCHPAPERSPUBLICATION:** More than 50 papers have been published in Reputed (Refereed

And indexed) International and National level Journals.

AREA OF SPECIALIZATION: Relativity , Cosmology and Analysis.

## SOME ADMINISTRATIVE RESPONSIBILITIES / DUTIES AND OTHER CREDENTIALS, SINIFICANT CONTRIBUTIONS AND AWARDS RECEIVED:

- 1. Dean & Faculty Chairman , University College of Science from July 2021 to April 2022
- 2. Member , Board of Management from July 2021 to April 2022
- 3. Head, Department of Mathematics & Statistics from 2020 to Aril 2022
- **4.** Member of Board of Management (Elected Teachers Representative) of Mohanlal Sukhadia University, Udaipur (Raj.) for continuous three years from 2008 2011.
- **5.** Associate Dean Student Welfare of University College of Science, Mohanlal Sukhadia University, Udaipur (Raj.), for more than five years i.e. from 2011 2016.
- **6.** Head, Department of Mathematics & Statistics, Mohanlal Sukhadia University, Udaipur (Raj.), for three years, from 2014 2017.
- Member of Finance Committee of Mohanlal Sukhadia University, Udaipur (Raj.) for three years from2009 - 2011.
- **8.** Member of the Medical Committee of Mohanlal Sukhadia University, Udaipur (Raj.) for three years from 2010 2013.
- **9.** Member, House allotment committeeof Mohanlal Sukhadia University, Udaipur (Raj.)during the year 2011.
- Member of Provident Fund committee of Mohanlal Sukhadia University, Udaipur (Raj.)during the year 2008 - 2011.
- 11. Convener of Committee of Courses of Mathematics of Mohanlal Sukhadia University, Udaipur (Raj.) from 2013 2016 and from 2018 April 2022
- Convener of Committee of Courses of Mathematics of Govind Guru Tribal University, Banswara (Raj.) from 2018 and continue up to April 2022.
- 13. Member, Committee of Courses of Mathematics of MDS University, Ajmer from 2017 to 2019

- 14. Associate N.C.C Officer in Army wing since November 1994 to 2021
- **15.** Awarded 'A' grade in pre-commission course of N.C.C. (Army) held at kamptee (M.H.).
- 16. Awarded 'A' grade in refresher course of N.C.C Army wing at Kamptee (M.H.).
- **17.** Presented Guard of Honor to, the then Honb'le Vice-President of Indiaandthe Honorable Governors of Rajasthan.
- **18.** Election officer of University College of Science, M L Sukhaia University, during Students Union Elections heldin the year 2011, 2012, 2013, 2014 and 2015.
- **19.** Hostel Warden of the University for 17 years.
- **20.** Member, Faculty of Science of Mohanlal Sukhadia University, Udaipur (Raj.) for three years from 2011 2013 and from 2018 to 2021
- **21.** Attended several national level NCC camps at different places of India.
- 22. Attended Republic Day camps at Jaipur and Delhi .
- **23.** Organized an AIDS awareness rally nearby Udaipur.
- **24.** Member of Discipline Committees of the College of Science for several years.
- **25.** Associate Dean, University College of Science in the year 2021.

# SOME OF THE CONFERENCES / WORKSHOPS ORGANIZED/ DELVER INVITED TALKS / PAPER PRESENTED

- Organized Five days National Workshop on Computational Techniques at Mohanlal Sukhadia University, Udaipur from 19<sup>th</sup> November to 23<sup>rd</sup> November, 2018.
- Organized 'International Workshop on Operator Theory & Relativity on 22<sup>nd</sup> February, 2018 at Mohanlal Sukhadia University, Udaipur.
- Organized 'International Conference on Recent Advances in Pure and Applied Mathematics &
  28<sup>th</sup> A C R G P' from 13<sup>th</sup> -14<sup>th</sup>. Feb., 2017 at Mohanlal Sukhadia University, Udaipur.
- Organized National Workshop on 'Analysis, Differential Equations and their Applications' from25<sup>th</sup> – 27<sup>th</sup>, Feb., 2016 at Mohanlal Sukhadia University, Udaipur.
- Member of the Organizing committee of 'International Workshop on wavelets frames and applications' at Kirorimal College , University Delhi organized in the month of December, 2011.
- Organized XIII<sup>th</sup>Annual conferenceand National Symposium of Rajasthan GanitaParishadfrom14<sup>th</sup>-15<sup>th</sup> December, 2004.

- 7. Organized a National Workshop as Joint coordinator of Inter University Centre for Astronomy and Astrophysics reference centre of M.L.S.U. at Shreejee Institute of Technology, Nathadwara on "Telescope Taking and Making".
- 8. Organized several Invited Talks and Extension lecturers of various experts from India and abroad like USA, RUSSIA, IRAN, TURKY etc. on various topics of Mathematics and related topics along with on "opportunities available for admissions in abroad" at the Department of Mathematics and Statistics, M L Sukhadia University, Udaipur.

## LIST OF SOME CONFERENCES, SEMINARS, SYMPOSIA AND WORKSHOPS ETC. ATTENDED / DELIVERED INVITED TALKSIN INDIA AND ABBROAD.

- 15<sup>th</sup> International Conference on Relativity and Gravitation **I.U.C.A.A., Pune** from Dec.16--- 21, 1997.
- 2. XII<sup>th</sup> Annual conference of Rajasthan GanitaParishad at**Bhilwara**from 3-4 Nov., 2000.
- XIIIth Annual Conference of The Rajasthan GanitaParishad And Symposium, Organised by The Deptt. Of Maths. & Stats . M.L.S.U. Udaipur from Dec, 14-15 , 2001.
- 23<sup>rd</sup> Conference of IAGRG and Symposium Organised atDeptt. Of Mathematics University of Rajasthan Jaipur from Dec.7-10, 2004.
- 3<sup>rd</sup>Astrosat workshop on Active Galactive Nuclei Deptt. of , M.L.S.U. from Dec, 21-29,2005.
- XVII th. Annual conference of Rajasthan GanitaParishad, organized by M. G. College, Udaipur from 10-12, Feb.2006.
- Workshop on Geometry, Gravity and Cosmology, organized at Deptt. Of Mathematics
  S.P.University ,VallabhVidyanagar from Feb 16-18, 2006
- An introductory workshop on Astrophysics Deptt. of Physics M.L.S.University, Udaipur from Dec.20-24<sup>th</sup>, 2006
- 20<sup>th</sup> Annual Conference of Rajasthan GanitaParishad, organized at Deptt.ofMaths. Govt CollegeKota from 18-19, 2009.
- 10. Partial differential equations, relativity and non linear waves, organized by **University of Viena** and **University of Granada (Spain)** from April 5-9, 2010.

- National seminar on recent developments in fluid dynamics , organized by Department of Mathematics , University of Rajasthan, Jaipur fromAug.7-8, 2010.
- 12. **National Conference** on Role of Mathematical Sciences and Physical Sciences in Engineering and Technology, oganised by Govt.College ,**Karnprayag**, **Uttrakhand** from Oct 21-22, 2011.
- 13. International Work Shop on Wavelets, frames and applications , organized at Kirori Mal College , **University of Delhi**, from Dec. 15-21.2011.
- 14. National coference on "Recent Advances in mathematics with applications in Engineering " organized by Govt. Engineering College, **Ajme**r, from March 12-13, 2012.
- NEB 15 Conference on, "Recent developments in Gravity", organized by Hell ionic Society of Greece at Creete (Greece), from June 20-23, 2012.
- National Conference on Computational and Mathematicall Sciences Computatia-iv, Nov. 25-26,2014organized by VIT, Jaipur.
- International Workshop on Wavelets Frames and Applications-II December 24 30,2014 organized by Department of Mathematics , Kirorimal College University of Delhi, Delhi
- International Workshop on Wavelets, Frames and Applications-III, Organized by Department of Mathematics ,Kirorimal College, University of Delhi, Delhi, from 14 - 20 December,2017& Chaired the Session.
- National Conference on New Advances in Theoretical Computer Science, Algorithms and Mathematical Modeling at Jodhpur, from 27 -28 April, 2018 and Delivered talk on "FeketeSzego Inequality".
- 20. 20. Conference on "DRAFT ATIONAL EDUCATION POLICY-2019", Organized by The Commissionerate of College Education and Project Director (RUSA), Government of Rajasthan , Jaipur on 24 July, 2019.

#### LIST OF SOME PUBLICATIONS:

- Inhomogeneous Viscous Fluid Cosmological Model With Electromagnetic Field In General Relativity, 138, 71-77, Astrophysics and Space Science, Netherlands 1987.
- Some Inhomogeneous Cosmological Models of Plane Symmetry with Electromagnetic Field, 139, 365-372, Astrophysics and Space Science, Netherlands 1987.

- Inhomogeneous Cosmological Models With Electromagnetic Field In General Relativity, 134, 47-54, Astrophysics and Space Science, Netherlands 1987.
- 4. Expanding and Shearing Inhomogeneous Cosmological Models for Viscous Fluid Distributions with Electromagnetic Field, 143,377-386, Astrophysics and Space Science, Netherlands 1988.
- Expanding and Shearing Inhomogeneous Cosmological Models with Electromagnetic Field Having Geodetic Flow, Vol.39, 139-152 ,The Journal of Scientific Research, Banaras Hindu University, 1989.
- Cylindically Symmetric Inhomogeneous Viscous Fluid Cosmological Models with Electromagnetic Field, Vol.1, 19-30 Ganita Sandesh, 2000.
- 7. Cylindrical Symmetric Inhomogeneous Cosmological Models For Perfect Fluid Distributions with Electromagnetic Field, Vol.15,No. 1,15-26 Ganita Sandesh, 2001.
- Cylindrical Symmetric Inhomogeneous Cosmological Models for Viscous Fluid Distribution with Electromagnetic Field Vol.15.No.2, 113-126, Ganita Sandesh, 2001.
- Some Inhomogeneous Perfect Fluid Cosmological Models in the Presence of Electromagnetic Field 281,677-688, Astrophysics and Space Science, Netherlands, 2002.
- 10. A Magnetized Homogeneous Inflationary Cosmological Model in General Relativity 288,457-464, Astrophysics and Space Science, Netherlands, 2003.
- 11. On Perturbations of Frames in Hilbert Spaces ,Vol. 37, No. 1, 65-72, International Journal of Pure and Applied Mathematics, Russia,2007.
- 12. A Note On Block Sequences In Hilbert Spaces Vol. 43 (63), 387-395, GLASNIK MATHEMATICKI ,Crotia, 2008.
- Magnetized Dust Fluid Tilted Universes for Perfect Fluid Distribution in General Relativity 2(17), ,Vol.2,No.17, 817-824, Advanced Studies in Theoretical Physics, Bulgaria, 2008.
- A Magnetized Tilted Homogeneous Cosmological Model with Disordered Radiations, Vol.2, No.19, 909-918, Advanced Studies in Theoretical Physics , 2008.
- 15. A Note on Frame Sequences in Hilbert Spaces, Vol. 3,No.16,791-799, Int.J. Contemp. Math. Sciences, Bulgaria, 2008.
- On Stability Of Frames In Conjugate Banach Spaces, Journal of Indian Mathematical Society ,Vol. 75. Vol.1-4, 161-172, 2008.
- 17. Tilted Bianchi Type I Dust Fluid Magnetized Cosmological Model in General Relativity, 33,1-11, Turkish Journal of Physics, Turkey, 2009.
- 18. Five Dimensional Bianchi type I String Cosmological Model in Brans-Dicke

Theory, 321,37-41, Astrophysics and Space Science, Springer, 2009.

- A Tilted Homogeneous Cosmological Model with Disordered Radiations In The Presence Of The Magnetic Field Vol.54, No.7-8,777-786, Romanian Journal of Physics, Romania, 2009.
- Five Dimensional Perfect Fluid Cosmological Models In Barber's Second Self –Creation Theory Vol.4, No.5, 213-224, Advanced Studies in Theoretical Physics, Bulgaria, 2010.
- 21.On Atomic Decomposition In Banach Spaces, Vol.4,No.10,481-488, Int. Journal of Math, Analysis (Bulgaria), 2010.
- Five Dimensional Strings Cosmological Models -----In Lyra Geometry, Vol.4, 827-835, Advanced Studies In Theor. Phys (Bulgaria), 2010.
- 23. On Stability of Frames In Hilbert Spaces, International Electronic Journal of Pure And Applied Mathematics, Sofia (Bulgaria), 2010.
- Magnetized Viscous Fluid Tilted ------Radiations, Vol.22 (3), 465-476,
  Ultra Scientists of Physical Sciences, 2010.
- 25. Some magnetized dust fluid tilted cosmological models in G.R., Vol.5. 1-2, Journal of Science Vidarbha, 2010.
- 26. Bianchi Type III string cosmological models with bulk viscosity and E.M.F,Vol.6,2, 36-49, Journal of Vectorial Relativity (Spain), 2011.
- 27. Stiff fluid homogeneous cosmological models, Vol.4 Issue-III July-Sept., Journal of Engineering, Science and Management Education, 2011.
- On Shrinking Retro Banach Frames, Vol. No.4, 425-432, International Journal of Pure and Applied Mathematics, 2011.
- 29. Stiff Fluid Homogeneous Cosmological Models, Vol.4 Issue III,,160-163, Journal of Engineering,Science&Management Education, **Bhopal**, 2011.
- Homogeneous String Dust Cosmological Model in Brans-Dicke Theory, Vol. 25/2 Dec., 161-172, Ganita Sandesh, 2011.
- 31. Bianchi Type-I Inflationary-----in General Relativity, Vol.25 (1)A,23-26,Ultra Scientists Journal Physical Sciences, Bhopal, 2013.
- 32. On stability of frames in Hilbert spaces, 677-685,2014, Journal of Chemical, Biological and Physical Sciences (International Online), 2014.
- On Block Transfinite Sequences in Banach Spaces, 71-75, Poincare Journal of Analysis & Application, Vol.2, New Delhi. 2014.

- Five Dimen. Bianchi Type-I Cosmological Models in GR, Vol.5, Sec.No.1,P;019-025 (2015-16),
- 35. Five Dim. Bianchi Type-----Self creation Theory ,vol.5,125-132,Journal of Environmental Science,Computer Science and Engineering & Technology(International Online), 2016.
- Higher Dim. Bianchi Type –IString Cosmological Models, Journal of Environmental Science, Computer Science and Engineering & Technology, Nov. 15, Vol. 4, No. 5, Sec. C, 556-565, (International Online), 2016.
- 37.On (p,q)-Frames in Banach Spaces, Vol.13,No.7,3561-3575,Global Journal of Pure and Applied Mathematics, International Online, 2017.
- Some Results on Block Frames, Vol.13,No.7, 2983-2996,Global Journal of Pure and Applied Mathematics, International Online, 2017.
- 39. A Note on Frames in Banach Spaces, Vol.12, No.2,631-638,International Journal of Computational and Applied Mathematics,**China**, **2017**.
- Some Results on SIP E<sub>d</sub> Frames in Banach Spaces, Vol.13, No.6, 1639-1650, 2017, Global Journal of Pure and Applied Mathematics, International Online, 2017.
- 41. On G-Banach Bessel Sequences in Banach Spaces, Vol.13, No.9, 5129-5142, Global Journal of Pure and Applied Mathematics, International Online, 2017
- A New Class of ------Subordination Method, Vol.6, No.8, 2548-2553, 2018, International Journal of Research in Advent Technology, India, 2018.
- 43. Retro K-Banach Frames in Banach Spaces, Vol. 2(1),67-79, Poincare J. Analysis & Applications, 2018.
- 44. On Weighted G-Banach Frames in Banach Spaces, Vol. 2(II),13-26, Poincare J. Analysis&Applications.Special Issue( IWWFA-III, Delhi), 2018.
- 45. Duals of a Frame in Quaternionic Hilbert Spaces, Vol. 2(11), 109-126, Poincare J. Anal.App. Special Issue (IWWFA-III, Delhi)., 2018.
- 46. Some Subclasses of a New Class of Analytic Functions with Fekete-Szego Inequality, Vol.7, No.1,233-237, January 2019, International Journal of Research in Advent Technology, India.
- 47. On Weighted G-Banach Frames in Banach Spaces2349-6789 (p)

2349-6797 (on line), Vol2 (ii) Special Issue (IWWFA-iii) Delhi, p:13-26 (2018)

48. A short Note on q-Analog of Modified Stancu-Beta Operators, Vol.105, No.6,881-887, 2019, Mathematical Notes (Springer), New York.

- 49. An Advance Class of Analytic Functions with Fekete-Szego Inequality Using Subordination Method Vol.7,IssueVIII, 922-925, 2019, International Journal for Research in Applied Science & Engineering Technology.
- 50. On G-Banach Frames, Vol. 12(4), 499-519, 2019, Jordan Journal Of Mathematics and Statistics (JJMS),
- 51. On Perturbation of Weighted G- Banach Frames in Banach Spaces , 87(1-2) Jan-June 2020, The Journal of Indian Mathematical Society.
- 52. Coefficient Inequality of a Significant Class of Analytic Function, 19, No 3&4, 2020, Journal of Rajasthan Academy of Physical Sciences.