Name	: Dhirendra Chhajed	Instanting of the Automation of Management of the
Designation	: Assistant Professor Deptt. of Mathematics and Statistics University College of Science Mohan Lal Sukhadia University Udaipur(Rajasthan)	
Educational Qualification	: M.Sc. (Gold Medalist in Math) NET (CSIR-JRF) and Ph.D.	
Teaching/Research Experience	: 22 years	

### List of Publications:

1. Expanding & Shearing Bianchi type I non static cosmological model in General Relativity. Journal of Rajasthan Academy & Physical Sciences (2004), vol-3, No.-1, 25-30.

2. Bianchi type V cosmological model for perfect fluid distribution in General relativity Journal of Rajasthan Academy & Physical Sciences (2008), vol-7, No.-4, 463-468.

3. Homogeneous Anisotropic Bianchi type IX cosmological model for perfect fluid distribution in General Relativity. Journal of Ultra Scientist of physical Sciences, (2011) vol-23(1) M, 173-176.

4. Homogeneous Anisotropic Bianchi Type IX Cosmological Model for Perfect Fluid Distribution with Electromagnetic Field. American Journal of Mathematics and Statistics (2012), vol-2, No-3,19-21, USA.

5. Bianchi Type I Anisotropic Inhomogeneous Cosmological model for perfect fluid distribution with electromagnetic field. Mathematical Sciences Research Journal (2013), vol-17, No-2, 30-38 Minnesota (USA).

6. Expanding & Non shearing Bianchi Type –III String cosmological models with Bulk Viscosity. Journal of Chemical, Biological & physical Science, (2013) vol-4, No-1, 481-485.

7. Inhomogeneous Bianchi Type  $VI_0$  String dust Cosmological Model of Perfect Fluid Distribution in General Relativity. Journal of Rajasthan Academy of Physical Sciences, (2015) Vol.14, No.1, 15-23.

8. Inhomogeneous Bianchi type-VIo String Cosmological Model for Stiff Perfect Fluid Distribution in General Relativity. Prespace time Journal, (2016) Vol.7, No. 3, 615-622.

9. Bianchi Type V Cosmological Model for Stiff Perfect Fluid Distribution with Variable Magnetic Permeability. Journal of Chemical, Biological & physical Science (2016) vol. 6. No. 2, 601-606.

10. Homogeneous Anisotropic Bianchi Type IX Cosmological Model for Stiff Fluid Distribution in General Relativity. Journal of Chemical, Biological & physical Science (2016) vol. 6. No. 2, 581-586.

11. Inhomogeneous Bianchi Type VIh String Dust cosmological model of Perfect Fluid Distribution in General Relativity. Journal of Chemical, Biological & physical Science (2016) vol. 6. No. 2, 607-618.

12. Bianchi Type-II Dust Cosmological Model in General Relativity. Prespace time Journal, (2016) Vol.7, No.11, 1489-1492.

13. Homogeneous Bianchi Type VIO Cosmological Model for Stiff Perfect Fluid in General Relativity. Prespace time Journal, (2016) Vol.7, No. 13, 1761-1765.

14. Bianchi Type VIII Cosmological Model with Quadratic Equation of State in General Relativity. Prespace time Journal, (2017) Vol.8, No. 7, 792-797.

15. Inhomogeneous Generalization of Bianchi Type VI<sub>h</sub> String Cosmological Model for Stiff Perfect Fluid Distribution. Bulg. J. Phys. (2017) Vol 44, No.3, 276-287

16 Bulk Viscous String Cosmological Model with Cosmological term  $\Lambda$  in FRW Space-Time. Journal of Rajasthan Academy of Physical Sciences, (2018) Vol.17, No.3 &4, 165-171.

17 Magnetized Bulk viscous Bianchi Type IX String Cosmological Model with cosmological term  $\Lambda$  Relativity. Journal of Environmental Science, Computer Science and Engineering & Technology (2018)

18. Locally Rotationally Symmetric Bianchi Type-V String Cosmological Model for Stiff Perfect Fluid with cosmological term  $\Lambda$ . Int. J of Basic and Applied Research (2019) vol 9 No.4, 649-654.

19. Bianchi Type  $VI_0$  String Cosmological Model for Barotropic Fluid Distribution with cosmological term A. Int. J. for Research in Applied Sci. & Engg. Tech (2019) Vol.7 No. IV.

20.Magnetized LRS Bianchi Type-I Massive String Cosmological Model for Perfect Fluid Distribution with cosmological term  $\Lambda$ . Int. J. of Scientific Research in Physics and Applied Sciences. (2019) vol 7 No.3, 167-172.

21.Magnetized Bianchi type -VI0 Cosmological Model for Barotropic Fluid Distribution with variable Magnetic Permeability and Dark Energy. Journal of Rajasthan Academy of Physical Sciences, (2020) Vol.19, No.3 &4, 207-216

22.Magnetized Bianchi type-III string cosmological model for anti-stiff fluid in General Relativity Journal of Rajasthan Academy of Physical Sciences, (2021) Vol.20, No.3 &4, 195-206.

23. Bianchi type VIII String Cosmological model for barotropic fluid with dark energy Ganita Sandesh, (2022) Vol. 31, 56-69.

24. Magnetized Bianchi type -VI0 string cosmological model for anti-stiff fluid in General Relativity. Journal of Ultra Scientist of Physical Sciences A (2022), 34(4), 51-60.

25. Bianchi Type-VIII Inflationary Universe with Flat Potential for perfect fluid distribution in General Relativity. Journal of Rajasthan Academy of Physical Sciences (2022), 21(3 &4).131-142.

26.Bianchi Type-IX inflationary cosmological model with flat potential for perfect fluid distribution in General Relativity. Prespace time Journal (2023), 14(3) 301-308.

27. Bianchi Type-VIII String Cosmological Model in the Presence of Magnetic Field in General Relativity published in Int. J. of Mathematics trends and technology (2023) 69(1). 1-7.

28. Inflationary Scenario in Bianchi Type – V Cosmological Model with Bulk Viscosity in General Relativity. Journal of Ultra Scientist of Physical Sciences. -B (2023) 35(2). 16-23.

29. Bianchi Type-I Inflationary Cosmological Model for Stiff Perfect Fluid Distribution in General Relativity. Journal of Research in Applied Mathematics. (2023), 9(7) .21-27.

### Chapter published in Edited book

 Expanding and Shearing Bianchi Type-VIII Universe in General Relativity. Published in "Recent Research Trends in Mathematics Vol-3. ISBN 978-93-95118-58-3.

### Workshops/Conferences/Seminar : attended/presented

1. Participated in the school on Cosmology and Large Scale Structure in the universe held at Harish Chandra Research Institute, Allahabad, Dec 17-31, 2001.

2. Presented a paper in 15<sup>th</sup> annual conference of "Rajasthan Ganita Parishad and Symposium" on Application of Advanced Mathematics in Engineering held at Arya Engineering college, Jaipur. Feb 14-15, 2004.

3. Attended the 17<sup>th</sup> annual conference of "Rajasthan Ganita Parishad and Symposium" on Mathematical Modeling" held at Department of Mathematics Govt. Meera Girl's College, Udaipur. Feb 10-11, 2006.

4. Presented a paper in 20<sup>th</sup> annual conference of "Rajasthan Ganita Parishad and Symposium" on Emerging Fields in Mathematics and their Interdisciplinary Uses held at Govt. College Kota.Jan 18-19, 2009.

5.Participated in a Latex Faculty Development Program organized by the spoken Tutorial project, IIT Bombay. June1, 2012.

6.Participated in the Workshop on Effective Documentation using LaTeX Organized by the Department of Computer Science & Engineering, Sir Padampat Singhania University, Udaipur. Dec 10-12, 2012

7. Participated in Two week ISTE Workshop on "Fluid Mechanics" which is organized by the IIT Kharagpur from 20 th May to 30<sup>th</sup> May 2014 and sponsored by the National Mission on Education through ICT, MHRD, Govt. of India.

8. Presented a paper in National workshop on "Analysis, Differential Equations & Applications(NWADA)" Organized by Department of Mathematics and Statistics, Mohan Lal Sukhadia University, Udaipur (Raj.) Feb 25-27, 2016.

9.Presented a paper in International Conference on "Recent Advances in Pure & Applied Mathematics" Organized by Department of Mathematics and Statistics, Mohan Lal Sukhadia University, Udaipur(Raj.) Feb 13-14, 2017.

10. Presented a paper in International Workshop on "Operator Theory and Relativity"Organized by Department of Mathematics and Statistics, Mohan Lal Sukhadia University, Udaipur(Raj.) Feb 22, 2018.

11. Attended National Workshop on Computational Techniques for Education and Research. Organized by Department of Mathematics and Statistics, Mohan Lal Sukhadia University, Udaipur(Raj.) Nov. 19-23, 2018.

12. Attended 3<sup>rd</sup> National Conference on Statistics for Sciences, Social Sciences and Humanities organized by Rajasthan Statistical Association and Department of Mathematics and Statistics, Mohan Lal Sukhadia University, Udaipur(Raj.)

- Attended National Webinar on "Better data better Lives" organized by Deptt. of Mathematics and Statistics MLS University and Maharana Pratap University of Agriculture and Technology held on 29<sup>th</sup> June 2020.
- Attended National Webinar on "Explore Mathematics to New Dimensions in Pandemic: COVID-19 organized by Deptt. of Mathematics and Statistics MLS University held on 12-13 June, 2020.
- 15. Participated in Seminar entitled "Present scenario of Higher Education in India and future Prospective" jointly organized by Sukhadia University Teachers Association, Rajasthan University and College Teachers Association and All India Federation of

University of University and College Teachers' Organizations held at MLS University on April 6-7, 2019.

16. Presented a paper titled "Bianchi Type VIII Cosmological Model with Linear Equation of State in General Relativity" in 2<sup>nd</sup> International Conference on Recent Development in Engineering and Technology Jointly Organized by RTU, Kota and Anand International College of Engineering, Jaipur from 26<sup>th</sup>- 27<sup>th</sup> February, 2021.

17.Presented a paper titled "Bianchi Type VIo Universe with constant deceleration parameter in General Relativity" in International Conference on Advances in Applied and Computational mathematics organized by Department of Mathematics and Statistics, Manipal University, Jaipur. During 16-17 September 2021.

# **Orientation/Refresher/Faculty Development Programme attended**

- Participated in 113<sup>th</sup> Orientation Programme from 3<sup>rd</sup> February 2020 to 22<sup>nd</sup> February 2020 conducted by UGC-HRDC, University of Rajasthan Jaipur. Obtained grade **A**.
- Participated in Refresher Course in Mathematics from 16-30 March 2021 conducted by Teaching Learning Centre, Ramanujan College and Department of Mathematics, Ramanujan College, University of Delhi. Obtained grade A+.
- Participated in Faculty Development Programme on Advanced Pedagogical Techniques from 30 june-6July 2021 conducted by Teaching Learning Centre, Ramanujan College University of Delhi Obtained grade A+.
- Participated in Faculty Development Programme on "THE 360 DEGREE ACADEMIA: SCOPE AND CHALLENGES" from 22-23 July 2021 conducted by S.S. JAIN SUBODH P.G. MAHILA MAHAVIDYALAYA, Jaipur.
- Participated in Faculty Development Programme on MATHEMATICAL DEVELOPMENTS IN CRPTOGRAPFYAND DATA SCIENCE Organized by the Department of Mathematics, Ramaiah Institute of Technology, Banglore held during August 9-13, 2021.

# **Conference/Seminar/Workshop Organized**

Member of Departmental Advisory Committee in International Conference on Recent Advances in Algebra, Analysis & applications organized by Deptt. of Mathematics and Statistics MLS University held on Dec. 20-22, 2019.

- Member of Transport and accommodation Committee in 3<sup>rd</sup> national Conference on Statistics for Sciences, Social Sciences and Humanities organized by Rajasthan Statistical Association and Department of Mathematics and Statistics MLS University held on Sep 13-14, 2019.
- Member of Organizing Committee and accommodation Committee in National workshop on "Computational Techniques for Educational and Research" organized by Deptt. of Mathematics and Statistics MLS University held on Nov. 19-23, 2018.
- Organizing Committee member and session coordinator of International Virtual Conference on RECENT APPLICATIONS OF MATHEMATICAL SCIENCE. 15-16 July, 2021.
- Organized as Co-Organizing Secretary in National Workshop on Intellectual Property Rights(IPR) organized by Deptt. of Mathematics and Statistics MLS University held on Feb 17, 2023.

# Awards/ Fellowship

(1) Certificate of merit by HRD Gov. of India for obtaining higher rank in secondary exam, Rajasthan Board Ajmer 1992.

(2) Awarded Gold Medal for standing first position in M.Sc. Mathematics examination 1999.

(3) Awarded NET (CSIR-JRF) fellowship after selected in NET-CSIR-UGC examination 2000(December)

# **Research Scholar under my supervision : 02**

Submitted PhD thesis : 01

**Persuing : 01**