

CURRICULUM VITAE

Personal Information

Name: **Bankteshwar Tiwari**
Citizenship: Indian
E-mail: btiwari@bhu.ac.in, banktesht@gmail.com
MR author ID: 697036
ORCID ID: 0000-0003-4529-8261 [HomePage](#)

Present Position

Professor & Coordinator, DST-Centre for Interdisciplinary Mathematical Sciences,
Institute of Science, Banaras Hindu University Varanasi (UP)-221005– **INDIA**

Research interests

Differential Geometry, Riemann-Finsler Geometry and Applications

Education

- 2001 **DDU Gorakhpur University** – Gorakhpur(UP), India.
PhD in Mathematics
- 1997 **CSIR, Gov of India.**
National Eligibility Test (NET+JRF)
- 1997 **DDU Gorakhpur University** – Gorakhpur(UP), India.
M.Sc. in Mathematics
- 1995 **DDU Gorakhpur University** – Gorakhpur(UP), India.
B.Sc. in Mathematics, Physics

Awards and scholarships

- 2015 BHU Varanasi.
Smriti Roy Gold Medal for best teacher of Institute of Science, BHU.
- 2001 International Academy of Physical Sciences.
Young Scientist Award for best paper presentation in CONIAPS
- 1997 CSIR, Gov of India.
Junior Research Fellowship

Administrative experience

- May 2020– Present **Coordinator, DST-CIMS, Institute of Science, BHU, Varanasi.**
- July 2018–July 2021 **Course Coordinator, MSc Mathematics & Computing**
A special course running at DST-CIMS, Institute of Science, BHU, Varanasi.
- 2013 – Present **Madhava Mathematics Competition (Regional Coordinator).**
Coordinating Madhava Mathematics Competition for undergraduate students at Varanasi region, as Centre Coordinator, supported by National Board of Higher Mathematics.

Teaching experience

- 2015–Present **Professor**
DST-CIMS, Institute of Science, BHU, Varanasi.
- 2012–2015 **Associate Professor**
DST-CIMS, Faculty of Science, BHU, Varanasi.
- 2010–2012 **Reader**
DST-CIMS, Faculty of Science, BHU, Varanasi.
- 2009–2010 **Reader**
BRD PG College Deoria (UP).
- 2001–2009 **Lecturer**
BRD PG College Deoria (UP).
- 2000–2001 **Lecturer**
DAV College Kanpur (UP).

Mentorship and other services

- Mentorship **Ph.D.:**
Dr. Manoj Kumar, Dr. Ghanashyam Kumar Prajapat, Dr. Ranadip Gangopadhyay, Mr. Ashok Kumar (continued), Ms. Anjali Shriwastava (continued), Ms. Arti Sahu (continued).
- Post Doctoral Fellow:**
Dr. Manoj Kumar (NBHM fellow), Dr. T.N. Mishra (NBHM fellow), Dr. Ranadip Gangopadhyay (CSIR fellow).
- DST-Inspire fellow at UG level:**
Mr Shivam Pathak, Mr Abhinay Gupta and Ms. Pravartika Singh
- Dissertation at PG level:**
2020-2021 Nikita Soni, Anjana Kumari, Sooraj Kumar, Manish Singh, Naveen Gond
2019-2020 Hari Pratap Singh, Sooraj Kumar, Sangeeta Patel
- Other Services **Member of Editorial Board:**
Journal of Finsler Geometry and its Applications [Journal home page](#).

Corresponding Editor:

Bhavana, The Mathematics magazine. [Bhavana Home page](#).

Managing Editor:

Journal of Academy for Progress of Mathematics, BHU.

Reviewer:

Mathematical Reviews, American mathematical Society.

Zentralblatt Reviews, European Mathematical Society, FIZ Karlsruhe & Springer-Verlag.

Publications since last ten years

- 2022 **On Minimal Surfaces of Rotations Immersed in Deformed Hyperbolic Kropina Space**
Banktेशwar Tiwari, Ranadip Gangopadhyaya, Ashok Kumar, Hemangi Madhusudan Shah.
Results in Mathematics, Springer, 77:202 DOI:/10.1007/s00025-022-01732-2.
- 2022 **On Minimal Surfaces Immersed in Three Dimensional Kropina Minkowski Space**
Banktेशwar Tiwari, Ranadip Gangopadhyaya, Ashok Kumar.
Results in Mathematics, Springer,77:22 DOI:10.1007/s00025-021-01558-4-1.
- 2022 **On weakly Douglas warped product Finsler metrics**
Banktेशwar Tiwari, Ranadip Gangopadhyaya, Anjali Shriwastawa.
Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci., Springer Nature. DOI: 10.1007/s40010-022-00784-x.
- 2022 **On C3-like Finsler metrics under Ricci flow**
Banktेशwar Tiwari and Ranadip Gangopadhyaya
Bulletin of the Transilvania University of Brasov,2(64) 2, 85-92.
https://webbut.unitbv.ro/index.php/Series_I/article/view/3184.
- 2022 **On a Bernstein-type theorem for minimal surfaces with Matsumoto metric**
Banktेशwar Tiwari, Ranadip Gangopadhyaya.
Journal of Finsler Geometry and its Applications, Vol. 3, No. 1, 16-30. DOI: 10.22098/jfga.2021.9688.1056.
- 2021 **On Generalized Kropina Change of Generalized m-th Root Finsler Metrics**
Banktेशwar Tiwari, Manoj Kumar, Akbar Tayebi.
Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci., Springer Nature, 91(3), 443-450.
DOI:10.1007/s40010-020-00681-1 **MR4288311**.
- 2021 **Stability and Bifurcation Analysis of a Prey-Predator Model**
T.N. Mishra, Banktेशwar Tiwari.
International Journal of Bifurcation and Chaos, World Scientific, 31(4), 2150059.
DOI:10.1142/S0218127421500590 **MR4238317**

- 2021 **On Finsler warped product metrics with vanishing E -curvature**
Banktेशwar Tiwari, Ranadip Gangopadhyaya, Anjali Shriwastawa.
AUT J. Math. Com., 2(2), 137-142 DOI:10.22060/AJMC.2021.19817.1052
- 2020 **On conformal transformation of m -th root Finsler metric**
Banktेशwar Tiwari, Manoj Kumar.
Mat. Vesnik, 72(2), 138–145. **MR4113574**
- 2020 **Projective change between Z-Shen’s square metric and Kropina metric with some curvature properties**
Banktेशwar Tiwari, Manoj Kumar.
An. Stiint. Univ. Al. I. Cuza Iasi. Mat. (N.S.), 66(1), 67-80. MR
- 2019 **On a class of Finsler spaces with general (α, β) -metrics**
Banktेशwar Tiwari, Ranadip Gangopadhyaya, G.K. Prajapati.
International J Geometric Methods in Modern Physics, World Scientific, 16(2), 1950102.
MR4038289
- 2019 **Stability Analysis of Navier-Stokes System**
Manoj Kumar, T.N. Mishra, Banktेशwar Tiwari.
International J Geometric Methods in Modern Physics, World Scientific, 16(10), 1950157.
MR4017798
- 2019 **Finsler-Randers Cosmological models in Modified Gravity Theories**
R. Chaubey, Anjani Kumar Shukla, Banktेशwar Tiwari, Manoj Kumar.
Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci., Springer Nature, 89(4), 757–768.
MR4039726
- 2019 **On Semi C-Reducibility of General (α, β) - Finsler Metrics**
Banktेशwar Tiwari, Ranadip Gangopadhyay, Ghanashyam Kr. Prajapati.
KYUNGPOOK Math. J., 59(2), 353-362. **MR3987715**
- 2019 **The Global Study of Riemannian-Finsler Geometry**
Katsuhiko Shiohama and Banktेशwar Tiwari.
Book Chapter entitled "Geometry in History" edited by SG Dani and Athanase Papadopoulos, Springer, Cham, NA, 581-621. **MR3965775**
- 2019 **On Spherically Symmetric Landsberg Metrics**
Banktेशwar Tiwari, Ranadip Gangopadhyay, Ghanashyam Kr. Prajapati, Manoj Kumar.
Journal of Dynamical Systems and Geometric Theories, Taylor & Francis, 17(1), 71-81.
- 2019 **On general (α, β) -metrics with some curvature properties**
Banktेशwar Tiwari, Ranadip Gangopadhyay, Ghanashyam Kr. Prajapati.
Khayyam J. Math., 5(2), 30-39. **MR3979972**
- 2019 **On Finsler spaces with rational spray coefficients**
Banktेशwar Tiwari, Ranadip Gangopadhyay, Ghanashyam Kr Prajapati.
Differ. Geom. Dyn. Syst., 21, 180-188. **MR3997856**

- 2018 **On Kropina change of m-th root Finsler metrics with special curvature properties**
BanktेशwarTiwari, Ghanashyam Kr. Prajapati, Ranadip Gangopadhyay.
An. Stiint. Univ. Al. I. Cuza Iasi. Mat. (N.S.), 64(1), 101–110. **MR3896811**
- 2017 **On generalized Kropina change of m-th root Finsler metrics with special curvature properties**
Banktेशwar Tiwari and G. Prajapati.
Turkish J. Math., 41(6), 1608–1617. **MR3731530**
- 2017 **On generalized Kropina change of m-th root Finsler metric.**
Banktेशwar Tiwari and G.K. Prajapati.
International J Geometric Methods in Modern Physics, World Scientific, 14(5), 1750081.
MR3635100
- 2016 **Strictly Convex Functions on Complete Finsler Manifolds**
Yoe Itokawa, Katsuhiko Shiohama, Banktेशwar Tiwari.
Proceedings Mathematical Sciences, Indian Academy of Sciences, 126(4), 623–627.
MR3568254
- 2016 **On the projective change between two special Finsler spaces of (α, β) -metrics**
Banktेशwar Tiwari, Manoj Kumar, Ghanashyam Kr. Prajapati.
An. Stiint. Univ. Al. I. Cuza Iasi. Mat. (N.S.), 62(2), 891–900. **MR3678823**
- 2016 **On Einstein Kropina change of m-th root Finsler metrics**
Banktेशwar Tiwari, Ghanashyam Kr. Prajapati.
Differ. Geom. Dyn. Syst., 18, 139-146. **MR3507757**
- 2015 **On Finsler space with a special (α, β) –metric**
Banktेशwar Tiwari, Manoj Kumar.
Journal of Indian Mathematical Society, 82(3-4), 207–218. **MR3467628**
- 2014 **On Randers change of a Finsler space with m-th root metric**
Banktेशwar Tiwari, Manoj Kumar.
International J Geometric Methods in Modern Physics, World Scientific, 11(10), 1450087
MR3275813
- 2014 **On the Hypersurface of Special semi-C-reducible Finsler spaces**
Banktेशwar Tiwari.
Journal of Indian Mathematical Society, 81(1-2), 187-194. **MR3155651**
- 2013 **Transformation of a Finsler space by normalized semi parallel vector fields**
Banktेशwar Tiwari. Manoj Kumar.
Tensor (N.S.), 74, 156-163. **MR3328364**
- 2012 **On Special reducible Finsler Spaces**
Banktेशwar Tiwari.
Diff. Geom. Dyn. Sys., 14, 132-137. **MR2914649**

- 2012 **Zermelo Navigation Problem and the Finsler-Poincare Disc**
Banktेशwar Tiwari.
Mathematics Newsletter, Ramanujan Mathematical Society, 22(2), 161-167.
- 2012 **On Landsberg spaces with some generalised T'-conditions**
Banktेशwar Tiwari .
Journal of the Indian Mathematical Society, 79(1-4), 201-208. MR2976038

Academic Events/Conferences/Workshops/Schools Organized

- 12-22 December 2022 **International CIMPA school on 'Geometric structures on surfaces, Moduli Spaces and Dynamics'**
Organized an International CIMPA school on 'Geometric structures on surfaces, Moduli Spaces and Dynamics' at BHU Varanasi during 12-22 December 2022 with Prof Athanase Papadopoulos, CNRS France as Co-organizer of the event. For details please [Click](#).
- 19-25 September 2022 **A National training program 'STUTI on Mathematics for Machine Learning'**
Organized a National training program 'STUTI on Mathematics for Machine Learning' supported by IIT(ISM), Dhanbad jointly coordinated with Professor S. P. Tiwari, IIT(ISM) Dhanbad.
- 5-15 December 2019 **International CIMPA school on 'Finsler geometry and Applications'**
Organized an International CIMPA school on 'Finsler geometry and Applications' at BHU Varanasi during 5-15 December 2019 with Prof Athanase Papadopoulos, CNRS France as Co-organizer of the event. For details please [Click](#).
- 14-17 December 2016 **International conference of TIMC in cooperation with AMS as Convener**
Organized an International conference of 'The Indian Mathematics Consortium in cooperation with American Mathematical Society' at DST-CIMS, Banaras Hindu University, Varanasi. For details please [Click](#).
- 23-27 June 2014 **Symposium on 'Riemann-Finsler geometry' as organizer**
Organized a symposium on 'Riemann-Finsler geometry' in the annual conference of Ramanujan Mathematical Society at IISER Pune (India) during .
- 7-19 July 2014 **Instructional School for Lecturers on Geometric Topology as Co-convener**
Organized an ATM schools (Instructional School for Lecturers) supported by National Board of Higher Mathematics jointly with Professor C.S. Aravinda, TIFR-CAM, Bangalore and Professor M.M. Tripathi, BHU Varanasi on Geometric Topology at BHU Varanasi.
- 8-20 Dec. 2014 **Instructional School for Lecturers on Differential Geometry as Co-convener**
Organized an ATM schools (Instructional School for Lecturers) supported by National Board of Higher Mathematics jointly with Professor C.S. Aravinda, TIFR-CAM, Bangalore and Dr. G. Shanker, Banasthali on Differential Geometry at Banasthali Vidyapeetha, Banasthali, India

- 02- 11 May, 2012 **National Workshop on Differential Geometry**
Organized as Convener of a national 'Workshop on Differential Geometry' at DST-CIMS, BHU Varanasi, India
- Sept. 22- Oct. 12, 2012 **Refresher course in ICTA as a course coordinator.**
Coordinated a Refresher course in ICTA organized by Academic Staff College, BHU Varanasi.

Talks delivered

- 04 November 2022 *Delivered an invited talk in the Refresher course on 'Mathematics and its Applications' during 02-15 November, 2022 organized by UGC-HRDC, University of Allahabad.*
- 25 May 2022 *Delivered an invited talk in "Geometry, group and mathematical philosophy-An International conference in honour of Prof Ravi Kulkarni's 80th birthday during 21- 25 May 2022 organized by Bhaskaracharya Pratishthana, Pune.*
- 18 November 2021 *Delivered an invited talk in the Refresher course on 'Advances in Mathematical and Physical Sciences' during 16- 30 November, 2021 organized by UGC-HRDC, DR. H.S.G. Vishwvidyalaya, Sagar (M.P.).*
- 26-28 October 2021 *Delivered an invited talk in the 27th International conference of International Academy of Physical sciences on 'Recent Advances in Differential Geometry and Topology' organized by Central University of Punjab, Bathinda.*
- 4-18 October 2021 *Delivered a couple of lectures in the Refresher course held at Department of Mathematics, University of Delhi.*
- 5-24 July 2021 *Delivered a series of four lectures in the 'NASI-TMC Summer School on Differential Geometry' organized by Central University of Punjab, Bathinda.*
- 25 January 2021 *Delivered a couple of invited talks in the refresher course at UGC-HRDC, Bangalore University*
- 01 January 2021 *Delivered an invited talks in the refresher course at UGC-HRDC, DDU Gorakhpur University on 01 January 2021.*
- 18-20 December 2020 *Delivered an invited talk in the 26th International conference of International Academy of Physical sciences on 'Advances in Topology and Differential Geometry' organized by Guru Ghasidas University, Bilaspur (C.G.) India.*
- 18 November 2020 *Delivered an invited talks in the refresher course at UGC-HRDC, Punjabi University Patiala on 18 November 2020.*
- 24-29 August 2020 *Delivered an invited talks in the Six-day 'e- Faculty Development Program on "Applied Mathematics and related fields' organized by Department of Mathematics, GLA University, Mathura.*
- 28 July-02 August 2020 *Delivered an invited talks in the one week 'Online Faculty Development Programme on "Applicability of Mathematical Sciences in Emerging World' organized by Invertis University, Bareilly in association with NASI and IAPS.*

- 15 June 2020 *Delivered an invited talk in the International Webinar on 'Recent Trends in Algebraic and Differential Geometry' at Dr. HSG Sagar University Sagar.*
- 8-9 February 2020 *Delivered an invited talk in the National Conference on 'Recent Trends in Geometry and their Applications' at Department of Mathematics, BHU Varanasi.*
- 11-12 November 2019 *Delivered an invited talk in the 35th Annual Conference of the Mathematical Society – BHU on "Advancements in Mathematical Analysis and their Application" (AMATA-2019) in the Department of Mathematics, Institute of Science, Banaras Hindu University-Varanasi*
- 8-10 November 2019 *Delivered an invited talk in the International conference on Differential Geometry and Relativity (ICDGR-2019) at Department of Mathematics and Statistics, DDU Gorakhpur University, Gorakhpur, UP INDIA.*
- 09-11 August 2019 *Delivered an invited talk in the 24th International Conference of International Academy of Physical Sciences (CONIAPSXXIV) organized by Chaudhary Charan Singh University, Meerut.*
- 13 June 2019 *Delivered a couple of lectures in the Refresher course held at Department of Mathematics, University of Delhi.*
- 30 Jan-02 Feb. 2019 *Delivered a series of three lectures in the 'National workshop on Differential Geometry' at Central University of Kerala.*
- 7-8, Dec. 2018 *Delivered an invited talk in the National Conference NCMAMM -2018 organized by Cal. Math. Soc. at Kolkata.*
- 24-25 November 2018 *Delivered an invited talk in the National Conference on 'Recent Trends in Mathematical Sciences' organized by DDU Gorakhpur University.*
- 20-24 August 2018 *Delivered an invited talk in the 23rd International Summer School on Global Analysis and its Applications-2018 during held at Brasov, Romania.*
- 3-5 August 2018 *Delivered an invited talk in the National Conference Differential Geometry and its Applications (DGACON 2018) organized by Nehru Gram Bharati, Allahabad-221505.*
- 02 Feb 2016 *Delivered a colloquium talk at TIFR-CAM, Bangalore entitled 'Complete Finsler manifolds in presence of strictly convex functions'*
- 04-05 Feb 2016 *Delivered an invited talk at the 'International Conference on Differential Geometry, Analysis and Fluid Mechanics' at Kuvempu University, Shimoga, Karnataka.*
- 13-19 Jan 2016 *Delivered a series of six lectures at 'Teachers Enrichment Program' at The Burdwan University Burdwan (W.B.) on 'Curves and Surfaces'.*
- 8-20 Dec. 2015 *Delivered a series of five lectures in the 'Instructional school for Teachers' on Algebraic Topology on 'Partition of Unity and Quotient spaces' at Goa University, Goa.*
- 27-30 Dec. 2014 *Delivered an invited talk on 'Some aspects of Global Riemann-Finsler Geometry' at the 'Annual Conference of Indian Mathematical Society' held at ISM Dhanbad.*
- 8-20 Dec. 2014 *Delivered a series of four lecture on 'Gauss -Bonnet Theorem' in an Instructional School for lecturers on Differential Geometry held at Banasthali university Banasthali.*

- 22-30, September 2014 *Delivered a talk on 'STRICTLY CONVEX FUNCTIONS ON COMPLETE FINSLER MANIFOLDS' at the Summer school on 'Finsler geometry and Applications' held at University of Aegean, Samos, Greece.*
- 7-19 July 2014 *Delivered a series of four lecture in an Instructional School for lecturers on Geometric Topology held at BHU and supported by NBHM.*
- 23-27, June 2014 *Delivered an talk in the symposium at the 29th Conference of Ramanujan Mathematical Society held at IISER Pune.*
- 22-27, October, 2013 *Delivered a series of six invited lectures at Banasthali University Banasthali, Rajasthan in National Workshop on Differential Geometry.*
- 14-17, Sept. 2013 *Delivered an invited talk and chaired a session in The 48th Symposium of Finsler Geometry of Japan held at Tokai University, Sapporo JAPAN during 14-17, Sept. 2013.*
- 04-06 June, 2012 *Delivered a series of 4 lectures in 'Advance Training Program on Linear Algebra and Analysis and Application' on 'Tensor and Geometry' at ISM Dhanbad.*
- 22-31 May, 2012 *Delivered a series of three lectures at Advanced training School for Lecturers on 'Differential Geometry of Curves and Surfaces' at Kumaon University Almora.*
- 04-08 April, 2012 *Delivered a series of four invited lectures at Banasthali University Banasthali, Rajasthan.*
- 02-11 May, 2011 *Delivered a series of three lectures on 'Frenets theory of Curves and Eulers theory of Surfaces' in 'Workshop on Differential geometry' at DST-CIMS, BHU.*

Professional memberships

- 1 April 2015 – 31 March 2018 Council member of Indian Mathematical Society.
- 2012–Present American Mathematical Society.
- Life member Ramanujan Mathematical Society.
- Life member Indian Mathematical Society.
- Member Lepage Research Institute, Slovakia
- Life member National Academy of Mathematics, Gorakhpur.
- Life member International Academy of Physical Sciences, Allahabad.
- Associated Member The Indian Mathematics Consortium.

Technical skills

Software

LaTeX, Mathematica, Sagemath

Languages

English , Hindi (fluent).