




**Faculty Details proforma for Website**  
**Kirori Mal College, University of Delhi**



|  |  |                   |                |                    |              |                  |              |   |
|--|--|-------------------|----------------|--------------------|--------------|------------------|--------------|---|
| <b>Title</b>   | <b>DR.</b>   | <b>First Name</b> | <b>VANDANA</b> | <b>Middle Name</b> | <b>SARIN</b> | <b>Last Name</b> | <b>WALIA</b> | <b>Photograph</b>   |
| <b>Designation</b>   | <b>ASSOCIATE PROFESSOR</b>   |                   |                |                    |              |                  |              |  |
| <b>Address</b>   | <b>6, TEACHER'S STAFF QUARTERS,<br/>KIRORI MAL COLLEGE,<br/>UNIVERSITY OF DELHI,<br/>DELHI-110007.</b>   |                   |                |                    |              |                  |              |   |
| <b>Phone No. Office</b>  | <b>011-27667861</b>  |                   |                |                    |              |                  |              |   |
| <b>Residence</b>   | <b>011-27662441</b>  |                   |                |                    |              |                  |              |   |
| <b>Mobile</b>  | <b>8285900700</b>  |                   |                |                    |              |                  |              |   |
| <b>Email</b>   | <a href="mailto:vandana_s_walia@yahoo.co.in">vandana_s_walia@yahoo.co.in</a> ,<br><a href="mailto:vandana_s_walia@kmc.du.ac.in">vandana_s_walia@kmc.du.ac.in</a> |                   |                |                    |              |                  |              |   |
| <b>Web-Page</b>  | <b>N.A.</b>  |                   |                |                    |              |                  |              |   |
| <b>Educational Qualifications</b>  |  |                   |                |                    |              |                  |              |   |
| <b>Degree</b>  | <b>Institution</b>   |                   |                |                    |              |                  |              | <b>Year</b>   |
| <b>BA,<br/>Mathematical<br/>Statistics</b>   | <b>Lady Shri Ram College for Women, Delhi University, New Delhi.</b>   |                   |                |                    |              |                  |              | <b>1984</b>   |
| <b>MA,<br/>Mathematical<br/>Statistics</b>   | <b>Lady Shri Ram College for Women, Delhi University, New Delhi.</b>   |                   |                |                    |              |                  |              | <b>1986</b>   |
| <b>M. Phil.,<br/>Statistics</b>  | <b>Department of Statistics, Delhi University, New Delhi.</b>  |                   |                |                    |              |                  |              | <b>1988</b>   |
| <b>Ph.D.</b>   | <b>Department of Statistics, Delhi University, New Delhi.</b>  |                   |                |                    |              |                  |              | <b>1997</b>   |
| <b>Career Profile</b>  |  |                   |                |                    |              |                  |              |   |
| <ol style="list-style-type: none"> <li><b>Appointed as Lecturer in Mathematical Statistics at Kirori Mal College in a temporary capacity on 1<sup>st</sup> August, 1988.</b></li> <li><b>Confirmed as Lecturer in Mathematical Statistics w.e.f. 1<sup>st</sup> August, 1989.</b></li> </ol> |  |                   |                |                    |              |                  |              |   |

3. Placed in the Senior Lecturer scale w.e.f. 1<sup>st</sup> August, 1995.
4. Promoted to the post of Reader designation w.e.f. 1<sup>st</sup> August, 1998.
5. Promoted as Associate Professor since 1<sup>st</sup> January, 2006.
6. Promoted as Professor since 26<sup>th</sup> September, 2018.

#### **Administrative Assignments**

1. Teacher in Charge, Department of Statistics, Kirori Mal College, 1997-1999.
2. Teacher in Charge, Department of Statistics, Kirori Mal College, 2011-2013.
3. Member, Proctorial Committee, 2011-2013.
4. Member, TIME TABLE Committee from 1990-1992.
5. Member, STANDING COMMITTEE for admissions from 1999-2003.
6. Secretary, Staff Association 2004-05.
7. Member, INTERNAL ASSESMENT Committee 2012-13.
8. Member, GRIEVANCE COMMITTEE for redressal of Grievances relating to under-graduate admission 2012-13.
9. Member, TIME TABLE Committee 2013-2015.
10. Member, Provident Fund committee 2014-15.
11. Member, Board of Moderators of B.Sc. (Hons.) Statistics and B.Sc. Mathematical Sciences in the Department of Statistics, D.U., 2012 onwards.
12. Convener/Co Convener/Member of Committees for setting Syllabi and Guidelines of the various papers taught at the Under Graduate Level, Department of Statistics, D.U., 2009, 2013, 2015, and 2018.
13. Presiding Officer, Internal Complaints Committee (KMC) under the Sexual Harassment of Women at work place (Prevention, Prohibition and Redressal) Act, 2013., 2014-17.
14. Member, Grievance Committee for redressal of Grievances relating to UG admission, 2012-13.
15. Additional Deputy Superintendent, Conduct of University Examinations-End semester, Law faculty, PG/M.Phil. Entrance, SOL, MBA entrance, 2015-2016, 2016-2017
16. Convener, Time Table Committee 2017-19.
17. Convener, Central Purchase Committee 2015-16.
18. Convener, Central Purchase Committee 2018 onwards.
19. Member, Research advisory committee, Department of Statistics, 2019- onwards.
20. Convener, Provident Fund Committee 2019-21.
21. Member, Generic Elective Committee 2017 onwards.
22. Member, College Time Table Committee, 2020-21.
23. Member, College Internal Assessment Committee, 2020-21.

#### **Areas of Interest / Specialization**

**DESIGN OF EXPERIMENTS with specialization in MIXTURE EXPERIMENTS.**

#### **Subjects/papers Taught**

1. Design of Experiments
2. Linear Models
3. Regression Analysis

4. Time Series Analysis
5. Index numbers
6. Statistical Quality Control
7. Psychological and educational statistics
8. Vital Statistics
9. Indian Official Statistics
10. Algebra
11. Computer Fundamentals
12. MS EXCEL
13. SPSS

#### Research Guidance

1. Co-guided the Ph.D. of Ms. Bushra Hussain titled "Optimal orthogonally blocked mixture designs using F-squares" (awarded in 2012), with Prof. Poonam Singh, Department of Statistics, D.U., Delhi.
2. Co-guided the Ph.D. of Ms. Rashmi Goel titled "Designs for Mixture experiments through Projections" (awarded in 2019), with Prof. Poonam Singh, Department of Statistics, D.U., Delhi.
3. Co-guiding the Ph.D. of Ms. Neha Midha, titled "Efficient mixture designs using Orthogonal Arrays" (submitted in 2021) with Prof. Poonam Singh, Department of Statistics, D.U., Delhi.

#### Publications Profile

*Publication Details: (attach copy of each separately)*

**a. Books (sole author/co-author/edited):**

*AUTHOR(S) NAME , YEAR, PUBLISHER DETAIL, TITLE OF THE BOOK, EDITED BY (WHEREVER APPLICABLE)*

**b. Chapters in book**

*AUTHOR(S) NAME, CHAPTER NUMBER, TITLE OF THE CHAPTER, YEAR, PAGE NO, PUBLISHER DETAIL, TITLE OF THE BOOK , EDITED BY (WHEREVER APPLICABLE)*

**c. Articles/Research papers (mention impact factor, SJR, H- index wherever applicable)**

1. Use of Asymmetrical factorials for generating designs for quadratic mixture models.(1996), Statistics and Probability Letters, Vol. 27, 275-279. (IF:0.595, SJR:0.627,H-INDEX:44) (SCOPUS indexed)
2. Designs for fitting Special Cubic Models in Constrained Mixture Spaces (1996), Transactions of Indian Association for Productivity Quality and Reliability. \*
3. Designs for Cubic Mixture models involving Process Variables (1997), Transactions of Indian Association for Productivity Quality and Reliability. \*

4. Optimal orthogonal block designs in two blocks for Becker's mixture models in three and four components. (2002), *Statistics and Probability Letters*, 59, 385-396. (IF:0.595, SJR:0.627, H-INDEX:44) (SCOPUS indexed)
5. Optimal orthogonal designs in two blocks based on F- Squares for Darroch and Waller's quadratic mixture model in four components. (2008), *Statistics and Applications*, 6, Nos. 1 & 2 (New Series), 257-274, (included in UGC Care list)
6. Mixture designs in orthogonal blocks using F- Squares. (2009), *METRON- International Journal of Statistics*, Vol. LXVII., no.2, 6, 105-128. (IF:-NA, SJR:0.332,H-INDEX:12) (SCOPUS indexed)
7. Nearly optimal orthogonally blocked. (2011), *Communications in Statistics- Simulation and Computation*, Vol. 40, no.1, 177-195. (IF:0.387, SJR:0.539,H-INDEX:34) (SCOPUS indexed)
8. Orthogonally blocked mixture component-amount designs via projections of F-Squares. (2012), *Journal of Korean Statistical Society*, 41, 49-60. (IF:0.505, SJR:0.412,H-INDEX:13) (SCOPUS indexed)
9. Optimal orthogonal designs in for four mixture components in two blocks based on F-Squares for Becker's models and K-model. (2013), *Statistics*, Vol. 47 No. 5, 1003-1021. (IF:1.594, SJR:0.576,H-INDEX:21) (SCOPUS indexed)
10. Projected mixture designs based on weighing matrices (2017), *International Journal of Experimental Design and Process Optimisation*, 5 (4), 285-300. (SCOPUS indexed).
11. Orthogonally blocked mixture designs for Darroch and Waller model (2018), *International Journal of Agricultural and Statistical Sciences* 14 (1), 239-250. (IF:0.28, SJR:0.194,H-INDEX:6) (SCOPUS indexed).
12. Mixture designs based on Hadamard matrices (2018), *Statistics and Applications*, 16 (2), 77-87. (included in UGC Care list)
13. Construction of mixture designs based on Taguchi's Fixed Elements Orthogonal Arrays, (2018), *International Journal of Statistics and Reliability Engineering*, 5(2). 89-95 .
14. Mixture designs constructed using Taguchi's Mixed Element Orthogonal Arrays (2020), *Journal of Statistical Theory and Practice*, 14, 1-12 (SCOPUS indexed).
15. Mixture Designs Generated by Orthogonal Arrays Developed using Difference Schemes (2020), *International Journal of Mathematical, Engineering and Management Sciences*, 5(6), 1379-1391. (IF:0.84, SJR:0.228, H-INDEX:10) (SCOPUS indexed).
16. Efficient Mixture Designs using Galois Field (2021), *International Journal of Applied Mathematics and Statistics*. 60(1), 31-44. (IF:0.77, SJR:0.268, H-INDEX:6) (SCOPUS indexed).
17. Mixture designs generated using orthogonal arrays from mutually orthogonal Latin squares (2021), *Statistics and Applications*, 18 (2). (included in UGC Care list)

***d. Articles published in Conference proceedings***

Mixture designs based on Plackett and Burman designs (2018), *Trends and Challenges in Mathematics* .

***e. Patents***

#### Conferences/Workshops/Trainings organized

1. Member, organizing committee of the “International Conference on Design of Experiments-Recent Trends and Future Directions”, jointly organized by DU and ISI).
2. As Co-PI, organized workshop “Changing Grassroots Dynamics of Glaciers and Climate change in Garhwal Himalayas” , at Ghuttoo, 26th Oct. 2012-28th Oct. 2012

#### Conferences/Workshops/ Trainings attended as faculty member

1. Current Trends in Statistics and Computer applications, May 28, 1990 to June 16, 1990 (Refresher Course), Department of Statistics, D.U.
2. Computer Workshop conducted by Delhi University Computer Centre, for College Teachers of Statistics, held at DUCC during 1<sup>st</sup> July to 12<sup>th</sup> July, 1991.
3. Participated in a 3-week Professional Development Programme, Refresher Course in Statistics (Stat.-3) Conducted by CPDHE from April 7-28, 1999.
4. “Advanced Lecture Circuit in Design of Experiments”, June 3, 2001 to April 14, 2001 (Saturdays only) (Organised by Department of Science and Technology and held in the Department of Statistics, DU, Delhi).
5. International Conference on Design of Experiments- Recent Trends and Future Directions, Dec. 27- 30, 2001, (Jointly organized by Department of Statistics, D.U. and ISI).
6. Indian Science Congress, 88<sup>th</sup> Session, 3-7 Jan., 2001, held at IARI, New Delhi (Jointly organized by ISCA, ICAR, IARI & NAAS).
7. Pre-ICM International Convention on Mathematical Sciences, Department of Mathematics, 18-20, Dec., 2008.
8. National meet on History of Mathematical Sciences, Department of Mathematics, D.U., 7-9, Jan., 2010.
9. Workshop on Statistical Computing Using R organised by Department of Statistics, D.U., 14-15, Sep., 2013.
10. National Conference on “Application of Mathematical Tools in Social Sciences and Sciences” Online Oct. 17, 2020-Oct. 18, 2020, Zakir Hussain College, University of Delhi
11. FDP-“Advanced Pedagogical Techniques” Online, OCT 29, 2020-NOV 5, 2020, TLC, Ramanujan College, University of Delhi (Centre of MHRD under PMMMNMTT),
12. Webinar-“E-Learning MOOC’s and Copyright Issues”, Online, Nov 5, 2020-Nov 5, 2020, GAD-TLC, SGTB Khalsa College, University of Delhi (Centre of MHRD Under PMMMNMTT)
13. FDP-“Digital Tools For 21st Century Teachers”, Online, Nov 19, 2020-Nov 23, 2020, GAD-TLC, SGTB Khalsa College, University of Delhi (Centre of MHRD Under PMMMNMTT)
14. Lecture series-Platinum Jubilee Celebrations of Dept of Statistics, University of Kerala, Online Nov 27, 2020 Nov 27, 2020 Department of Statistics, University of Kerala
15. Webinar-“Effective Implementation of Flipped Classroom Model to Enhance the Quality of Teacher-Learning” Online Dec. 27, 2020- Dec 27, 2020 GAD-TLC, SGTB Khalsa College, University of Delhi (Centre of MHRD Under PMMMNMTT)

#### Invited lectures/resource persons

Invited as visiting Faculty the Department of Statistics, D.U., to teach “Advanced Design of Experiments” to M.A./M.Sc. (Final) from 1989-1993.

#### Research Projects (Title ,funding agency and funds received)

“Mapping the Spatial Topology of two sub-glacier basins of NW Himalayas for multi class change detection using MODIS, Landsat and IRS data” (Project Code KMC-109) under the “Innovation Project from Colleges, University of Delhi”. Fund received: Rs.10,00,000.

#### Awards and distinctions

Secured 1st position in Delhi University in M.A. (Final).

#### Association With Professional/learned Bodies

Life member of Indian Society of Probability and Statistics: Membership Id - LM/33/175 ([http://www.isps.org.in/Files/ISPS\\_Final\\_Membership.pdf](http://www.isps.org.in/Files/ISPS_Final_Membership.pdf) )

#### Membership of College societies and initiatives undertaken

1. In charge of the SPICMACAY chapter, 1990-1992. Performances by Pt. Bhimsen Joshi, Ustad Bismillah Khan and Guru M.M. Chakyar were organized under the SPICMACAY FEST.
2. Convenor, FINE ARTS CLUB 1990-1992. Photography was introduced into the Fine Arts Club.
3. Member, Fine Arts and Photography Society, 1998-04.
4. Convenor, FINE ARTS AND PHOTOGRAPHY SOCIETY 2004-2006. Decoration of stage during the Golden Jubilee Celebrations of the College.
5. Member, FINE ARTS AND PHOTOGRAPHY SOCIETY, 2004-13.
6. Member, Placement Cell 2013-14.
7. Member, Parivartan-the gender forum and WDC, 2015-16
8. Member, Eco Club, 2015-16.
9. Member, Parivartan-the gender forum and WDC , 2016-17.
10. Member, Placement Cell UG Kirori Mal College 2016-17.
11. Member, Joint Teacher Student Consultative , 2016-17.
12. Member, Students'-Teachers' Computer Facility , 2016-17.
13. Member, Student Teacher Computer Facility Committee, 2017-18.
14. Member, Eco Club UG Kirori Mal College 2016-17Member, 2018-20.
15. Member, Students'- Teachers' Computer Facility Committee, 2018-20.

#### Other activities

1. As the Teacher in Charge, organized the lecture on ‘Challenges in Higher Education in Statistics’, by Prof. Poonam Singh, Department of Statistics, DU, 2012.
2. As the Teacher in Charge, organized the lecture on ‘Fun with Numbers’, by Mr. S. C. Gupta, Retired Faculty, Department of Statistics, Hindu College, DU, 2013.
3. Reviewer, Statistics, Optimization & Information Computing, 2018 onwards
4. Member, Research Advisory Committee, Department of Statistics, University of Delhi 2019 onwards.

5. Member of the expert panel interview board, Staff Selection Commission, for post of Combined Graduate Level, STA, Sub-Inspector in CPO etc., 2012, 2013, 2014, and 2015.
6. Department of Operational Research, Member of the expert panel, interviews for admission to the PG courses, 2016 and 2017.



**Vandana Sarin Walia**

Signature of Faculty Member

- You are requested to give hard copy of your completed CV and e-mail the same as a DOC file to [naackmccordinator@gmail.com](mailto:naackmccordinator@gmail.com) latest by 07<sup>th</sup> August 2016 (Sunday).