# Anil Kumar V. Curriculum Vitae

#### **PERSONAL DETAILS**

Birth June 27, 1964

Address Aluvila,

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Chempazhnathy P.O

Trivandrum

Kerala, India 673 635

Sex Male
Nationality Indian
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#### **EDUCATION**

Ph.D. Mathematics

University of Kerala

Title of the thesis: A Study on Point Symmetric Graphs.

Supervising Teacher: Prof. Sathyabhama V.

M.Phil. Mathematics

University of Kerala

Title of the thesis: Point Symmetric graphs and Algebraic Extension of Graphs

Supervisor: Prof. Sathyabhama V.

Grade Obtained: A

M.Sc. Mathematics

University of Kerala

Institution: Department of Mathematics

University of Kerala

Percentage of marks: 85.4(First Rank)

B.Sc. Mathematics

University of Kerala

Institution: S. N. College, Chempazhanthy, Trivandrum

Percentage of Marks: 95.71

**SKILLS** 

Languages Malayalam (mother tongue)

English

Software FORTRAN, C, C++, MATLAB, LATEX, MAPLE, Phython, Moodle

#### **OTHER QUALIFICATIONS**

NET 1997 Passed NET Examination conducted by UGC/CSIRGATE Passed GATE Examination with percentile score 97.51(All India Rank 16.) Account Test Passed Account Test for Executive Officers conducted by Kerala Public Service Commission. TEACHING EXPERIENCE Lecturer St. Xavier's College Thumba Period: 14.12.1994 to 30.06.1995 Scale of pay: 8000 - 275 - 13500Lecturer 1995 S. N. College, Kannur Period: 02.12.1995 to 25.04.1997 Scale of pay: 8000 - 275 - 13500Assistant Professor Kerala Agricultural University Period: 26.04.1997 to 25.04.2001 Scale of pay: 8000 - 275 - 13500Assistant Professor(Sr. Scale) 2001 Kerala Agricultural University Period: 26.04.2001 to 25.04.2006 Scale of pay: 10000 - 325 - 15200Associate Professor 2006 Kerala Agricultural University Period:26.04.2006 to 27.01.2009 Scale of pay: 12000 - 420 - 18300Reader University of Calicut Period:28.01.2009 to 27.01.2012Scale of pay: 12000 - 420 - 18300Associate Professor 2012 University of Calicut Period: 28.04.2009 to 27.01. 2015 Scale of pay: 37400 - 6700, AGP 9000 Professor University of Calicut

Scale of pay: 37400 - 6700, AGP 10000

Period: 28.01.2015 on wards

#### LIST OF PUBLICATIONS(RESEARCH PAPERS)

- 1. Anil Kumar V., A Simple Proof of the Arithmetic Geometric Mean Inequality, News Letter, Sep. 1997, No.2, Vol 7., pp 41.
- 2. Anil Kumar V., A Simple Proof of the Holders Inequality, News Letter, Sep. 1997, No.3, Vol 7., pp 57-58.
- 3. Anil Kumar V, An AM GM Variation, American Mathematical Monthly, Vol. 106, No.10(Dec., 1999), p.969
- 4. Anil Kumar V., A Note on a Series, News Letter, Sep. 1998, No.1, Vol 8., pp 12-13.
- 5. Sathyajith Mathew, K.P. Pandey and Anil Kumar V, Analysis of Wind Regimes Energy for Energy Estimation, Renewable Energy, Volume 25, issue 3, 2002.
- 6. Sathyajith Mathew, Anil Kumar V., Damodar Rao, Devanand U Gorate, Geetha Susan Philip and Vishnu B., Performance Simulation of Wind Energy Conservation Systems using Wind Energy Resource Analysis, International Conference of institution of Engineering and technology, Brunei Darussalam Network, 2008, pp 1-4.
- 7. Anil Kumar V & Sathyajith Mathew, A Method for estimating the Surface Area of Ellipsoidal Food Materials, Biosystems engineering, ISSN 1537-5110, Vol. 85, No 1, 2003, págs. 1-5.
- 8. Anil Kumar V & Vishnu B, A summation formula for estimating the surface area of general ellipsoids, Journal of Computational Mathematics Vol. 22, No. 3 (MAY 2004), pp. 403-406.
- 9. Anil Kumar V., An alternate proof for the inequality "An AM-GM variation", South Asian Journal of Mathematics 2012 , Vol. 2 ( 2 ) :  $199-200\,$
- 10. Anil Kumar V & Ashok Parameswaran Nair, A regression Model for estimating surface area of general ellipsoids, Volume 4, Issue 1, Pages 1 7 (September 2010)
- 11. Anil Kumar V & Ashok Parameswaran Nair, A class of double coset Cayley digraphs induced by right solvable ward groupoids, South Asian Journal of Mathematics 2012 , Vol. 2 ( 4 ) : 360  $372\,$
- 12. Anil Kumar V & Ashok Parameswaran Nair, A Class of Cayley Digraph Structures Induced by Groups, Journal of Mathematics Research Vol. 4, No. 2; April 2012.
- 13. Anil Kumar V and Ashok Parameswaran Nair, A class of Cayley digraphs induced by loops, Journal of Mathematics and Computational Science, Vol 2, No. 5, 2012.
- 14. Anil Kumar V. & Ashok Parameswaran Nair, Coset Cayley Graph Structures, Journal of mathematical and computational Science, 2(6), 2012, 1766-1784
- 15. Anil Kumar V., Double Coset Cayley Digraphs, International Journal of Algebra, Vol. 5, 2011, no. 15, 747 753.
- 16. Anil Kumar V, A Class of Double Coset Cayley Digraphs Induced by Loops, International Journal of Algebra, Vol. 5, 2011, no. 22, 1073 1084
- 17. Anil Kumar V., A Class of Vertex Transitive Graphs Induced by Quasigroups, International Mathematical Forum, Vol. 6, 2011, no. 50, 2497 2511

- 18. Anil Kumar V & Shyama M.P , A Class of Generalized Cayley Digraphs Induced by Quasigroups, Theoretical Mathematics & Applications, vol.2, no.1, 2012, 127-142
- Anil Kumar V and Mohanan T., On generalizations transitive Cayley graphs induced by loops, Fareast Journal of mathematical Sciences, Vol. 76, No.1, 2013, 25-44.
- 20. N. M. M. Namboothiri, V. A. Kumar, and P. T. Ramachandran, "Cayley fuzzy graphs," Far East Journal of Mathematical Sciences, vol. 73, pp. 1–15, 2013.
- 21. Anil Kumar V and Mohanan T., Generalization of Transitive Cayley Digraphs, Journal of Mathematics Research; Vol. 4, No. 6; 2012
- 22. Anil KumarV and Mohanan T., Transitivity of Generalized cayley digraphs, South Asian Journal of mathematics, 2012, Vol. 2 (6): 542-557
- 23. Anil Kumar V., A class of generalized Caayley graphs induced by loops, South Asian Journal of Mathematics, Vol2, No. 3, 2012
- 24. Anil Kumar V and Shyama M.P., A Class of Double Coset Cayley Digraphs Induced by Quasigroups, Journal of Mathematics Research Vol. 4, No. 2; April 2012
- Anil Kumar V, A class of Cayley Graphs induced by Right Solvabe Ward Groupoids, MATEMATIQKI VESNIK, 65, 4 (2013), 466–469.
- 26. Anil Kumar V., Generalised cayley Graphs, Pure Mathematical Sciences, Vol. 1, 2012, no. 1, 1-12.
- 27. Anil Kumar V and Vandana P.T, V4- Magic Labelings of Some Shell Related Graphs, British Journal of Mathematics & Computer Science, 9(3): 199-223, 2015, Article no.BJMCS.2015.197
- 28. P.T.Vandana, V.Anil Kumar, Some Special V4 Barycentric Magic Graphs, Bulletin of Kerala Mathematics Association, 14(2), 235-250, (2017)
- 29. P.T.Vandana, V.Anil Kumar, A note on V4-magic labelings of graphs, Journal of Infor-mation amp; Optimization Sciences, 37(6), 873-880, (2016).
- 30. V.Anil Kumar, P.T.Vandana, V4-magic labelings of some Shell related graphs, British Journal of Mathematics and Computer Science, 9(3), 199-223, (2015).
- 31. P.T.Vandana, V.Anil Kumar, V4-bimagic graphs, Advances and Applications in Discrete Mathematics, 18(3), 237-268, (2017).
- 32. P.T.Vandana, V.Anil Kumar, On a class of V4-barycentric magic graphs, Far East Journal of Mathematical Sciences, 102(1), 67-96, (2017).
- 33. Vandana P.T. and Anil Kumar V., V4- Magic Labelings of Some Wheel Related Graphs, 8(3): 189-219, 2015,
- 34. P. T. Vandana and V. Anil Kumar, V4 Magic Labelings of Some Graphs, British Journal of Mathematics & Computer Science, 2015,
- 35. Shyama P. and Anil Kumar V., Total Domination Polynomials of squares of some graphs, Advances and Applications in Discrete Mathematics, Vol 15, No. 2, 2015, 167-16

- 36. Latheesh Kumar A. R and Anil Kumar V., A Note on Global Domination in Graphs, Malaya Journal of Matematik: Volume 4, Issue 3, 2016, Pages:438-442.
- 37. A. R. Latheeshkumar and Anil Kumar V., On total domination polynomials, Far East Journal of Mathematical Sciences, Volume 102, Number 10, 2017, Pages 2277-2289.
- 38. Latheeshkumar A. R. and Anil Kumar. V., On Global Bipartite Domination Polynomials, Palestine Journal of Mathematics, Vol. 7(1)(2018), 227–233.
- 39. Latheesh Kumar A.R., Anil Kumar V, TD-Polynomials of Paths and Cycles- A New Approach, Global Journal of Pure and Applied Mathematics (GJPAM), Vol. 13, No. 10, (2017)
- 40. Latheeshkumar A.R., Anil Kumar.V, Total Domination Polynomials of Some splitting Graphs, Advances and applications in Discrete Mathematics, Vol. 18,No. 3, (2017)
- 41. Vandana P.T and Anil Kumar V., A Note on V4 magic Graphs, Journal of Discrete Mathematical Sciences & Cryptography (Accepted for publication)
- 42. Shyama M.P and Anil Kumar V., On the roots of Hosoya Polynomial, Discrete mathematical Sciences & Cryptography, Vol 19, No.1, 2016.
- 43. Shikhi M. and Anil Kumar V., Common neighbor polynomial of graphs, Far East Journal of mathematical sciences, Volume 102, Number 6, 2017, Pages 1201-1221.
- 44. Shikhi M. and Anil Kumar V., Common neighbor polynomial of graph operations, Far East Journal of mathematical sciences, Volume 102, Issue 11, 2017, Pages 2629 2641.
- 45. Shikhi M. and Anil Kumar V., *CNP-equivalent Classes of Graphs*, South East Asian Journal of Mathematics and Mathematical Sciences, Vol.13, No.2, 2017, pages 75-84.
- 46. Neethu K.T and Anil Kumar V., Cayley fuzzy graphs induced by loops, Far East Journal of Mathematical Sciences 102(6):1139-1163 · September 2017
- 47. Neethu K.T and Anil Kumar V., Cayley Bipolar Fuzzy Graphs Induced By Loops, Global Journal of Pure and Applied Mathematics, Volume 13, Number 9 (2017), pp. 6681-6693
- 48. Shikhi M. and Anil Kumar V., On the Stability of Common Neighbor Polynomial of some Graphs, South East Asian Journal of Mathematics and Mathematical Sciences, Vol.14, No.1, 2018, pages 95-102.
- Shikhi M. and Anil Kumar V., Common neighbor polynomial of some graph constructions, International Journal of Research in Advent Technology, Vol.6, No.11, 2018, pages 3330-3334.
- 50. Shikhi M. and Anil Kumar V., On the real roots of common neighbor polynomial of graphs, Journal of Applied Science and Computations, Vol.6, Issue 4, 2019, pages 1424-1431.
- 51. Shikhi M. and Anil Kumar V., Generalized common neighbor polynomial of graphs, International Journal of Mathematical Combinatorics, Vol.3, 2019, pages 80-89.

- 52. K. P. Vineesh and V. Anil Kumar, Neighbourhood V4-magic labeling of some cycle related graphs, Far East Journal of Mathematical Sciences (FJMS), Volume 111, Number 2, 2019, Pages 263-272.
- K. P. Vineesh and V. Anil Kumar, Neighbourhood V4-magic labeling of star and path related graphs, Journal of Discrete Mathematical Sciences & Cryptography, Volume 22 (2019), Number 6, Pages 10671076.
- 54. K. P. Vineesh and V. Anil Kumar, Neighbourhood V4-magic labeling of some graphs, Far East Journal of Mathematical Sciences (FJMS), Volume 113, Number 1, 2019, Pages 47-64.
- 55. K. P. Vineesh and V. Anil Kumar, Neighbourhood V4-magic labeling of some splitting graphs, International Journal research in Advent technology, Volume 7, Number 1, January 2019, Pages 530-535.
- K. P. Vineesh and V. Anil Kumar, Neighbourhood barycentric V4-magic labelings of some graphs, International Journal of Research and Analytical Reviews, Volume 6, Issue 1, February 2019, Pages 1350-1360.
- 57. K. P. Vineesh and V. Anil Kumar, Star magic labeling of some graphs, Far East Journal of Mathematical Sciences (FJMS), Volume 113, Number 2, 2019, Pages 209-219.
- 58. K. P. Vineesh and V. Anil Kumar, Neighbourhood V4-magic labeling of some shadow graphs, International Journal of Mathematical Combinatorics, Volume 2 (2019), Pages 86-98.
- 59. K. P. Vineesh and V. Anil Kumar, Neighbourhood V4-magic labeling of some middle graphs, Malaya Journal of Matematik, Volume 8, Number 2 (2020), Pages 499-501.
- 60. Neethu K.T. and Anil Kumar V., Cayley Fuzzy Digraph Structure Induced by Groups, International Journal of Mathematical Combinatorics . 2020, 33-39.
- 61. Shikhi M. and Anil Kumar V., Common neighbor polynomial of some special trees, Aegaeum Journal, Vol. 8, Issue 5, 2020.
- 62. Shikhi M. and Anil Kumar V., Common neighbor polynomial of graphs and its significance in network data clustering, Journal of Xidian University, Vol. 14, Issue 4, 2020,857-862.
- 63. Libeesh Kumar K.B and Anil Kumar V., Induced  $V_4$  magic labelings of cycle related graphs, Malaya Journal of Mathematics, vol 8, no 2, 473-477, 2020
- Libeesh Kumar K.B and Anil Kumar V., Induced magic labelings of some graphs, Malaya Journal of Mathematics, vol 8, no 1, 473-477, 2020
- 65. Priya K. and Anil Kumar V., Edge cut polynomials of graphs, Advances and applications of discrete mathematics, 2020(Accepted for publication)
- 66. Libeesh Kumar K.B and Anil Kumar V., Induced  $V_4$  Magic Labeling of Some Star and Path Related Graphs, SEAJMMS, Vol. 16, No. 2, 89–102, 2020

#### RESEARCH SUPERVISION EXPERIENCE

Candidates Supervised for Ph. D.

- 1. Ashok Parameswaran Nair
- 2. Shyama M.P
- 3. Vandana P.T
- 4. Latheesh Kumar A.R
- 5. Shiki M
- 6. Vineesh K.P

Candidates Supervised for M.Phil. Supervised twelve M. Phil students

#### **ADMINISTRATIVE EXPERIENCE**

- 1. Head of the Department of Mathematics, University of Calicut from 2011-2013
- 2. Member UG Board of Studies, University of Kerala from 2011-2014
- 3. Research Admission Committee Member, Department of Physics, University of Calicut
- 4. Research Admission Committee Member, Department of Mathematics, University of Calicut
- 5. Research Admission Committee Member, Department of Statistics, University of Calicut
- 6. Research Admission Committee Member, Govt College, Pattambi, University of Calicut

### **LIST OF PUBLICATIONS(BOOKS)**

- 1. Anil Kumar V. and Shyama M.P., Book:Domination and Distance k-Domination Stable Graphs, LAMBERT Publications (2017).
- Vandana P.T Anil Kumar V., Advances in Computer Networks Information Technology, Book Chapter: V4 Magic Graphs., United Scholars Publications (USA) 5 ISBN-10: 1539855228, ISBN-13: 978-1539855224
- 3. Anil Kumar V, Diffrential Equations, Balaleela Publications (2014), ISBN: 9788192517612

#### MEMBERSHIP IN PROFESSIONAL BODIES

Ramanujan Mathematical Society, Kerala Mathematical Association, Institute of Mathematics Research and Training

## **EDITORIAL WORK**

- 1. Reviewer of AMS
- 2. Reviewer of ZbMATH

## **MEMBERSHIP IN PROFESSIONAL BODIES**

Ramanujan Mathematical Society, Kerala Mathematical Association, Institute of Mathematics Research and Training