

# CURRICULAM VITAE



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## EDUCATIONAL DETAILS:

Qualification	Name of the college	Name of the university	Year
Ph.D	Shrimati Indira Gandhi College,Trichy.2	Bharathidasan University	2012-2015
M.Phil	St.Joseph College, Trichy.2	Bharathidasan University	1987-1988
M.Sc	Seethalakshmi Ramaswami College,Trichy.2	Bharathidasan University	1985-1987
B.Sc	Seethalakshmi Ramaswami College,Trichy.2	Bharathidasan University	1982-1985
B.Ed	Distance Education	Annamalai university	1992-1993

## DETAILS OF THESIS:

Title of the thesis	University	Year of Award
<b>Ph. D:</b> Diophantine n-tuples (n=3,4) and solutions of Diophantine Equations	Bharathidasan University	2016
<b>M. Phil:</b> Chebyshev Polynomial and its Approximations.	Bharathidasan University	1988
<b>M.sc:</b> Modular groups	Bharathidasan University	1987

**No of Papers Published : 45**

**No of M.Phil Students guided : 19**

## COURSE ATTENDED:

Attended UGC Sponsored Orientation course conducted by UGC-Academic staff College, Bharathidasan University ,Trichy.23 from 30.04.2005 to 27.05.2005.

**Paper Presented:** Presented Paper in ICOMAC, Jamal college, Trichy ,” On the Exponential Diophantine Equation  $x^{x^n} y^{y^m} = z^{z^p}$  on Febrauary 2014.

## PUBLICATION DETAILS:

1. Gopalan,M.A,Vidhyalakshmi.S,Usha RaniT.R., andMallika.S, Observations on  $y^2 = 12x^2 - 3$  Bessel Journal of Mathematics,2 (3),(2012),153-158.
- 2.. Gopalan,M.A,Vidhyalakshmi.S,Usha RaniT.R., andMallika.S Integral pointson the homogeneous cone  $6z^2 + 3y^2 - 2x^2 = 0$ .,Impact J. of Math.Vol.6,No.1,(2012) 07-13.

3. Gopalan, M.A., Vidhyalakshmi, S., Usha Rani, T.R., and Mallika, S. Observations on Hyperbolic paraboloid  $4x^2 - y^2 - z^2 + 2yz + 3x - 4y + 8z - 2 = 0$  RETELL, St. Joseph college, Trichy, Vol. 13, No. 1, Nov. (2012), 85-86 ISSN.No.0796-404X.
4. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Observations on Hyperboloid of one sheet  $x^2 + 2y^2 - z^2 = 2$ , Bessel J. Math, 2(3), (2012), 221-226.
5. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Observations on cubic equation with four unknowns  $xy + 2z^2 = w^3$ , Global Journal of Mathematics and Mathematical Sciences, Vol. 2, No. 1 (2012), 69-74, ISSN.No.0972-9836
6. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Observations on Cubic Equation with Four Unknowns  $2(x^3 + y^3) = z^3 + w^2(x + y)$  IJAMP, Vol. 4, No. 2, (July-Dec 2012), 103-107.
7. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., On the Ternary Non-homogeneous cubic equation  $x^3 + y^3 - 3(x + y) = 2(3k^2 - 2)z^3$  Impact Journal of Sci. Tech, Vol. 7, No. 1, (2013), 41-45, ISSN.No.0973-8290..
8. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Integral points on the cubic equation with five unknowns  $x^3 + y^3 = z^3 + w^3 + 6t^2$  Diophantus J. Math, 2(1), (2013), 39-46.
9. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Observations on the non-homogeneous quintic equation with five unknowns  $x^4 - y^4 = 2(k^2 + s^2)(z^2 - w^2)p^3$  International Journal of innovative research in Science, Engineering and technology Vol. 2, Issue 4 April 2013, 1216-1221. [ISSN.No.2319-8753].
10. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Integral Solutions Of  $2(X^2 + Y^2) + 3XY = (\alpha^2 + 7)^n z^4$  International Journal of Management IT and Engineering, Vol. 3, Issue 5, May (2013), 408-414, [ISSN-No.2249-0558]
11. Gopalan, M.A., Vidhyalakshmi, S., Mallika, S., Integral Points On The Cubic Equations With Five Unknowns  $x^3 + y^3 = z^3 + w^3 + 6(x + y) + 6t^2$  American Journal Of Applied Mathematics and Mathematical Science, Vol. 2, No. 3, Jan-June 2013, 31-35.

12. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., On The Homogeneous Quintic Equation with Five Unknowns  $x^5 - y^5 + xy(x^3 - y^3) = 34(x+y)(z^2 - w^2)P^5$  IOSR. Journal of Mathematics Vol.7, Issue 3 (May-June 2013) [eISSN.No.2278-5728, p.ISSN No.2319-765X], Page.72-76.
13. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., On The Transcendental Equation  $\sqrt[3]{X^2 + Y^2} + \sqrt[3]{Z^2 + W^2} = 2(k^2 + s^2)R^5$  International Journal of Modern Engineering Research Vol.3, Issue 63, May-June 2013, 1501-1503. [ISSN.No.2249-4645].
14. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., An Interesting Transcendental Equation  $6\sqrt[2]{Y^2 + 3X^2} - 2\sqrt[3]{Z^2 + W^2} = R^2$  Cayley J.Math, 2(2) (2013), 157-162.
15. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., On The Exponential Diophantine Equation  $k^{2z} - xk^z = k^y$  International journal of Engineering Online Vol.1, Issue.2, 2013, 131-133, .ISSN.No.[2321-7758]
16. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., On The Exponential Diophantine equation  $x^{x^n} y^{y^m} z^{z^p} = w^w$  International journal of Mathematics Trends and Technology, Vol.4, Issue 11-Dec.2013, 247-253. [ISSN No.2231-5373]
17. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., On The Exponential Diophantine Equation  $[k^2 + 2(\alpha + 1)k + \alpha(\alpha + 2)]^x + 1 = y^2$  International journal of Applied Mathematical Sciences Vol.6, No.3, (2013) 189-191. [ISSN No.0973-0176]
18. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., Some special non-extendable Diophantine Triples Scholars journal of Engineering and Technology vol.2(2A) 2014, 159-160. [ISSN No.2321-435X], (Online), ISSN No.2347-9523](Print)
19. Gopalan, M.A, Vidhyalakshmi, S, Mallika.S., Special family of Diophantine Triples Scholars journal of Engineering and Technology vol.2(2A) 2014, 197-199. [ISSN No.2321-435X], (Online), ISSN No.2347-9523](Print)
20. Gopalan, M.A, Mallika.S, Vidhyalakshmi.S., On the extendibility of the Gaussian Diophantine 2-tuple to Gaussian Diophantine Quadruple with property

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21. Gopalan.M.A, Mallika.S, Vidhyalakshmi.S., On Diophantine Quadruple with property  $D(P^2)$  where  $P$  is prime and  $P^2 \equiv 1 \pmod{6}$ , International Journal of current research, May 2014, Vol.6, Issue 5, Pg 6810-6813.

22. Gopalan.M.A, Mallika.S, Vidhyalakshmi.S., Integral solutions of  $61x^2 + y^2 = z^2$  International Journal of Innovative Science, Engineering and Technology (IJSET) Vol.1, Issue 7, September 2014, Page.271-273.

23. Gopalan.M.A, Mallika.S, Vidhyalakshmi.S., On Sequences of Irrational Gaussian Diophantine Quadruples International Journal of Mathematical Sciences and Applications. (IJMSA) Vol.4, No.1, Jan-June 2014, Page.128-135. ISSN No: 2230-9888

24. Gopalan.M.A, Mallika.S, Vidhyalakshmi.S., Integer points on the Hyperbola  $x^2 - 4xy + y^2 + 16x = 0$ , SAS Publishers Scholars Academic and Scientific Publishers vol.1, Issue 2, Sep-Nov. 2014, Page.81-83.

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28. Gopalan.M.A, Mallika.S, Vidhyalakshmi.S., Formation of Sequences of Irrational Gaussian Diophantine Quadruples, International Journal of Engineering Mathematics Computer Science journal, 4, 3, 2015, 1-7.

29. Abinaya.P and Mallika.S, On negative Pellian Equation  $y^2 = 40x^2 - 15$ , Journal of Mathematics and informatics, Vol.11, 2017, page 95-102.

30. Selva Keerthana .K,Mallika.S,On the Ternary Quadratic Diophantine equation  $3(x^2 + y^2) - 5xy + 2(x + y) + 4 = 15z^2$  Journal of Mathematics and Informatics, Vol.11,2017,page.21-28.
31. D.Hema,Mallika.S, On the Ternary Quadratic Diophantine equation  $5y^2 = 3x^2 + 2z^2$ .Journal of Mathematics and Informatics, Vol.10,2017,page.157-165.
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- 33.Mallika.S ,Hema.D, Observations on the Hyperbola  $8x^2 - 3y^2 = 20$ . International Journal on Research Innovations in Engineering and Technology, Vol.3,Issue.4, April.2018,page.575-582.
- 34.Mallika.S,Anitha.M, On negative Pellian Equation  $y^2=27x^2-8$  International Journal on Research Innovations in Engineering Science and Technology, Vol.3,Issue.4, April 2018,Page 583-589.
- 35.Mallika.S ,Hema.D, On the negative Pell Equation  $y^2 = 20x^2 - 11$  International Journal of Academic Research and Development vol.3,Issue.3, May.2018,page.33-40.
- 36.Mallika.S A connection between Pythagorean Triangle and Sphenic Numbers ,International Journal for Research in Applied Science and Engineering Technology ,Vol.7,Issue III, March 2019.page.63-66.
- 37.Malika.S,Ramya.G,On the Negative Pellian Equation  $y^2 = 48x^2 - 23$ ,International Journal for Research in Applied Science and Engineering Technology ,Vol.7,Issue IV, April 2019.page.159-
- 38.Mallika.S,Surya.V,On Binary Quadratic Equation  $y^2 = 35x^2 + 29$  ,International Journal of Engineering Science and Research Technology8(4),April 2019,page.198-205.
- 39.Mallika.S, Ramya.K,On Binary Quadratic Equation  $5x^2 - 6y^2 = 5$ , International Journal of Engineering Sciences and Research Technology,8(5),May.2019,page20-28.
- 40.Mallika.S, Ramya.K, On Binary Diophantine Equation  $8x^2 - 7y^2 = k^2 + 14k - 7$ , Global Journal of Engineering Science and Researches 6(4),April 2019,page 168-178.

41.Mallika.S, Ramya.G, On Binary Diophantine Equation  $7x^2 - 5y^2 = 8$ , Global Journal of Engineering Science and Researches 6(4),April 2019,page 271-278.

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44. Mallika. S, Pythagorean Triangle with  $2A/P+H$ -Leg as a Narcisstic Number of orders 3,4 and 5,Global Journal of Engineering Science and Researchesvol.6,Issue.3 March 2019,page.1-4.

45.Mallika.S,On the Homogeneous ternary Quadratic Diophantine Equation  $6x^2 + 7y^2 = 559z^2$ International Journal of Mathematics Trends and Technology ,Vol .65,Issue.7,July 2019,page,206-217.