

PROFILE

Name : Dr.V.Sangeetha
Designation : Assistant Professor
Qualification : M.Sc.,M.Phil.,Ph.D.
Date of Joining : 05.07.2012



Publications

- [1]. Integral points on the homogeneous cone $z^2 = 5x^2 + 11y^2$, Discovery Science, Vol.3, No.7 pp.5-8, Jan.2013.
- [2]. Lattice Points on the Homogeneous cubic equation with four unknowns $(x + y)(xy + w^2) = (k^2 - 1)z^3, k > 1$, Indian Journal of Science, Vol.2, No.4, pp.97-99, Feb.2013.
- [3]. Integral solutions of the quadratic equation with four unknowns $x^2 = y^2 + zw + 3w^2$, IJPAMS, Vol.6, No.2, pp.241-246, 2013.
- [4]. Equality of centered decagonal number with special m-gonal numbers, IJESM Vol.2, No.2, pp.208-212, June 2013.
- [5]. Integral points on the quadratic equation with four unknowns $2(x^2 + y^2) + 3xy + x - y + 1 = z^2 + 7w^2$, Diophantus Journal of Mathematics, Vol.2, No.1, pp 47-54, 2013.
- [6]. Equality of centered tetradecagonal number with special m-gonal numbers, Bessel Journal of Mathematics, Vol.3, No.1, pp.181-185, 2013.
- [7]. On the ternary quadratic equation $5(x^2 + y^2) - 9xy = 19z^2$, IJIRSET, Vol.2 No.6, pp.2008-2010. June 2013.
- [8]. Centered m-gonal number-1= a perfect square, Archimedes Journal of Mathematics, Vol.3, No.3, pp.233-236, 2013.
- [9]. Centered m-gonal number-1= a perfect square, International Journal of Applied Mathematical Sciences, Vol.6, No.1, pp.81-83. 2013.
- [10]. Lattice Points on the Homogeneous cubic equation with four unknowns $x^2 - xy + y^2 + 3w^2 = 7z^3$, IJCER, Vol.3. No.7, pp. 24-26, July 2013.
- [11]. Pythagorean triangle and special pyramidal numbers, IOSR Journal of Mathematics, Vol.7 No.4, pp.21-22, July-Aug. 2013.
- [12]. Pythagorean triangle and pentagonal number, Cayley Journal of Mathematics, Vol.2 No.2, pp.151-156, 2013.
- [13]. Observations on rhombic dodecahedral number, International Journal of Engineering Research-Online, Vol.1, No.2, pp.283-288, 2013.
- [14]. Observations on triangular prism number, IJITR, Vol.1, No.5, pp.427-432. Aug-Sep.2013.
- [15]. Pythagorean Equation and Special m-gonal Numbers, Antarctica J.Math. Vol.16, No. 6, pp.611-623, 2013.
- [16]. On the integer solutions of the Pell equation $x^2 - 18y^2 = 4^k$, International Journal of Engineering Science Invention, Vol. 12, No.12, pp. 01-03, 2013.

- [17]. Construction of Diophantine triple involving polygonal numbers, Scholars Journal of Engineering and technology, Vol.2, No.1, pp.19-22, 2014.
- [18]. On the integer solutions of the Pell equation $x^2 - 3y^2 = (k^2 + 4k + 1)^t$, Jamal research journal-proceedings of ICOMAC, pp.256-258, Feb. 2014.
- [19]. On the integer solutions of the Pell equation $x^2 = 13y^2 - 3^t$, International Journal of Applied Mathematical Research, Vol.3, No.1, pp.58-61, 2014.
- [20]. Observations on the ternary quadratic equation $X^2 = 24a^2 + Y^2$, Bulletin of Society for Mathematical Services & Standards, Vol. 3, No. 2, pp. 88-91, 2014.
- [21]. Construction of strong and almost strong rational Diophantine quadruples, JP Journal of Algebra, Number Theory and Applications, Vol.35, No.1, pp.35-48, 2014.
- [22]. On the non-homogeneous heptic equation with five unknowns $(x^2 - y^2)(4x^2 + 4y^2 - 6xy) = 8(X^2 - Y^2)z^5$, International Journal of Innovative Research and Review, Vol.2, No.4, pp.23-26, 2014.
- [23]. Integral points on the non-homogeneous cubic equation with five unknowns $x^3 - y^3 = z^3 - w^3 + 12t^2$ International Journal of Innovation in Science and Mathematics Vol.2, No.6, pp.576-577, 2014.
- [24]. Integer solutions of non-homogeneous biquadratic equation with four unknowns $4(x^3 + y^3) = 31(k^2 + 3s^2)zw^3$, Jamal Academic Research Journal, Special issue, pp.296-299, 2015.
- [25]. On the Ternary Cubic Equation $3(x^2 + y^2) - 2xy + 4(x + y) + 4 = 51z^3$, International Journal of Innovative Science and Modern Engineering (IJISME), Vol 3, No.6, pp. 29-31, 2015
- [26]. Integer solutions of non-homogeneous biquadratic equation with four unknowns $xy + (k^2 + 1)z^2 = 2^{2n}w^4$, Proceedings of ReDeEM, Thiagarajar College, Madurai, pp.119-124, 2015.
- [27]. Non-extendable special rational dio triples, International Journal of Mathematical Sciences and Applications, Vol.5, No.2, pp.233-241, 2015.
- [28]. Pythagorean triangle with area/perimeter as a quartic integer, IJERM, Vol.2, No.3, pp.84-85, 2015.
- [29]. Integer solutions of non-homogeneous heptic equation with five unknowns $x^3 - y^3 - (x^2 + y^2) + z^3 - w^3 = 2 + 5(x - y)(z - w)^2p^4$, International Journal of Scientific and Research Publications, Vol.5, No. 1, pp.1-3, 2015
- [30]. Special Pythagorean triangles and 10 digit dhuruva numbers, Global Journal of Science Frontier Research : F, Vol.15, No.5, Version 1.0, pp.13-18, 2015.
- [31]. On the integer solutions of Pell equation $x^2 = 17y^2 - 19^t$, JP Journal of Applied Mathematics, Vol.15, No.2, pp.81-88, 2017.
- [32]. Solutions of Pell's Equation involving Hilbert Primes, IJSRR, Vol.7, No.8, pp.288-291, 2018.
- [33]. On interesting Diophantine Pairs, CASIRJ, Vol.11, No.8, pp.55-61, 2020.
- [34]. On the Gaussian Integer Solutions for an Elliptic Diophantine Equation, Advances and Applications in Mathematical Sciences, Vol. No. 20 & Issue No. 05, pp.815-822, March,

2021.

- [35]. Construction of Special dio – triples ,Vidyabharati Interdisciplinary Research Journal,Special issue on Recent Trends in Management,Science and Technology,pp.1693-1694,2021.
- [36].Lattice Points for the Quadratic Diophantine Equation $21(x^2 + y^2) - 19xy = 84z^2$, International Journal of Innovative Research science, Engineering and Technology (IJIRSET) Volume 11,Issue 5,pp 5542-5549,May2022.
- [37].Integral Solutions of Quadratic Diophantine Equation with two unknowns $11(\theta^2 + \Omega^2) = 2(12\theta\Omega - 1)$, Research and Reflections on Education ,Vol. 20 No. 3A pp.108-111,October 2022.
- [38].Special Dio - triples involving Primes, Engineering, Science, and sustainability. Proceeding of the International Sustainability Conference,(CRC Press Taylor&Francis group) pp. 173-176, August 2022.

Conference / Workshops/Seminars attended

| S.No | Conference/ Workshop Name | Institution | Title | Participated/ Presented | Level | Date |
|------|---------------------------|---|--|-------------------------|---------------|---------------------|
| 1. | ICOMAC 2014 | Jamal Mohammed College,Trichy | On the integer solutions of Pell Equation $x^2 - 3y^2 = (k^2 + 4k + 1)^t$ | Presented | International | 13&14 February 2014 |
| 2. | UGC Sponsored-NCRTMM-2014 | Government Arts College for Women, Pudukottai | Construction of the Diophantine Triples involving Polygonal numbers | Presented | National | 12&13 March 2014 |
| 3. | ICOMAC 2015 | Jamal Mohammed College,Trichy | Integer solutions of non-homogeneous biquadratic equation with four unknowns $4(x^3 + y^3) = 31(k^2 + 3s^2)zw^3$ | Presented | International | 22&23 January 2015 |

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|----|--|---|---|-----------|---------------|----------------------|
| 4. | UGC Sponsored- ReDeEM | Thiagarajar College, Madurai | Integer solutions of non-homogeneous biquadratic equation with four unknowns $xy + (k^2 + 1)z^2 = 2^{2n}w^4$ | Presented | National | 12&13 March 2015 |
| 5. | UGC Sponsored – National Conference on Graph Theory, Fuzzy Graph Theory and its Applications | Jamal Mohammed College, Trichy | An Interesting Diophantine Problem | Presented | National | 10&11 February 2016 |
| 6. | National Level Seminar on “Modern Trends in Mathematics” | Shrimati Indira Gandhi College, Trichy | - | Attended | National | 22 December 2016 |
| 7. | ICDCM - 2017 | Gandhigram Rural Institute Deemed to be University, Dindigul. | An Interesting Diophantine Pairs | Presented | International | 16-18 February 2017. |
| 8. | NCATPAM’19 | Dr. Umayal Ramanathan College for Women, Karaikudi | - | Attended | National | 19&20 September 2019 |

Books Published

A chapter in the ISBN edited book “Contemporary Research Trends in Mathematics”, Multi Spectrum Publications, ISBN 978-93-94428-82-9, First edition 2023.

Experience

| Institution | Designation | Period | No. of Years |
|---|---------------------|--------------------------------------|-------------------|
| St.Joseph's Matric. Hr.Sec.School,Acharapakkam, Kanchipuram Dt. | Maths Teacher | 1,June 2002 – 22,December 2004 | 2 yrs 6 months |
| National College | Assistant Professor | 5,July 2012 to till date | 11 yrs |

Membership

Life Time Member in Ramanujan Mathematical Society

Extension Activities

Coordinator for outreach programmes (CSIR-NET/SET/ IIT – JAM Coaching) jointly organized by National College and Ramanujan Mathematical Society.