## **CAUVERY COLLEGE FOR WOMEN**

## (AUTONOMOUS)

#### **STAFF PROFILE**

#### PERSONAL INFORMATION

1. Name : Dr.P.SARANYA

2. Date of Birth : 26. 06. 1986

3. Address :

Residential	Office
16, DROWPATHY AMMAN KOVIL	PG AND RESEARCH DEPARTMENT OF
STREET,	MATHEMATICS,
POONTHOTTAM,	CAUVERY COLLEGE FOR WOMEN
PUTHUR, TRICHY.	(AUTONOMOUS),
PIN - 620017.	ANNAMALAI NAGAR, TRICHY-620018.
E -Mail: saran2606@gmail.com	E-Mail: saranyap.maths@cauverycollege.ac.in

### **ACADEMIC INFORMATION**

4. Designation & Department: Associate Professor, Department of Mathematics

### **5. Educational Qualification**:

Degree	Year	College/University	
		Cauvery College for Women	
Ph.D	2021	(Autonomous), Bharathidasan University,	
		Trichy.	
M.Phil	2010	Vinayaka Missions University, Salem.	
MSc	2008	Cauvery College for Women, Trichy.	
PGDCA	2007	Cauvery College for Women, Trichy.	
BSc	2006	Cauvery College for Women, Trichy.	

#### **6.Researcher ID:**

**GOOGLE SCHOLAR:** 9GtiJBwAAAAJ&hl=en

**ORCID ID:** https://orcid.org/0000-0001-9084-6509

**SCOPUS ID: Registered** 

**MENDELEY:** https://www.mendeley.com/settings/scopus-profile/

WEB OF SCIENCE: Registered

**PUBLONS:** <a href="https://publons.com/dashboard/activity/notification/">https://publons.com/dashboard/activity/notification/</a>

**VIDWAN:** <a href="https://vidwan.inflibnet.ac.in/myprofile">https://vidwan.inflibnet.ac.in/myprofile</a> <a href="https://vidwan.inflibnet.ac.in/myprofile">205981</a>

### 7. Experience:

Date of Joining	Institution	Year of Experience
13.07.2010	Cauvery College for Women,	14 years and 8 months
	Trichy	

**8. Areas of Specialization**: Number Theory

# **9. Languages known :** Tamil, English, Hindi, Telugu

# 10. Subjects Taught :

UG	Mathematical Statistics-II, Mathematical Statistics-III, Algebra and Calculus, Real
	Analysis, Ordinary Differential Equations and Laplace Transforms, Algebra and
	Theory of Numbers, Sequences and Series, Algebra, Analytical Geometry of 3D and
	Trigonometry, Operations Research, Numerical Analysis and Statistics, Discrete
	Mathematics, Office Management Tools, Probability and Statistics, Linear Algebra,
	Number theory, MatLab Practicals, Statistics through Excel (PRACTICAL),
	Complex Analysis, Cybersecurity.
PG	Partial Differential Equations, Ordinary Differential Equations, Discrete
	Mathematics, C++ (PRACTICAL), Mathematical Foundation for Computer Science,
	SPSS (PRACTICAL), Bio Informatics and Statistics, Algebraic Number Theory,
	Number Theory and Cryptography, Mathematical Programming, Business Analytics,
	Data Analysis Using Excel (PRACTICAL), Cybersecurity.
M.Phil	Nil

# 11. Research Supervision: Nil

# 12. Details of Publications:

Journal Name & Volume	Year of Publication	ISSN Number	Name of the Paper	Impact Factor
Imperial Journal of Interdisciplinary Research, Vol-2, Issue-3	2016	2454-1362	On the Ternary Quadratic Diophantine Equation $5(x^2 + y^2) - 6xy = 4z^2$	3.75
International Journal of Science and Research- Online, Vol-5, Issue-3	March 2016	2319-7064	On the Ternary Cubic Diophantine Equation $5(x^2 + y^2) - 6xy$ $+4(x+y) + 4 = 40z^3$	5.611
International Journal of Multidisciplinary Research and Development, Vol- 3, Issue-4	April 2016	2349-4182	Special Pairs of Pythagorean Triangles and Narcissistic Number	5.72
American International Journal of Research in Science, Technology, Engineering and Mathematics,Vol- 14, Issue-2	March- May,2016	2328-3580	Special Pythagorean Triangles in Connection with the Narcissistic Numbers of Order 3 and 4	5.01
International Journal For Research in Applied Science and Engineering	June 2016	2321-9653	Special Rectangles and Narcissistic Numbers of Order 3 and 4	5.011

Technology, Vol-4				
, Issue-6 Universal Journal of Mathematics, Vol- 1, Issue-3	June 2016	2456-1312	Observations on Truncated Octahedral Number	0.754
International Research Journal of Engineering and Technology, Vol-3 , Issue-8	August 2016	2395-0056	Special pairs of rectangles and Narcissistic numbers of order 3 and 4	4.45
International Journal of Engineering Science and Computing,Vol-7, Issue-2	February 2017	2321-3361	On the Quinitic Non- Homogeneous Diophantine Equation $x^4 - y^4 = 40(z^2 - w^2)p^3$	5.611
International Journal of Advanced Research and Development(ijard ), Vol-2, Issue-6	Nov 2017	2455-4030	Construction of Special Dio 3- Tuples from $\frac{CC_n}{Gno_n} - I$	5.24
International Research Journal of Engineering and Technology (IRJET), Vol-4, Issue-11	Nov -2017	2395-0056	On the Exponential Diophantine Equation $36^{x} + 3^{y} = z^{2}$	6.171
International Journal for Research in Applied Science & Engineering Technology (IJRASET) ,Vol-5 , Issue-XI	Nov 2017	2321-9653	Construction of Special Dio 3- Tuples from $\frac{CC_n}{Gno_n} - II$	6.887 IC Value: 45.98
International Journal of Statistics and Applied Mathematics(ijsam ), Vol-2, Issue-6	Dec 2017	2456-1452	Construction of Gaussian Diophantine triples with the property D (25)	5.34 IC Value:57.4
Journal of Mathematics and Informatics(jmi) ,Vol-10 ,Special Issue	11 Dec 2017	2349-0632 (P), 2349-0640	Connections between Cylinder, Frustum of a Cone with Truncated Octahedral Number and Other Special Numbers	1.627
International Journal for Science and Advance Research in Technology(ijsart) ,Vol- 4, Issue-4	April 2018	2395-1052	Half companion sequences of Dio 3-tuples from $\frac{CC_n}{Gno_n}$	5.388
International Journal for	May 2018	2321-9653	Explication of dio 3-tuples from truncated octahedral number-I	6.887 IC Value:

Research in Applied Science & Engineering Technology (IJRASET),Vol- 6, Issue-V				45.98
International Journal for Science and Advance Research in Technology(ijsart) ,Vol- 4, Issue-5	May 2018	2395-1052	Explication of dio 3-tuples from truncated octahedral number-II	5.388
International Journal Of Scientific Research And Reviews(IJSRR) ,Vol-7, Issue-4	Oct-Dec 2018	2279-0543	Allegory of Lateral Surface Area of A Cube With A Special Number	6.946
Compliance Engineering Journal, Vol- 10, Issue-08.	2019	0898-3577	Ascertainment On The Exponential Equation $p^{3c} - a(p^{2c} - p^b) = p^{b+c}$	6.1
Adalya Journal, Vol-8 , Issue-9	SEP 2019	1301-2746	Explication Of The Transcendental Equation $p + \sqrt{p^3 + q^3} - pq + \sqrt[3]{r^2 + s^2}$ $= (m^2 + 1)t^3$	5.3
Infokara Journal, Vol-9, Issue-1	Jan 2020	1021-9056	Gaussian quadruples involving Fermat number, Stellaoctangula number and pronic number	5.3
Parishodh Journal Vol-IX, Issue-III	Mar 2020	2347-6648	Ascertainment on the integral solutions of the Biquadratic Diophantine Equation  m <sup>4</sup> - n <sup>4</sup> =  4(u <sup>2</sup> +1)(r-s)t <sup>3</sup>	6.3
Aryabhatta Journal of Mathematics and Informatics Vol-12, Issue-1	Jan – June 2020	0975- 7139(P) 2394-9309	On some Non-Extendable Gaussian Triples involving Mersenne and Gnomonic number.	5.856
Sambodhi Journal Vol-43, Issue-4	Oct- Dec 2020	2246-6661	Generation of Special Diophantine Quadruples with the property D (2)	5.80
Kala –The journal of Indian Art History Congress Vol-26, Issue- 2(XXVII)	2021	0975-7945	Diophantine Equations on Chemical Reactions	6.125

#### 13. Details of Papers Presented:

Date	Organizer	Name of the Seminar	Paper Name
10 &11 Feb 2016	Jamal Mohammed College, Trichy	National conference on Graph theory, Fuzzy Graph theory and their applications	On the Ternary Cubic Diophantine Equation $5(x^2 + y^2) - 6xy + 4(x + y) + 4 = 40z^3$
11 <sup>th</sup> Dec 2017.	Jamal Mohamed College, Trichy.	International Conference On Mathematical Methods and Computation	Connections between Cylinder, Frustum of a Cone with Truncated Octahedral Number and Other Special Numbers
7-9 Jan 2019	St.Joseph's College, Trichy.	International Conference on Discrete Mathematics	Ascertainment on the Exponential Diophantine equation $p^{3c}-a(p^{2b}-p^c)=p^{b+c}$

#### **Student Publication:**

- Published an article with M.Shri Padmapriya titled, "Solutions of the Transcendental Equations  $p^2 \sqrt{p^5 + q^5 (pq)^3} + \sqrt[3]{r^2 + s^2} = k^3(n^2 + 1)$ ", International Journal for Research in Applied Science & Engineering Technology, Volume 11, Issue III, March 2023. Pg. No. 599-603, Impact Factor: 7.538, ISSN No: 2321-9653.
- Published an article with K.Poorani titled, "Intrinsic solutions of Diophantine Equation Involving Centered Square Number  $E^4 H^4 = (n^2 + (n-1)^2)(k-l)R^2$ ", International Journal for Research in Applied Science & Engineering Technology, Volume 11, Issue III, March 2023. Pg. No. 510-516, Impact Factor: 7.538, ISSN No: 2321-9653.
- Published an article with M.Shri Padmapriya titled, "Transcendental Equation Involving Palindrome number  $p^5 \sqrt{p^7 + q^7 (pq)^5} + \sqrt[3]{r^2 + s^2} = 20402h^3$ ", Aryabhatta Journal of Mathematics and Informatics, Volume 5, Issue 1, Jan -June 2023. Pg. No. 60-66, Impact Factor: 5.856, ISSN No: 0975-7139(P) 2394-9309.
- Published an article with D. Keerthana, titled, "Tackling Ternary Cubic Diophantine Equation  $4(\alpha^2+\beta^2)-7(\alpha\beta)=64\gamma^3$ ", International Journal for Research in Applied Science & Engineering Technology, Volume 12, Issue III, March 2024. Pg. No. 602-605, Impact Factor: 7.538, ISSN No: 2321-9653(P).
- Published an article with B Umadevi titled, "Pellian Equation involving Factorian Number", International Journal for Research in Applied Science & Engineering Technology, Volume 13, Issue III, March 2025. Pg. No. 857-860, Impact Factor: 7.538, ISSN No: 2321-9653(P).

#### 14. Details of Seminars / Conferences / Workshops Attended:

Year & Date	Organizer	Title	National / International	Topic
10 &11 Feb 2016	Jamal Mohammed College, Trichy	National conference on Graph theory, Fuzzy Graph theory and their	National Conference	Graph theory, Fuzzy Graph theory and their applications

		applications		
11 <sup>th</sup> Dec 2017.	Jamal Mohamed College, Trichy.	International Conference On Mathematical Methods and Computation	International Conference	Mathematical Methods and Computation
7-9 Jan 2019	St.Joseph's College, Trichy.	International Conference on Discrete Mathematics	International Conference	Discrete Mathematics

# 15. Details of Seminars / Conferences / Workshops Organized: Nil

## 16.Details of Orientation / Faculty Devolopment Programme/Refresher Course Attended:

Date	Title of the Course	Organizer
30.03.2019	SWAYAM ARPIT ONLINE COURSE- ICT for Science, Technology, Engineering and Mathematics Education	SWAYAM-Indian Institute of Science Education and Research Bhopal(IISER, Bhopal)
August-October 2019 (8 week course)	Faculty Devolopment Programme- Matrix Analysis with Applications	NPTEL-AICTE
Jul-Sep 2023 (8 week course)	Faculty Development Programme- Introduction to Abstract and Linear Algebra	NPTEL-AICTE

## 17. Details of Study Materials / Books written and published: Nil

## 18. Details of Chairing as Resource Person:

Date	Title of the Seminar/Conference	Session Chaired
09.03.2011	Chief Judge at Thanthai Hans Roever	MatroQuiz
07.03.2011	College, Perambalur	MatroQuiz
03.10.2018	Seminar on Mat lab Practical's at Arignar	Seminar
03.10.2016	Anna Arts College, Musiri.	Schillar

## 19. Administrative Positions held in the College:

Nature of Position	Year
-	-

## 20. Details of In charge / Participation in Extracurricular Activities :

### ( NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):

Nature of Activity	Period of Incharge
Cultural in charge	2012-2013, 2013-2014, 2014-2015.
Website in charge	2014 to Till date.

## 21. Details of Participation in Consultancy, Training, Development etc..:

S.No	Development Programme
1	Certified Microsoft Innovative Educator

## 22. Details of Membership in Academic Bodies/ Board of Studies: Nil

# 23. Details of Membership of Professional Bodies:

Bharat Ganita Parisad	Lifetime Member

24. Countries visited academically: Nil

25. Any other information if any: Nil