CAUVERY COLLEGE FOR WOMEN(AUTONOMOUS)
STAFF PROFILE

PERSONAL INFORMATION

1. **Name : A. GOWRISHANKARI**

2. **Date of Birth : 16.05.1983**

3. **Address :**

Residential	Office
NO. 5/4A, EAST STREET, KADIYAKURICHI, JEEYAPURAM POST, TRICHY 639 101.	CAUVERY COLLEGE FOR WOMEN, ANNAMALAI NAGAR, TRICHY-620018

ACADEMIC INFORMATION

4. **Designation & Department:** Assistant Professor, PG and Research Department of Mathematics.

5. **Educational Qualification :**

Degree	Year	College/University
Ph. D	2022	Pursuing
SET	2017	Mother Teresa Women's University
B.Ed.,	2009	Institute of Education, Srirangam
M.Phil	2007	Bharathidasan University, Trichy
M.Sc	2005	Seethalakshmi Ramaswami College, Trichy
B.Sc	2003	Seethalakshmi Ramaswami College, Trichy

6. **Research ID**

GOOGLE SCHOLAR : Registered
ORCID: https://orcid.org/0000-0001-7905-0323
WEB OF SCIENCE: Registered
PUBLONS: Registered
SCOPUS: Registered
MENDELEY: Registered

VIDWAN: https://vidwan.inflibnet.ac.in/profile/205892

7. Experience:

Date of Joining	Institution	Year of Experience
18.06.2018 - till date	Cauvery College for Women	8 Years
09.09.2015 - 26.05.2018	Dhanalakshmi SrinivasanInstitute of Technology, Samayapuram.	3 Years 9 Months
14.06.2010 - 02.06.2014	K.Ramakrishnan College of Engineering, Samayapuram.	4 Years

8. Areas of Specialization: Number Theory

9. Languages known: English, Tamil**.**

10. Subjects Taught :

UG	Engineering Mathematics I, Engineering Mathematics II, Engineering Mathematics III, Operations Research, Numerical Methods, Probability and Random Processes, B. Arch Mathematics, Algebra and Calculus, Calculus and Fourier Series, Sequences and Series, Differential Equations and Laplace Transforms, Complex Analysis, Mathematics I, Mathematics II, Mathematics III, Numerical methods with MATLAB programming, Essential Mathematics, Numerical Analysis and Statistics, Biostatistics, Professional Skills, Universal Human Values, Introduction to R Programming (Practical), Number Theory, Introduction to MS- Word (Practical), Environmental studies, Business Statistics, Skills for competitive Examination, Mathematics for Competitive Examination-II, Cyber Security, Business Tools for Decision Making, E-Commerce and Web Designing.
PG	Applied Operations Research for Management, Statistics for Management, Stochastic Processes Advanced Operations Research, Differential Geometry, Algebraic Number Theory, Cyber Security.

11. Details of Publications:

Journal Name & Volume	Year of Publication	ISSN Number	Name of the Paper	Impact Factor

Turkish Online Journal of Qualitative Inquiry (SCOPUS), Volume 12	June 2021	1309-6591	Ranking of TraIFNsBased on Improved Accuracy Function and its Application	-
International Journal for Research in Applied Science & Engineering Technology, Volume 10, Issue VIII	August 2022	2321-9653	Properties of the Ternary Cubic Equation $5x^2 - 3y^2 = z^3$	-
Aryabhatta Journal of Mathematics and Informatics, Volume 14, Issue 2	December 2022	0975-7139(P) 2394-9309(O)	Cryptographic Algorithm Using Binary Quadratic Equation $x^2 - 7y^2 = 1$ with Exponent Assignment of Alphabets	-
Asian Journal of Science and Technology, Volume 14, Issue 02	February, 2023	0976-3376	Integer Right triangle with Area/Perimeter as a Canada Numbers", "Asian Journal of Science and Technology	-
METSZET Journal	March, 2023	2061-2710	Generating Dio-3 Triples using the Second-Order Polynomials with Incisive Properties	-
International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 11, Issue III	March, 2023	730-735	Integral solutions of the Ternion Quadratic Equation $a^2 + g^2 = 401 s^2$	-
Ratio Mathematica (UGC Care list 1) Volume 46	March, 2023	1592-7415, 2282-8214	Algebraic coding theory using Pell equation $x^2-8y^2=1$	-
Acta Ciencia Indica Mathematics, Volume XLVIII-M, No. 1 to 4(2022)	May, 2023	0970-0455	Integral Solutions of the Homogeneous Trinity Quadratic Equation $3x^2+y^2=16z^2$	-

Aryabhatta Journal of Mathematics & Informatics, Volume 15, No. 1	June, 2023	0975-7139	Integral Solutions of the Trinity Cubic Equation $5(p^2+q^2)-6(pq)+4(p+q+1)=1600r^3$	-
Journal For Basic Sciences, Volume 23, No. 7, Page No. 391-396	July 2023	1006-8341	Connection between Distinguished Integer Right Triangle and Canada Numbers	-
International Journal of Scientific Development and Research (IJSDR), Volume 8, No. 9, Page No. 1788-1179	September 2023	2455-2631	Exponential Diophantine Equation $2^a+n^{2b}=c^2$, n=1, 2, 3,…	-
International Journal of Latest Engineering Research and Applications (IJLERA), Volume 08, No. 12, Page No. 99-104	December, 2023	2455-7137	Renovated RSA Algorithm for Sending Secret Numbers using Primes and 3-Length Words Employing Gaussian Primes	
Global Journal of Science Frontier Research: F Mathematics and Decision Sciences, Volume 23, No. 8(1.0), Page No. 69-72	December, 2023	Print: 0975-5896, Electronic: 2249-4626,	Distinguished Couple Of Integer Right Triangles And Canada Numbers	
Indian Journal of Science and Technology (IJST), (**WEB OF SCIENCE**), Volume 17, No. 2, Page No. 166-170	January, 2024	Print: 0974-6846, Electronic: 0974-5645	Exponential Diophantine Equation $(n^2-1)^u+n^{2v}=w^2$, $n=2,3,4,5$	
Indian Journal of Natural Sciences (IJONS) **(WEB OF SCIENCE)** (UGC CARE List Group II) Volume 15, No. 84, Page No. 74267-74274	June, 2024	0976 – 0997	Non-Extendable Half Companion Sequences of Special Dio 3-Tuples Involving First Type of Rectangular Numbers	-
AIP Conference Proceedings **(SCOPUS Elsevier)** and The Conference Proceedings	August, 2024	Electronic:1551-7616, Print :0094-243X	Concatenation of irrational Gaussian dio triples with the property D(1)	-

Citation Index (part of Web of Science)) Volume 3180, No. 1, Page No. 020019-1 to 020019-8				
Aryabhatta journal of mathematics and informatics. Volume 6, No. 2 Page No. 139-142	December, 2024	2394-9309	Integral Solutions of the Trinity Cubic Equation $6(x^2+y^2)-8xy+3(2x+2y+3)=500z^3$	-
Indian Journal of Natural Sciences (**WEB OF SCIENCE)** Volume 15, Issue 88 Page No: 90233-90236	Febraury 2025	(P): 0976-0997	On the Diophantine Equation $\eta^{\alpha}+11^{\beta}=\gamma^2$, where $\eta\equiv 2(\text{mod } 33)$ and $\eta+1$ is a Square Free Number	-
Bodhi International Journal of Research in Humanities, Arts and Science Volume 9, Issue 3, Page No: 97-104	April 2025	2456-5571	EXPONENTIAL DIOPHANTINE EQUATIONS INVOLVING CANADA NUMBERS	-
International Journal of Scientific Research in Mathematical and Statistical Sciences Volume 12, Issue 2, Page No: 11-14	April 2025	2348-4519	Integral Solutions of the Homogeneous Quinary Quintic Diophatine Equation Involving Palindrome Number $p^5+q^5-pq(p^3+q^3)=202(r^2-s^2)t^3$	
International Journal for Multidisciplinary Research (IJFMR) Volume 7, Issue 3, Page No: 1-5	June 2025.	2582-2160	Integral Solutions of the Ternion Quadratic Equation $4(x^2+y^2)-7xy+2(x+y+2)=10z^2$	9.24
International Journal on Science and Technology (IJSAT) Volume 16, Issue 2, Page No: 1-5	June 2025	2229-7677	Quinary Transcendental Equation Involving Palindrome number $\sqrt[3]{p^2-q^2}+2\sqrt{r^2-2s^2}=121t^2$	9.88
Aryabhatta Journal of Mathematics and Informatics Volume 17, Issue 1, Page No: 43-48	June 2025	(P): 0975-7139 & (O): 2394-9309	Integral Solutions of the Homogeneous Quinary Quintic Diophantine Equation involving Palindrome Number $p^5+q^5-p^2q^2(p+q)=939(p+q)(r-s)^2t^2$	
Jnanabha **(UGC CARELIST 1)** Volume 55, Issue 1, Page No: 273-275	June 2025	0304-9892 (Print), 2455-7463 (Online),	Perceiving solutions for the Exponential Diophantine equation $m^a+n^b=c^2$ uniting twin primes	

Indian Journal of Natural Sciences **(WEB OF SCIENCE)** Volume 16, Issue 93, Page No: 103757-103764	December 2025	0976-0997	Integer Triples from Centered figurate Numbers with Arithmetic Mean Constraints	
International Advanced Research Journal in Science, Engineering and Technology (IARJSET) Volume No: 13, Issue:3, Page No: 273-275,	March 2026	2394-1588 (Print), 2393-8021, (Online)	SPECIAL RECTANGLES WITH 3-DIGIT SPY AND AUTOMORPHIC NUMBERS	8.311

12. Chapter Publications:

S.No	Chapter Name	Book Name & Volume	Year of Publication	Print ISBN	eBook ISBN
1	A Cryptographic Algorithm Based on Large Gaussian Primes and Primes	Research Highlights in Mathematics and Computer Science B P International Volume 2	Oct 2022	978-93-5547-911-2	978-93-5547-912-9
2	Relation between Lateral Surface Area of a Cube and Centered Polygonal Numbers	Explorations in Diophantine Equations, B P International	November 2023	978-81-967488-3-8	978-81-967488-6-9
3	Encryption and Decryption Algorithm Using Balancing Numbers	Explorations in Diophantine Equations, B P International	November 2023	978-81-967488-3-8	978-81-967488-6-9
4	Exponential Diophantine Equations Concerning Numbers in Reverse Order	Research Updates in Mathematics and Computer Science B P International	May 2024	978-81-973514-8-8	978-81-973514-0-2

13. Details of Seminars / Conferences / Workshops Attended:

Year & Date	Organizer	Title	National / International	Topic

1st May 2008	Oxford Engineering College, Trichy	Medical Informatics & Telemedicine	National	Medical Informatics & Telemedicine
1st November 2011	Oxford Engineering College, Trichy	Quality Enhancement & Sustenance In Higher Educational Institutions Through Six Sigma Quality Strategy	National	Quality Enhancement & Sustenance In Higher Educational Institutions Through Six Sigma Quality Strategy
1st November 2011	Oxford Engineering College, Trichy	Emerging Trends In Science & Technology	National	Emerging Trends In Science & Technology
1st November 2011	Oxford Engineering College, Trichy	Productivity Through Creativity	National	Productivity Through Creativity
11th November 2011	Oxford Engineering College, Trichy	Teaching Operations Research Using Case Studies And Optimization Packages	National	Teaching Operations Research Using Case Studies And Optimization Packages
6th August 2011	K.Ramakrishnan College of Technology, Samayapuram.	Fuzzy Set Theory and Applications/Queuing Theory And Applications	National	Fuzzy Set Theory And Applications/Queuing Theory And Applications
24th August 2019	Kongunadu College of Engineering and Technology, Namakkal	CSIR sponsored work shop "Innovations in Number Theory for Cryptography Applications"	CSIR sponsored workshop	Innovations in Number Theory for Cryptography Applications

11th October 2019	AIMAN College of Arts and Science, Trichy	Fuzzy Mathematics	Faculty development Programme	Fuzzy Mathematics
24. 01. 2025	Seethalakshmi Ramaswami College (Autonomous), Trichy	Mathematical Explorations and Breakthroughs	International Conference	Mathematical Explorations and Breakthroughs

14. Details of Paper Presented in Conferences:

Year & Date	Organizer	Title	National / International	Topic
14 – 16th September 2022	Thiruvalluvar University, Vellore	International Conference on Mathematical Modelling, Analysis and Computing – MMAC 2022	International	Algebraic Coding Theory Using Pell Equation $x^2 - 8y^2 = 1$
09 & 10th Jan 2023	Holy Cross College (Autonomous), Trichy 620 002	Recent Trends in Applications of Mathematics" (ICRTAM'23)	International	Formation of Special Diophantine Triples
24 & 25th March 2023	SASTRA, Deemed University, Kumbakonam	International Conference on Mathematics and its Applications in Technology – ICMAT'23	International	Concatenation of irrational Gaussian Dio triples with the property $D(1)$
28 – 30th April 2023	Dayanand Vedic College, Orai (Jaluan), Uttar Pradesh	24th Annual Conference of Vijnana Parishad of India and National Seminar on New Thrust Areas in Mathematics, Mathematical Sciences and Engineering (NTAMMSE-2023)	International	Generalization of Gaussian Diophantine Triples {(3r+n)+i5g, (3r+n+6)+i5g, 4[(3r+n+3)+i5g], n= 1,2,3, …} With the property D(9)",

21st & 22nd October 2023	Holy Cross Arts and Science College for Women, Tirupattur	Mathematical Modelling, Analysis and Computing - 2023	International	Constructing Families of Polynomial Diophantine Quadruples from Chebyshev's Polynomials
23 -02-2024	Aiman College of Arts and Science, Trichy	International Conference on Recent Trends In Mathematics And Its Applications - 2024	International	Exponential Diophantine Equations Concerning Numbers With Digits In Reverse Order

15. Details of Orientation / Refresher Course Attended:

Date	Title of the Course	Organizer
5.6.2019 to 10.06.2019	Capacity building work shop on E-Content Development	Cauvery college for Women (Autonomous)
August to October 2019	Higher Engineering Mathematics-FDP	NPTEL FDP online course
February to April 2021	Descriptive Statistics with R Software	NPTEL FDP online course
February to April 2023	Introduction to Research	NPTEL FDP online course
July to October 2024	A Basic Course in Number Theory	NPTEL FDP online course
January to April 2026	Applied Linear Algebra in AI and ML	NPTEL FDP online course

16. Details of Incharge / Participation in Extracurricular Activities :
(NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):

Nature of Activity	Period of In-charge
Placement In-charge	2019-2025
Class In-charge (II M. Sc Mathematics)	2020-2022
Online Syllabus Completion In-charge	2020-2022
Alumnae In-charge	2021-2025
Students Progression In-charge	2021-2025

Timetable In-charge	2022-2023
Club In-charge	2023-2025

17. Details of Participation in Consultancy, Training, Development etc..: -

- Getting with one note
- Digital story telling with Microsoft's way

18. Details of Membership in Academic Bodies/ Board of Studies and Reviewer Details:

Reviewer in

- Indian Journal of Science and Technology.
- Journal of Advances in Mathematics and Computer Science.

19. Details of Membership of Professional Bodies:

- Indian Society for Technical Education,
- Bharat Ganita Parisad,
- Vijnana Parishad of India.

20. Any other information if any:

- Number of Faculty Development Programs Attended: 28
- Number of Webinars Attended: 14
- Number of Workshops Attended: 03