

**CAUVERY COLLEGE FOR  
WOMEN(AUTONOMOUS)  
STAFF PROFILE**

**PERSONAL INFORMATION**

**1. Name : A. GOWRI SHANKARI**

**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	5 Years 9 Months
09.09.2015 - 26.05.2018	Dhanalakshmi Srinivasan Institute of Technology, Samayapuram.	3 Years 9 Months
14.06.2010 - 02.06.2014	K.Ramakrishnan College of Engineering, Samayapuram.	4 Years
18.01.2008 - 26.2.2009	Oxford Engineering College, Trichy – 9	1 Year 1 Month

## 8. Areas of Specialization: Number Theory

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

## 10. Subjects Taught :

<b>UG</b>	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, Bio Statistics, Business Statistics
<b>PG</b>	Applied Operations Research for Management, Statistics for Management, Stochastic Processes, Advanced Operations Research, Differential Geometry, Algebraic Number Theory.

### 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 TraIFNs Based 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 $5x^2 - 3y^2 = z^3$	-
Aryabhata 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 (IJS DR), Volume 8, No. 9, Page No. 1788-1179	September 2023	2455-2631	Exponential Diophantine Equation $2^a+n^{2b}=c^2$ , $n=1, 2, 3, \dots$	-
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 $(n^2-1)^u+n^{2v}=w^2$ , $n=2,3,4,5$	

## 12. Chapter Publications:

S.No	Chapter Name	Book Name & Volume	Year of Publication	Print ISBN	eBook ISBN
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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

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

Year & Date	Organizer	Title	National / International	Topic
1 <sup>st</sup> May 2008	Oxford Engineering College, Trichy	Medical Informatics & Telemedicine	National	Medical Informatics & Telemedicine
1 <sup>st</sup> 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
1 <sup>st</sup> November 2011	Oxford Engineering College, Trichy	Emerging Trends In Science & Technology	National	Emerging Trends In Science & Technology
1 <sup>st</sup> November 2011	Oxford Engineering College, Trichy	Productivity Through Creativity	National	Productivity Through Creativity

11 <sup>th</sup> 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
6 <sup>th</sup> August 2011	K.Ramakrishna n College of Technology, Samayapuram.	Fuzzy Set Theory and Applications/Queuing Theory And Applications	National	Fuzzy Set Theory And Applications/Queuing Theory And Applications
24 <sup>th</sup> 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
11 <sup>th</sup> October 2019	AIMAN College of Arts and Science, Trichy	Fuzzy Mathematics	Faculty development Programme	Fuzzy Mathematics

#### 14. Details of Paper Presented in Conferences :

Year & Date	Organizer	Title	National / International	Topic
14 – 16 <sup>th</sup> 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 & 10 <sup>th</sup> Jan 2023	Holy Cross College (Autonomous), Trichy 620 002	Recent Trends in Applications of Mathematics” (ICRTAM’23)	International	Formation of Special Diophantine Triples

24 & 25 <sup>th</sup> 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 – 30 <sup>th</sup> April 2023	Dayanand Vedic College, Orai (Jaluan), Uttar Pradesh	24 <sup>th</sup> 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 $\{(3r+n)+i5g,$ $(3r+n+6)+i5g,$ $4[(3r+n+3)+i5g], n=$ $1,2,3, \dots\}$ With the property $D(9)$ ”
21 <sup>st</sup> & 22 <sup>nd</sup> 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

**16. Details of Incharge / Participation in Extracurricular Activities :**

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

Nature of Activity	Period of In-charge
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Placement In-charge	2019-2024
Class In-charge (II M. Sc Mathematics)	2020-2022
Online Syllabus Completion In-charge	2020-2022
Alumnae In-charge	2021-2024
Students Progression In-charge	2021-2024
Timetable In-charge	2022-2023
Club In-charge	2023-2024

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

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

**18. Details of Membership of Professional Bodies:** Indian Society for Technical Education

**19. Any other information if any:**

- (i) Number of Faculty Development Programs Attended: 25
- (ii) Number of Webinars Attended: 14
- (iii) Number of Workshops Attended: 03