## 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 STREET, | PG AND RESEARCH DEPARTMENT OF |
| POONTHOTTAM, | MATHEMATICS, |
| PUTHUR, TRICHY. | CAUVERY COLLEGE FOR WOMEN |
| PIN - 620017. | (AUTONOMOUS), |
| E -Mail: $\underline{\text { saran2606@gmail.com }}$ | ANNAMALAI NAGAR, TRICHY-620018. |
| Mobile: 7019208451 | E-Mail: saranyap.maths@cauverycollege.ac.in |

## ACADEMIC INFORMATION

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

## 5. Educational Qualification :

| Degree | Year | College/University |
| :---: | :---: | :---: |
| Ph.D | 2021 | Cauvery College for Women <br> (Autonomous), Bharathidasan University, <br> 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: https://publons.com/dashboard/activity/notification/
VIDWAN: https://vidwan.inflibnet.ac.in/myprofile 205981

## 7. Experience :

| Date of Joining | Institution | Year of Experience |
| :---: | :---: | :---: |
| 13.07 .2010 | Cauvery College for Women, <br> Trichy | 13 years and 7 months |

8. Areas of Specialization : Number Theory
9. Languages known : Tamil, English, Hindi, Telugu

## 10. Subjects Taught <br> :

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

## 11. Research Supervision:

|  | Thesis |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Completed (in <br> numbers) | Year of <br> Completion | Pursuing <br> (in numbers) |
|  |  | - | - | - |
| M.Phil | - | - | - | - |
| P.hD | - |  |  |  |

## 12. Details of Publications:

|  <br> Volume | Year of <br> Publication | ISSN <br> Number | Name of the Paper | Impact <br> Factor |
| :---: | :---: | :---: | :---: | :---: |
| Imperial Journal of <br> Interdisciplinary <br> Research,Vol-2, <br> Issue-3 | 2016 | $2454-1362$ | On the Ternary Quadratic <br> Diophantine Equation <br> $5\left(x^{2}+y^{2}\right)-6 x y=4 z^{2}$ | 3.75 |
| International <br> Journal of Science <br> and Research- <br> Online,Vol-5, <br> Issue-3 | March 2016 | $2319-7064$ | On the Ternary Cubic <br> Diophantine Equation <br> $5\left(x^{2}+y^{2}\right)-6 x y$ <br> $+4(x+y)+4=40 z^{3}$ | 5.611 |
| International <br> Journal of <br> Multidisciplinary <br> Research and | April 2016 | $2349-4182$ | Special Pairs of Pythagorean <br> Triangles and Narcissistic <br> Number | 5.72 |


| Development, Vol3, Issue-4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| American International Journal of Research in Science, Technology, Engineering and Mathematics,Vol14 , Issue-2 | March- <br> 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 Technology,Vol-4, Issue-6 | $\begin{aligned} & \text { June } \\ & 2016 \end{aligned}$ | 2321-9653 | Special Rectangles and Narcissistic Numbers of Order 3 and 4 | 5.011 |
| Universal Journal of Mathematics,Vol-1 , Issue-3 | $\begin{aligned} & \text { June } \\ & 2016 \end{aligned}$ | 2456-1312 | Observations on Truncated Octahedral Number | 0.754 |
| International Research Journal of Engineering and Technology,Vol-3, Issue-8 | $\begin{gathered} \text { August } \\ 2016 \end{gathered}$ | 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 NonHomogeneous Diophantine Equation $x^{4}-y^{4}=40\left(z^{2}-w^{2}\right) p^{3}$ | 5.611 |
| International Journal of Advanced Research and Development(ijard) ,Vol-2 , Issue-6 | $\begin{gathered} \text { Nov } \\ 2017 \end{gathered}$ | 2455-4030 | Construction of Special Dio 3- <br> Tuples from $\frac{C C_{n}}{G n o_{n}}-I$ | 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- <br> Tuples from $\frac{C C_{n}}{G n o_{n}}-I I$ | $\begin{gathered} 6.887 \\ \text { IC Value: } \\ 45.98 \end{gathered}$ |
| International Journal of Statistics and Applied Mathematics(ijsam) | Dec 2017 | 2456-1452 | Construction of Gaussian Diophantine triples with the property D (25) | $\begin{gathered} 5.34 \\ \text { IC } \\ \text { Value:57.47 } \end{gathered}$ |


| ,Vol-2, Issue-6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Journal of Mathematics and Informatics(jmi) ,Vol-10 ,Special Issue | 11 Dec 2017 | $\begin{gathered} 2349-0632 \\ (\mathrm{P}), \\ 2349-0640 \end{gathered}$ | 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 $\frac{C C_{n}}{G n o_{n}}$ | 5.388 |
| International Journal for Research in Applied Science \& Engineering Technology (IJRASET),Vol- 6, Issue-V | May 2018 | 2321-9653 | Explication of dio 3-tuples from truncated octahedral number-I | $\begin{gathered} 6.887 \\ \text { IC Value: } \\ 45.98 \end{gathered}$ |
| 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 | $\begin{gathered} \text { Oct-Dec } \\ 2018 \end{gathered}$ | 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 <br> Exponential <br> Equation $p^{3 c}-a\left(p^{2 c}-p^{b}\right)=p^{b+c}$ | 6.1 |
| Adalya Journal, <br> Vol-8, Issue-9 | SEP 2019 | 1301-2746 | $\begin{aligned} & \text { Explication Of The } \\ & \text { Transcendental } \\ & p+\sqrt{p^{3}+q^{3}-p q}+\sqrt[3]{r^{2}+s^{2}} \\ & =\left(m^{2}+1\right) t^{3} \end{aligned}$ | 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 <br> Vol-IX, Issue-III | $\begin{gathered} \text { Mar } \\ 2020 \end{gathered}$ | 2347-6648 | Ascertainment on the integral solutions of the Biquadratic Diophantine Equation $\begin{aligned} & m^{4}-n^{4}= \\ & 4\left(u^{2}+1\right)(r-s) t^{3} \end{aligned}$ | 6.3 |
| Aryabhatta Journal of Mathematics and Informatics Vol-12, Issue-1 | $\begin{gathered} \text { Jan - June } \\ 2020 \end{gathered}$ | $\begin{gathered} 0975- \\ 7139(\mathrm{P}) \\ 2394-9309 \end{gathered}$ | On some Non-Extendable Gaussian Triples involving Mersenne and Gnomonic number. | 5.856 |


| Sambodhi Journal <br> Vol-43, Issue-4 | Oct- Dec <br> 2020 | $2246-6661$ | Generation of Special <br> Diophantine Quadruples with the <br> property D (2) | 5.80 |
| :---: | :---: | :---: | :---: | :---: |
| Kala-The journal <br> of Indian Art <br> History Congress <br> Vol-26, Issue- <br> 2(XXVII) | 2021 | $0975-7945$ | Diophantine Equations on <br> Chemical Reactions | 6.125 |

## 13. Details of Papers Presented:

$\left.\begin{array}{|c|c|c|c|}\hline \text { Date } & \text { Organizer } & \begin{array}{c}\text { Name of the } \\ \text { Seminar }\end{array} & \text { Paper Name } \\ \hline 10 \& 11 \\ \text { Feb 2016 } & \begin{array}{c}\text { Jamal Mohammed } \\ \text { College, } \\ \text { Trichy }\end{array} & \begin{array}{c}\text { National conference } \\ \text { on Graph theory, } \\ \text { Fuzzy Graph theory } \\ \text { and their } \\ \text { applications }\end{array} & \text { On the Ternary Cubic Diophantine } \\ \text { Equation }\end{array} \quad \begin{array}{c}5\left(x^{2}+y^{2}\right)-6 x y+4(x+y)+4=40 z^{3} \\ \hline \begin{array}{c}\text { International } \\ \text { Dec } \\ 2017 .\end{array} \\ \begin{array}{c}\text { Jamal Mohamed } \\ \text { College, Trichy. } \\ \text { Conference On } \\ \text { Mathematical } \\ \text { Methods and } \\ \text { Computation }\end{array}\end{array} \begin{array}{c}\text { Connections between Cylinder, Frustum of } \\ \text { a Cone with Truncated Octahedral } \\ \text { Number and Other Special } \\ \text { Numbers }\end{array}\right]$

## Student Publication:

$>$ Published an article titled, "Solutions of the Transcendental Equations $p^{2}-\sqrt{p^{5}+q^{5}-(p q)^{3}}+\sqrt[3]{r^{2}+s^{2}}=k^{3}\left(n^{2}+1\right)$ ", 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 titled, "Intrinsic solutions of Diophantine Equation Involving Centered Square Number $E^{4}-H^{4}=\left(n^{2}+(n-1)^{2}\right)(k-l) R^{2} "$, 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 titled, "Transcendental Equation Involving Palindrome number $p^{5}-\sqrt{p^{7}+q^{7}-(p q)^{5}}+\sqrt[3]{r^{2}+s^{2}}=20402 h^{3 \prime}$, 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.

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

| Year \& Date | Organizer | Title | National / <br> International | Topic |
| :---: | :---: | :---: | :---: | :---: |
| $10 \& 11$ Feb <br> 2016 | Jamal Mohammed <br> College, <br> Trichy | National conference <br> on Graph theory, <br> Fuzzy Graph theory | National <br> Conference | Graph theory, <br> Fuzzy Graph <br> theory and their |


|  |  | and their <br> applications |  | applications |
| :---: | :---: | :---: | :---: | :---: |
| $11^{\text {th }}$ Dec | Jamal Mohamed |  |  |  |
| 2017. | International <br> Conference On <br> Mathematical <br> Methods and <br> Computation | International <br> Conference | Mathematical <br> Methods and <br> Computation |  |
| 7-9 Jan 2019 | St.Joseph's <br> college, <br> Trichy. | International <br> Conference on <br> Discrete <br> Mathematics | International <br> Conference | Discrete <br> Mathematics |

15. Details of Seminars / Conferences / Workshops Organized:

| Date | Title | National / <br> International | Topic |
| :---: | :---: | :---: | :---: |
| - | - | - | - |

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

| Date | Title of the Course | Organizer |
| :---: | :---: | :---: |
| 30.03 .2019 | SWAYAM ARPIT ONLINE <br> COURSE- ICT for Science, | SWAYAM-Indian Institute of <br> Science Education and <br> Research Bhopal(IISER, <br> Technology, Engineering and <br> Mathematics Education |
|  | Faculty Development Programme- <br> Matrix Analysis with Applications | NPTEL-AICTE |
|  | Faculty Development Programme- <br> Introduction to Abstract and Linear <br> 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 <br> College, Perambalur | MatroQuiz |
| 03.10 .2018 | Seminar on Mat lab Practical's at Arignar <br> Anna Arts College, Musiri. | Seminar |

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 |
| :--- | :--- |
| $\mathbf{1}$ | Certified Microsoft Innovative Educator |

22. Details of Membership in Academic Bodies/ Board of Studies: Nil
23. Details of Membership of Professional Bodies: Nil
24. Countries visited academically: Nil
25. Any other information if any: Nil
