

Name: Dr.D.SASIKALA

Designation : Assistant Professor

Department : MATHEMATICS (Aided)

Qualification: M.Sc., M.Phil., Ph.D., PGDCA

Experience: Teaching -18 Years

Research: 11 Years

Area of Specialization(s) : Topology, Fuzzy set Theory

Email(Official ID): dsasikala@psgrkcw.ac.in

Academic Qualifications

| Degree | Branch | Institution/UniversityName | Year of Graduation |
|---------|--------------------------|------------------------------------|--------------------|
| Ph.D. | Mathematics | Bharathiar University | 2014 |
| PGDCA | Computer Applications | Bharathiar University | 2009 |
| M.Phil. | Mathematics | Alagappa University | 2006 |
| M.Sc | Mathematics | Annamalai University | 2003 |
| B.Sc. | Mathematics | PSGR Krishnammal College for Women | 1998 |

Additional Qualifications

| Certification | Area of Specialization | Institution/University | Year |
|---------------|---|---------------------------------|------|
| Certification | Essential Linear Algebra for Data Science | University of Colorado, Boulder | 2023 |

| Certification | Data Science Math Skills | Duke University | 2023 |
|---------------|-----------------------------|---|------|
| Certification | Data Science | Mathematics for Machine Learning: Linear Algebra | 2023 |

ResearchGuidance

| Programme | No of Scholars | |
|-----------|----------------|-----------|
| | Completed | Pursuing |
| M.Phil. | 11 | Completed |
| Ph.D. | 4 | 4 |

Research Publications (Indexed)

- Necessary or sufficient condition for Alexandroff topological spaces to be cordial graphic, Results in control and Optimization (2024) Vol 17, Elsevier.
- Innovative Expert System for Coronary Heart Disease using Diagnosis Utilizing Soft Sets, IEEE Xplore 2024, https://doi.org/10.1109/CISCON62171.2024.10696680
- A Contemporary postulates on resolvable sets and functions, Neutrosophic Sets and Systems, 2023, Volume 56, 326-337.
- The Role of Interior and closure operator in Medical Application, TWMS J.Apps and Eng. Math,2022, Volume 12, pp. 425 434.
- A New Perspective of Neutrosophic Hyperconnected Spaces, Neutrosophic Sets and Systems, 2022, Volume 51, pp. 619-632.
- An Elementary approach on Hyperconnected Spaces, Turkish Journal of Computer and Mathematics Education, 2021, vol 12, pp. 946-950. https://doi.org/10.17762/turcomat.v12i9.3336.

Other Publications: International/National

• Scholarly contributions include over 40 publications in reputed international and national journals,

Acted as a Resource Person

- 20 + invited talks in conferences, workshops and faculty development programmes and numerous papers presented at academic forums.
- Served as Convener for several National and International Conferences

- Centre for Research, Anna University, Chennai.
- Kongu Nadu Arts and Science College, Coimbatore.
- LRG Government Arts and Science College, Thirupur.
- Nirmala College for Women, Coimbatore
- CBM college, Coimbatore
- Chikkanna college, Tirupur.

Member of Board of Studies

- Kongu Nadu Arts and Science, Coimbatore.
- PSGR Krishnammal College for Women, Coimbatore
- Nirmala College for Women, Coimbatore.
- Sri Ramakrishna College of Arts and Science, Coimbatore.
- G.T.N Arts College, Dindugul.

Advisory Committee Member

Sri Ramakrishna Arts and Science College, Coimbatore, Tamil Nadu.

Reviewer in journal

- Advances in Fuzzy systems
- Journal of Advances in Mathematics and Computer Science,
- Asian Journal of Pure and Applied Mathematics.

• Paper Presentations in Conference

• Presented 30+ research papers in national and international conferences.

Participation in Workshop

 Participated in 80+ workshops covering diverse topics such as "Soft_Computing by Soft Sets", "Awareness on Revised NAAC Norms and Procedures", "Current Tenors in Graph Theory", "Technology & Description of Statistical Models in Math Education , Computing Technologies and Mathematical Sciences, "Application of Statistical Models in agricultural Sciences

Participation in Orientation / Refresher Course/ Short term course

- Short term course on Education Technology organised by UGC Malaviya Mission Teaching Training Center, 2024.
- 112 th Orientation Programme -2016 conducted by the UGC-Human resource Development centre, Bharathiar University, Coimbatore
- Short term Training Programme in Matlab- Statistics and Data Science -2020
- Short term Training Programme in Matlab and Mathematica for Scientific Research- 2020
- Refresher Course in Mathematics & Statistics ,UGC Human Resource Development Centre, Bharathiar University- 2021
- Refresher Course in Mathematics ,UGC- Human Resource Development Centre, University of Allahabad 2022

Participation in Faculty Development Programme

 Participated in 40 + Faculty Development Programs (FDPs) on various topics, including "Research Perspectives in Mathematics and its Applications", "National Education Policy 2020 - Challenges in implementation in Higher Education", "e - filing of Income Returns", Redefining Education through Gamification, Managing Online classes and co - creating MOOCS", "Fuzzy mathematics and its Applications"

Conference/Seminar/WorkshopOrganized

• Organized various conferences, workshops and seminars focused on Mathematical Analysis in computational biology and data science, Operation Research using TORA software, Statics and Dynamics with GNU- Fisica Lab

Grants

• Funded by GRG Trust. Topic: An Expert System design to diagnose coronary artery disease using soft sets.

Membership in Professional Bodies

| Name of the Professional Body | Nature of membership | |
|---|----------------------|--|
| Indian Science Congress Association | Life Member | |
| Teaching and Education Research Association | Life Member | |

Awards/Honors

- Appreciation award in 2024, Lions Club of Coimbatore
- Appreciation Award in 2024, Nirmala College for Women
- Best Researcher award in 2019 by Indian Academic Researchers Association
- Best Department award in 2017 by PSGRKCW.
- Best faculty Coordinator Award in 2014 by Indian RedCross Society, Coimbatore.

Indexing

• Published high-quality research articles indexed in prestigious databases such as Scopus, Web of Science, and Elsevier, contributing significantly to the academic community.

Contribution

- YRC Coordinator
- Intercollegiate Coordinator
- Nodal Officer ERP Bharathiar University
- Co ordinator ,DBT Star College
- Admission Co ordinator
- Committee Member NAAC
- Alumni Executive Member
- Committee Member, College Website
- Co ordinator, Fine Arts Association
- ISO Internal Auditor