

Dr. K. DHANALAKSHMI

Dean of Academic Affairs

Associate Professor & Head

Theivanai Ammal College for Women (Autonomous)

Villupuram

E-mail : ksdhanalakshmi@gmail.com

Mobile:9795025272

ACADEMICS:

| COURSE | INSITITUTE | UNIVERSITY | YEAR OF COMPLETION | PERCENTAGE |
|---|---|-----------------------------|-------------------------------|-------------------|
| Ph.D (Geometric Function Theory) | University College of Engineering, Villupuram. | Anna University | 2018 | NA |
| M.Phil., (Mathematics) | Annamalai University-DDE, Chidambaram | Annamalai University | 2009 | 62 |
| M.sc., (Mathematics) | Viveganandha College of Arts and Science for Women, Thiruchencode | Periyar University | 2005 | 75 |
| B.Sc., (Mathematics) | Dhanalakshmi Srinivasan College of Arts and Science, Perambalur | Bharadhidasan University | 2003 | 74 |

EXPERIENCE:

| DESIGNATION | COLLEGE | EXPERIENCE |
|----------------------------|---|--|
| Dean of Academic Affairs | TheivanaiAmmal College for Women (Autonomous), Villupuram | May 2022 to till date |
| Associate Professor | TheivanaiAmmal College for Women (Autonomous), Villupuram | August 2022 to till date |
| Assistant Professor | TheivanaiAmmal College for Women (Autonomous), Villupuram | July 2019 to August 2022 |
| Visiting Faculty | University College of Engineering, Villupuram | August – 2018 to June 2019 |
| Senior Assistant Professor | IFET College Of Engineering, Villupuram | March- 2013 to May-2016 (3 Years 3 Months) |
| Assistant Professor | IFET College Of Engineering, Villupuram | June-2009 toFebruary-2013 (3 Years 8 Months) |
| Lecturer | Srinivasan Engineering College,Perambalur | September-2006 to May-2009 (2 Years and 8 Months) |

SUBJECTS TAUGHT

Engineering Mathematics - I, Engineering Mathematics – II, Transform and Partial Differential Equations, Probability and Random Processes, Numerical Methods, Ordinary Differential Equations, Stochastic Processes, Real Analysis, Complex Analysis.

PAPERS PRESENTED:

- **“Initial Maclaurin Co-Efficients and Fekete SzegoEstimation for Bi Univalent Function of Order λ ”** in International Conference on Analysis and Number Theory – 2022 organized by Ayya Nadar Janaki Ammal College,Madurai.
- **“Fekete-Szego” inequality for certain classes of analytic functions associated with Srivastava-Attiya integral operator”** in ICMAA-2014 at University College of Engineering, Villupuram.
- **“On third order Hankel determinant for some special class of analytic functions related with generalized Sakaguchi functions”** in ICMAA-2016 at IIT, Roorkee.

- **“Coefficient estimates for a class of spirallike function in the space of sigmoid function”** in NCETMS at S.A Engineering College, Chennai.
- **“Certain aspects of the harmonic functions with respect to symmetric points”** in ICCCE-2016 at University College of Engineering, Villupuram.
- **“Inclusion relations for Orthogonal polynomial characterized by Conical Domains”** in NCMSFP-2017 at University College of Engineering, Villupuram.
- **“Certain subclasses of bi-univalent functions involving q-derivative Operator”** in ICCIEEE-2018 at Idhaya Engineering College for Women, Chinnasalem.

BOOK PUBLISHED:

- Published a book **“ Problems and Solutions in Numerical Methods”** .

PAPERS PUBLISHED:

Papers in Scopus Indexed journals

1. **Dhanalakshmi K**, Kavitha D and A.Anbukkarasi Coefficient Estimates for Bi-Univalent Functions in Connection with (P,Q) Chebyshev Polynomial, Journal of Mathematical and Computational Science, 2021, No.6, 8422-8429.
2. **Dhanalakshmi K** and Kavitha D, Certain Subclasses Of Bi-Univalent Functions Associated With Horadam Polynomials, International Journal of Applied Mathematics, vol 34, 2021, 77-90.
3. Kavitha D, **Dhanalakshmi K** and Arulmozhi N, Fekete szegő properties for the class of mocanu functions associated with q-ruscheweyh operator, Journal of Mathematical and Computational Science, 2021, 11(1), pp. 603–613
4. Kavitha D and **Dhanalakshmi K**, Coefficient Estimates For Certain Subclasses Of Analytic Functions Associated With Horadam Polynomial, Advances in Mathematics: Scientific Journal, vol 9, 2020, 1-9.
5. **Dhanalakshmi K** and Kavitha D , Subclasses of Analytic Functions with Respect to Symmetric and Conjugate Points Bounded by Conical Domain, Advances in Mathematics: Scientific Journal, vol 9, 2020, 394-404.
6. **Dhanalakshmi K** and Kavitha D, Fekete-Szegő inequality for a subclass involving the generalized K Mittag-Leffler functions, Vol 83, TEST Engineering and Management, March/April 2020.

7. Ramachandran C, **Dhanalakshmi K** and Vanitha L, Certain Aspects of Univalent Function with Negative Coefficients Defined by Bessel Function, Brazilian Archives Of Biology And Technology, vol 59, 2016, pp 1-14.
8. Ramachandran C, **Dhanalakshmi K** and Vanitha L, Fekete-Szegő Inequality for Certain Classes of Analytic Functions Associated with Srivastava-Attiya Integral Operator, Applied Mathematical Sciences, vol 9, 2015, no 68, pp 3357 – 3369.

Papers in International Journals

1. **Dhanalakshmi K**, Kavitha D and Anitha K, Toeplitz Determinant For Error Starlike & Error Convex Function, Mathematics and Statistics Vol. 11(2), pp. 345 – 352, 2023
2. **Dhanalakshmi K**, Kavitha D and P Manikandan, A new subclass of bi-univalent functions associated with q -Chebyshev Polynomial, Int. J. Nonlinear Anal. Appl. 1-8, 2022.
3. **Dhanalakshmi K** and Kavitha D, Studies on Coefficient Estimates and Fekete-Szegő Problem for a Class of Bi-Univalent Functions Associated With (p, q) -Chebyshev Polynomial, Communications in Mathematics and Applications, Vol. 12, No. 3, 691–697, 2021.
4. R. Keerthika, K. Pavithra, S. Pooja, K. Priya, **Dhanalakshmi K**, Analysis in Algorithms of Spanning Tree to Reduce the Distance Between the Cable, Vidyabharati International Interdisciplinary Research Journal (Special Issue), Oct – 2021.
5. Gayathri. D and **Dhanalakshmi K**, Coefficient Inequalities of q -starlike and q -convex Functions Defined by $-$ Derivative, Journal of Xidian University, vol 14, Issue 5, 2020, 1796-1800.
6. **Dhanalakshmi K** and Kavitha D, Certain Coefficient Estimates for a New Class of Analytic Function Involving q - Derivative Operator, Journal of Xi'an University of Architecture & Technology Vol XII, Issue IV, 2020, 2407-2410.
7. **Dhanalakshmi K** and Kavitha D, Certain bounds for a subclass of analytic functions of reciprocal order α , Journal of Xidian University, vol 4 ,2020, 123-130.
8. **Dhanalakshmi K** and Kavitha D, Certain aspects of the harmonic functions with respect to symmetric points, Science, Technology and Development Multidisciplinary Journal, Special Issue, 2020, 1-6.
9. Gomathy. D and **Dhanalakshmi K**, The Fekete-Szegő Inequality for Certain Analytic Functions of Starlike Function of Order $\alpha/2$, Science, Technology and Development Multidisciplinary Journal, vol IX, 2020, 391-395.

10. Gayathri .D and **Dhanalakshmi K**, The Fekete-Szegő Inequality for Certain Analytic Functions of Convex Function of Order $\alpha/2$, Science, Technology and Development Multidisciplinary Journal, vol IX, 2020, 167-170.
11. Ramachandran C, Vanitha. L, **Dhanalakshmi K**, On third order Hankel Determinant for some special class of analytic functions related with generalized sakaguchi functions, International journal of Mathematical and its Applications, 6(4), 2018, 163-173.
12. Ramachandran C, **Dhanalakshmi K**, The Fekete-Szegő Problem for a Subclass of Analytic Functions related to Sigmoid Function, International Journal of Pure and Applied Mathematics, vol 113, 2017.
13. Ramachandran C, **Dhanalakshmi K**, Coefficient Estimates for a Class of Spirallike Function in the space of Sigmoid Function, Global Journal of Pure and Applied Mathematics, vol 13, 2017, no1, pp 13-19.
14. Ramachandran C, **Dhanalakshmi K**, and Vanitha L, Hankel Determinant for a subclass of Analytic Functions Associated with Error Functions bounded by Conical regions, International Journal of Mathematical Analysis, vol 11, 2017, no 12, pp 571 – 581.
15. Ramachandran C, **Dhanalakshmi K**, Fekete-Szegő inequality for subclasses of analytic functions bounded by Chebyshev polynomial, Global Journal of Pure and Applied Mathematics, vol 13, 2017, no 9, pp 4953-4958.
16. Ramachandran C, **Dhanalakshmi K**, An approach of Generalized Meixner-Pollaczek polynomials for analytic functions bounded by Conical domains, International Journal of Pure and Applied Mathematics, vol 116, 2017, no 4, pp 949-958.

Papers in National Journals

1. **K.Dhanalakshmi** and A.Hajira Banu, Fekete-Szegő, Inequality for Analytic Functions Using a Starlike Functions Associated with Sine Function, Journal of the Maharaja Sayajirao University of Baroda, Vol(55), no 1, 2020-2021.
2. **K.Dhanalakshmi** and S.Senthamizh Meera , Fekete-Szegő inequality for Certain Classes of analytic functions Subordinate to Exponential Function, Journal of the Maharaja Sayajirao University of Baroda, Vol(55), no 1, 2020- 2021.
3. **K.Dhanalakshmi** and B.Mistika Flami, To Determine the Shortest Path from the Google Map using Graph Theory, Journal of the Maharaja Sayajirao University of Baroda, Vol(55), no 1, 2020- 2021.
4. **K.Dhanalakshmi** and M.Mounika, Fekete-Szegő problem for certain class of analytic functions subordinate to chebyshev polynomials, Journal of the Maharaja Sayajirao University of Baroda, Vol(55), no 1, 2020- 2021.

5. **K.Dhanalakshmi** and V.Rajapriya, Fekete-Szego Inequality for a Subclass of Analytic Functions Associated with Exponential Function, Journal of the Maharaja Sayajirao University of Baroda, Vol(55), no 1, 2020- 2021.
6. **K.Dhanalakshmi** and V.Subasri, Initial bounds for Certain classes of Univalent Functions bounded by Chebyshev Polynomials, Journal of the Maharaja Sayajirao University of Baroda, Vol(55), no 1, 2020- 2021.

WEBINARS

- Participated in International **Webinar** on "**Plagiarism - Importance, Consequence and How to avoid**" Organized by Theivanai Ammal College for Women (Autonomous) on 08.03.2023.
- Participated in the **Webinar** on "**Nonuniformly elliptic problems**" Organized by Springer Nature Group, Germany, 19th March, 2021.
- Participated in the **Webinar** on "**Mathematical Modeling Using Maple**" Conducted by Coimbatore Institute of Technology, Coimbatore, 27th November, 2020.
- Participated in the **Webinar** on "**National Education Policy- 2020**" Conducted by Janta College, Bakewar, Etawah (U.P.), 20th November, 2020.
- Participated in **Webinar** on "**Numerical Solution Navier Stokes equation in Two-Dimensional flow in Square Cavity**" Conducted by Theivanai Ammal College for Women (Autonomous), Villupuram, 21st August, 2020.
- Participated in the **Webinar** on "**Teaching and Learning College Level Mathematics With ICT Tools**" Conducted by Sri Malolan College of Arts And Science, Madurandakam, 28th July, 2020.
- Participated in the **Webinar** on "**Monte Carlo Simultaneous with Microsoft Excel and Solver**" Conducted by Keshav Memorial Institute of Commerce and Science, Hyderabad, 22nd July, 2020.
- Participated in the **Webinar** on "**Mathematical Models in Applied Sciences**" Conducted by PSG College of Technology, Coimbatore, 21st July 2020.
- Participated in the **Webinar** on "**Recent Trends in Mathematics**" Conducted by Govt.Arts. College, Udhagamandalam, 10th & 11th July, 2020.
- Participated in the **Webinar** on "**AI and the New Normal in the World**" Conducted by Sri AIMs School of Business, Bangalore, 26th June, 2020.

- Participated in the **Webinar on “New Extorial Function & Its Application in Fractional Calculus”** Conducted by Govt. Arts College for Women, Salem, 24th June, 2020.
- Participated in the **Webinar on “New Skills to Adopt during Digital Era”** Conducted by Audi Sankara College of Engineering and Technology, Gudur, Andhra Pradesh, 19th June, 2020.
- Participated in the **Webinar on “Emerging Trends in Graph Theory”** Conducted by Sacred Heart College (Autonomous), Tirupattur, 14th to 16th June, 2020.
- Participated in the **Webinar on “Innovation Process and Challenges of Fuzz Modelling”** Conducted by KunthavaiNaachiyaar Government Arts College for Women (Autonomous), Kumbakonam, 4th June, 2020.
- Participated in the **Webinar on “Challenges of Higher Education: E-Learning during COVID - 19”** Conducted by National college, Thiruchirappali, 23rd May, 2020.

EDITORIAL MEMBER & REVIEWER

Editorial Member in Pure and Applied Mathematics Journal
and
Active Reviewer in,

1. International Journal of Engineering Research & Technology
2. Shanlax International Journals
3. Advances in Science, Technology and Engineering Systems Journal
4. International Journal of Scientific Development and Research
5. Science Frontier Research Journal

LIFETIME MEMBERSHIP:

- Indian Mathematical Society.
- Indian Society for Technical Education.

WORKSHOP AND SYMPOSIUM:

- Attended 7 days program on “Transforms and Partial Differential Equation” conducted by University College of Engineering, Villupuram.
- Attended 7 days program on “National Workshop on Computational Mathematics” conducted by Anna University, Chennai.
- Attended one day Workshop on “Research Methodology” conducted by Anna University, Chennai.

- Attended one day “MATLAB workshop for Engineering Applications” conducted by VIT, Chennai.
- Attended one day Workshop on “Preparation of Technical Articles & Research Proposals” conducted by University College of Engineering, Villupuram.
- Attended one day Symposium on “Geometric Function Theory” conducted by Indian Statistical Institute.
- Attended one day Symposium on "Geometric Function Theory and Special Functions" conducted by Indian Statistical Institute.

CHAired SESSIONS

- Acted as **Resource person** in Two Days Workshop on "**Research Methodology and Technical Writing using LaTeX**" on 23.03.2023 & 24.03.2023 by Nadar Saraswathi College of Arts & Science, Theni.
- Acted as **Resource person** in National level webinar on 'World of PI' conducted on the occasion of 'PI DAY' on 14.03. 2023 by **SST College of Arts and Commerce, Mumbai.**
- Acted as **Resource person** in **Shree Raghavendra Arts and Science College** for State level Workshop on Latex on 19.05.2022
- Acted as **Resource person** for the Webinar Predatory/Fake Journal Identification (An Overview) Organized by **RAAK College of Engineering & Technology** on 28.06.2021.

AWARDS AND ACHIEVEMENTS:

- Completed **LaTeX Training** is offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India.
- Organized National Commission for Women, New Delhi Sponsored webinar on “Capacity Building and Personality Development Programme” on 08.11.2021.
- Acted as a reviewer for ICCCEG 2021 (Virtual Mode) held at the University of Greenwich, London, United Kingdom.
- Acted as an Executive Member for the 2nd Universal Conference on "Multidisciplinary Research & Innovation" and PERFICIO Awards-2021 Organized by DHS Foundation, New Delhi.

- Delivered a Lecture in Faculty Development Training Program on "MA6453 – Probability and Queueing Theory" conducted by IFET College of Engineering, Villupuram.
- Awarded for producing above 95% result in Mathematics-I, Mathematics-II, and Numerical Methods in Anna University Exams.
- Awarded for producing 100% result in Applied Mathematics for Electronic Engineers and Mathematics-II in Anna University Exams.

QUALITY IMPROVEMENT PROGRAMME:

- Attended Faculty Development Program on “Effective Teaching Methodology” held at IFET College of Engineering, Villupuram.
- Participated in the “Effective Teaching Using PPT” program conducted by IFET College of Engineering, Villupuram.
- Participated in a Faculty development program on “Preparation of Proposals for Research Projects” held at IFET College of Engineering, Villupuram.
- Participated in a Staff development program on “Kindling the Teacher in You” held at IFET College of Engineering, Villupuram.