

## PROFILE

**Name:** Dr.K.Nirmala,  
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### Educational Qualification

Qualification	Discipline	College/University	Year of passing
Ph.D (Part Time)	Mathematics- (Specialization- Fluid dynamics)	Bharathiyar University, Coimbatore.	2019 Highly Recommended
M.I.S.T.E	ISTE	AICTE	Life Member from 2005
B.Ed. (Regular)	Mathematics	Alagappa University, Karaikudi.	1998
M.Phil (Regular)	Mathematics	Madurai Kamaraj University, Madurai.	1997
M.Sc.	Mathematics	S.F.R.College for Women, Sivakasi	1996
B.Sc.	Mathematics	S.F.R.College for Women, Sivakasi	1994

### Teaching Experience in other Colleges: 16.8 years

S.No.	Name of the College/University	Designation/Responsibility	No.of Years
1.	Kalasalingam Academy of Research Education, Deemed to be University, Srivilliputhur.	Assistant Professor III& HOD	2 Yrs
2.	Dhirajlal Gandhi College of	Senior Asst.Prof.& HOD	3 Yrs 3 months

	Technology, Salem.		
3.	Mahendra Engineering College For Women, Namakkal.	Professor & HOD	10 months
4.	Paavai College of Engineering, Namakkal.	Asst.Prof.& HOD	4Yrs 3 months
5.	PGP Engineering College, Namakkal.	Senior Lecturer & HOD	7 months
6.	Pandian Saraswathi Yadav Engineering College, Sivagangai Dt.	Lecturer & HOD	4Yrs 9 months
7.	Central ElectroChemical Research Institute, Karaikudi.(B.Tech.- Chemical and ElectroChemical Engineering)	Post Graduate Fellow	1Yr
<b>Total</b>			<b>16Yrs 8 months</b>

### Research Publication in International / National Journal

- [1]. R. Muthuraj, S.Srinivas and **K.Nirmala**, MHD flow of a couple-stress fluid and a Viscous fluid in a vertical wavy porous space with travelling thermal waves and temperature dependent heat source, **Heat Transfer – Asian Research (Wiley Publication-SCOPUS)**, **43(2)**, 2014, **134-147**.
- [2]. **K. Nirmala**, R.Muthuraj, S.Srinivas and D.Lourdu Immaculate, Combined effects of Hall Current, Wall Slip, Viscous Dissipation and Soret Effect on MHD Jeffery Fluid Flow in a Vertical channel with Peristalsis, **JP journal of Heat and mass transfer (SCOPUS)**, **Volume 12**, 2015, **131-165**.
- [3]. R.Muthuraj, **K. Nirmala** and S.Srinivas, Influences of chemical reaction, wall properties on MHD Peristaltic transport of a Dusty Fluid with Heat and mass transfer, **Alexandria Engineering Journal – Elsevier (SCOPUS)**, **Volume 55**, 2016, **597-611**.
- [4]. **K.Nirmala**, B. Manimegalai and L. Rajendran, Steady-State Substrate and Product Concentrations for Non-Michaelis-Menten Kinetics in an Amperometric Biosensor Hyperbolic Function and Pade Approximants Method, **International Journal of Electrochemical Science (SCI)**, **15(2020) 5682-5697**.
- [5]. K Prabhavathi , **K.Nirmala**, P.Balamurugan & R.Senthil Kumar, Approximate Solutions of Chemical Reaction-Diffusion Brusselator System Using New Iterative Method, **Solid State Technology (SCOPUS)**, **63 (2020), 2, 695-701**.

- [6]. **K. Nirmala**, M. Chitra Devi and L. Rajendran, “Analysis of Steady-State Behavior of EC’ Catalytic Mechanism at Rotating Disk Electrode: Taylor Series Approach” **European Journal of Molecular & Clinical Medicine (SCOPUS)**, 7 (2020), 11, 440-447.
- [7]. J. Visuvasam, **K. Nirmala**, A. Meena & L. Rajendran, “Approximate Solution of Non-linear Reaction-Diffusion in a thin membrane: Taylor Series Method” **Turkish Journal of Computer and Mathematics Education (SCOPUS)**, 12 (2021), 586-594.

**Paper Presentation in the Conference**

- [1] Presented a paper titled “**MHD convective flow Transport of a Carreau fluid in an inclined channel with peristalsis and chemical reaction**” in an **International Conference on “Mathematical Modeling and Computational Methods in Science and Engineering”** held from 20<sup>th</sup> to 22<sup>nd</sup> February, 2017 organized by **Ramanujan Centre for Higher Mathematics & Department of Mathematics, Alagappa University, Karaikudi.**
- [2].Presented a paper titled “**MHD peristaltic transport of a Carreau fluid in an inclined channel in the presence of inclined magnetic field with chemical reaction**” in the **National Conference on “ Bridging Innovative Trends in Pure and Applied Mathematics”** held on 15<sup>th</sup>& 16<sup>th</sup> July 2016 organized by Department of Mathematics, **Bannari Amman Institute of Technology, Sathyamangalam, Erode.**
- [3]. Presented a paper titled “**Influences of chemical reaction, wall properties on MHD Peristaltic transport of a Dusty Fluid with Heat and mass transfer**” in the **National Conference on “Mathematics and its applications”** held on 22<sup>nd</sup> & 23<sup>rd</sup> December, 2015 organized by Department of Mathematics, **Sri Venkateswara University, Tirupathi, Andhra Pradesh.**
- [4]. Presented a paper titled “**Combined effects of Hall Current and Soret Effect on MHD Jeffery Fluid Flow in a Vertical channel with peristalsis**” in the **National Conference on “ Modern aspects of Theoretical and Applied Mathematics”** held on 9<sup>th</sup> & 10<sup>th</sup> April 2015 organized by Department of Mathematics, **PSNA college of Engineering and Technology, Dindigul.**

<b>Participation in the Seminar / Symposium / Workshop / Training/ Webinar</b>
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- [1]. Participated in the One day Seminar on “**Globalization and Employment Opportunities for Engineers**” Co-Sponsored by **Indian Society for Technical Education, New Delhi** held on November 8, 2005 at **Pandian Saraswathi Yadav Engineering College, Sivagangai**.
- [2]. Participated in the Symposium on “**Recent Advances in Mathematical Modeling in Engineering**” Sponsored by **TNSCST, Chennai** held during September 14<sup>th</sup> and 15<sup>th</sup>, 2007 at Department of Mathematics, **Thiagarajar College of Engineering, Madurai**.
- [3]. Participated in the Two day Faculty Orientation Programme conducted by **PGP Educational Institutions** held on 25<sup>th</sup> and 26<sup>th</sup> July, 2008.
- [4]. Participated in the One day Seminar on “**Application of Mathematics in Engineering Disciplines**” held at **Bannari Amman Institute of Technology, Sathyamangalam** on 21<sup>st</sup> October, 2010.
- [5]. Participated in the One day Workshop on “**Smart Ph.D planning**” Sponsored by **Computer Society of India** and conducted by **Paavai Engineering College, Namakkal** held on 19<sup>th</sup> March, 2012.
- [6]. Participated in the Pedagogical Training Programme on “**Effective Teaching Methodologies**” organized by **Dhirajlal Gandhi College of Technology, Salem** held on 6<sup>th</sup> November, 2014.
- [7]. Participated in the One day **Webinar** on “**Distance Learning with Cloud-based Tools from MathWorks**” on 3<sup>rd</sup> April, 2020 Organized by **IUCEE**.
- [8]. Participated in the One day **Webinar** on “**IFEES GEDC IUCEE Webinar: Problem-Based Learning and Mathematics at University**” on 20<sup>th</sup> May, 2020 Organized by **IUCEE**.

- [9]. Participated in the One day **Webinar** on "**IUCEE Virtual Academy: Effective Conduction of Online Lectures**" on **21<sup>st</sup> May, 2020** Organized by **IUCEE**.
- [10]. Participated in the One day **Webinar** on "**IUCEE Virtual Academy: "Effective Use of Online Tools"**" on **22<sup>nd</sup> May, 2020** Organized by **IUCEE**.
- [11]. Participated in the One day **Webinar** on "**IFEES GEDC IUCEE Webinar: "Engineers Make a Difference"**" on **01<sup>st</sup> July, 2020** Organized by **IUCEE**.
- [12]. Participated in the One day **Webinar** on "**IFEES GEDC IUCEE Webinar: "Industry Academy Collaboration – Huawei ICT Academy"**" on **08<sup>th</sup> July, 2020** Organized by **IUCEE**.
- [13]. Participated in the **one week Faculty Development Programme** on "**Modern Trends in Pure and Applied Mathematics**" from **5<sup>th</sup> to 11<sup>th</sup> December, 2019** at **KARE**.
- [14]. Participated in the **one week Faculty Development Programme** on "**Probability & Statistics**" from **16<sup>th</sup> to 22<sup>nd</sup> May, 2020** at **KARE**.
- [15]. Participated in the **Three Day Kalasalingam Global Conference KGC – 2019** "**Sustainable Development**" during **December 18-20, 2019** at **KARE**.
- [16]. Participated in the One day **Webinar** on "**Centrality Measure in Graph Theory**" on **May 23, 2020** at **KARE**.
- [17]. Participated in the One day **Webinar** on "**Groups and Rings**" on **June 06, 2020** at **KARE**.
- [18]. Participated in the One day **Webinar** on "**Fourier & Wavelet Transforms**" on **10<sup>th</sup> June, 2020** at **KARE**.
- [19]. Participated in the Two Day **International Conference** on "**Materials and Mathematical Sciences**" (**ICMMS 2020**) on **19<sup>th</sup> & 20<sup>th</sup> June, 2020**.

### Chaired Technical Session

- [1]. Two Day International Conference on “**Materials and Mathematical Sciences**” (ICMMS 2020) on 19<sup>th</sup> & 20<sup>th</sup> June, 2020 at Kalasalingam Academy of Research and Education.

### Achievements

- [1]. Got cash award of Rs. 3000 for published **Engineering Mathematics** for I<sup>st</sup> year B.E./B.Tech.in the year **2006 (Annual Pattern)** at **Pandian Saraswathi Yadav Engineering College**, Sivaganga Dt.
- [2]. Got appreciation certificate with **two gold coins for an efforts to produce 98% and 96.29%** results in the Anna University Examinations held during the academic year 2008- 2009, Semester-II in the **Engineering Mathematics-II** subject at **Paavai College of Engineering**.
- [3]. Got **Silver Coins** for various administration activities in the **Staff Day Celebration** at **DGCT**.
- [4]. **Books Published**
- (i) **Engineering Mathematics** for I<sup>st</sup> year B.E./B.Tech.in the year **2006 (Annual Pattern)**, HANA Publications, Madurai at **Pandian Saraswathi Yadav Engineering College**.
- (ii) **Mathematics-I & II** in the year **2013** (Jai Tech. Publications, Chennai) and **Mathematics-I & II** in the year **2014** (Global publishers, Chennai) at **DGCT**.
- [5]. Reviewer for “**Advances in Science, Technology and Engineering Systems Journal**” from **June 2020**.
- [6]. Publication member in **SK Research Group of Companies**.  
Membership Number: **2021SKRGC1034** .

### Professional Membership

- [1]. Life Member in **INDIAN SOCIETY FOR TECHNICAL EDUCATION, NEW DELHI**.

