Dr.K.Sumathi

Associate Professor and Head



Name : Dr.K. Sumathi

Designation: Associate Professor and Head

Department : Mathematics (Aided)

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

Experience: Teaching -31 Years Research: 20 Years

Field of specialization: Applied Mathematics – Fluid dynamics – Stability theory

Email : ksumathi@psgrkcw.ac.in

Academic Qualifications

College / University	Degree Obtained	Year of Passing	Grades / Marked Obtained
Bharathiar University	Ph.D	1995	Highly Commended
Bharathiar University	M.Phil	1988	Outstanding
Bharathiar University	M.Sc	1987	Outstanding
Madurai Kamaraj University	PGDCA	1995	Outstanding

Additional Qualifications

CoursEra Courses completed - 100

Research Guidance

Completed: M.Phil -40; Ph.D. - 11

Research Publications (Indexed)

60+ List is available in the following link

 $\frac{https://scholar.google.com/citations?view\ op=list\ works\&hl=en\&hl=en\&user=S2Rk5HEAAAA}{J\&pagesize=80}$

Science Communications

13

Book Published - Four

❖ Engineering Mathematics I Sri Vignesh Publications (2011) (ISBN No. 13-978 -93-80716-11-4)

Engineering Mathematics II Sri Vignesh Publications (2013) (ISBN No. 978-93-80716-46-6)

❖ Engineering Mathematics III Sri Vignesh Publications (2013) (ISBN No. 978-93-80716-

❖ Statistics with Excel Blue Hill Publishers (2019) (ISBN No. - 978-81-939936-0-6)

Hand books/ SOP/ Lab manuals Published - 15

Acted as a Resource Person – 150 + Invited Talks

Editorial Board member in journals

- Advances in Applied Research
- Reflections des era Journal of Mathematical sciences

Reviewer in Journals

Around 10 Journals

Grants Received

S.No.	Date	Event	No. of
			Beneficiaries
1	21.12.2011	Science Academies' Lecture workshop on Differential	200
	22.12.2011	Equations and their applications	
	23.12.2011	Amount Sanctioned Rs. 1 34 000/-	
2	14.5.2012	INSPIRE Internship Programme	
	to	Funded by DST, India,	150
	18.5.2012	Amount Sanctioned Rs. 9 75 000/-	
3	27.8.2012	Science Academies' Refresher Course on Theoretical and	32
	То	Computational Fluid Dynamics	
	8.9.2012	Amount Sanctioned Rs. 4 95 050/-	
4	02.01.2014	Science Academies' Lecture workshop on <i>Recent Trends in</i>	190
	to	Functional Analysis	
	04.04.2014	Amount Sanctioned Rs. 1 69 000/-	
5	22.12.2014	Science Academies' Lecture workshop on <i>Fluid dynamics</i>	210
	to	and its applications	
	24.12.2014	Amount Sanctioned Rs. 1 57 000/-	
6	7.1.2015	NBHM Sponsored <i>International conference on</i>	140
	То	Applications of mathematics in Engineering, Science and	
	9.1.2015	technology	
		Funded by NBHM, Department of Atomic Energy, Mumbai	
		Amount Sanctioned Rs. 1 30 000/-	
7	22.12.2015	Science Academies' Lecture workshop on <i>Special functions</i>	137
	&	and their applications	
	23.12.2015	Amount Sanctioned Rs. 1 15 000/-	
8	21.12.2016-	Science Academies' Lecture workshop on Mathematical	233
	23.12.2016	modelling	
		Amount Sanctioned Rs. 1 63 000/-	
9	11.09.2017	Science Academies' Refresher Couurse on <i>Differential</i>	32
	То	equations and its applications	
	23.09.2017	Amount Sanctioned Rs. 7 36 200/-	

Institutional projects co-ordinated

UGC Paramarsh Mentoring Scheme Amount Sanctioned Rs. 30 Lakhs – September 2019 – September 2021

UGC STRIDE Developing Digital pedagogies – Amount Sanctioned Rs. 59.1 Lakhs – January 2020 – February 2023

Minor Projects Completed

- UGC Minor project entitled Stability of flow through porous medium 2014 -15
 Amount received Rs.80000/-
- 2. GRG Trust Book grant Business Statistics with Excel 2017-18

Amount received – Rs. 20000/-

Membership in Professional Bodies

Life member in

- ➤ Indian Mathematical Society
- ➤ Indian Society of Theoretical and applied mechanics
- ➤ Indian Chapter of ICTP

Awards/Honors

- ❖ *DG NCC Plaque of Honour* for the year 2001-2002 for being selected as the best all round NCC Officer
- **❖** Awarded CSIR UGC (Net) Junior Research Fellowship
- ❖ Best Faculty Award for the year 2011 Cognizant Technologies Ltd & PSGR Krishnammal College Women
- ❖ Best Faculty Award for the year 2012 PSGR Krishnammal College Women
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- ❖ Best Faculty Award for the year 2014 PSGR Krishnammal College Women
- ❖ Best Faculty Award for the year 2015 PSGR Krishnammal College Women
- ❖ Best Faculty Award for the year 2016 Cognizant Technologies Ltd & PSGR Krishnammal College Women
- **❖** Certificate of Excellence 2021 Internshala University
- **❖ Teaching Excellence Award** − **2025** − Lions' Club

Received grants to attend the following

- III SERC School on Geophysical Fluid dynamics at IITM., Pune, During 21.5.1996 22.06.1996 – Supported by Department of Science and Technology, Government of India, New Delhi
- Intel Teach to the Future Master Trainer Course Supported by Microsoft – 15.02.2002 – 14.03.2002 (An international program conducted in 20 cities of 20 countries)
- 3. ICWM 2010 (International conference of Women Mathematicians) at University of Hyderabad 17.08.2010 18.08.2010 Supported by NBHM, Department of Atomic energy, Mumbai
- 4. 24th Midyear meeting of the academy at Bangalore during 05.07.2013 06.07.2013 Supported by Indian Academy of Sciences, Bengaluru

- 5. 25th Midyear meeting of the academy at Bangalore during 04.07.2013 05.07.2013 Supported by Indian Academy of Sciences, Bengaluru
- 6. 80th Annual meeting of the academy at Chennai during November 7 -9, 2014– Supported by Indian Academy of Sciences, Bengaluru
- 7. 79^{th} Annual meeting of the academy at Chandigarh during November 13 15, 2013. (Not availed due to personal reasons)
- 8. Summer fellowship to work at IISc, Bangalore with Dr.PL Sachdev during 2002 2003 Supported by Indian Academy of sciences, Bangalore (Not availed due to personal reasons)

Contribution to Department/College activities

Department Level

S.No.	Activity	No. of years	Particulars
1	Mathematics Association Staff Advisor	5	1998-2000, 2007-09, 2011-12
2	Class Advisor/ Attendance In Charge	16	All the years except 1998-99, 2001- 02,2005-07
3	Placement In Charge	2	2007-08, 2011-12
4	Eco Watch Club In Charge	2	2007-08, 2011 -12
5	Industrial Visit Coordinator/ Escort	9	1994-96, 2007-09, 2010-11, 2013-14, 2014-15
6	Library In Charge	5	1995-97, 2001-02, 2007-08, 2010-11
7	Time Table In Charge	11	1996-99, 2002-03, 2007-08,2009-15,
	CMS In Charge	7	2008- 2009 to till date
8	Admission Duty U G	8	1995-96,1997-98, 1999-2000, 2002-03, 2005-06,2008-09, 2011 -12, 2014-15
	M. Phil.	6	2009-10 to till date
9	IEDC Duties	3	2010-13
10	Preparation of NAAC, Academic Audit, M. Phil. /Ph.D reports		Whenever need arises
11	PTA Meeting		Periodically arranged
12	Alumni meeting		Periodically arranged
13	Gandhian Studies Centre Students' research project		2007-08,2008-09

College Level

NCC Care taker

 $1999 - 2000 \ NCC \ Officer \ 2000 - 2009$

Important Achievements

- ➤ Increased the cadet in take from 100 to 150 in the year 2007 -2008.
- ➤ 6 Cadets were sent to Foreign Countries like Singapore, UK, Vietnam, Russia and Bhutan under Youth Exchange programs.

Roll of Honour

S.NO	YEAR	RDC	TSC	VSC	NIC

1.	1999-2000	3	4		5
2.	2000-2001	3	1		14
3.	2001-2002	7*	1	3	4
4.	2002-2003	4	1	3	7
5.	2003-2004	5	2	1	3
6.	2004-2005	1	3	1	4
7.	2005-2006	2	1		1
8.	2006-2007	4	1	1	2
9.	2007-2008	2	2	2	6

^{*} State Record of Maximum number of Cadets attending Republic Day parade from the same institution.

Karishma 2008 Inter Collegiate Program Co-ordinator 2008 -2009

Special Invitees: Ms. Srilekha Parthasarathy (Play back Singer) and Mr. Vijay Adhiraj (TV Anchor and Director)

Center for E-Resources Co-ordinator 2009 – till date

- Developed a database of subject materials and question banks for all the subjects.
- > Developed around 50 lectures in Video mode.

Spoken Tutorials Project of IIT, Bombay, Sponsored by Ministry of Human Resources Development, New Delhi - Coordinator

UGC SET/NET Coaching Co-ordinator 2009 -2010

Guest lectures

- ➤ Handling classes for B.Sc. Computer Science and M.Sc. Mathematics.
- ➤ Handled ACS, CA CPT Coaching classes.

Included Department of Mathematics under Book distribution scheme – NBHM Other Contributions

- ➤ ADD ON Course of Optimizing Technology Coordinator 2008-09, 2010-11,
- ➤ Research Cell member 2009 10 to till date
- Consultancy Cell member
- Organized Interface meeting for the Department
- ➤ Participated in the Basic Science promotion events organized by the college
- > Promotion of education fairs
- > BSR Grant administration

ISO 9001: 2000 Internal Quality Auditor since 2007 -2008

IQAC co –ordinator from 2017-18 to 2019-20

^{*} Cadets Received Commendation letter from Walter Devaram, IPS, (Retd.) Director General of Police.