FACULTY PROFILE

Name	Dr.K.Rathi			
Department	Mathematics			
Qualifications	M.Sc.,PGDCA,M.Phil.,Ph.D.,			
Area of Specialization	Operations Research under Fuzzy			
	environment			
Date of Joining	12.11.2007			
(VCET)				
Date of Birth	09.01.1984			
Experience in (Years)	Teaching	15	Industry	-
Research Guideship	Recognised Super	ed Supervisor of Anna University, Chennai (ID:3070017)		
Number of Papers	International	13		
Published	Journals	13		
Number of Papers	National	10	International	01
Presented	Conferences		Conferences	
Books Published	01			
Book Chapters	02			
Grants Received:	01			
	(Received a sum	of Rs.25,000	/- as fund from Ann	a University,
	Chennai and orga	nized a sever	n days Faculty Deve	elopment and
	Training Programme on PRP from 08.12.2014 to 14.12.2014)			
Contact Details	Email: rathi.erode@gmail.com			
	Mobile	978697152	1	

LINK TO ACADEMIC IDENTITIES (ONLINE)

VIDWAN Researchers	VIDWAN-ID: 232905	https://vidwan.inflibnet.ac.in//profile/23
Profile		<u>2905</u>
PUBLONS Researcher Profile page	Web of Science Researcher ID: AAU- 5066-2020	https://publons.com/researcher/3791863/ rathi-k/
SCOPUS Researcher	SCOPUS ID:	https://www.scopus.com/authid/detail.ur
Profile page	56312647400	<u>i?authorId=56312647400</u>
ORCID Page		https://orcid.org/0000-0002-7716-8077
Google Scholar Profile	Scholar ID:	https://scholar.google.com/citations?hl=
page	C0W9r oAAAAJ	en&user=C0W9r_oAAAAJ

ACADEMIC QUALIFICATIONS

S.No.	Examination passed (with main subject)	Month & Year	Marks/ Grade Class/rank	Institution/ University
1.	Ph.D., Mathematics	April 2017	Commended	Anna University, Chennai
2.	M.Phil., Mathematics	May 2007	First Class	Alagappa University, Karaikudi
3.	PGDCA	September 2006	First Class	Alagappa University, Karaikudi
4.	M.Sc., Mathematics	April 2006	First Class	Sri G.V.G. Visalakshi College for Women, Udumalpet Bharathiar University, CBE
5.	B.Sc., Mathematics	April 2004	First Class	Sri G.V.G. Visalakshi College for Women, Udumalpet Bharathiar University, CBE

TEACHING EXPERIENCE (15 Years as on 28.02.2022)

S.	Name of the College	Designation and	Per	boir
No.		Department	From	То
1.	Velalar College of Engineering & Technology, Erode	Professor	01.09.2020	Till Date
2.	Velalar College of Engineering & Technology, Erode	Associate Professor in Mathematics	01.07.2017	31.08.2020
3.	Velalar College of Engineering & Technology, Erode	Assistant professor (Sl.Gr.) in Mathematics	01.07.2015	30.06.2017
4.	Velalar College of Engineering & Technology, Erode	Assistant professor (Sr.Gr.) in Mathematics	01.01.2011	30.06.2015
5.	Velalar College of Engineering & Technology,Erode	Lecturer in Mathematics	12.11.2007	31.12.2010
6.	RVS College of Arts & Science, Sulur	Lecturer in Mathematics	19.06.2006	03.11.2007

RESEARCH DETAILS

FACULTY IN WHICH PH.D. AWARDED: Science and Humanities (Mathematics)

TITLE OF Ph.D. THESIS

• A study on Heptagonal Fuzzy numbers for handling numerical and linguistic uncertainties in real time applications

SUPPORT TO RESEARCH GUIDANCE

• Recognized Supervisor of Anna University, Chennai (Reference No. 3070017)

AREA OF RESEARCH

- Fuzzy number and its application
- Fuzzy Decision Making Processes
- Operations Research under Fuzzy environment.

AREA OF SPECIALIZATION

- Transforms
- Differential Equations
- Statistics and Operations Research

RESEARCH PUBLICATIONS

(a) Book Publication : 1

(b) Chapters Published in edited Books : 1

(c) Articles published in Journals : 13

(d) Papers published in Conferences : 11

DETAILS

(a) Book Publication

Title	Authors	Publisher	Year
A Textbook of	M.Eswaramurthi	Pearson India Education	
Mathematics	and K.Rathi	Services Pvt. Ltd.	2018
for Engineers	anu K.Katili	ISBN 978-93-528-6741-7	

(b) Chapters Published in edited Books

Title of the Book	Chapter Title	Authors	Publisher	Year
Energy and Power	A Mathematical approach for the selection of Renewable energy sources to progress towards Sustainable Energy	K.Rathi and S.Muruganantham	ESN Publications ISBN 978-81- 947019-5-8	2021
COVID- 19 and Its Impact	Energy and Power	D.Lakshmi, R.Zahira, K.Rathi et al.	ESN Publications ISBN 978-81- 947019-4-1	2021

(c) Articles Published in International Journals

Total number of Publications : 13 with 71 citations, h-index 5, i10-index 2

Number of Publications indexed by **Web of Science** : 2

Number of Publications indexed by **Scopus** : 4

Sl. No.	Title of Article	Journal	Volume No.	Page No.	Month & Year
1.	Absolute point algorithm for solving unbalanced fuzzy transportation problem	Transportation Management doi:10.24294/tm.v1 i2.573	vol. 1	ı	2018
2.	Application of Intuitionistic Fuzzy Soft Matrix Theory	TAGA Journal of Graphic Technology	vol. 14	pp. 389- 396	2018
3.	A New Hendecagonal Fuzzy Number for Optimization Problems	International Journal of Trend in Scientific Research and Development	vol. 1, no. 5	pp. 326- 332	2017
4.	A mathematical model for subjective evaluation of alternatives in fuzzy multi-criteria group decision making using COPRAS method	International Journal of Fuzzy Systems	vol. 19, no. 5	pp. 1290 - 1299	2016
5.	Two stage decision making approach for sensor mission assignment problem	RAIRO Operations Research	vol. 50	pp. 797- 807	2016
6.	Comparative study of arithmetic nature of heptagonal fuzzy numbers', Asian Journal of Research in Social Sciences and Humanities	Asian Journal of Research in Social Sciences and Humanities	vol.6, no.7	pp. 238- 254	2016
7.	A fuzzy approach for unequal workers-task assignment with heptagonal fuzzy numbers	International Journal on Recent and Innovation Trends in Computing and Communication	vol. 4, no. 4	pp.5 64 – 569	2016
8.	Fuzzy Row Penalty Method to solve Assignment Problems with uncertain parameters	Global Journal of Pure and Applied Mathematics	Vol.11, Issue no. 1	Pg. 39 – 44	June 2015
9.	A new approach to solve travelling salesman problem under fuzzy environment	International Journal of Current Research	vol. 7, no. 12	pp. 2412 8- 2413 1	2015
10.	Representation and ranking of fuzzy numbers with heptagonal membership function using value and ambiguity Index	Applied Mathematical Sciences	Vol. 8, Issue no. 87,	Pg. 4309 - 4321	Nov 2014

Sl. No.	Title of Article	Journal	Volume No.	Page No.	Month & Year
11.	Revised Max-Min Average Composition Method for Decision Making Using Intuitionistic Fuzzy Soft Matrix Theory	Advances in Fuzzy Systems	Vol 2014	Artic le ID 8640 74, 5 pgs	August 2014
12.	Intuitionistic Fuzzy Soft Matrix Theory In Medical Diagnosis Using Max-Min Average Composition Method	Journal of Theoretical and Applied Information Technology	Vol.67, Issue No.1,	Pg. No.1 86- 190	Sep 2014
13.	Positive Deviation Method for Decision Making using Intuitionistic Fuzzy Sets	International Journal of Computer Applications	Vol. 106, Issue no. 12	pg. no.7- 9	Nov 2014

(d) Papers Presented in Seminar/Conference

Number of Papers Presented in Conferences: 7

Number of Papers Presented in Seminars: 4 **Total Number of papers presented**: 11

- Presented a paper in International Conference on ADVANCES IN COMPUTING, CONTROL, COMMUNICATION, AUTOMATION AND STRUCTURAL ENGINEERING at Al-Ameen Engineering College, Erode on 10th and 11th April 2015.
- 2. Presented a paper in DRDO sponsored **National Conference** on Analysis and Applied Mathematics organized by Department of Mathematics, National Institute of Technology, Trichy on 27th and 28th November 20**14**.
- 3. Presented Paper in 5th **National Conference** on RECENT TRENDS IN MODERN SCIENCE AND LINGUISTICS at Velalar College of Engineering and Technology, Erode on 16th March 20**13**.
- 4. Presented Paper in 4th **National Conference** on RECENT TRENDS IN MODERN SCIENCE AND LINGUISTICS at Velalar College of Engineering and Technology, Erode on 17th March 20**12.**
- 5. Presented Paper in **National Conference** on ADVANCES IN MATHEMATICAL ANALYSIS AND APPLICATIONS at K.S.R. College of Arts and Science, Thiruchengode on 12th & 13th August 20**11**.
- 6. Presented Paper in A Two Day **National Conference** on e-LEARNING at SNMV College of Arts and Science, Coimbatore held during 8th and 9th February 20**08**.

- 7. Presented Paper in One day Regional **Seminar** on OPTIMIZATION TECHNIQUES IN ENGINEERING FIELDS at Sri Shakthi Institute of Engineering and Technology, Coimbatore held during 7th December 20**07**.
- 8. Presented Paper in A Two Day **National Conference** on RECENT TRENDS IN BIOSCIENCES (RTB-07) at Kongu Arts and Science College, Nanjanapuram, Erode held during 13th, 14th September 2007.
- 9. Presented Paper in State Level **Seminar** on MATHEMATICAL METHODS & FUZZY APPLICATIONS-2006 at Jamal Mohamed College, Tiruchy on 27th February 20**06**.
- 10. Presented Paper in **State** Level **Inter Collegiate** Competition at Rev. Jacob Memorial Christian College, Ambilikkai on 18th February 20**04**.
- 11. Presented Paper in Students' **Seminar** on MATHEMATICS AROUND THE WORLD at Sri G.V.G. Visalakshi College for Women, Udumalpet on 26th February 2004.

PARTICIPATION IN CONFERENCE/ SEMINAR/FDP/WORKSHOP

Number of Conferences Attended : 1

Number of Seminars Attended : 11

Number of FDP/STTPs Participated: 11

Number of Workshops Attended : 14

Number of Webinars Attended : 14

Total Participation: 51 (as on June 2021)

FUNDED PROGRAMMES ORGANIZED

Sl. No	Date	Event	Status as organizer	Topic / Title	Name of the funding agency	Grant (Rs.)	Status (Applied/ Granted/In Progress / Completed)
1.	08.12.14 to 14.12.14	FDTP	Co-ordinator	Anna University sponsored Seven Days FDTP on MA6451 Probability and Random Processes	Centre for Faculty Development, Anna University, Chennai-25	Rs.21,179	Grant received

PROGRAMMES ORGANIZED

S.	Title of the Program	Type of Program	Duration	Beneficiary
----	----------------------	-----------------	----------	-------------

No.				
1.	Organized an Invited talk on "Entrepreneurship in Emerging Economies"	Invited Talk	10.06.2021 (2 hours)	Students
2.	Organized a virtual lecture on "Appreciate the Scientist, but thank the Engineer" to commemorate the National Science day	Virtual Lecture	27.02.2021 (2 hours)	Students
3.	Organized a special lecture on "Sir C V Raman's contribution to Indian Science" (Through Online Mode) to commemorate the 132 nd Birth Anniversary of Sir C.V.Raman	Special Lecture	07.11.2020 (2 hours)	Students
4.	Quiz	Science Club Activity	23.02.2020, 20.02.2019	Students
5.	Paper Presentation	Science Club Activity	17.10.2019, 18.10.2019 and 22.11.2018, 23.11.2018	Students
6.	Mahatma Gandhi's 150th Birth Anniversary Celebration	Science Club Activity	12.04.2019	Students

INVITED AS RESOURCE PERSON

- Acted as Resource Person in more than 10 Webinars, Conferences, FDPs and Guest Lectures
- PeerReview Committee Member in CSIR sponsored Conferences during 2018-19.

REVIEWER IN THE JOURNALS

- Journal of Services and Operations Management, RAIRO Operations Research
- Annals of Fuzzy Mathematics and Informatics
- International Journal of Fuzzy Systems
- International Journal of Mathematics in Operational Research

EDITORIAL BOARD MEMBER

• Editorial Board Member of the journal entitled Transportation Management

AWARDS AND RECOGNITIONS RECEIVED

- Received a memento of Honour for the contribution for achieving INDIA BOOK OF RECORDS entitled Maximum Authors Contributing for a book organized by ESN Publications during January 2021.
- Honoured as **BEST TEACHER** by the management of Velalar College of Engineering and Technology, Erode on Teachers' day 2018.
- Won Cash Prize for **BEST TEACHER 2009** on the basis of Academic Performance at Velalar College of Engineering and Technology, Thindal.
- Received Proficiency prize in Mathematics for all the Semesters while pursuing B.Sc. and M.Sc. at Sri G.V.G. Visalakshi College for women from the year 2001-2006
- Received Smt. SEETHALAKSHMI ALAVANDAR MEMORIAL prize for the
 Outstanding Student of B.Sc., Mathematics at Sri G.V.G. Visalakshi College for
 women, Udumalpet in the year 2004.

POSITIONS OF RESPONSIBILITY

- Member of Research Council, VCET, Erode.
- Department R&D Coordinator, VCET
- Member of Board of Studies, Mathematics Board, VCET
- Coordinator for Criteria 3, NAAC VCET
- Coordinator for Criteria 9, NBA VCET
- Member of Administrative and Academic Audit, VCET
- Member and Coordinator of the associations "Mathematics Colloquium" and 'Science Club" at Department of Science and Humanities, VCET, Erode
- Member of Stock verification team at VCET, Erode
- Playing the role of Class Advisor and Class Mentor since inception
- Test Co-ordinator for Internal Examination of I year B.E. Courses

(K.RATHI)