

## FACULTY PROFILE

Name : Dr.S.NAGARANI  
 Designation : Assistant Professor (Selection Grade)  
 Email ID : nagarani.sh@srit.org



Area of Specialization : Fluid Dynamics, Space Time Coding & its Applications, Networks and Communications

Total Experience : Academic : 18 years  
 Industry : Nil

### Educational Qualification:

Degree	Branch / Specialization	College	University
Ph.D.,	Space Time Coding & Its Applications	Anna University, Chennai	Anna University, Chennai
M.Phil.,	Fluid Dynamics	Bharathiar University	Bharathiar University
M.Sc.,	Mathematics	Government Arts College, Coimbatore	Bharathiar University
B.Sc.,	FCS/Mathematics	Avinashilingam Deemed University, Coimbatore	Avinashilingam Deemed University, Coimbatore

### Experience Details:

S.No	Institution/Industry	Design.	Experience		Total Years & Months
			From	To	
1	Sri Ramakrishna Institute of Technology, Coimbatore.	Assistant Professor (Selection Grade)	01.02.2011	till date	5 Years 1 Month
2	Sri Ramakrishna Institute of Technology, Coimbatore.	Assistant Professor (Senior Grade)	01.08.2010	31.01.2011	6 Months
3	Sri Ramakrishna Institute of	Lecturer	01.02.2008	31.07.2010	2 Years 6 Months

	Technology, Coimbatore.	(Senior Grade)			
4	Sri Ramakrishna Institute of Technology, Coimbatore.	Lecturer	28.07.2003	31.01.2008	4 Years 6 Months
5	Sri Ramakrishna Engineering College Coimbatore.	Lecturer	05.07.2001	27.7.2003	2 Years 1 Months
6	Bannari Amman Institute of Technology, Sathy.	Lecturer	30.04.1999	23.06.2001	2 Years 2 Months
7	Park College of Engineering & Technology, Coimbatore.	Lecturer	10.08.1998	28.04.1999	9 Months
<b>Total (as on Feb 2016)</b>					<b>17 Years 7 Months</b>

Publications :

Journals :

1. Nagarani, S. "A Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks using Swarm Intelligence based Optimized Approaches- A Comparative Analysis" Asian Journal of Information Technology -2016 (Accepted)
2. Nagarani, S. "Preparation of Low Cost Activated Carbon Adsorbents from Natural Sources", *International Journal of Engineering Technology Science & Research* Vol.3, Issue 4, April 2016 ISSN 23943386.IMPACT FACTOR: 4.116.
3. Nagarani, S. "A Novel Approach for Search Engine using Algorithms ",*International Journal of Innovations and Advancement in Computer Science* vol 5, Issue 6, June 2016, ISSN 2347 – 8616, DIIF Impact Factor Value 2.65
4. A Paper titled "Intelligence Swarm Techniques Based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks" has been *published* in International Journal of Applied Engineering Research 10 (2)-2015.
5. A Paper titled "Nature Inspired Metaheuristics Techniques based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks", has been published in Life Science Journal Volume(10), Issue(1), Part3 from page 4241 to page 4251(2013).
6. A Paper titled "Dynamic Subcarrier, Bit and Power Allocation in OFDMA-Based Relay Networks

through Efficient Optimization Approach” has been *published* in European Journal of Scientific Research (EJSR)ISSN 1450-216X Vol.82 No.3 (2012), pp.354-365 © Euro Journals.

7. A paper titled “Artificial Bee Colony Optimization based Dynamic Resource Allocation for OFDMA-Based Relay Networks” has been *Published* in International Journal of Soft Computing December 7(6) 2012.
8. A paper titled “An Improved Artificial Bee Colony Optimization based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks “ has been *Published* in Archives des Sciences. September 2012.
9. A paper titled “A Swarm Intelligence based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks” has been *published* in Bonfring International Journal of Networking Technologies and Applications, Vol. 1, No. 1, September 2012.
10. A paper titled “An Efficient Plotkin-Alamouti Superposition Coding Scheme for Wireless Communications” has been published in IJCSES International Journal of Computer Sciences and Engineering Systems, Vol.6, No.2, April 2012.
11. A paper titled “An Efficient Space-Time Coding For Wireless Communications With Offset 4 – Phase Shift Keying” has been published in ARPN Journal of Engineering and Applied Sciences VOL. 6, NO. 12, DECEMBER 2011, ISSN 1819-6608.
12. A Paper titled “An Efficient Space-Time Coding For Wireless Communications” has been *published* in European Journal of Scientific Research (EJSR). ISSN 1450-216X Vol.52 No.2 (2011), pp.195-203 © EuroJournals.
13. A Paper titled C.V. “A Survey on Space-Time Turbo Codes”, has been published in International Journal Computer Science and Information Security Year: 2010 Volume: 7 Issue: 3 Pages: 171-177.

#### International Conferences:

1. Paper titled “A Novel Approach for Search Engine using Algorithms “ , International Conference On International Conference “Advancement in Mobile Computing Applications and Innovations”, Acharya Nagarjuna University, Guntur, AP.
2. Paper titled . “Preparation of Low Cost Activated Carbon Adsorbents from Natural Sources”, 3rd INTERNATIONAL CONFERENCE ON INNOVATIVE RESEARCH IN ENGINEERING SCIENCE AND MANAGEMENT (ESM-16),April 2016.
3. Paper titled “Ant Colony Optimization based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks” has been published in International Conference on Emerging

Trends in Science, Engineering & Technology (INCOSET-2012) during Dec 13 -14 at JJ College of Engineering and Technology, Tiruchirappalli. ( IEEE Xplore).

4. Three Assignments are published in Mission 10X portal (2009).
5. Presented the Paper “ Resource Allocation using Genetic Algorithm” in the “International Conference on Computing Communication and Networking ICCCN -08” at Chettinad College of Engineering & Technology, Karur (Dec 18-20, 2008)
6. Presented the Paper “ Literature Survey of Linear Semimetric Space” in the “International Conference on Mathematics and Computer Science” at Loyola College, Chennai (March 01-03, 2007)

**National Conferences:**

1. Presented the paper “SEARCH ENGINE PROCESS-A SURVEY” at the International Conference on Advanced Technologies for Research and Product Development (ICATRPD 2016) from 21 - 22 April 2016 at the KCE Conference Hall, Coimbatore, India.
2. Presented the Paper in the AICTE Sponsored National Conference on Scientific Computing and Applied Mathematics on “A New Modified Space – Time Coding for Wireless Communications at V.L.B. Janakiammal College of Engineering and Technology , Coimbatore. ( 29<sup>th</sup> and 30<sup>th</sup> June 2011)

**Seminar, Conference, Workshop Attended:**

- One Week workshop on “Effecting teaching” held during 2<sup>nd</sup> week of May 2000 at Bannari Amman Institute of Technology, Sathy.
- Two days workshop on “Strategies for effective Teaching” on 10.06.2005 to 11.06.2005 at SRIT.
- Mission 10X on “High impact on teaching skills” held during 8<sup>th</sup> June to 12<sup>th</sup> June 2009 at Sri Krishna College of Engineering and Technology, Coimbatore.

**2. Participation in Workshops / Seminars – Yes.**

- Participated in the one day Workshop on Quality Improvement Cell Workshop at GCT on 23.01.2014.

- Paper titled “A New Modified Space – Time Coding for Wireless Communications” has been Published in AICTE Sponsored National Conference on Scientific Computing and Applied Mathematics Proceeding 2011.
- Participated in the One Day Seminar on Applications of Mathematics in Engineering Discipline held at Bannari Amman Institute of Technology, Sathy. (21<sup>st</sup> October 2010).
- Mission10X Advanced Workshop on 28<sup>th</sup> and 29<sup>th</sup> of August 2009 at Sri Krishna College of Engineering and Technology, Coimbatore.
- Participated in the Two days Seminar on “Recent Trends in High Data Rate Wireless Communication” conducted by the department of ECE on August 20-21, 2009 at Sri Ramakrishna Institute of Technology, Coimbatore.
- Participated in the Two days National Workshop on “Neural Networks and Image Processing” at Anna University of Technology, Coimbatore (30<sup>th</sup> & 31<sup>st</sup> Jan 2009).
- Participated in the “International Conference on Computing Communication and Networking ICCCN -08” at Chettinad College of Engineering & Technology, Karur (Dec 18-20, 2008).
- Participated in the National Seminar on “Emerging trends in Mathematical Modeling Techniques - 2008” at CSI College of Technology, Ketti. ( 18<sup>th</sup> Oct 2008).
- Participated in the National Seminar on “Colloquium of Mathematics Scenario – 2008” at P.S.G.R Krishnammal College for Women, Coimbatore. ( 12<sup>th</sup> Jan 2008).
- Participated in the National Level Seminar on “Recent Developments and Milestones of Mathematics” at Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore. ( 16<sup>th</sup> Feb 2007)
- Participated in Mid Term Workshop and Public Appraisal held at Mother Teresa Women’s University Research Centre at Chennai on Dec 14<sup>th</sup> and 15<sup>th</sup>, 2006.
- Participated in XXXIII ISTE Annual Convention & National Seminar on “Reaching the Unreached: A Challenge to Technical Education” at KCT, CBE. (27 – 30 December 2003).

### 3. Participation in summer / winter schools:

- Participated a Two – week ISTE WORKSHOP on Cyber Security conducted by IIT Bombay from 10<sup>th</sup> to 20<sup>th</sup> July 2015.

- Participated a Two – week ISTE WORKSHOP on Signals & Systems conducted by IIT Bombay from 2<sup>nd</sup> to 12<sup>th</sup> Nov 2014.
- Participated a two days ISTE WORKSHOP on Research Methods in Educational Technology conducted by IIT Bombay on 2<sup>nd</sup> & 9<sup>th</sup> Nov 2013.
- Participated a two days ISTE WORKSHOP on Aakash for Education conducted by IIT Bombay on 10<sup>th</sup> & 11<sup>th</sup> Nov 2012.

#### **4. Participation in National / International conferences – Yes**

- Participated in the one day National Conference on Indian Business Management organized by Department of Management, SRIT on 23 May 2014.
- Participated & Presented the Paper in the AICTE Sponsored National Conference on Scientific Computing and Applied Mathematics on “A New Modified Space – Time Coding for Wireless Communications at V.L.B. Janakiammal College of Engineering and Technology , Coimbatore. ( 29<sup>th</sup> and 30<sup>th</sup> June 2011)
- Participated & Presented the Paper “ Resource Allocation using Genetic Algorithm” in the “International Conference on Computing Communication and Networking ICCCN -08” at Chettinad College of Engineering & Technology, Karur (Dec 18-20, 2008)
- Participated & Presented the Paper in the National Seminar on “Colloquium of Mathematics Scenario – 2008”at P.S.G.R Krishnammal College for Women, Coimbatore. ( 12<sup>th</sup> Jan 2008)
- Participated & Presented the paper in the National Seminar on “Emerging trends in Mathematical Modeling Techniques - 2008”at CSI College of Technology, Ketti. ( 18<sup>th</sup> Oct 2008)
- Participated & Presented the Paper “ Literature Survey of Linear Semimetric Space” in the “International Conference on Mathematics and Computer Science” at LoyolaCollege, Chennai (March 01-03, 2007)
- Participated & Presented the Paper “Fuzzy Topological Spaces” in the National Level Seminar on “Recent Developments and Milestones of Mathematics at Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore. ( 16<sup>th</sup> Feb 2007)

**Guest Lectures Delivered:**

Topic	Institution	Date(s)
Graph Theory & its Applications sponsored by Anna University FDP Topic:- Binomial theorem - combinations with repetition	Sri Ramakrishna Institute of Technology, Coimbatore	21 <sup>st</sup> May 2016
"Amusing Mathematics"	Bharathiyar Institute of Engineering for Women, Attur TK, Salem	11 <sup>th</sup> November 2013
"National Education Day"	Bharathiyar Institute of Engineering for Women, Attur TK, Salem	11 <sup>th</sup> November 2013
"Testing of Hypothesis – I & II"	Narayana Guru Institute of Management Studies, Coimbatore	26 <sup>th</sup> February 2010

#### Membership in Professional Bodies:

1. Life Member in ISTE– No. 29346 (Indian Society for Technical Education)
2. Life Member in IMS – No. 2758 (Indian Mathematical Society)
3. Life Member in IAENG – No. 140229 (International Association of Engineers)

#### Contributions to the Institution, Department and Society:

1. Stock Verification for the Library
2. Stock Verification for the Book Depot
3. Time Table in charge for First Year B E/B Tech
4. Course Committee In charge
5. Assisted HOD in organizing the College Functions
6. Handling new subjects for every Semester
7. Taking extra care for Lateral entry and Slow Learners by way of conducting special classes
8. Taking extra care for Senior students they are weak in Mathematics subjects by way of conducting special classes in evening hours
9. First year students admission duties (Different types of committees)
10. Question Paper scrutinizing Committee
11. Internal Audit committee member

12. Preparing notes, 2 mark and 12 mark questions with the answers and motivation topics well in advance
13. Conducting Tutorial Classes Regularly
14. Anti Ragging Committee Member
15. Annual Day – Reception and Decoration committee
16. Conducting Pattukku Pattu Event in Annual Day Programme
17. Graduation Day – Reception and Registration committee
18. EMS coordinator for S & H Department
19. AICTE & Accreditation works for the S & H Department
20. NIRF - Department coordinator
21. NBA Core Committee Member for S & H Department
22. Parent –Teacher meeting Discipline, Visitors Management Committee Coordinator
23. Bridge Course for Slow learners and Lateral Entry students evening 4.45 to 5.45 p.m.
24. College Maintenance Committee Member
25. House Keeping Faculty Incharge
26. Furniture Committee Member
27. Book Depot Staff Incharge

**Awards and Recognitions:**

1. Women's day awards & celebrations 2015, received "SENIOR WOMAN EDUCATOR & SCHOLAR AWARD" for significant contribution to teaching & scholarly activities by National Foundation for Entrepreneurship Development (NFED) in march 2015.
2. SRIT alumni association "DR.S.RADHAKRISHNAN AWARD" for contribution and excellence in academics awarded on 26.1.2015.
3. Awarded the Best Team work by Mission 10X in the year 2009 (WIPRO).