

**Name : Dr. R. Srilatha**

**Designation: Asst.Prof.**

**Department: Humanities & Sciences**

**Mail.I.D:** srilatha\_r@vnrvjiet.in



**Experience (in years): Teaching: 18 years Research: 14 Others (If any, Specify):**

**1. Educational / Technical qualifications:**

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	<b>Ph. D</b>	2015.	<b>Mathematics</b> (Mathematical Modelling)
2	<b>M. Sc.</b>	2005	Applied Mathematics
3	<b>B.Sc.</b>	2003	M.S.Cs

**2. Teaching and Learning:**

2.1. Teaching Interests:

- Numerical Analysis
- Complex variables
- Differential Equations
- Laplace Transforms
- Probability & Statistics

2.2. Novel Teaching & Learning Techniques adopted:

- Learning by doing
- Video presentations

Involvement in curriculum updating / Design: NO

**3. Co-curricular and Extra-Curricular Activities**

3.1. Interests and Hobbies:

- Reading books
- Playing games.

3.2. CCA/ECA Organized: NIL

3.3. CCA/ECA participated:

- Sports committee (2014)
- Stage decoration committee (2013)
- Stock verification work (library)(2012)

3.4. Counseling and Mentoring Activity:

- Mentor for EEE (2012)
- Counseling for I year and Ilyr students.

3.5. Committees involved in:

Department level: NAAC (Files Management)

Institute Level: Induction Programme 2022

#### **4. Conference / Workshop / Seminar / Guest Lectures:**

4.1 Conducted: NIL

4.2 Attended:

- 1) Attended a three day conference on "Recent Trends in Applications of Mathematics" in APSMS XXII Congress hosted by Department of Humanities & Sciences, Anurag Group of Institutions, Hyderabad, 13<sup>th</sup> to 15<sup>th</sup> December, 2013.
- 2) Attended a three day conference on "Applications of Mathematics in Engineering, Physical and Life Sciences" in APSMS XXI Congress hosted by Sri Venkateswara University, Tirupati from 7-9, December, 2012.
- 3) Attended One week National Workshop on "Mathematical Modeling in Life Sciences", Sumathi Reddy Institute of Technology for Women, Warangal, 11<sup>th</sup> to 16<sup>th</sup> June, 2012.
- 4) Attended a three day conference on "Mathematical Modelling & Simulation" in APSMS XX Congress hosted by Swarna Bharathi Institute of Science & Technology, Khammam from 9<sup>th</sup> to 11<sup>th</sup> December, 2011.
- 5) Attended a three day conference on "Mathematical aspects of Cryptography and Network Security" in APSMS XIX Congress hosted by Jyothishmathi Institute of Technology & Science, Karimnagar from 12<sup>th</sup> to 14<sup>th</sup> November, 2010.
- 6) Attended a three day conference on "Mathematical Modeling in Emerging Technologies" in APSMS XVII Congress hosted by MREC, Secunderabad from 13<sup>th</sup> to 15<sup>th</sup> February, 2009.
- 7) Attended a national Level webinar on "**Innovative Approaches in differential Equations**" Organized by Department of Mathematics, Vignana Barathi Institute of Technology VBIT, Hyderabad on 5<sup>th</sup> June 2020.

- 8) Participated a one day national Level webinar on **“modeling and Simulation Fluid flows using PDE”** Organized by Department of Humanities and sciences, CMR Engineering College, Hyderabad on 25<sup>th</sup> June 2020.
- 9) Attended a national webinar on **“Research (Why, What & How)”** Organized by Department of Mathematics, Vignana Barathi Institute of Technology VBIT, Hyderabad on 14<sup>th</sup> June 2020.
- 10) Attended a 7-day International national Faculty Development Program on **“Mathematical Modeling in Multidisciplinary Domain”** Organized by Department of Mathematics, Bannari Amman Institute of Technology, Tamil Nadu, India, from 1<sup>st</sup> -7<sup>th</sup> June, 2020.
- 11) Attended One Week Online Faculty Development Program on **“Taxonomy of Software's related to Mathematical Sciences ”** Organized by Gokaraju and Ranga Raju Institute of Engineering and Technology, Hyderabad, Telangana from 9<sup>th</sup> -14<sup>th</sup> June, 2020.
- 12) Attended and successfully completed One Week National level Online Faculty Development Program and online Training on **“SCILAB-An open Source Substitute for MATLAB”** Jointly organized by JNTUH College of Engineering, Sulthanpur, Sangareddy, Telangana and Spoken Tutorial Project, IIT Bombay from 25-30<sup>th</sup> May, 2020.
- 13) Attended and successfully completed One Week National level Online Faculty Development Program and online Training on **“Moodle Learning Management System”** Jointly organized by JNTUH College of Engineering, Sulthanpur, Sangareddy, Telangana and Spoken Tutorial Project, IIT Bombay from 10-15<sup>th</sup> June 2020.

## **5 Academic Contribution and Research & Consultancy:**

5.1. Invited Lectures: NIL

5.2. Articles / Chapters published in Books: NIL

5.3. Books published as single author or as editor:

5.4. Projects Guided: NIL

a) UG:

b) PG:

5.5. Research Interests: Mathematical Modelling, Numerical Analysis

5.6. Ph.D students: NIL

- a) Enrolled:
- b) Submitted:
- c) Awarded:

5.7. Papers published in reviewed Journals:

<b>S.No</b>	<b>Title of the Paper</b>	<b>Journal Name Vol.No. PP</b>	<b>ISBN/ISSN No.</b>	<b>National/ International</b>
1	A Mathematical Model of Four Species Syn-Ecosymbiosis comprising of Prey Predation, Mutualism and Commensalisms-I (Fully Washed out State)	ARPJ Journal of Engineering and Applied Sciences, Vol.6, No.4, April, 2011.	1890-6608	<b>International</b>
2	A Mathematical Model of Four Species Syn-Ecosymbiosis comprising of Prey Predation, Mutualism and Commensalisms-III (Two of the Four Species are Washed out States)	Advances in Applied Science Research, Vol.2, No.3, 2011.	0976-8610	<b>International</b>
3	A Mathematical Model of Four Species Syn-Ecosymbiosis	Advances in Applied Science Research, Vol.2, No.3, 2011.	0976-8610	<b>International</b>

	comprising of Prey Predation, Mutualism and Commensalisms-IV (one of the Four Species are Washed out States)			
4	A Mathematical Model of Four Species Syn-Ecosymbiosis comprising of Prey Predation, Mutualism and Commensalisms-V (The Co-Existent State)	Journal of Experimental Sciences 2012, 3(2): 45-48.	2218-1768	<b>International</b>
5	Mutualism and Commensalisms-II (Three of the Four Species are Washed out States),	International eJournal of Mathematics and Engineering 145 (2012) 1322 – 1330.	0976-1411	<b>International</b>
6	A model of two mutually interacting species with harvesting, Atti Della Fondazione Giorgio Ronchi	ANNO LXVI, No.3, 2011.	0391-2051	<b>International</b>

7	A Mathematical syn-ecological model comprising of Prey-Predator, Host-Commensal, Mutualism and Neutral pairs	International Journal of Mathematical Archive-3(4), 2012, page: 1502-1512.	2229-5046	<b>International</b>
8	Stability Analysis of Mathematical Syn-Ecological Model Ecomprising of Prey-Predator, Host-Commensal, Mutualism and Neutral Pairs-IV(One of the four species are washed out states),	Int. J. of Engg. Science and Innovative Technology, Volume 2, Issue 1, January 2013, 216-226.	2319-5967	<b>International</b>
9	A Discrete Host-Commensal species with limited resources and mortality rate for the Commensal	International Journal of Mathematics Trends and Technology, Vol.4, Issue 1, 2013, 10-15.	2231-5373	<b>International</b>
10	A Stochastic Analysis of Two Competitive Interacting Species with Bionomic Harvesting of Both the Species	International Journal of Statistika and Matematika, Vol.5, Issue 2, pp 39-44.	2277-2790	<b>International</b>
11	Stability Analysis of Four Species Syn-Ecological	International Journal of Mathematics and Computer Applications	2249-8060	<b>International</b>

	Model comprising of Prey-Predation, Mutualism and Commensalisms	Research (IJMCAR), Vol. 3, Issue 1, Mar 2013, 249-264.		
12	A model of two mutually interacting species pair with Monad type-variable coefficient of one of the species	International Journal of Mathematics and Computer Applications Research (IJMCAR), Vol. 3, Issue 2, Jun 2013, 121-132.	2249-8060	<b>International</b>
13	Stability Analysis of Three Species Model in Series Mutualism with Bionomic and Optimal Harvesting of Two Terminal Species	International Journal of Scientific and Innovative Mathematical Research (IJSIMR), Volume 2, Issue 12, December 2014, PP 1043-1052.	2347-3142	International Journal
14	A Mathematical Model of Four Species Syn-Ecosymbiosis comprising of Prey Predation, Mutualism and Commensalisms-II (Three of the Four Species are Washed out States)	Proceedings of the International conference on recent advances in fluid mechanics.		International conference
15	Stability Analysis of Tumor treatment model using virotherapy and chemotherapy	International journal of ecology and development ,year 2022,volume 37,issue no.1.	0972-9984	International

#### 5.8. Papers presented at National / International Journals:

- 1) “A Stochastic Competition Model of two Ecological Species” in APSMS XXII Congress & National Conference on Recent Trends in Applications of Mathematics at Department of Humanities & Sciences, Anurag Group of Institutions, Hyderabad, 13<sup>th</sup> to 15<sup>th</sup> December, 2013.
- 2) “A discrete host commensal species with limited resources and mortality rate for the commensal” in APSMS XXI Congress & National Conference on Applications of Mathematics in Engineering, Physical and Life Sciences at Department of Mathematics, Sri Venkateswara University, Tirupati from 7-9, December, 2012.
- 3) “A Model of two mutually interacting species pair with monad type-variable coefficient of one of the species” in one day National Workshop on Mathematical Modeling in Life Sciences at Department of Humanities and Sciences, Sumathi Reddy Institute of Technology for Women, Warangal, 11<sup>th</sup> to 16<sup>th</sup> June, 2012.
- 4) “Stability Analysis of a Mathematical Syn-Ecological Model Comprising of Prey Predator, Host-Commensal, Mutualism and Neutral Pairs” in APSMS XX Congress & National Conference on Mathematical Modelling & Simulation at Swarna Bharathi Institute of Science & Technology, Khammam from 9<sup>th</sup> to 11<sup>th</sup> December, 2011.
- 5) “A Mathematical model of four species syn-ecosymbiosis comprising of Prey-Predation, Mutualism and Commensalisms-I (Fully Washed out State)” in APSMS XIX Congress & National Conference on Mathematical aspects of Cryptography and Network Security at Jyothishmathi Institute of Technology & Science, Karimnagar from 12<sup>th</sup> to 14<sup>th</sup> November, 2010.
- 6) “A Mathematical model of four species syn-ecosymbiosis comprising of Prey-Predation, Mutualism and Commensalisms” in APSMS XVII Congress & National Conference on Mathematical Modeling in Emerging Technologies at MREC, Secunderabad from 13<sup>th</sup> to 15<sup>th</sup> February, 2009.

5.9. Sponsored research Projects: NIL

5.10 Consultancy Projects: NIL

**6. Awards / Honors received: NIL**

**7. Motto: If you believe you can achieve.**

