### **FACULTY PROFILE**

Name : Dr. SWETHA LANKA
 Designation : Associate Professor
 Department : First Year Department

Date of Joining : 07-10-2014
 Nature of Employment : Regular
 Date of Birth : 15-06-1986
 Unique ID (AICTE FID) : 1-2388354534

8. Email : swethadeepukommana@gmail.com

9. Phone : 9291482939

10. Address for communication: Dr. SWETHA LANKA, W/O K. Anil Kumar,

H.N0: 10-84, Near Hanuman Temple, Vatluru,

Eluru Dist, A.P, Pin:534007

#### 11. Educational Qualifications:

Qualification	Institute	University/ Board	Specialization	Year of Passing	Division/ Class
Ph.D	K L University, Guntur	K L University	Fluid Dynamics	2024	Awarded
B.Ed	Sir C R R College of Education, Eluru	Andhra University	Mathematics	2009	First Class
PG	Sir C R Reddy PG College, Eluru	Andhra University	M.Sc (Mathematics)	2008	First Class with Distinction
UG	Sir C R R College for Women, Eluru	Andhra University	B.Sc (Mathematics, Physics, Chemistry)	2006	First Class
Inter/Diploma	Vidhya Vikas Junior College, Eluru	Board of Intermediate Education	Mathematics, Physics, Chemistry	2003	First Class
SSC	Kasturiba MPL High School, Eluru	Board of Secondary Education	Mathematics	2001	First Class

#### 12. Work Experience:

Teaching: 11Years 4months Research: -- Industry: -- Total: 11Years 4months

Name of the Organization	Designation	Date From	Date To
Sir C.R.R. College of Engineering, Eluru	Assistant Professor	07-10-2014	Till date
Abinav Hi-Tech College of Engineering and Technology, Hyd	Assistant Professor	02-11-2009	30-08-2011

# 13. Courses taught:

S.No.	Name of the subject	UG/PG
1	Mathematics - I	UG
2	Mathematics – II	UG
3	Mathematics – III	UG
4	Mathematics - IV	UG
5	Probability & Statistics	UG
6	Aptitude	UG

### 14. Administrative Responsibilities:

S.No.	Description	College/ Department level
1	Discipline Committee	Department Level
2	Feed Back & Counselling Committee	Department Level
3	Result Analysis Committee	Department Level
4	Result Analysis Committee - NBA	College Level
5	NAAC	College Level

### 15. Research Guidance: Nil

M.T	ech.	Ph.D.		
Completed Ongoing		Completed	Ongoing	

# ${\bf 16. \ Research \ Publications \ in \ Journals \ (National/International):}$

S.No.	Author(s) Name	Title of the Paper	Name of the Journal	National/ International	Month & Year	Volume, Issue No, Page Nos	UGC/ Web of Sciences/ Scopus/ SCI/Other s
1.	Swetha Lanka, S.V. Subrahmanyam, D. Prasad	Lubrication of Asymmetric Rollers considering viscosity as function of mean temperature	IJAME	International Journal	June, 2023	Vol 28, Issue 2, PP: 49-63	Scopus
3.	Swetha Lanka, S.V. Subrahmanyam, D. Prasad	Thermal Effects in Lubrication of Asymmetric Rollers using Roelands Viscosity-Pressure Equation including Convection	IJΗΤ	International Journal	June, 2023	Vol 41, Issue 3, PP 701-708	Scopus and Web of Science
4.	Swetha Lanka, S.V. Subrahmanyam, D. Prasad	Lubrication of Asymmetric Rollers using Roelands Viscosity – Pressure – Temperature Relationship	FHMT	International Journal	October , 2023	Vol 21, PP:385-405	Scopus and Web of Science

5.	Swetha Lanka, S.V. Subrahmanyam, D. Prasad	Non-Newtonian Fluid Film Lubrication of Asymmetric Rollers using Vogel Viscosity- Temperature Relationship	JARFM TS	International Journal	Dec, 2023	Vol 110, Issue 2, PP: 32-48	Scopus
6.	Revathi Gademsetty Venkata Subrahmanyam Sajja, Swetha Lanka, Dhaneshwar Prasad	Thermohydrodynami c Lubrication of Asymmetric Rollers by Bingham Plastic Fluid	Solid State Techno logy	National Journal	August, 2020	Vol 63, Issue 5, 6165-6181	Google Scholar
	Swetha Lanka, S.V. Subrahmanyam, D. Prasad	Hydrodynamic lubrication of asymmetric rollers by power-law fluids	IJET	International Journal	March, 2020	Vol 11, Issue 2, PP:948-953	Scopus
7.	L. Swetha & S. Ravi Kumar	A Review on Fuzzy Set Theory and its Operations	IJATE T	International Journal	August, 2017	Vol 4, Issue 21, PP:74-79	UGC
8.	L. Swetha & D. Saraswathi	Data Security Using Modular Operation: A Number Theoretic Transform	BOMS R	International Journal	March, 2017	Vol 5 Issue 1, PP:100-101	UGC

# ${\bf 17.\ Research\ Papers\ in\ Conferences\ (National/International):}$

S.No.	Author(s) Name	Title of the Paper	Name of the Conference/Journa l	National/ International	Month & Year	Page Nos
1.	Swetha Lanka, S.V. Subrahmanyam, D. Prasad	Non-Newtonian Fluid Film Lubrication of Asymmetric Rollers Using Vogel Viscosity- Temperature Relationship	3 <sup>rd</sup> International Conference on Recent Trends in Applied Mathematics with Computing, K L University, Guntur	International Conference	December , 2023	
2.	Revathi Gademsetty Venkata Subrahmanyam Sajja, Swetha Lanka, Dhaneshwar Prasad	Thermohydrodyn amic Lubrication Analysis of Asymmetric Roller Bearings Including Convection	Advances in Mathematical Sciences and its Applications, ANU, Nagarjuna Nagar	National Conference	March, 2023	
3.	Swetha Lanka, S.V. Subrahmanyam	Squeeze Film Lubrication of Asymmetric Rollers Using Roelands	2 <sup>nd</sup> International Conference on Essence of Mathematics and Engineering	International Conference	December, 2022	

		Viscosity-	Applications, K L			
		Pressure-	University, Guntur			
			Oniversity, Guntur			
		Temperature Relationship with				
		1				
		Convection	T , , , , 1			
		Lubrication of	International			
	Swetha Lanka,	Asymmetric	Conference on			
	S.V.	Rollers	Mathematics & its	International	March,	
4.	Subrahmanyam,	considering	Relevance to Science	Conference	2022	
	D. Prasad	viscosity as	and Engineering,	Comercia	2022	
	D. Trusud	function of mean	Osmania University,			
		temperature	Hyd			
	Cryotha I anka	Hydrodymomic	National Conference			
	Swetha Lanka,	Hydrodynamic	on Essence of			
_	S.V.	lubrication of	Mathematics and	National	December,	
5.	Subrahmanyam,	asymmetric	Engineering	Conference	2018	
	D. Prasad	rollers by power-	Applications, K L			
		law fluids	University, Guntur			
			International			
			Conference on Recent			
	L. Swetha &	A Review on Fuzzy Set Theory and its Operations	Advancement in			
			Technical Fields of			
			Computer Science and	International	August,	
6.			Mathematics,	Conference	2017	
	S. Ravi Kumar		CH.S.D.ST Theresa's	Conference	2017	
			Autonomous College			
			for Women,			
			Eluru			
		A Daviery on Date	EIUIU			
		A Keview on Data	National Seminar on			
	L. Swetha	•	Emerging Trends in	NI_4: 1	D 1	
7.	&	Modular	Mathematics, Sir C R	National	December,	
	D. Saraswathi	Operation: A	Reddy Autonomous	Seminar	2016	
		Number Theoretic	Reddy Autonomous College, Eluru			
		Transform				
			National Workshop			
			on Applications of			
			Differential	National	December,	
8.	Swetha Lanka	Modeling -	Equations, CH.S.D.ST	Workshop	2015	
		Sciences	Theresa's	w orkshop	2013	
			Autonomous College			
			for Women, Eluru			

### 18. No of Books Published: Nil

S.No.	Author(s) Name	Title	Publisher	ISBN	Year of Publishing

# 19. Workshops/FDPs/STTPs /etc., (Organised): Nil

S.No.	Name of the Workshop/	Place	Period	
	FDP/STTP/ etc.,	riace	From	To

# 20. Workshops/FDPs/STTPs/ etc., (Attended):

G.N.	Name of the Workshop/	Di	Period		
S.No.	FDP/STTP/ etc.,	Place	From	To	
1	International Workshop on "Advanced Trends in Computational Mathematics"	K L University, Guntur	04-08-2023	05-08-2023	
2	A three-day FDP on "Mathematical Analysis of Fluid Transfer Mechanism and Study of Seismic Wave Behavior"	Vellore Institute of Technology, Chennai	19-06-2023	21-06-2023	
3	One Week FDP on "Mathematics and its Applications in Technology & Science"	Madanapalle Institute of Technology & Science, Madanapalle	05-06-2023	09-06-2023	
4	Virtual Workshop on" MATLAB FOR ENGINEERS"	Easy Solve PVT.LTD, Virtual Workshop	27-09-2020	01-10-2020	
5	National Level 5-Day FDP on "Emerging Trends in Mathematical Modeling Using Python Programing"	CMR Institute of Technology, Hyd	07-08-2020	11-08-2020	
6	A Three day STTP on" MATLAB and MATHEMATICA for Scientific Research"	Arul Anandar College, Madurai	27-07-2020	29-07-2020	
7	International Online FDP on "Mathematical Sciences"	Vignan's Foundation for Science, Technology & Research, Guntur	18-07-2020	24-07-2020	
8	One Week Online International FDP on "Importance of Mathematics in Science and Technology"	GMR Institute of Technology, Kakinada	25-06-2020	29-06-2020	
9	One day National Webinar on "Writing Good Technical Paper: A Necessary Skill Development"	K L University, Guntur	30-05-2020		
10	A 5-day Online International FDP on "Online Teaching Tools for Video Lecturing and Digital e-Learing"	Sir C R R College(Aided & Autonomous), Eluru	04-05-2020	08-05-2020	
11	One day National Workshop cum hands on training on "R Programming & Statistical Techniques"	K L University, Guntur	13-12-2019		

# 21. Sponsored Projects: Nil

S.No.	Title	Sponsored by	Amount	Period	Ongoing/ Completed
	-				

#### 22. Consultancy Projects: Nil

					Completed
S.No.	Title	Agency	Amount	Period	Ongoing/

#### 23. No of Patents (Filed/Granted):

S.No.	Title	Application Number	Year	Filed/Granted
1	Fluid Dynamic Melted Aluminium Refinement in A Designed Furnace Through A Mathematical Model	202241041907	2022	Filled Publication
2	A Self Induced Laser MHD For Operating Turbocharged Gas Turbine Engine	202441015699	2024	Filled Publication

#### 24. Awards/Honours Received: Nil

S.No.	Award Name	Awarded by	Contribution	Date Received

### 25. Professional Memberships:

S.No.	Name of the Professional Body	Membership No.	Membership Type
1	APTSMS (Andhra Pradesh and Telangana Society for Mathematical Sciences)	1382	Life Member
2	IAENG (International Association of Engineers)	319403	Life Member

### 26. Membership in BOS/ Editorial Boards: NIL

S.No.	Name of the University/ Journal	Member/ Editor/ Reviewer	Period

# 27. Details of Personal Blogs/ Educational Youtube Channels/ e content (if any):

#### CRRCE2YSEC1

- 28. Details of Innovative Design/ Development of Product or Model (if any): Nil
- 29. Technology Transfer: Nil
- 30. Special Achievements (If any): Nil

### 31. Personal Details:

(a) Father's Name : L. SUBRAHMANYESWARA RAO

(b) Mother's Name : L. SRIDEVI

(c) Gender : FEMALE

(d) Marital Status : MARRIED

(e) Religion : HINDU

(f) Nationality : INDIAN

Suetho:

Signature