



JSS Mahavidyapeetha

**JSS Academy of Technical Education**

Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060

www.jssateb.ac.in



## FACULTY PROFILE

**Department:** Engineering Mathematics

### 1. Personal Details

NAME	Dr. B. Umadevi	
DEPARTMENT	Mathematics	
DESIGNATION	Assistant Professor	
PHONE	+91 9900094176	
EMAIL ID	bumadevi@jssateb.ac.in	
Date of Joining (JSSATEB)	07-04-2006	

### 2. Experience

Total Experience in Years	Teaching: 27 Years	Industry: Nil	Research: 15 Years
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### 3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.Sc.,	Maths, Physics and Statistics	1993	Arts and Science Degree College, Anantapur	Sri Krishnadevaraya University, Anantapur
M.Sc.,	Mathematics	1995	Sri Krishnadevaraya University, Anantapur	Sri Krishnadevaraya University, Anantapur
B.Ed	Mathematics & English	1996	Sri Krishnadevaraya University, Anantapur	Sri Krishnadevaraya University, Anantapur
M.Phil	Mathematical Modelling	2005	Annamalai University	Annamalai University
Ph.D.	Bio-Fluid Mechanics	2013	RIT, Bangalore	VTU, Belagavi
Post.doc	-----	-----	-----	-----

#### 4. Research & Publications

Papers Published in Web of Science indexed Journals	International: 3	National: Nil
Papers Published in SCOPUS indexed Journals	International: 2	National: Nil
Papers Published in other Journals	International: 1	National: 1
Papers Presented in Conferences / Symposium	International: 5	National: 02
Books / Book chapters Published	Name of the book: Advances in Applied Mechanical Engineering Publisher: Springer Year of Publication: Feb 2020	

#### 5. Research Guidance

PhD Guide? Give field & University	Yes, Bio Fluid Mechanics	University: Visvesvaraya Technological University, Belagavi
Anumanchi Radhika 1JS21PMA01	Image Processing	Differential Equations based on Fourier Transforms in Image Processing. University: Visvesvaraya Technological University, Belagavi

#### 6. Grants

i. Funds Received (Projects): Nil

ii. Patents Published : 4

#### Patents Details

Name of the Faculty	Applicant/Co-Applicant	Title	Date of Filing	Date of Published	Date of Grant	Patent Number	National/International
Dr.B. Umadevi	Applicant	A Method to Analyze the Response of Particulate Drag through Nonlinear Oscillatory Flow in Annulus	3/9/22	16/9/22	-	202241050373 A	National
Dr.B.Umadevi	Co-Applicant	Assorted Wireless Charging Power Adapter - UK Grant	30/1/23		21/2/23	6259175	International UK Grant
Dr.B.Umadevi	Co-Applicant	Patient Vital Signs Prediction Algorithm - AI-Powered Decision System for Nursing Professionals	30/5/24	7/6/24	-	202441041987	National
Dr.B.Umadevi	Applicant	Detection of accidents in surveillance video using RCNN	2/7/24	5/7/24	-	202441050592	National

iii. **Consultancy:** Nil

7. **Awards Received :** Nil

8. **Publications**

i. **International Journals**

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	Climate Change Prediction in Sustainable Healthcare Systems for Biodiverse Ecosystem Based on Satellite Data Modelling	Makarand Mohan Jadhav, Pankaj Agarwal, Ali Khatibi, N.Akhila, Kasturi Sai Sandeep and Sudipta Banerjee	Remote Sensing in Earth Systems Sciences	7(3), 2024	Scopus	3.1	Springer
2	The influence of drag on non linear oscillatory flow through concentric annulus	C.V.Vinay Dinesh P.A,	Molecular and Cellular Biomechanics	18 (4), 2021	WOS	0.34	Tech Science Press(USA)
3	The Analytical study of velocity slip on two phase flow in an eccentric annular region	Dinesh P.A, C.V.Vinay	Advances in Applied Mechanical Engineering	Chapter 26, 2020	Scopus	0.14	Springer
4	The Effect of Couple Stress on Hydrodynamic Rotating Flow	Dinesh P.A, C.V.Vinay	Procedia Engineering	127, 2015	WOS	0.216	Elsevier
5	Mass Transfer in an Eccentric Annular Region through Diffusion	Dinesh P.A, R Indira C.V.Vinay	Molecular and Cellular Biomechanics	11(2), 2014	WOS	0.88	Tech Science Press(USA)

ii. **National Journals :** 1

Sl. No	Name of Co-Author	Title of Paper	Name of the Journal	Publisher	Publication citation ISSN, ISBN, Vol. No., Issue, Impact Factor, pp
1	Dr. Dinesh, Dr. C. V.Vinay Dr. Indira Rao	The Effect of Particle Drag and Wall Absorption on Mass Transfer in Concentric Annulus Flows	Mapana Journal of Sciences	Christ University publications	Vol.10, No.1, 2011

iii. Conferences : International / National

Sl. No	Name of Co-Author	Title of Paper	Name of the Conference	Publisher	Publication citation ISSN, ISBN, Vol. No., Issue, pp
1	Dr. Dinesh, Dr. C. V. Vinay	Interphase Mass transfer of a solute in a power law fluid of concentric annulus flow	20 <sup>th</sup> International conference of International Academy of Physical Sciences July 14-16 2017	Osmania University, Hyderabad	(Abstract)
2	Dr. Dinesh, Dr. C. V. Vinay	The Effect of Couple Stress on Hydrodynamic Rotating flow	ICCHMT Nov 30 <sup>th</sup> -2 <sup>nd</sup> Dec 2015 Proceedings	NIT Warangal	
3	Dr. Dinesh, Dr. C. V. Vinay Dr. Indira Rao	Effect of Particle Drag on Convective-Diffusive Mass Transfer in Doubly Connected Regions	Proceedings of 11 <sup>th</sup> Asian International Conference on Fluid Machinery and the 3 <sup>rd</sup> Fluid Power Exhibition Technology Exhibition	IIT Chennai Nov 21-23	ES_012, pp.1-12 (2011).
4	Dr. Dinesh, Dr. C. V. Vinay Dr. Indira Rao	The Effect of Particle Drag and Wall Absorption on Mass Transfer in Concentric Annulus Flows	Recent Trends in Fluid Mechanics and Graph Theory	FEB 2011, Christ University, Bengaluru	
5	Dr. Dinesh, Dr. C. V. Vinay	The Effect of Couple Stress on Hydrodynamic Rotating flow	Recent Trends in Applied Mathematics	SIT, Tumkur from 7th to 8th June 2013	

iv. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	One day online work shop on "Mathematics made easy with Breath and Yoga"	New Horizon College of Engineering, Bangalore	18 <sup>th</sup> July 2020
2	Five day webinar series on "Exploring ICT initiatives in higher Education"	The National College, Jayanagar, Bangalore	13 <sup>th</sup> July to 17 <sup>th</sup> July 2020
3	One day Online webinar on "Application of probability on speech recognition"	AMC Engineering College, Bangalore	11 <sup>th</sup> July 2020
4	Five day online FDP on "Mathematical Perspectives on Computational Science and Engineering"	Ramaiah Institute of Technology, Bangalore	6 <sup>th</sup> July to 10 <sup>th</sup> July 2020
5	Two day Workshop on Application of Wavelets for Signal and Image Processing in Research	JSSATE, Bangalore	8 <sup>th</sup> to 9 <sup>th</sup> of April 2013
6	National workshop on Recent Advances in Applied Chemistry and Nano Technology	JSSATE, Bangalore	26 <sup>th</sup> to 30 <sup>th</sup> of March 2012
7	National Workshop on Probability and Statistics	PESIT, Bangalore	8-12 June 2010
8	National Workshop on Literature survey and Thesis writing	SJCE, Mysore	1 <sup>st</sup> Jan 2010
9	National Workshop on Mathematical Modeling in Fluid Mechanics	NMIT, Bangalore	Feb 25-27 2009.

v. Workshops / Conference (Organized): Nil

vi. **Conference Attended (those sponsored by AICTE / ISTE /IETE /TEQIP or any other sponsoring body)**

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	ATAL Five day online FDP on "Mathematics for Machine Learning"	JSS Science and Technology University, SJCE, Mysore	18 <sup>th</sup> January - 22 <sup>th</sup> January 2021
2	ATAL Five day online FDP on "CFD"	LBS College of Engineering, Kasaragod	4 <sup>th</sup> January -8 <sup>th</sup> January 2021
3	ATAL Five day online FDP on "Data Sciences"	Central University, Tamilnadu	5 <sup>th</sup> October -10 <sup>th</sup> October 2020
4	ICAMER	NIT, Warangal	2 <sup>nd</sup> May – 4 <sup>th</sup> May 2019
5	CONIAPS XX	Osmania University, Hyderabad	14 <sup>th</sup> -16 <sup>th</sup> July 2017
6	ICCHMT	NIT, Warangal	30 <sup>th</sup> Nov - 2 <sup>nd</sup> Dec 2015
7	FDP program on Computational Fluid Dynamics	B.M.S, college of Engineering, Bengaluru during 23 <sup>rd</sup> June to 5 <sup>th</sup> July 2014.	23 <sup>rd</sup> June to 5 <sup>th</sup> July 2014.
8	UGC sponsored International symposium on MATLAB tools for research with hands on experience	JSSATE, Bangalore	4 <sup>th</sup> - 6 <sup>th</sup> Feb 2013
9	National workshop on Recent Advances in Applied Chemistry and Nano -Technology	Basic science department JSSATE, Bangalore	26 <sup>th</sup> to 30 <sup>th</sup> of March 2012
10	National Science day	JSSATE, Bangalore	28 <sup>th</sup> February 2011

**9. Details of NPTEL / COURSERA courses completed**

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade / Marks
1	Non Parametric Statistical Inference	NPTEL	Aug 2022	55%
2	Introduction to Probability (Using R programming)	NPTEL	Aug 2021	51%
3	Machine Learning for All	Coursera	26 -10-2020	92.5%
4	Multiple Regression Analysis in Public Health	Coursera	11- 09-2020	91.15 %
5	Linear Regression for Business Statistics	Coursera	03-08-2020	85.45 %
6	Data Science for Engineers	NPTEL	16-06-2020	85 %
7	Introduction R Software	NPTEL	08-12-2019	86%
	Descriptive Statistics using 'R' Programming	NPTEL	12-05-2019	87%

**10. Membership of Professional Bodies:**

International Association of Engineers (IAENG) : LM 206152
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**11. Any other information you will like to share about your professional experience**

An Idea "Smart Glove for Sign Language" has been presented by a team of three students on 14th November 2024 in AICTE Inventors Challenge 2024 sponsored by STM electronics.

**Team:** 1. N Karthik (USN 1S22CI040)  
2. Tejas S (USN : 1JS22EI049)  
3. Vikram Kharvi (USN : 1JS22EI054)

**Dr. B. Umadevi**  
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