# **Dr.Santhosh H B**

Assistant professor Department of Mathematics Bapuji Institute Engineering and Technology, DAVANGERE -577004 Mob: 9740101436 Email: santu1603@gmail.com

# **RESEARCH INTEREST :**

Fluid Mechanics

**TEACHING EXPERIENCE**: 14 years of teaching experience.

- 1. Working as Assistant Professor in Department of Mathematics from September 11<sup>th</sup> 2024 till date
- 2. Worked as Assistant Professor in The National Institute of Engineering, Mysure, from Sep 01<sup>st</sup> 2020 to 31<sup>st</sup> July 2024
- 3. Worked as Assistant Professor in GITAM Deemed to be University, Bengaluru, 27<sup>th</sup> July 2017 to 30<sup>th</sup> April 2020.
- 4. Worked as a Teaching assistant in department of Mathematics, Davangere University, Davangere. From August 2016-May 2017.
- 5. Worked as a Lecturer in Jain institute of Technology Davangere, from 27<sup>th</sup> Jan 2014 to 3<sup>rd</sup> July 2015.
- 6. Worked as assistant professor 1<sup>st</sup> September 2012 to 22<sup>nd</sup> June 2013 and from 25<sup>th</sup> July to 2013 to 24<sup>th</sup> January 2014. BIET Davangere.
- 7. Worked as Lecturer from 03<sup>rd</sup> March 2011 to 25<sup>th</sup> June 2012, 02<sup>nd</sup> July 2012 to 31<sup>st</sup> August 2012 in BIET Davangere.
- 8. Worked as Lecturer in STJ IIT Academy, Anubhava Mantapa from Aug 2010-Feb 2011

# **EDUCATION**

- Ph.D [Mathematics] from Visvesvaraya Technological University, 2019.
- M.Sc (Mathematics) from Kuvempu University, Shankarghatta, 2008-2010 secured first class with distinction.
- B.Sc (PME) from Kuvempu University, Govt. Science College, Chitradurga, 2005-2008 secured first class with distinction.

## PROFESSIONAL MEMBERSHIP:

• Life Member of Indian Society for Technical Education

## **PUBLICATIONS**

- Santhosh H.B, Mahesha, C.S.K. Raju, "Partial Slip Flow of Radiated Carreau Dusty Nanofluid Over Exponentially Stretching Sheet with Non-Uniform Heat Source or Sink," Journal of Nano fluid, 7(1) (2018) 72-81.(Scopus)
- 2. Santhosh H.B, Mahesha, C.S.K. Raju, "Connective conditions and exponentially decaying heat source on MHD Carreau dusty fluid over stretching sheet filled with darcy porous" Research Journal of Science and Technology, 9(4)(2017), 505-510. (Scopus)
- 3. Santhosh H.B, Mahesha, C.S.K. Raju, "Unsteady Carreau-Casson fluids over a radiated shrinking sheet in a suspension of dust and graphene nanoparticles with non-Fourier heat flux," Nonlinear Engineering Modeling and Application.( Scopus)
- 4. Mahesha, Santhosh H.B, C.S.K. Raju, "Unsteady Carreau radiated Two-Phase flow in a deformation of graphene nanoparticles with heat generation and convective conditions," Journal of nano fluid, Vol 7, 2018, pp 1-8. (**Scopus**)
- 5. Santhosh H.B, Mahesha, C.S.K.Raju, "Carreau fluid over a radiated shrinking sheet in a suspension of dust and Titanium alloy nanoparticles with heat source," Journal of Integrative Neuroscience. doi: 10.3233/JIN-180083 (Scopus)
- Santhosh H.B, Mahesha, C.S.K.Raju, "The flow of radiated Carreau dusty fluid over exponentially stretching sheet with partial slip at the wall," Journal of Defect and diffusion forum. Vol 16. (2018) Pp 96-108.( Scopus)
- Santhosh H.B, Mahesha, C.S.K.Raju, "Comparative study on MHD Carreau fluid due to stretching/shrinking surface in a suspension of dust and graphene nano particles" Bionanoscience. <u>https://doi.org/10.1007/s12668-019-00624-0</u> (Scopus)
- 8. Santhosh H.B, M. Karunaprasad, C.S.K. Raju, Mahesha, "Unsteady tangent hyperbolic fluid on radiated exponentially porous surface", International Journal of Engineering and Advanced Technology. Vol 9, issue 1S5, Dec2019
- Rohit Sharma, C.S.K. Raju, Isaack L Animasun, Santhosh H B, Manoj K Mishra. "Insight into significance of joule dissipation, thermal jump and partial slip: Dynamics of Unsteady Ethelene glycol conveying graphene nano particles through porous medium", <u>https://doi.org/10.1515/nleng-2021-0002</u>(Scopus)
- 10. Santhosh HB, Mamata Upadaya, N Ameer Ahamed, CSK Raju, Nehad Ali Sha, Wajaree Weera. "Comparative Analysis of a Cone, Wedge, and Plate Packed with Microbes in Non-Fourier Heat Flux", Mathematics(MDPI), <u>https://doi.org/10.3390/math10193508</u>. (Scopus-Q1)
- 11. Santhosh HB, Nagendramma, P Durga Prasad, SU Mamata, CSK Raju, K Vijaya Bhaskar Raju
- Santhosh HB, Nagendramma, P Durga Prasad, SU Mamata, CSK Raju "Dynamics of unsteady Carreau fluid in a suspension of dust and hybrid solid particles with non-Fourier and Fourier fluxes" <u>https://doi.org/10.1142/S021797922350251X</u>, (Scopus)
- 13. Santhosh HB, Ramesha M, Nagendramma, CSK Raju, Kiran Sajjan, Mahesha, "Dynamical steady Carreau fluid with heat generation and porosity effect in a suspension of hybrid solid and dust particles" <u>https://doi.org/10.1080/10407790.2024.2345702</u>, (Scopus)

#### PAPER PRESENTED IN CONFERENCES/ SEMINAR/WORKSHOP

1. Attended and presented the research article **Carreau fluid over a radiated shrinking sheet in** suspension of dust and titanium alloy nano particles with heat source, in the National Conference on Recent Trends in Mathematics and It's Applications(NCRTMA-2019) Organized by Department of Mathematics, GITAM School of Technology Department of Mathematics , Bengaluru from 20<sup>th</sup> December 2019 to 21<sup>st</sup> December 2019.

2. Attended and presented the research article Unsteady Magnetic and Dissipative Tangent Hyperbolic Fluid due to Radiated Exponentially Porous Surface, in the National Conference on Recent Trends in Mathematics and It's Applications(NCRTMA-2018) Organized by Department of Mathematics, GITAM School of Technology Department of Mathematics , Bengaluru from  $21^{st}$  December 2018 to  $22^{nd}$  December 2018.

3. Attended and presented the research article **Radiated Casson Unsteady Flow in a Suspension of Dust and Graphene Nano Particles With Cattaneo-Christov Heat Flux,** in the International Conference On Advances in Mathematical Science (ICAMS) Organaized by Department of Mathematics VIT, Vellore from 1<sup>st</sup> December 2017 to 3<sup>rd</sup> December 2017.

4. Attended and presented the research article **Connective Condition and Exponentially Decaying Heat Source on MHD with Darcy Porous,** in the National Conference Emerging Research Trends in Pure and Applied Mathematics, Organized by Department of Mathematics Sri Padmavathi Mahila Visvavidyalayam, Tirupathi from 29<sup>th</sup> -30<sup>th</sup> August 2017.

5. Attended and presented the research article **Partial Slip Flow of Radiated Carreau Dusty Nanofluid Over Exponentially Stretching Sheet with Non-Uniform Heat Source or Sink,** in the International Conference on Fluid Mechanics and its Application Organized by Department of Mathematics BNMIT,Bengaluru during July 12<sup>th</sup> -14<sup>th</sup> 2017.

## SHORT TERM COURSES/WORSHOPS ATTENDED

- 1. Attended **National webinar on Projection and Orthogonality of Vectors**, organized by department of Mathematics, P.C. Jabin Science College, Hubballi. On 09<sup>th</sup> July 2021.
- 2. Attended four days short term Faculty Development Programme on Programming for **Mathematicians and Physicist** organized by Department of Electronics and Communication Engineering, The National Institute of Engineering Mysuru, from 05<sup>th</sup> to 08<sup>th</sup> April, 2021.
- 3. Attended three days short term Course on **Mathematics and its Importance in Engineering** from 25<sup>th</sup> to 27<sup>th</sup> November 2020.
- 4. Attended e-Colloquium on **Recent Advancement on in Fluid Flow and Heat Transfer** organized by department of Mathematics, Indian Institute of Technology, Roorkee, from 19-25<sup>th</sup> October 2020.
- 5. Attended Five days international e-seminar on Recent Research in Mathematics (ISRRM-2020), organized by department of Mathematics, School of Science, GITAM, Bengaluru, from 11<sup>th</sup> to 15<sup>th</sup> September, 2020.
- 6. Participated Three-Days workshop on **Research Methodology and Latex** organized by VTU elearning centre, Mysore from 20-22 December 2016 at Raja Rajeswari College of Engineering, Bengaluru.
- Attended one day UGC sponsored National Seminar on Recent Trends in Mathematics and Their Implication organized by Department of Mathematics D.R.M.Science College, Davangere, on 08<sup>th</sup> March 2014.
- Attended Feel Teacher, Learning and Development Intervention Programme from 19<sup>th</sup> -21<sup>st</sup> April 2013 Organized By College for Leader Ship and Human Resource Development at Bapuji Institute of Engineering and Technology, Davangere.
- Attended Ramanujan Mathematics Awareness Programme(RAMP-2013) held on 1<sup>st</sup> March 2013, at Bapuji Institute of Engineering and Technology, Davangere, Organized by Department of Marhematics, ISTE Students And Faculty Chapter, BIET And Sponsored by Indian Society for Technical Education.
- Attended four day workshop on Advanced Linear Algebra And its Applications to Engineering Organized by Department of Mathematics M.S.Ramaiah Institute of Technology Banglore-560054 held during 17<sup>th</sup> -20<sup>th</sup> July,2013.
- 11. Attended eight days instructional work shop on UGC-NET/SLET examination in Mathematics held at Department of Mathematics Jnana Sahyadri Shankaraghatta-577451, Kuvempu University from 5<sup>th</sup> to 12<sup>th</sup> May 2010.

#### Seminars/Workshops/Events Organized:

1. Organized faculty development programme on **Probability Statistics and its application** organized by the department of Mathematics and Department of Electronics and Communication, The National Institute of Engineering Mysuru from 05.03.2021 to 10.03.2021.

## Awards

Awarded the first prize in ISTE-Srinivasa Ramanujan Mathematical Competitive Examination 2013-2014 Engineering college (Teacher) at Zonal level conducted by ISTE, New Delhi on 9<sup>th</sup>

December 2013

#### **Faculty Development Program**

- 1. Completed NPTEL Certification course on **Basic Linear Algebra** conducted by **IIT-Bombay** with 76 % score.
- 2. Completed NPTEL Certification course on **Essential of Mathematics for Machine Learning** conducted by **IIT-Roorkee** with 60% score

#### **RESPONSIBILITIES**

Worked as:

• Board of Examination in Autonomous institutions.

## SUBJECTS TAUGHT

Engineering Mathematics, Group Theory and Linear Algebra and its Applications. Graph Theory.

Ph.D. Thesis: "Heat Transfer Over Stretching/ Shrinking Sheet"

**Communication Address** 

Dr. Santhosh H B Assistant Professor Department of Mathematics BIET-04