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Teaching Experience:

- Professor in Mathematics, Osmania University from May 2022 to till date.
- Associate professor in Mathematics, Osmania University from May 2019 to May 2022.
- Assistance Professor in Mathematics, Osmania University from May 2007 to May 2019.

Contribution to Teaching/Academic Environment

- **In-charge Head of the Department** in Koti Women College, Department of Mathematics from March 2008 to July 2009.
- Member of the **College Development Committee** at OUCW Koti from March 2008 to July 2009.
- Member of **BOS** at OUCW Koti
- Member of **Departmental (Science College) committee** from Dec 2008 to June 2011.
- **In-charg Head of the Department of Mathematics**, in PG college Secundrabad from July 2011 to Jan 2014
- In-charge of **department of Computer Science** (UG) in PG college Secundrabad from July 2011 to June 2012
- Member in following college committees at PG College Secudarabad from July 2011 to Jan 2014.
 - Mess committee
 - Sports committee
 - Purchase committee
 - Library committee
- Appointed as **Additional Chief Warden** for all Hostels and Messes from Feb-2012 to June 2014 in Osmania University.

Research Areas:

Theoretical and Computational Fluid Dynamics.

Ph. D Scholars:

Completed: 6

Ongoing: 3

RESEARCH PAPERS PUBLISHED:

- 1). G. CHANDRASHEKHAR, V. GANESH, **A. VENKATALAXMI**, Bounds on the eigenvalues for the circular Rayleigh problem of hydrodynamic stability, Proc. Indian Acad. Sci. (Math. Sci.) (2024) Volume 134, article number 1 2024, Feb - 2024, <https://doi.org/10.1007/s12044-023-00771-1> .
- 2). G. ChandraShekhar, **A. VenkataLaxmi**, Ganesh Venkataraman, On the condition for wave number in the stability of hydromagnetic swirling-flows, American Institute of Physics Conference Series, Proceedings, Volume 2707, Issue 1, id.030001, 8 pp, May 2023, DOI: 10.1063/5.0143050.
- 3). G. ChandraShekhar and **A. VENKATALAXMI**, ON THE IMPROVED INSTABILITY REGION FOR THE CIRCULAR RAYLEIGH PROBLEM OF HYDRODYNAMIC STABILITY, Appl. Math. & Informatics, 2023, Volume 41 (1), Page 155-165 <https://doi.org/10.14317/jami.2023.155>, Jan -2023.
- 4). G. ChandraShekhar and **A. VenkataLaxmi**, Note on the Circular Rayleigh Problem, Springer International Publishing, Nonlinear Dynamics and Applications: Proceedings of the ICNDA 2022, Pages 367-376, October 2022.
- 5). Alfunsu Prathiba and **A. Venkata Lakshmi**, Impact of convection on three dimensional Casson rotatory fluid over an extending sheet: A numerical approach, November 2022, *Ethiopian Journal of Science and Technology* 15(3):325-340, DOI:[10.4314/ejst.v15i3.7](https://doi.org/10.4314/ejst.v15i3.7).
- 6). Alfunsu Prathiba and **A. Venkata Lakshmi**, Influence of Radiation and Convection on 3D-Casson Hybrid Nanofluid Flow in the Presence of Suction Over a Rotary Sheet, November 2022 *Communications in Mathematics and Applications* 13(3):1143-1167 DOI:[10.26713/cma.v13i3.1878](https://doi.org/10.26713/cma.v13i3.1878).
- 7). **Akavaram Venkata Lakshmi**: Unsteady Stokes Flow past a Shear Free Sphere, "*Communications in Mathematics and Applications*" (CMA), eISSN 0975-8607; pISSN 0976-5905, Vol. 13, No. 2, pp. 1-5 2022.
- 8). Alfunsu Prathiba and **A. Venkata Lakshmi**, Exploration of the Internal Energy Effect on 3D-Casson Fluid Embedded by Porous Media over A Rotating Sheet, *EJ-MATH, European Journal of Mathematics and Statistics*, ISSN: 2736-5484, Vol 3, Issue 3, Published on 5th May 2022, <http://dx.doi.org/10.24018/ejmath.2022.3.3.111> .
- 9). Mohammed Younus and **Akavaram Venkata Lakshmi**: Numerical investigation of activation energy of radiative magnetohydrodynamic Williamson nanofluid flow, *Heat Transfer*, Accepted on 1st May 2022, ISSN: 2688-4534 eISSN:2688-4542 <https://doi.org/10.1002/htj.22588>.

- 10). Bhukya Ravi, **A. Venkata Lakshmi**, and Yogesh J. Bagul: A SOLUTION TO AN OPEN PROBLEM ON REVERSE TRIGONOMETRIC MASJED-JAMEI INEQUALITY, *JOURNAL OF THE CHUNGCHONG MATHEMATICAL SOCIETY*, 1226-3524 (pISSN)/2383-6245 (eISSN) Volume 35, Feb 2022.
- 11). Prathiba Alfunsu and **Venkata Lakshmi Akavaram**, Numerical investigation of a convective hybrid nanofluids around a rotating sheet, *Heat Transfer*, First published: 22 January 2022 <https://doi.org/10.1002/htj.22454>, ISSN: 2688-4534 eISSN:2688-4542.
- 12). **A.Venkata Lakshmi**, A SOLUTION TO QI'S EIGHTH OPEN PROBLEM ON COMPLETE MONOTONICITY, *Probl. Anal. Issues Anal. (PROBLEMY ANALIZA-ISSUES OF ANALYSIS)* - July 2021, Vol. 10 (28), No 3, 2021, pp. 108–112, ISSN 2306-3424, eISSN 2306-3432.
- 13). Prathiba Alfunsu and **A. Venkata Lakshmi**. Viscous Dissipation and Suction characteristics of Heat and Mass Transfer past a Stretching Sheet. *Turkish Journal\ of Computer and Mathematics Education*, Vol.12 No.1S (2021), 623-630, <https://doi.org/10.17762/turcomat.v12i1S.1948>, e-ISSN 1309-4653 - April 2021.
- 14). Ravi Bhukya and **A. Venkata Lakshmi**, Completely monotonicity of class functions involving the polygamma and related functions, *Asian-European Journal of Mathematics*, Vol. 14, No. 04, 2150064 (July 2020), ISSN- 1793-5571, eISSN: 1793-7183.
- 15). B Ravi Bhukya and **A. Venkata Lakshmi**, Monotonicity and inequalities related to gamma function, *BULLETIN OF THE INTERNATIONAL MATHEMATICAL VIRTUAL INSTITUTE*. Vol. 9(2019), ISSN (p) 2303-4874, ISSN (o) 2303-4955, 169-175.
- 16). T. Gangaiah, N. Saidulu and **A. Venkata Lakshmi**, The Influence of Thermal Radiation on Mixed Convection MHD Flow of a Casson Nanofluid over an Exponentially Stretching Sheet; *Int. J. Nanosci. Nanotechnol.*, Vol. 15, No. 2, June. 2019, pp. 83-98, ISSN: 1735-7004, E-ISSN: 2423-5911.
- 17). N. Saidulu, T. Gangaiah and **A. Venkata Lakshmi**, Impact of Thermal Radiation on MHD Flow of Tangent Hyperbolic Nanofluid Over a Nonlinear Stretching Sheet with Convective Boundary Condition, *Journal of Nanofluids*, Vol. 8, pp. 1–10, 2019.
- 18). N. Saidulu, T. Gangaiah and **A. Venkata Lakshmi**, MHD Flow of Tangent Hyperbolic Nanofluid over an Inclined Sheet with Effects of Thermal Radiation and Heat Source/Sink, *Applications and Applied Mathematics: An International Journal*, 4, 54-68, ISSN: 1932- 9466, March 2019.
- 19). T. Gangaiah, N. Saidulu and **A. Venkata Lakshmi**, The Influence of Thermal Radiation on MHD Tangent Hyperbolic Fluid Flow with Zero Normal Flux of Nanoparticles over an Exponential Stretching Sheet, *Applications and Applied Mathematics: An International Journal*, 4, 16-30, March 2019, ISSN: 1932-9466.
- 20). N. Saidulu, T. Gangaiah and **A. Venkata Lakshmi**, RADIATION EFFECT ON MHD FLOW OF A TANGENT HYPERBOLIC NANOFLUID OVER AN INCLINED EXPONENTIALLY STRETCHING SHEET, *International Journal of Fluid Mechanics Research*, 46(3):277–293, 2019.

- 21). Ravi Bhukya, **Venkatalakshmi Akavaram**, and Feng Qi, Some inequalities of the Turan type for confluent hypergeometric functions of the second kind, *Integral Transforms and Special Functions*, Stud. Univ. Babes,-Bolyai Math.64 (2019), no. 1, 63–70; available online at <https://doi.org/10.24193/subbmath.2019.1.06>.
- 22). N. Saidulu, **A. Venkata Lakshmi** and T. Gangaiah, Thermal Radiation and Slip Effects on MHD Flow and Heat Transfer of Casson Nanofluid Over an Exponentially Stretching Sheet, *Journal of Nanofluids*, Vol. 7, pp. 1–10, 2018.
- 23). N. Saidulu, T. Gangaiah and **A. Venkata Lakshmi**, Inclined Magnetic Field and Viscous Dissipation Effects on Tangent Hyperbolic Nanofluid Flow with Zero Normal Flux of Nanoparticles at the Stretching Surface, *Eur. J. Adv. Eng. Technol.*, 5(3), 142-150, 2018, ISSN: 2394 - 658X.
- 24). T. Gangaiah, N. Saidulu and **A. Venkata Lakshmi**, Magnetohydrodynamic Flow of Nanofluid Over an Exponentially Stretching Sheet in Presence of Viscous Dissipation and Chemical Reaction, *Journal of Nanofluids*, 7, 1-10, 2018.
- 25). T. Gangaiah, N. Saidulu and **A. Venkata Lakshmi**, The Effects of Thermal Radiation and Inclined Magnetic Force on Tangent Hyperbolic Fluid Flow with Zero Normal Flux of Nanoparticles at the Exponential Stretching Sheet, *Journal of Nanofluids*, Vol. 7, pp. 1–12, 2018.
- 26). Ravi Bhukya and **A. Venkata Lakshmi**, Some Inequalities for the Ratio of Confluent Hypergeometric Function of the Second Kind, *Electronic Journal of Mathematical Analysis and Applications*, 6(1), 316-321, ISSN: 2090-729X, 2018.
- 27). Ravi Bhukya and **A. Venkata Lakshmi**, Subadditive and completely monotonic properties of the tricoli confluent hypergeometric functions, *International Journal of Advances in Mathematics*, 2018(5), 25-33, eISSN 2456-6098, 2018.
- 28). Feng Qi, Ravi Bhukya, and **Venkatalakshmi Akavaram**, Inequalities of the Grunbaum type for completely monotonic functions, *Advances and Applications in Mathematical Sciences* 17(3), 331-339, 2018.
- 29). Ravi Bhukya and **A. Venkata Lakshmi**, Some Inequalities for the Beta Function, *Bulletin of the International Mathematical Virtual Institute*, ISSN (p) 2303-4874, ISSN (o) 2303-4955, Vol 7, 403-406, 2017.
- 30). N. Saidulu and **A. Venkata Lakshmi**, Slip Effects on MHD Flow of Casson Fluid over an Exponentially Stretching Sheet in Presence of Thermal Radiation, Heat Source/Sink and Chemical Reaction, *Eur. J. Adv. Eng. Technol.*, 3(1), 47-55, 2016, ISSN: 2394 - 658X.
- 31). N. Saidulu and **A. Venkata Lakshmi**, Mhd Flow of Casson Fluid With Slip Effects over an Exponentially Porous Stretching Sheet in Presence of Thermal Radiation, Viscous Dissipation and Heat Source/Sink, *American Res. J. Math.*, SSN(online)- 2378-704X , Volume 2, 1-15, ,2016.
- 32). **A. Venkatalaxmi**, B.S.Padmavathi, T. Amaranath, “A General Solution of Oseen Equations”, *Fluid Dynamics Research*, Vol. 39, 2007, pp595-606
- 33). **A. Venkatalaxmi**, B.S. Padmavathi, T. Amaranath, “Complete General Solution of Stoke equations for Plane Boundaries”, *Mechanical Research Communications*, Vol.31(4), 2004, 466-475.

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- 35). **A. Venkatalaxmi**, B.S. Padmavathi, T. Amaranth, "A General Solutions of Unsteady Stokes Equations", Fluid Dynamics Research, Vol.35(3), 2004, 229-236
- 36). **A. Venkatalaxmi**, B.S. Padmavathi, T. Amaranath, "Unsteady Stokes Equations: Some Complete General Solutions" Proc. Indian Acad. Sci. (Math. Sci), Vol.114(2), 2004, 203-213.

- **Presented papers and participated in various national and international conferences and workshops.**