

Dr. PUNNAMCHANDAR BITLA  
E-mail: [punnamchandarbitlea@tripurauniv.ac.in](mailto:punnamchandarbitlea@tripurauniv.ac.in)



✦ [Institute Profile](#), [ORCID](#), [SCOPUS](#), [Google Scholar](#), [ResearchGate](#)

<b>Present Address</b>	Department of Mathematics Tripura University (A Central university) Agartala, India, 799022. Mobile: +91 9030859034
----------------------------	--

## Research Interests:

✓ Analytical and Numerical Solutions, Computational Fluid Dynamics, and Machine Learning

## Education

<b>2009-2013</b>	<b>Awarded in October 2013</b> : Department of Mathematics, National Institute of Technology Warangal, Telangana (India). <b>Thesis Title</b> : Some unsteady flows of micropolar and couple stress fluids between permeable beds <b>Supervisor</b> : Professor. T. K. V. Iyengar (Late), Department of Mathematics, National Institute of Technology, Warangal.
<b>2007-2009</b>	<b>M.Sc. (Applied Mathematics), CGPA : 8.75</b> National Institute of Technology Warangal.
<b>2005-2007</b>	<b>B. Ed. (Mathematics &amp; English), 70.36 %</b> College of Teacher Education - Warangal, Kakatiya University.
<b>2002-2005</b>	<b>B.Sc. (Mathematics, Physics &amp; Computer Science), 80.05 %</b> Kakatiya University.
<b>2000-2002</b>	<b>Intermediate (M.P.C), 93.20 %</b> Adarsha Junior College, Warangal.
<b>2000</b>	<b>SSC, Z.P.S.S. Nagaram, 81.66 %</b>

# Experience

## Teaching & Research Exp.

- ✓ Worked as an Assistant Professor (Regular Sr.Gr.) in AMRITA University, Coimbatore from Jul 1, 2013 to Oct 20, 2017.
- ✓ Worked as an Associate Professor in Wollega University, Nekemte, Ethiopia from Oct 25, 2017 - Aug 1, 2022.
- ✓ Worked as an Assistant Professor in Anurag University, Gatkesar from Sept 26th, 2022 to Dec 2nd, 2023.
- ✓ Working as an Associate Professor in Tripura University ( A Central University), Agartala from Dec 7th, 2023 to till date.

## Published Research articles

1. T.K.V. Iyengar and **Punnamchandar Bitla**, Pulsating Flow of an Incompressible Couple stress Fluid between Two Permeable Beds, *World Academy of Science, Engineering and Technology* 56, 1355-1365, **2011**. (**web of sciences**)
2. T.K.V. Iyengar and **Punnamchandar Bitla**, Oscillating Flow of an Incompressible Couple stress Fluid between Two Horizontal Parallel Permeable Beds, *International Reviews of PHYSICS*, 6(2), 222-226, **2012**.
3. T.K.V. Iyengar and **Punnamchandar Bitla**, Pulsating flow of an incompressible micropolar fluid between permeable beds with an imposed uniform magnetic field, *Journal of Porous Media*, 16(4), 303-314, **2013**. (**SCI**)  
<https://doi.org/10.1615/JPorMedia.v16.i4.30>
4. **Punnamchandar Bitla** and T.K.V. Iyengar, Effects of slip on pulsating flow of an incompressible micropolar fluid through a porous medium between two parallel plates, *Journal of Porous Media*, 16(8), 769-775, **2013**. (**SCI**)  
<https://doi.org/10.1615/JPorMedia.v16.i8.70>
5. **Punnamchandar Bitla** and T.K.V. Iyengar, Oscillating flow of an incompressible couple stress fluid between permeable beds with an imposed uniform magnetic field, *Special Topics and Reviews in Porous Media*, 4(1), 23-31, **2013**. (**Scopus**)  
<https://doi.org/10.1615/SpecialTopicsRevPorousMedia.v4.i1.30>
6. **Punnamchandar Bitla** and T.K.V. Iyengar, Pulsating flow of an incompressible micropolar fluid between permeable beds, *Nonlinear Analysis: Modeling and Control*, 18(4), 399411, 2013. (**Scopus**)  
<https://doi.org/10.1515/ijnsns-2017-0126>
7. **Punnamchandar Bitla**, T.K.V. Iyengar, Pulsating flow of an incompressible micropolar fluid between permeable beds with an inclined uniform magnetic field, *European Journal of Mechanics - B/Fluids*, 48, 174-182, **2014**. (**SCI**)  
<https://doi.org/10.1016/j.euromechflu.2014.06.002>
8. Punnamchandar Bitla and Fekadu Yemataw Sitotaw, Effects of slip and uniform magnetic field on the flow of immiscible couple stress fluids in a porous medium channel, **The International Journal of Engineering and Science (IJES)**, 1, 01-08, 2020.

9. Punnamchandar Bitla and Yitagesu Daba, Effects of inclined magnetic field on Poiseuille flow of micropolar fluid in a channel bounded below by a porous bed, **International Journal of Engineering and Science (IJES)** 1, 49-54, 2020.
10. Punnamchandar Bitla and Fekadu Yemataw Sitotaw, “Effects of Slip and Inclined Magnetic Field on the Flow of Immiscible Fluids(Couple Stress Fluid and Jeffrey Fluid) in a Porous Channel” **Journal of Applied Mathematics**, 2022. Article ID 2799773, **(WOS (ESCI))**  
<https://doi.org/10.1155/2022/2799773>
11. Punnamchandar Bitla and Fekadu Yemataw Sitotaw, “Hydromagnetic Flow of Two Immiscible Couple Stress Fluids in an Inclined Porous Channel: Effects of Slip Boundary” **Mathematical Problems in Engineering**, 2023. Article ID 9683532, **(Scopus)**  
<https://doi.org/10.1155/2023/9683532>
12. Punnamchandar Bitla and Yitagesu Daba Kore, “Hydromagnetic Flow of Two Immiscible Couple stress Fluids through Porous medium in a Cylindrical Pipe with Slip effect ” **Journal of Applied Mathematics** 2023. Article ID 1902844, **(WOS (ESCI))**  
<https://doi.org/10.1155/2023/1902844>

## Conferences Attended/ Papers Presented

1. T.K.V Iyengar and Punnamchandar Bitla, Pulsating flow of an incompressible couple stress fluid flow between two permeable beds with an imposed magnetic field, 55th Congress of the Indian society of theoretical and applied mechanics (ISTAM), National Institute of Technology, Hamirpur, Dec. 18-21, 2010, India.
2. T.K.V Iyengar and Punnamchandar Bitla, Pulsating flow of an incompressible micropolar fluid flow between two permeable beds, XX Congress and National Conference on Mathematical Modeling and Simulation (APSMS) SBIST, Khammam, Dec. 9-11, 2011, India.
3. T.K.V Iyengar and Punnamchandar Bitla, Pulsating flow of an incompressible micropolar fluid flow between two permeable beds with an imposed uniform magnetic field, 56th Congress of the Indian society of theoretical and applied mechanics (ISTAM), National Institute of Technology, Surat, Dec. 19-21, 2011, India.
4. Punnamchandar Bitla, Effects of slip on Pulsating flow of an incompressible micropolar fluid flow between two parallel plates with an imposed uniform magnetic field, 57th Congress of the Indian society of theoretical and applied mechanics (ISTAM), Defense Institute of Advanced Technology (DIAT), Pune, Dec. 17-20, 2012, India.
5. Punnamchandar Bitla, Effects of inclined magnetic field on oscillating flow of a micropolar fluid between permeable beds, International Conference on Recent Trends in Engineering & Technology and the Quest for Sustainable Development, Institute of Technology, Ambo University, May.13-14, 2019, Ethiopia.
6. Participated in the International Conference on Artificial Intelligence in Materials Science & Engineering (ICAIMSE-2022), Anurag University, Hyderabad, Telangana, India, Dec, 21 22, 2022.
7. Participated in a 5-Day International workshop on Applicable Mathematics for Science and Engineering - Recent Advances (AMSE - 2023) held at VIT-AP University, Andhra Pradesh, India, Feb, 16 20, 2023.
8. Participated in a 5 - day workshop on ”Statistical Analysis using Python” held at VNRVJIET, Hyderabad, Telangana, India, Mar, 06 11, 2023.

9. Participated in the Industrial Guest Lecture on How to Build a Machine Learning System for Customer Churn Prediction with AWS Sage Maker, Organized by School of Advanced Sciences, VIT-AP University, Amaravati held on 4th April 2023.
10. Participated in a Five Day National Online Professional Development Programme on "Computational Fluid Dynamics Methods and Applications" organized by Department of Mathematics, Little Flower Degree College in collaboration with Sonapur College, Sonapur, Assam from 4th to 8th September 2023.

## Workshops Attended

1. "*Prof. S. Minakshi Sundaram Memorial Society and One day seminar on Challenges in Current Mathematics Research*" conducted at NIT Warangal on Oct. 22, **2010**.
2. XIX Congress of Andhra Pradesh Society for Mathematical Sciences (APSMS) organized by the Department of Mathematics, J.I.T.S., Karimnagar during November 12- 14, **2010**.
3. "*STTP on Mathematical Modeling and Numerical Techniques*", 17-21 Jan **2011** organized by Department of Mathematics, NIT, Warangal.
4. "*The training on Design and Simulation of Fuzzy Logic Controller Using MATLAB*" conducted at Wollega University, Ethiopia on April 21, **2018**.

## Membership/Fellowship of accredited bodies

- × Indian Society of Theoretical and Applied Mechanics (ISTAM)
- × Andhra Pradesh Society of Mathematical Sciences (APSMS)

## Achievements

- ✓ Qualified APSET - 2012 (Andhra Pradesh State Eligibility Test - 2012).
- ✓ Qualified GATE - 2009 (Graduate Aptitude Test in Engineering).
- ✓ NIT Warangal : NITWET - 2007, All India Rank : 2
- ✓ Pondicherry Central University :PCU - 2007, All India Rank : 5
- ✓ Osmania University Hyderabad : OUCET - 2007, Rank : 24

## Competence in Computer Applications

- ✓ Mathematica, Maple and Python
- ✓ MS Office and Latex
- ✓ FORTRAN 77 & 90, C, C++ and MATLAB

## **Research and Programming Exp.**

1. Taught Numerical Methods and Operations Research related Lab programming in M.Sc Level in NIT Warangal using C, C++ while pursuing my PhD in 2010 and 2011.
2. Taught Numerical Methods using MATLAB for B.Sc (Math) and B.Tech(Mech) students in AM-RITA University, Coimbatore in 2016 and 2017.
3. Taught Numerical Methods using FORTRAN 90 for PhD Students (Numerical Analysis) in Wollega University, Ethiopia in 2017.
4. Taught Finite Element Method (using MATLAB) for PhD Students (Fluid Dynamics) in Wollega University, Ethiopia in 2017.
5. Taught Advanced Numerical Methods using MATLAB for PhD Students (Mathematical Modelling) in Wollega University, Ethiopia 2021.
6. Taught Mathematica (Symbolic Programming) for research scholars in Wollega University, Ethiopia.
7. Served as an Internal Examiner in the thesis evaluation for three research scholars in Fluid Dynamics in Wollega University, Ethiopia in 2020 and 2021.

## **Reviewer for the Journals**

1. Nonlinear Analysis: Modeling and Control
2. International Journal of Applied and Computational Mathematics
3. Environmental Fluid mechanics
4. Journal of Porous Media
5. Journal of Applied Mathematics
6. Special Topics and Reviews in Porous Media
7. The European Physical Journal Plus