Curriculum Vitae

Personal Details:

Name, Current Designation: Ponnam Anjaneyulu, Associate Professor
& Affiliation: Department of Physics, School of Physical Sciences,
Central University of Karnataka (CUK), Kalaburagi, Karnataka
Gender: Male
Nationality: Indian
Languages known: English, Telugu, Hindi and Kannada

Academic Qualifications:

Doctor of Philosophy (Ph.D. in Physics): June 2013, Indian Institute of Science, Bengaluru, India.
Master of Science (M.Sc. in Physics): June 2006, University of Hyderabad, Hyderabad, India.
Bachelor of Science (B.Sc.): June 2003, Kakatiya University, Warangal, India.

Area of Specialization: Experimental Condensed Matter Physics (Organic Semiconductors)
***PhD Dissertation Title*:** Charge Transport in Semiconducting Polymer Devices.

Academic Honours and Awards:

1. Research Associate fellowship from Indian Institute of Science, Bengaluru, India (Aug 2012-July 2013).
2. Travel award from Centre for International Co-operation in Science (CICS), Chennai, India to attend an international conference (June 2012) in Singapore.
3. Junior and Senior Research Fellowship from Council of Scientific and Industrial Research (CSIR-UGC-NET) based on an all-India examination (Dec 2006).
4. Best teacher and researcher award from REVA University during 2019-20 (with cash incentive).

Career details/Experience: Total experience 13 years (12 years of teaching, 1 year as research associate).

Designation & Duties	**Department/University/ Institution/Country**	**Duration**	**Years of experience**
Associate Professor, Teaching and Research	Department of Physics, Central University of Karnataka, Kalaburagi, India	Nov-2023 to till date	03 years
Associate Professor, Teaching and Research	Department of Physics, School of Applied Sciences, *REVA University,* Bengaluru, India	Dec 2017 to till date	5 years, 10 months
Assistant Professor, Teaching and Research	Department of Physics, School of Applied Sciences, *REVA University,* Bengaluru, India	July 2015 to Nov 2017	2 years 5 months
Assistant Professor, Teaching and Research	Engineering Physics Department, *GITAM University,* Hyderabad, India	Aug 2013 to June 2015	1 year 10 months
Research Associate, Research and Training	Physics Department, *Indian Institute of Science (IISc),* Bengaluru, India	Aug 2012 to July 2013	1 year

Ongoing Research activities:

1. Health monitoring Point of care devices making based on polymer and metal-oxide nanostructures for glucose level monitoring
2. Resistive switching based memory devices, hybrid and heterostructures to realise multilevel resistive switching/multibit memory and neuromorphic applications.
3. Nanostructures of metal-oxides and metal-sulphides, polymer nanocomposites, to realise multifunctional devices using the above structures.
4. Synthesis of conducting polymers by electro polymerization on various substrates and devices making.
5. Low-temperature charge transport, current-voltage studies on different polymer devices, electrical hysteresis, optical studies and switching, Raman and Impedance studies.

Research Grants: (External)

S.No.	**Role**	**Project title & Duration**	**Sanctioned amount & sponsored Agency**	**Status**
1	Principal Investigator	Metal -oxide nanomaterial-based hybrid devices for memory applications (11-July-2017 to 29th Oct 2021)	25,40,380/ DST-SERB, Government of India	Completed (at REVA University)

2	Principal Investigator	Photo memristors using nanomaterials for neuromorphic applications (08-March 2025 to 07-March-2028)	1,35,000/ UGC-DAE-CSR	Ongoing
3	Principal Investigator	Copper oxide nanostructures and polymer-based health monitoring biomedical point-of-care devices. (Oct 2025 to Apr 2029)	67.5 lakhs, DST-PAIR program	Ongoing

*As a Co-Investigator two projects are running, one at REVA University and one at CUK.

PhD Awarded/guiding details:

Number of PhD's awarded	02 as a sole supervisor	**Number of PhD's ongoing**	04 as co-supervisor, 01 as sole supervisor

International Conferences: 06; **International Conference Papers:** 04

Invited Talks: 05

1. ***Invited Talk*** on "Electrical hysteresis in hybrid devices" at International conference on Materials for Energy applications, Jaipur, 6-8th December 2018.
2. ***Resource Person*** in the UGC sponsored Refresher Course in Material Science: Recombinant Memetics being conducted by the HRDC from 07.12.2021 to 20.12.2021 in online Google Meet platform, at University of Calicut, Kerala. A three hour session in the FN of 18.12.2021 on the topic (i) Fundamentals of Organic Electronics,(ii) Organic Electronics: Fabrication and Application.
3. ***Resource person*** in the DST-SERB sponsored faculty development program conducted by school of Electrical and Communication Engineering, REVA University, Bengaluru. Title of the talk is "Novel nanomaterials for capacitive and resistive switching", 26th May 2023.
4. ***Invited Talk*** on "Recent Trends in Advanced Materials (NCRTAM-2024)" at National conference, Hyderabad, 15-16th February 2024.
5. ***Resource person*** in the DST-FIST sponsored 5-days (online) Faculty Development Program (FDP) on MULTIDISCIPLINARY INNOVATIONS IN ADVANCED SUSTAINABLE MATERIALS AND TECHNOLOGIES, Guntur, Andhra Pradesh, 24-28th June 2025.

Professional Activities:

- Nodal officer for Swayam at Central University of Karnataka, from July 2024 to till date.
- External doctoral committee member for VTU, PES, and Manipal University PhD students.
- Doctoral committee member (Thesis and Oral Examination Committees for PhD Students at REVA University, 2019-2023).
- Board of Studies and Board of Examiner member at REVA University (2019-2023).
- Designed and executed Atomic and Molecular Physics Lab experiments for master's students and Applied Physics Lab experiments for the first year B. Tech Civil Engineering at REVA University.

Membership of Professional Bodies:

1. Member of Materials Research Society, Singapore (07/2012 to 06/2013).
2. Life member of IISc Alumni council, India.

Computer skills/programming skills:

LabView programming for interfacing the instruments with computer (real time experimental monitoring and data collection). Interfaced the Tektronix/Keithley 2450, 6510, 2220 instruments.

Courses teaching/previously taught:

1. Solid state physics
2. Atomic and molecular physics
3. Nanoscience and nanotechnology
4. Heat and thermodynamics (Theory and lab)
5. Modern physics (Theory and Lab)
6. Engineering Physics (Theory and lab)
7. Applied Physics (Theory and lab).
8. LabVIEW programming introduction and interfacing (lab)

List of Books/Book Chapters:

1. Book Chapter with title "Hybrid Devices for Neuromorphic Applications (Chapter 24)" under the book title of Advanced Memory Technology: Functional Materials and Devices, Edited by Ye Zhou, ***RSC, 2023.*** https://doi.org/10.1039/BK9781839169946-00622

Total number of Publications: 27 (Scholar link for total publications)
https://scholar.google.co.in/citations?hl=en&user=KkBl6GQAAAAJ&view_op=list_works&sortby=pubdate

List of Publications in International peer-reviewed journals in last 5 years: 14

Sl. No	Title of the article	Author(s)	Name of the Journal, Vol, Issue, Year of Publication
14*	Investigating the effects of dopant and synthesis temperature on the conduction mechanism in Poly(3-methylthiophene) devices	S.K. Usha, P Anjaneyulu, Shobith M Shanbogh, Sougata Mandal, Mahipal Ranot	Synthetic metals, 18306, 2026
13*	Coexistence of Nonvolatile and Volatile Memory in Molybdenum Disulfide-Polymethyl Methacrylate Polymer Nanocomposite Memory Device	Priyanka B. M., **Ponnam Anjaneyulu***, Ashish Varade, Deepak K.	physica status solidi (a): 223, 10, 2026, e202500671
12	Chromium cyanurate-based robust resistive switching device emulating synaptic plasticity for neuromorphic application	UM Reddy, K Deepak, A Varade, **P Anjaneyulu**, SM Shanbogh	Synthetic Metals, 118161, 2026
11*	Influence of quinoid and aromatic structures on the electrical properties of electropolymerized poly(3-methylthiophene) devices	S.K. Usha, **P. Anjaneyulu***, Shobith M. Shanbogh, Sougata Mandal, Mahipal Ranot	Synthetic Metals, 317, 118059, 2026
10	Cobalt-doped zinc sulfide quantum dot thin films for next-generation electronic devices: Synthesis, characterization, and switching properties	Omkar Sharma, BM Priyanka, Karan Agarwal, **P Anjaneyulu,** Gajanan Honnavar	Solid-State Electronics, 228, 109146, 2025.
9	Compliance current dependent multilevel resistive switching in Titanium dioxide nanosheet based memory devices	Vindya Shetty, Shobith M. Shanbogh, **P. Anjaneyulu** & K. Deepak	Journal of Materials Science: Materials in Electronics, 35, 2014, 2024, 10.1007/s10854-024-13777-w
8*	Multi-functionality in de-doped poly 3-methylthiophene memristor device	Shobith M Shanbogh, Amit Roy, Ashish Varade, P Anjaneyulu	117648, 306, 2024, 10.1016/j.synthmet.2024.117648
7*	Probing the role of dopants on structural and electrical properties through Raman and Impedance spectroscopy in Poly (3-methylthiophene) devices	S K Usha, Shobith M Shanbogh, Sougata Mandal, Ashish Varade, **P Anjaneyulu***	117643, 307, 2024, 10.1016/j.synthmet.2024.117643
6*	Tailoring Opto-electronic and Interface properties via Electrochemical Doping in Poly(3-hexylthiophene)	Vaibhav V, Ashish Varade, **Anjaneyulu P***, Anup Kumar, Ramesh K. P	Current Applied Physics, 52, 57-64, 2023
5	Ohmic conduction in poly (o-toluidine)–nano CuO composite based devices	S. Ponkumar, D. Prakash Babu, **P. Anjaneyulu,** R. Uthrakumar, K. Kaviyarasu	Kuwait Journal of Science, Volume 50, Issue 4, 2023, 580-583
4*	Poly 3-methylthiophene based memristor device for neuromorphic computing	Shobith M S, Ashish Varade, Anju Kumari R, **P Anjaneyulu**	Synthetic metals, 296, 117360, 2023
3≠	Evidence of Lampert Triangle and Jonscher's Double Power Law in Doped Poly(3,4-ethylenedioxythiophene) Devices	Amit Roy, **Anjaneyulu Ponnam**, Vaibhav Varade, Gajanan V Honnavar, and Reghu Menon	The Journal of Physical Chemistry C, 127, 11, 5502–5512, 2023
2	Synthesis, electrical, and dielectric properties of novel polyaniline/strontium di-nitrate composites	Indavara S. Ashwini, Jayadev Pattar, Rajagopalachar Sreekanth, Madihally Nagaraja,	Polymer Composites. 2021;42:5125–5133.

		Shambonahalli Rajanna Manohara, **Ponnam Anjaneyulu**	
1*	Role Of Sweep Direction And Substrate Work Function On Resistive Switching Of Titanium-Di-Oxide [TiO2] Nanoparticles.	Anju Kumari R, **P Anjaneyulu***	Current Applied Physics, Elsevier, 25, 75-81, 2021.

*Corresponding author/First author/Research supervisor, # *Best publication*