

Name: Dr. G. Suresh
Designation: Assistant Professor
Department: H&S (Physics)
Mail I.D: suresh_g@vnrvjiet.in
Google Scholar: https://scholar.google.com/suresh_g

Experience (in years): Teaching : 4 + Research: 4



1. Educational / Technical qualifications

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization	Board/University
1	Ph. D	2019	Experimental Soft-condensed Matter	IIT Madras
2	M. Tech	2010	Exploration Geophysics	University of Hyderabad
3	M. Sc	2007	Computational Physics	Osmania University
4	B. Sc	2002	Math, Physics, Chemistry	Nagarjuna University

2. Teaching and Learning

2.1 Teaching Interests:

- Engineering Physics
- Applied Physics
- Experimental Soft Matter Physics
- Computational Physics
- Solid State Physics
- Quantum Mechanics
- Nanoscience and Technology

2.2 Novel Teaching & Learning Techniques adopted:

- Mind maps
- Think-Pair-Share
- WIT-WIL

3. Co-curricular and Extra-Curricular Activities

3.1 Interests and Hobbies:

- Reading and writing science articles
- Browsing and learning new skills

3.2 CCA/ECA Organized:

- Organized Mono dialogue, Open mic and Dialogue war competitions during Sintillashunz-2022.

3.3 CCA/ECA participated: Nil

3.4 Counseling and Mentoring Activity: Nil

3.5 Committees involved in:

- **Department level:** Engineering Physics Lab in-charge

- **Institute Level:** Institute level Time-Table Coordinator during 2020-2022
Institute level Time-Table team member during 2022-2023

4. Conference / Workshop / Seminar / Guest Lectures

4.1 Conferences conducted: Nil

4.2 Conferences Attended:

- Attended Emerging Polymer Technologies Summit in November 2017 held at Melbourne, **Australia** and presented my research work titled '*Improved Dielectric and Ferroelectric Properties in Cobalt Ferrite Doped PVDF Multiferroic Polymer Composites*'
- Attended 10th Liquid Matter Conference held at Ljubljana, **Slovenia** during July 2017 and presented my research work titled '*Evolution and Correlation of Morphology and Mechanical Properties in Polymorphic Phases of PVDF*' as a poster presentation
- Presented my research work titled '*Interplay between the spherulite size and Nano-Mechanical Properties in Polymorphic Phases of PVDF*' at Nanoyantrika 2017, **Trivandrum**
- Participated to present my work titled '*Crystallinity, Ferroelectricity and Mechanical Properties of PVDF and (PVDF-TrFE) Blends*' at CompFlu 2016 at **IIT Hyderabad**
- Participated and volunteered in the 7th International Asia Oceania Geosciences Society meet and presented my M. Tech. project work as an oral presentation

4.3 Workshops attended:

- Enthusiastically participated in a one-week Faculty Development Programme on "**Design Thinking in Engineering Education**" during 15th -20th June, 2020 conducted by VNRVJIET
- Successfully completed "**Effective Online Teaching in the age of Corona, A Hands On Workshop**" on 16th May, 2020 conducted by **IIT Bombay**
- Completed an AICTE approved Faculty Development Programme on "**Effective Teaching and Evaluation Methods in Engineering Education**" conducted by **National Institute of Technology Warangal** during 9th to 11th August, 2019
- Undergone an international workshop on **Nano-mechanical Testing** at Nanoyantrika 2017, **Trivandrum**
- Attended a school titled "**Basics of Magnetism and Investigations of Magnetic Properties of Materials using Synchrotron Radiation**" held at **Raja Ramanna Centre for Advanced Technology, Indore**
- Attended workshop on GEON-09 (Cyber infrastructure for earth sciences data) conducted by **San Diego Centre for Super Computing, California** and University Centre Earth and Space Sciences, University Of Hyderabad

5. Academic Contribution and Research & Consultancy

5.1 Invited Lectures:

- Presented an invited talk in A Four-day Training on Fabrication and Characterization of Nanomaterials, *IEEE Summer School on Nanotechnology-2022* titled, "*Nanomechanical Characterization of Materials*" during 16th to 19th November 2022, organized by IEEE Nanotechnology Council Hyderabad Section Chapter and VNRVJIET

- Delivered an invited talk in a two-day webinar titled, “*Multifunctional Materials*” from 15th to 16th July 2020, organized by Centre for Nano Science and Technology, Dept. of H&S, VNRVJIET

5.2 Articles / Chapters published in Books: Nil

5.3 Books Published as Single Author or as Editor: Nil

5.4 Projects Guided: Nil

5.5 Research Interests:

- Flexible nanocomposites for energy harvesting applications
- Multifunctional materials for sensors and actuators
- Experimental softmatter and biomimics
- Computational modeling and molecular dynamic simulations
- Geophysical Exploration of Minerals and Hydrocarbons

5.6 Ph. D students:

- a) Enrolled: Nil
- b) Submitted: Nil
- c) Awarded: Nil

5.7 Papers published in reviewed Journals:

- **G. Suresh**, C. Thirmal, P. Nikhil Mohan, D.N. Prasad, K.C. James Raju, T. Vishwam, Dielectric characterization of P(VDF-TrFE)-CuO nanocomposite solutions in the microwave frequency range using open-ended coaxial probe technique, *Materials Today: Proceedings*, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.04.321>
- C. Thirmal, P. Nikhil Mohan, **G. Suresh**, T. Lakshmi Viveka, K.C. James Raju, T. Vishwam, Investigation of dielectric properties of P(VDF-Trfe)-Nafion blended solutions in the microwave frequency region, *Materials Today: Proceedings*, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.04.138>
- C. Thirmal, P. Nikhil Mohan, **G. Suresh**, K.C. James Raju, T. Vishwam, Improved dielectric and AC conductivity properties of P(VDF-TrFE)-Nafion blends for high-temperature flexible capacitor applications, *Current Applied Physics*, **44**, 63-70 (2022)
- Ashtosh Kmar, Manjusha Battabyal, Avnee Chauhan, **G. Suresh**, R. Gopalan, N.V. Ravi kumar and Dillip K. Satapathy, Charge transport mechanism and thermoelectric behavior in Te:(PEDOT:PSS) polymer composites, *Mater. Res. Express* **6**, 115302 (2019)
- **G. Suresh**, Sanjay Jatav, G. Mallikarjunachari, M. S. Ramachandra Rao, Pijush Ghosh and Dillip K. Satapathy, Influence of Microstructure on the Nanomechanical Properties of Polymorphic Phases of Poly(vinylidene fluoride), *Journal of Physical Chemistry B*, **122** (36) 8591-8600 (2018)
- **G. Suresh**, Sanjay Jatav , P. M. Geethu, Yurlan Rephung, M. S. Ramachandra Rao and Dillip K Satapathy, Poly(vinylidene fluoride)- Formvar blends: dielectric, miscibility and mechanical studies, *Journal of Physics D: Applied Physics*, **51**, 065604 (2018)
- **G Suresh**, G Mallikarjunachari, Sanjay Jatav, Ch.Thirmal, M. S. Ramachandra Rao and Dillip K. Satapathy, Evolution of Morphology, Ferroelectric and Mechanical Properties in Poly(vinylidene fluoride) - Poly(vinylidene fluoride-trifluoroethylene) Blends, *Jour. App. Poly. Sci.* **135**, 45955 (2017)
- **G Suresh**, S Jatav, M S Ramachandra Rao and Dillip K Satapathy, Enhancement of dielectric and ferroelectric properties in cobalt ferrite doped poly(vinylidene fluoride) multiferroic composites, *Mater. Res. Express* **4**, 075301 (2017)

5.8 Sponsored Research Projects: Nil

5.9 Consultancy Projects: Nil

6. Awards / Honors received

- Awarded with the **Baldota Fellowship** for completing M. Tech. Programme
- Got several **Best Poster** and **Best Oral Presentation** awards
- Cracked distinct national and state level examinations (**GATE, SLET, JAM** etc.,)
- Achieved both **B & C** certificates of National Cadet Corps, Government of India
- Got the **Best Director Award** and also stood as the **Best Actor** during graduation

7. Motto

“Nothing in this world can bother you as much as your own mind, so believe in yourself and live this moment”