Dr.G.Shireesha

Designation: Associate Professor & Head of the Department
Qualification: M.Sc., M.Phil., Ph.D
Experience: Teaching-23 years

Area of Interest: Thin Films and Polymer Nanocomposites for Sensors
Date of Joining at RVCE: 02/04/2001
Email ID: shireeshag@rvce.edu.in

Project:

Funded Project: 01

Number of PG Projects guided: 01
Number of Doctorate Students

Completed: 02 Guiding: 00

Publication

National Journals	National Conferences	International Journals	International Conferences	Book/Book Chapter Published	Patent Granted
01	02	16	05	02	03

List of International Journal Publications :

1. Enhanced Electrochemical Performance of NiFe-LDH@ CNT Nanocomposite for High-Energy Supercapacitors AC Vittal Rao Manjunatha Rao, **Shireesha G**, CK Rastogi, M Channegowda ACS Applied Electronic Materials 7 (1), 48-63, 2024.

2. INVESTIGATION ON PRISTINE AND DOPED PVDF-HFP ELECTROSPUN THIN FILMS S Joshi, **G Shireesha**, MU Kumari , 8th International Conference on Computational System and Information, IEEE transactions, 2024.

3. Probing the influence of mixed alkaline electrolytes towards the fabrication of melamine-derived porous Co3O4-based supercapacitor, VMA Chavan, C Manjunatha, KP Shwetha, **G Shireesha**, SG Kumar, Materials Chemistry and Physics 308, 128209, 2023.

4. A succinct review on piezoelectric characteristics of PVDF and its copolymer PVDF-HFP, AC VM, **G Shireesha**, MR Ambika, ECS Transactions 107 (1), 10623, 2022.

5. Effect of position and shape of electrode on resonant frequency of an artificial epithelium membrane for frequency selectivity SR Karbari, S Sankanatti, MU Kumari, **G Shireesha** , IOP Conference Series: Materials Science and Engineering 1136 (1), 012074, 2021.

6. Design and simulation of stacked PVDF layers with ZnO for piezoelectric nanodevices, K Malhotra, MU Kumari, SR Karbari, **G Shireesha**, Materials Today: Proceedings 42, 951-954, 2021.

7. Optimization, Design and Analysis of a MEMS Microphone with PVDF as a Structural Layer for Cochlear Implant Applications SR Karbari, S Jain, S Gaur, M Uttara Kumari, **G Shireesha** Nanoelectronics, Circuits and Communication Systems: Proceeding of NCCS 2019, 2021.

8. Signal conditioning circuits for low vibration signals using an array of piezoelectric sensors SR Karbari, S Mohanram, SS Sriniketh, MU Kumari, **G Shireesha** Materials Today: Proceedings 46, 2212-2220, 2021

9. Effect of Ultrasonication and Centrifugation on the Pore Size of PVDF/CNT Nanocomposites SR Karbari, R Singhal, M Uttara Kumari, **G Shireesha**, Nanoelectronics, Circuits and Communication Systems: Proceeding of NCCS 2019, 2021

10. Modelling and optimization of PVDF based surface acoustic wave MEMS microphone SR Karbari, MU Kumari, **G Shireesha**, Materials Today: Proceedings 46, 2255-2260, 2021

11. Centrifugation on the Pore Size of PVDF/CNT Nanocomposites SR Karbari, R Singhal, MU Kumari, **G Shireesha**, Nanoelectronics, Circuits and Communication Systems: Proceeding of NCCS 2019, 2020

12. Simulation and Optimization of stacked PVDF Membrane for Piezoelectric Application SR Karbari, S Inasu, V Kamalaksha, VA Nayak, MU Kumari, **G Shireesha**, International Journal of Engineering and Advanced Technology 9 (5), 551-555, 2020

13. Influence of Cd0. 99Eu0. 01SiO3 nanoparticles concentration on Cd0. 99Eu0. 01SiO3/PVDF nanocomposite films **G Shireesha**, C Manjunatha, A Jain, MC Radhakrishna Materials Today: Proceedings 5 (10), 21162-21174, 2018.

14. MEMS capacitive humidity sensor with plate array structure using polyimide sensing layer, PR Vijapur, SR Karbari, **G Shireesha**, 2017 International Conference on Circuits, Controls, and Communications, 2017

15. Investigations on spin coated poly(vinylidene fluoride) flexible films, **G.Shireesha**, Anjana Jain, R.Chandramani & M C Radhakrishna, Archieves of Physics Research, 2015, 6(4):1-6.

16. Influence of $Cd_{0.99}Ni_{0.01}SiO_3$ nanofiller on structural and optical properties of spin coated poly(vinyl fluoride) nanocomposite flexible films, **G.Shireesha**,

C.Manjunatha, Anjana Jain, & M C Radhakrishna, Asian Journal of Physics, Vol 24, No.7, July 2015.

List of International Conference Publications :

1. **G.Shireesha,** Influence of Cd0.99Eu0.01SiO3 nanoparticles concentration on Cd0.99Eu0.01Si03/PVDF nanocomposite Films, Materials Today Proceedings 5(1) 21162-21174, (2018).
2. **G.Shireesha**, C.Manjunatha, Anjana Jain, & M C Radhakrishna "Characterization of spin coated Poly(vinylidene fluoride) thin film for its application as Acoustic sensor" at 3rd Asian Symposium on Materials & Processing (ASMP 2012), August 30-31, 2012, IIT Madras, Chennai, India.
3. **G.Shireesha**, C.Manjunatha, Anjana Jain, & M C Radhakrishna "Preparation and Characterization of Poly(vinylidene fluoride)-$CdSiO_3$ nanocomposite thin films" at Advanced Materials, Manufacturing, Management & Thermal Sciences (AMMMT-2013), May 03-04, 2013, at SIT Tumkur, India.
4. **G.Shireesha**, C.Manjunatha, Anjana Jain, & M C Radhakrishna "Experimental Characterization of P(VDF-co-HFP)(poly vinylidene fluoride-co-hexafluoropropylene) copolymer thin film doped with titanium oxide nanoparticles for sensor applications" at Advanced Materials, Manufacturing, Management & Thermal Sciences (AMMMT-2013), May 03-04, 2013, at SIT Tumkur, India.
5. **G.Shireesha**, C.Manjunatha, Anjana Jain, & M C Radhakrishna "Investigation on characteristics of PVDF/ $Cd_{0.99}Ni_{0.01}SiO_3$ nanocomposite films for high k-capacitors" at ILAFM 2014, December 18-20,2014, at RVCE, Bangalore, India.

List of National Conference Publications :

1. **G.Shireesha**, C.Manjunatha, Anjana Jain, & M C Radhakrishna "Structural and Thermal Characterization of $Cd_{0.99}Eu_{0.01}SiO_3$/Poly(vinylidene Fluoride) nanocomposites" at RIESMS-2015, DSCE, Bangalore, ISBN 978-93-5254-017-4
2. **G.Shireesha**, C.Manjunatha, Anjana Jain, R Chandramani & M C Radhakrishna "Structural and Optical Characterization of $Cd_{0.99}Cr_{0.01}SiO_3$ Poly(vinylidene fluoride) nanocomposite flexible films" at Nano and Material Science (NMS-2015) at Dayanand Sagar University, Bangalore, ISBN 978-93-85682-09-4

Patents Granted :

1. Flexible Artificial Basilar Epithelium,, Inventors –Dr.M Uttara Kumari, Prof.Rohini S Hallikar, **Dr.G Shireesha, 18-05-2018**
2. Optimization of lowest dimensional Nanofibre with 1D Nanostructured PVDF doped MWCNT, Inventors-Prof.Sudha R Karbari, **Dr. G Shireesha**, Dr. Uttara Kumari M. **21-03-2024**

3. A Multilayered Mask with Hydrophobic Nanofibres as Functional layer with a smart valve for Protection against the aerosol Transmission of Covid-19, Inventors-, **Dr. G Shireesha**, Prof.Sudha R Karbari, Dr. Uttara Kumari M, Dr.Subramanya K M, **04-02-2025.**

Project:

SERB sponsered project on "Design & fabrication of flexible artificial Basilar Epithelium" SPG/2021/003740 (Amount: Rs. 30,00,000; Duration: 2022-2025)

Awards :

Best poster presentation at 3rd Asian Symposium on Materials & Processing (ASMP 2012), August 30-31, 2012, IIT Madras, Chennai, India.