



Dr. RAGHU S

Assistant Professor
Department of Physics
KLE SOciety's, Basavaprabhu Kore
Arts, Commerce, and Science
College, Chikodi-591201

Mobile No: 9901687078

E-mail: raghu.mona@gmail.com

Personal Information:

Date of Birth: 05/06/1984

Marital Status: Married

Languages: Kannada, English, Telugu.

Permanent Address : S/O Shakunappa, Krishnapura, Dharmapura,
Hiriyur Taluk, Chitradurga District-577546, Karnataka

Educational Qualifications:

a) PhD with course work

University/Institution : Mangalore University, Karnataka

Field of Study : Solid State Physics

Year : 2017

Thesis title "*Electron Beam Irradiation Effect on Electrical and Dielectric Properties of Polymer Electrolytes*"

b) M. Sc. In Physics

University/Institution : Kuvempu University, Karnataka

Subject Studied : Physics with Solid State Physics Specialization

Year : 2008

Project Work on: "*Studies on Dielectric properties of Polyaniline-Flyash Composites*"

c) B.Sc.

University/Institution : Govt. Science College, Chitradurga (Kuvempu University)

Subject Studied : Physics, Chemistry and Mathematics

Year : 2005

Research Experience: 08 year

Teaching Experience: 05 years

List of Research Papers Published:

Papers in Reputed Journals: 19

1. A paper entitled “**Modifications of PEO Based Polymer Electrolytes by Electron Beam Irradiation for Energy Storage Applications**” in *Polymer Bulletin* (2022) (**Impact Factor 2.8**)
S. Raghu, H. Devendrappa, S. Ganesh, Shidaling Matteppanavar
2. A paper entitled “**Effect of NaBr Salt on Crystallinity, Structural, Thermal and Mechanical Properties of HPMC:NaBr Composite Films**” in *Asian Journal of Chemistry; Vol. 34, No. 2* (2022)
Sunil kumar, **S Raghu**, T Demappa, J Sannappa.
3. A paper entitled “**Electron Beam Induced Modifications In Conductivity and Dielectric Property of Polymer Electrolyte Film**” in *Radiation Measurements* 53-54 (2013) 56-64 (**Impact factor 1.17**)
S. Raghu, Subramanya Kilarkaje, Ganesh Sanjeev, Devendrappa H.
4. A paper entitled “**Effect of Electron Beam Irradiation on Polymer Electrolytes: Change in Morphology, Crystallinity, Dielectric Constant and AC Conductivity with Dose**” in “*Radiation Physics and Chemistry*” Volume 98, May 2014 124-131 (**Impact factor 1.40**)
S. Raghu, Subramanya Kilarkaje, Ganesh Sanjeev, Devendrappa H.
5. A paper entitled “**The physical and chemical properties of gamma ray irradiated polymer electrolyte films**” in *Journal of Non-Crystalline Solids* 426 (2015) 55–62 (**Impact factor 1.76**)
Raghu S, Archana K, Sharanappa C, Ganesh S, Devendrappa H
6. A paper entitled “**Electron Beam and Gamma Ray Irradiated Polymer Electrolyte Films: Dielectric Properties**” is published in *Journal of Radiation Research and Applied Sciences* 9 (2016) 117-124. (**ISSN 1687-8507**)
S. Raghu, K. Archana, C. Sharanappa, S. Ganesh, H. Devendrappa
7. A paper entitled “**Effect of 8MeV electron irradiation on the optical properties of doped polymer electrolyte films**” in *J. Phys. D: Appl. Phys.* 44 (2011) 105403 (8pp) (**Impact factor 2.721**)
Subramanya K, V Manjunatha, **S Raghu**, M V N Ambika Prasad, H Devendrappa.
8. A paper entitled “**Methyl blue dyed polyethylene oxide films: Optical and electrochemical characterization and application as a single layer organic device**” in *Optical Materials* 51 (2016) 213–222. (**Impact factor 1.981**)

Archana Kamath, **S. Raghu**, H. Devendrappa

9. A paper entitled “**Enhanced electrochemical, structural, optical, thermal stability and ionic conductivity of (PEO/PVP) polymer blend electrolyte for electrochemical applications**” in *Ionics* (2015). (**Impact factor 1.754**)
Sharanappa Chapi, **Raghu S**, Devendrappa H
10. A paper entitled “**Dielectric Constant and Transport Mechanism of Percolated Polyaniline Nanoclay Composites**” in *Industrial & Engineering Chemistry Research* 53(43) · September 2014 (**Impact factor 2.587**).
Mini V, Archana K, **S. Raghu**, Sharanappa C, and Devendrappa H
11. A paper entitled “**Nanostructured multifunctional core/shell ternary composite of polyaniline-chitosan-cobalt oxide: Preparation, electrical and optical properties**” in *Materials Chemistry and Physics*, (2015) 1-9 (**Impact factor 2.259**).
Mini V, Archana K, **S. Raghu**, Sharanappa C, and Devendrappa H
12. A paper entitled “**Structural, Optical and Thermal Study on PEO-Based Solid Polymer Electrolyte for Optical Device Applications**” in *Macromol. Symp.* 2016, 361, 129-135 (**Impact factor 0.9**)
Sharanappa C, **Raghu S**, Mini V, Archana K, S. Thomas, Devendrappa H
13. A paper entitled “**Optical, DC Conductivity and Electrochemical Parameter of Polymer Electrolyte Complexes**” in *Journal of International Academy of Physical Sciences* Vol. 15(2011) Special Issue 2 pp. 297-314.
Manjunatha V, Subramanya K, **Raghu S**, Devendrappa H
14. A paper entitled “**Localized polarons in *in situ* synthesized polyaniline nanocomposite improve the morphology and the thermal and electrical conductivity**” in *RSC Adv.*, 2016, **6**, 115074-115084. (**Impact factor 3.289**)
M. Niranjana, L. Yesappa, S. P. Ashokkumar, H. Vijeth, **S. Raghu** and H. Devendrappa
15. A paper entitled “**Structural, Thermal, Morphology Studies of Cu-CoZnFe₂O₄ nano ferrites by combustion method**” in *nano progress* (2020) 2(3), 21-24.
Madhu kumar, **Raghu S**, Mohan N R, Harihar C A, and Basavaraj H G
16. A paper entitled “**Characterization, Electrical Conductivity and Electrochemical Performance of Polyaniline-LiClO₄-CuO Nano Composite for Energy Storage Applications**” in *Polymer-Plastics Technology and Engineering*, 29 May 2018, ISSN: 0360-2559 (Print) 1525-6111 (Online).
L Yesappa, M Niranjana, S Ashokkumar, H Vijeth, **S Raghu** & H Devendrappa
17. A paper entitled “**Evidence of Weak Ferromagnetism, Space Charge Polarization, and Metal to Insulator Transition in Dy-Doped CaMnO₃**” in *Journal of Superconductivity and Novel Magnetism*, 06 January 2021 (Impact factor 1.244)
Ravi Bharamagoudar, V. Jagadeesha Angadi, I. Shivaraja, Basavaraj Angadi, Rajib Mondal, Anil S. Patil, Sunil Patil, Vinayak Pattar, **S. Raghu** & Shidaling Matteppanavar
18. A paper entitled “**Synthesis, Characterization and Absorption Study of Aloe Vera doped Polyaniline Bio-Composite**” *Materials Today: Proceedings* 5 (2018) 21076–21081.
Yesappa L, Niranjana M, Ashokkumar SP, Vijeth H, Sharanappa C, **Raghu S**, Devendrappa H

19. A paper entitled “**Investigation of the Structure, Optical and Electrical Properties of Lithium Perchlorate Doped Polyaniline Composite: Aloe Vera used as a Bio-Plasticizer**”, Journal of Electronic Materials (2017)
L. Yesappa, M. Niranjana, S P Ashokkumar, H. Vijeth, Chapi sharanapp, **S Raghu**, H. Devendrappa.

Papers in Proceedings: 13

1. A paper entitled “**The change in dielectric constant, AC conductivity and optical band gaps of polymer electrolyte film: Gamma irradiation**” AIP Conference Proceedings **1591**, 1272 (2014); doi: 10.1063/1.4872927
S Raghu, K Subramanya, C Sharanappa, V Mini, K Archana, Ganesh, H Devendrappa
2. A paper entitled “**AC Conductivity & Dielectric Relaxation of Polymer Complexes**” in “**Solid State Physics (AIP publication)**” 1447, 967 (2012); 10.1063/1.4710326.
S. Raghu, Subramanya Kilarkaje, V. Manjunatha, Devendrappa H.
3. A paper entitled “**Structural, thermal studies and ionic conductivity of doped polymerelectrolytes**” in “**Solid State Physics (AIP publication)**” 1447, 965 (2012); doi: 10.1063/1.4710325
Subramanya Kilarkaje, **S. Raghu**, H. Devendrappa
4. A paper entitled “**Electrical transport and thermochromic properties of polyaniline/chitosan/Co3O4 ternary nano composite**” AIP Conference Proceedings 1665, 110004 (2015); doi: 10.1063/1.4918060
Mini V, Archana Kamath, **Raghu S**, Sharnappa Chapi, Devendrappa H
5. A paper entitled “**Thermochromism and fluorescence in dyed PEO films**” AIP Conference Proceedings 1665, 060003 (2015); doi: 10.1063/1.4917838
Archana Kamath, **Raghu S**, Mini V, Sharanappa C, and Devendrappa H
6. A paper entitled “**Conductivity and optical band gaps of polyethylene oxide doped with Li₂SO₄ salt**” AIP Conference Proceedings **1591**, 1275 (2014); doi: 10.1063/1.4872928
Sharanappa C, **S Raghu**, K. Subramanya, K. Archana, V. Mini, and H. Devendrappa
7. A paper entitled “**A Study Of Optical And Dielectric Properties of 8MeV Electron Irradiated Polymer Electrolyte Film**” in International Conference proceedings ICAM-2012, during 5-7th Jan. 2012, at Loyola College, Chennai, Tamilnadu, India
Subramanya Kilarkaje, **Raghu S**, Devendrappa H
8. A paper entitled “**In-situ chemical synthesis of PANI dodecylbenzene sulfonic acid doped vanadium pentoxide: Optical and electrical properties**” Advanced Materials Proceedings, 2017, 2(3), 184-188
Niranjana M, Sharanappa Chapi, Yesappa L, Archana K, **Raghu S**, Devendrappa H
9. A paper entitled “**optical and electrical studies of vanadium pentoxide doped polyaniline composite**” in AIP proceedings-61st DAE-SSPS 2019 was held at KIIT University, Bhubaneswar, Odissa during December 26-30, 2016.
Niranjana M, Yesappa L, Ashok Kumar S P, Vijeth, Sharanappa Chapi, **Raghu S**,

Devendrappa H

10. A paper entitled "**Structure, morphology and optical studies of Li⁺ doped Polyaniline Composite**" in AIP proceedings-61st DAE-SSPS 2019 was held at KIIT University, Bhubaneswar, Odissa during December 26-30, 2016.
Yesappa L, Niranjana M, Ashok Kumar S P, Vijeth, Sharanappa Chapi, **Raghu S**, Devendrappa H
11. A paper entitled "**Synthesis, Morphology and Optical band gap of CuO Nanoparticles Immersed Li/Polyaniline Composite**" in proceedings of DAE BRNS-6th Interdisciplinary Symposium on Material Chemistry was held at Bhabha Atomic Research Centre, Mumbai, India during December 06-10. 2016.
Niranjana M, Yesappa L, Ashok Kumar S P, Vijeth H, Sharanappa Chapi, **Raghu S**, Devendrappa H
12. A paper entitled "**Ternary Polyaniline Nanocomposite for high performance of Super capacitor application**" in proceedings of International Conference on Material Science and Technology was held at University of Delhi, Delhi, during March 1-6 2016.
Niranjana M, Sharanappa Chapi, Yesappa L, Archana Kamath, **Raghu S**, Devendrappa H
13. A paper entitled "**Optical Absorption and Morphology of Bio-Intercalated Polyaniline Composite**" in proceedings of International Conference on Material Science & Technology was held at University of Delhi, during March 1-6 2016.
Yesappa L, Niranjana M, Sharanappa Chapi, Archana Kamath, **Raghu S**, Devendrappa H

International/national Conferences attended and papers presented: 28

1. Participated & presented a paper entitled "**AC Conductivity and Dielectric Relaxation of Polymer Complexes**" in 56th DAE-SSP Organized by SRM University, Kattankulatturu, Chennai, Tamilnadu, India during 19-23rd Dec., 2011.
Raghu S, Subramanya Kilarkaje, Devendrappa H
2. Participated & presented a paper entitled "**Dielectric Studies on PEO-Cadmium Sulphide Polymer Electrolytes**" in 1st International Conference, ICPM- MDF-2012, during 17-19th Jan. 2012, at Shivaji University, Kolhapur, India.
Raghu S, Subramanya Kilarkaje, Devendrappa H
3. Participated & presented a paper entitled "**A study of optical, electrical and dielectric properties of 8MeV electron beam irradiated polymer electrolyte films**" in International Conference on Advanced Materilas (ICAM 2012), during 5-7th Jan. 2012, at Dept. of Physics, Loyola College, and Chennai, India.
Raghu S, Subramanya Kilarkaje, Devendrappa H
4. Participated and presented a Paper entitles "**Electron Beam Induced Modifications in the Conductivity and Dielectric Property of Polymer (PEO:LiSO₄) System**" in 3rd international conference on natural polymers, biopolymers, polymer electrolytes, blends: macro to nano scales (ICNP 2012). Mahatma Gandhi University, Kottayam, Kerala. Oct.

26-28th 2012.

Raghu S, Subramanya Kilarkaje, Ganesh Sanjeev, Devendrappa H

5. Participated and presented a paper entitled “**Electron Beam Induced changes in Dielectric Properties of Polymer Electrolyte films**” in International Conference on Recent Advances in Material Science (RAMS-2012), Bangalore. Nov. 6-8th 2012.
Raghu S, Subramanya Kilarkaje, Ganesh Sanjeev, Devendrappa H
6. Participated and presented a paper entitled “**The Change in Dielectric Constant, AC Conductivity & Optical Band Gaps of Polymer Electrolyte Film: Gamma Ray Irradiation**” in 58th DAE-Solid State Physics Symposium 2013 was held at Tapar University, Punjab. From Dec. 17-21-2013.
Raghu S, Subramanya K, Sharanappa Chapi, Archana K, Mini V, Devendrappa H
7. Participated and presented a paper entitled “**Electron Beam and Gamma Ray Irradiated Polymer Electrolyte Films: Dielectric Properties**” in APA-2014 International Conference on Polymer: Vision & Innovation was held at IIT New Delhi, Feb.19-21 2014.
Raghu S, Subramanya Kilarkaje, Ganesh Sanjeev, Nagaraja G K, Devendrappa H
8. Participated in the 2nd international conference on “**Po and Ra radioactive Pb Isotopes (INCO-PoPb-2013)**” organised at Mangalore University, Mangalore on 10-13 February 2013
9. Participated in the 30th IARP National conference on “**Radiological protection and Safety in nuclear reactors and radiation installations**” organised at Mangalore University, Mangalore on 15-17 March 2012.
10. Participated and presented a paper entitled “**Study the Conductivity and Dielectric Properties of Electron Beam Irradiated Polymer electrolyte Film**” in International Conference on Recent Advances in Material Science (RAMS-2012), Bangalore. Nov. 6-8th 2012.
Devendrappa H, **Raghu S**, Subramanya Kilarkaje, Ganesh Sanjeev
11. Participated and presented a paper entitled “**Characterization, optical and transport properties of doped Polyaniline**” in International Conference on Recent Advances in Material Science (RAMS-2012), Bangalore. Nov. 6- 8th 2012.
Subramanya Kilarkaje, **Raghu S**, Devendrappa H, Ganesh Sanjeev.
12. Participated & presented a paper entitled “**Structural, Thermal Studies and Ionic Conductivity of Doped Polymer Electrolytes**” in 56th DAE-SSP Organized by SRM University, Kattankulatturu, Chennai, Tamilnadu, India during 19-23rd Dec., 2011.
Subramanya Kilarkaje, **Raghu S**, Devendrappa H
13. Participated & presented a paper entitled “**Ionic Conductivity and Electrochemical Parameter of Doped Polymer Film**” in 1st International Conference, ICPM- MDF-2012, during 17-19th Jan. 2012, at Shivaji University, Kolhapur, India.
Subramanya Kilarkaje, **Raghu S**, Manjunatha V, Devendrappa H
14. Participated & presented a paper entitled “**Studies on Structural, Optical and Cluster Size of doped polyaniline**” in International Conference on Advanced Materilas (ICAM 2012),

during 5-7th Jan. 2012, at Dept. of Physics, Loyola College, Chennai, India.
Subramanya Kilarkaje, Raghu S, Devendrappa H

15. Participated and presented a paper entitled **“Conductivity & Optical Band Gaps of Polyethylene Oxide Doped with Li₂SO₄ Salt”** in 58th DAE-Solid State Physics Symposium 2013 was held at Tapar University, Punjab. From Dec. 17-21-2013.
Sharanappa C, Archana K, Raghu S, Subramanya K, Mini V, Devendrappa H
16. Participated and presented a paper entitled **“Investigate the AC Conductivity and Optical Band Gaps in Polyethylene Oxide Based Complexes Solid Electrolyte Films”** in APA-2014 International Conference on Polymer: Vision & Innovation was held at IIT New Delhi, Feb.19-21 2014.
Sharanappa C, Manjunatha V, Raghu S, Subramanya K, Archana K, Devendrappa H
17. Participated and presented a paper entitled **“Optical Transmittance & Reflectance of Methyl Blue Dye Doped Polyethylene Oxide Films”** in APA-2014 International Conference on Polymer: Vision & Innovation was held at IIT New Delhi, Feb.19-21 2014.
Archana K, Raghu S, Subramanya K, Sharanappa C, Mini V, Devendrappa H
18. Participated and presented a paper entitled **“Polyaniline/ chitosan/Co3O4 nano composite - Structural and Optical Studies”** in APA-2014 International Conference on Polymer: Vision & Innovation was held at IIT New Delhi, Feb.19-21 2014.
Mini V, Archana K, Raghu S, Subramanya K, Sharanappa C, Devendrappa H
19. Participated and presented a paper entitled **“Optical band gaps and structural Properties of PEO doped with Methyle blue”** in ICAPM-2013 International Conference on Advanced Polymeric materials was held at MG University Kottayam, Kerala from Oct. 11-13-2013.
Archana K, Raghu S, Subramanya K, Sharanappa Chapi, Mini V, Devendrappa H
20. Participated and presented a paper entitled **“Structural, Morphological and Optical Studies of Polyaniline Nano Clay Composites”** presented in ICAPM-2013 International Conference on Advanced Polymeric materials was held at MG University, Kottayam, Kerala, from Oct. 11-13-2013.
Mini V, Archana K, Raghu S, Subramanya K, Sharanappa Chapi, Devendrappa H
21. Participated and presented a paper entitled **“Investigate the AC Conductivity and Optical Property of Polyethylene Oxide Based Complex Film”** presented in ICAPM-2013 International Conference on Advanced Polymeric materials was held at MG University, Kottayam, Kerala, from Oct. 11-13-2013.
Sharanappa C, Manjunatha V, Raghu S, Subramanya K, Archana K, Devendrappa H
22. Participated and presented a paper entitled **“Transport Property of Polyaniline Clay-Nano Composities”** in **“ICMCT 2014”** International Conference on Materials and Characterization techniques, held in VIT University Vellore Tamilnadu during 10-12, March 2014.
Mini V, Archana K, Raghu S, Subramanya K, Sharanappa Chapi, Revanasiddappa M, Devendrappa H*
23. Participated and presented a paper entitled **“Studying the Effect of KCl Addition on the**

Optical Properties and morphological of the solid polymer electrolyte film” in “**ICMCT 2014**” International Conference on Materials and Characterization techniques, held in VIT University Vellore Tamilnadu during 10-12, March 2014.

Sharanappa Chapi, **Raghu S**, Subramanya K, Archana K, Mini V, Devendrappa H*

24. Participated and presented a paper entitled “**Polymer Degradation Due to Irradiation**” in “**ICMCT 2014**” International Conference on Materials and Characterization techniques, held in VIT University Vellore Tamilnadu during 10-12, March 2014. Devendrappa H, **Raghu S**, Subramanya K, Ganesh Sanjeev
25. Participated and presented a paper entitled “**Thermal and Fluorescence Spectroscopy Studies on Dyed Polymer Films**” International Conference on Materials and Characterization techniques, held in VIT University Vellore Tamilnadu during 10-12, March 2014. Archana K, Mini V, Subramanya K, **Raghu S**, Sharanappa C, Devendrappa H*
26. Participated and presented a paper entitled “**Thermochromism and Fluorescence in Dyed PEO Film**” in 59th DAE-Solid State Physics Symposium was held at VIT University Vellore, Tamilnadu. From Dec. 16-20-2014. Archana K, **Raghu S**, Mini V, Sharanappa C, Devendrappa H
27. Participated and presented a paper entitled “**Electrical Transport and Thermochromic Properties of Polyaniline/Chitosan/Co₃O₄ Ternary Nano composite**” in 59th DAE-Solid State Physics Symposium was held at VIT University Vellore Tamilnadu. From Dec. 16-20-2014. Mini V, Archana K **Raghu S**, Sharanappa C, Devendrappa H
28. Participated and presented a paper entitled “**Electrical and electrochemical properties of electron beam irradiated polymer electrolytes**” in ICPN-2019, at Department of physics Mangalore university, magalagangotri, Mangalore, Karnataka on 19-21 September 2019 **Raghu S**, Ganesh Sanjeev, and Devendrappa H

Seminars and Workshops Attended: 04

1. Participated in the seminar on “**Radiation and Radioisotopes: Tools for scientific research**” on 28th April 2014 at CARRT, Mangalore University, Mangalore.
2. Participated in the Workshop on “**Radiation- Its applications in physical, chemical and life sciences**” on 24-25th June 2015 at Dept. of studies in physics, Mangalore University, Mangalore.
3. Attended the DST-SERB school on “**Ion Interaction with Matter**” organised by Department of physics, Saurashtra University, Rajkot (Gujarat) during March 2-21, 2015.
4. Attended the Science Academies Lecture Workshop on “**Condensed and Soft Matter Physics**” on 22-24th February 2017 held at Dept. of studies in physics, Mangalore University, Mangalore.

Awards received: 01

1. **Best poster presentation award** for the paper entitled “*Electron Beam Induced changes in Dielectric Properties of Polymer Electrolyte films*” in International Conference on Recent Advances in Material Science (**RAMS-2012**), Bangalore. Nov. 6-8th 2012.

Raghu S, Subramanya Kilarkaje, Ganesh Sanjeev, Devendrappa H

Membership of Professional bodies

1. Inter University Accelerator centre (IUAC) New Dehli

Google Scholar Profile:

<https://scholar.google.com/citations?user=wWfsq7wAAAAJ&hl=en>

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Dr. Raghu S - Google Scholar



Dr. Raghu S

KLE Society's, B K Arts, Science &
Commerce College, Chikodi

polymer electrolytes
radiation effect
Dielectric properties

	All	Since 2017
Citations	356	302
h-index	10	9
i10-index	10	9
Articles	0 articles	4 articles

Research Gate Profile: <https://www.researchgate.net/profile/Raghu-S>

Academia research Profile: <https://independent.academia.edu/DrRaghuS>

I certify that the information furnished above is true to the best of my knowledge.

Place: Chikodi
Date: 01.02.2022

Signature

(Dr. Raghu S)