## RESEARCH PROFILE OF THE **DEPARTMENT OF PHYSICS, KARNATAK SCIENCE COLLEGE, DHARWAD**

The department has six permanent faculty members, all of them having Ph.D. degree. Details are as follows:

SI.	Name	Designation	Area of research	Remark
<u>No.</u> 1.	Dr. G. H. Malimath	Professor	Fluorescence Spectroscopy and Nanomaterials/ Sensors/ Materials Science	1. Recognized by         KUD as Guide         for Ph.D         Guided three         students         successfully         for Ph.D         2. Supervised         M.Sc project         work/         dissertations
2.	Dr. Blaise Lobo	Professor & Head	Polymer Physics/ Nuclear Condensed matter physics/ Materials science	1.       Recognized by KUD as Guide for Ph.D         Guided six         students         successfully         for Ph.D.         2.       Supervised         M.Sc project         work/         dissertations
3.	Dr. (Smt.) Nirupama J M	Assistant Professor	Molecular Spectroscopy	Supervised M.Sc project dissertations
4.	Dr. (Smt.) Geeta N Chavan	Assistant Professor	Ferrite materials / Materials science	Supervised M.Sc project dissertations
5.	Dr. (Smt.) Jyothi S Doddamani	Assistant Professor	Experimental Condensed matter physics/ Materials science/ Nanomaterials	Supervised M.Sc project dissertations
6.	Dr. (Smt.) Reshma Nesargi	Assistant Professor	Theoretical condensed matter physics	Supervised M.Sc project dissertations

#### Profile of Dr. G. H. Malimath

#### Professor, UG & PG Department of Physics, Karnatak Science College, Dharwad



#### **Research Areas:**

Design, Synthesis and Characterisation of Fluorophores as Energy Transfer Dye Lasers, Metal ion sensors, Environmental Pollutants (Aromatic amines and their derivatives) Sensors, Picric Acid Sensors and Photosensitisers for solar cell applications. Theoretical and experimental studies on Photophysical properties of Novel Fluorophores

#### Research Publications (Title, Citations and year of publication...Ctrl+Click for details):

Enhanced humidity sensing stability of Dy <sup>3+</sup> -doped Mg-Rb ferrites for room temperature operatable humidity sensor applications VG Hiremath, GH Malimath, B Chethan, NSA EL-Gawaad, SAO Abdallah, Journal of Materials Science: Materials in Electronics 34 (20), 1537	1	2023
Novel coumarin substituted fluorescein derivative for selective and sensitive detection of mercury V Praveenkumar, GH Malimath, L Naik Proceedings of the fifteenth national symposium on radiation and photochemistry		2023
Solute-solvent interaction and DFT studies on bromonaphthofuran 1, 3, 4-oxadiazole fluorophores for optoelectronic applications L Naik, MS Thippeswamy, V Praveenkumar, GH Malimath, D Ramesh, Journal of Molecular Graphics and Modelling 118, 108367	12	2023
Studies on the characterisation of thiophene substituted 1, 3, 4-oxadiazole derivative for the highly selective and sensitive detection of picric acid MS Thippeswamy, L Naik, CV Maridevarmath, HM Savanur, GH Malimath Journal of Molecular Structure 1264, 133274	8	2022
Saussurea obvallatta leaves extract as a potential eco-friendly corrosion inhibitor for mild steel in 1 M HCI AG Kalkhambkar, SK Rajappa, J Manjanna, GH Malimath Inorganic Chemistry Communications 143, 109799	15	2022
Effect of expired doxofylline drug on corrosion protection of soft steel in 1 M HCI: Electrochemical, quantum chemical and synergistic effect studies AG Kalkhambkar, SK Rajappa, J Manjanna, GH Malimath Journal of the Indian Chemical Society 99 (9), 100639	10	2022
Interactions of Environmental Pollutant Aromatic Amines With Photo Excited States of Thiophene Substituted 1, 3, 4-Oxadiazole Derivative: Fluorescence Quenching Studies T MS, L Naik, CV Maridevarmath, GH Malimath Journal of Fluorescence 32 (4), 1543-1556	4	2022
Humidity sensing behaviour of Rubidium-doped Magnesium ferrite for sensor applications VG Hiremath, IS Yahia, HY Zahran, B Chethan, GH Malimath, Journal of Materials Science: Materials in Electronics 33 (14), 11591-11600	9	2022

Interactions of Environmental Pollutant Aromatic Amines with photoexcited states of Thiophene Substituted 1, 3, 4-Oxadiazole Derivative: Fluorescence quenching studies GH Malimath, MS Thippeswamya, L Naik, CV Maridevarmath		2022
Interaction studies of novel thiophene substituted 1, 3, 4-oxadaizole derivative with nitro aromatic compounds MS Thippeswamy, L Naik, GH Malimath Proceedings of the sixteenth DAE-BRNS biennial Trombay symposium on		2022
Synthesis, spectroscopic properties, and DFT correlative studies of 3, 3'-carbonyl biscoumarin derivatives S Walki, GH Malimath, KM Mahadevan, S Naik, SM Sutar, H Savanur, Journal of Molecular Structure 1243, 130781	13	2021
Synthesis and Photophysical Properties of Multi-Functional Bisimidazolyl Phenol Zinc (II) Complex: Application in OLED, Anti-Counterfeiting and Latent Finger Print Detection RM Kempegowda, MK Malavalli, GH Malimath, L Naik, KB Manjappa ChemistrySelect 6 (12), 3033-3039	15	2021
A highly selective and sensitive thiophene substituted 1, 3, 4-oxadiazole based turn-off fluorescence chemosensor for Fe2+ and turn on fluorescence chemosensor for Ni2+ and L Naik, CV Maridevarmath, MS Thippeswamy, HM Savanur, IAM Khazi, Materials Chemistry and Physics 260, 124063	20	2021
A comprehensive studies on photophysical and electrochemical properties of novel D-π-A thiophene substituted 1,3,4-oxadiazole derivatives for optoelectronic applications: A GHM ThippeswamyM.S, LohitNaik, C.V.Maridevarmath Chemical Physics 550, 111301	8	2021
Synthesis, characterization, photo physical and DFT studies of bicoumarin and 3-(3-benzofuranyl) coumarin derivatives U Hunagund, F Shaikh, LA Shastri, GH Malimath, L Naikh, VS Sunagar Chemical Data Collections 30, 100537	9	2020
Electronic excitation energy transfer studies in binary mixtures of novel optoelectronically active 1, 3, 4-oxadiazoles and coumarin derivatives L Naik, IAM Khazi, GH Malimath Chemical Physics Letters 749, 137453	5	2020
Studies on the effect of temperature on dielectric relaxation, activation energy ( $\Delta G^*$ ), enthalpy ( $\Delta H^*$ ), entropy ( $\Delta S^*$ ) and molecular interactions of some anilines, phenol and CV Maridevarmath, GH Malimath The Journal of Chemical Thermodynamics 144, 106068	4	2020
Design of new Imidazole-derivative dye having donor-Π-acceptor moieties for highly efficient organic- dye-sensitized solar cells ASMSYKCKGHMKM Mahadevana Optik	9 <b>*</b>	2019
Synthesis, characterization and photophysical studies on novel benzofuran-3-acetic acid hydrazide derivatives by solvatochromic and computational methods CV Maridevarmath, L Naik, VS Negalurmath, M Basanagouda, Journal of Molecular Structure 1188, 142-152	22	2019
Synthesis, photophysical, DFT and solvent effect studies on biologically active benzofuran derivative:(5-methyl-benzofuran-3-yl)-acetic acid hydrazide CV Maridevarmath, L Naik, VS Negalurmath, M Basanagouda, Chemical Data Collections 21, 100221	20	2019
Dielectric, photophysical, solvatochromic, and DFT studies on laser dye coumarin 334 CV Maridevarmath, L Naik, GH Malimath Brazilian Journal of Physics 49 (2), 151-160	11	2019
Studies on photosensitization of TiO2 nanoparticles by novel 1, 3, 4-oxadiazoles derivatives L Naik, IAM Khazi, GH Malimath Optik 183, 732-741	7	2019

Studies on characterization of I, 3, 4-oxadiazole derivative as metal ion sensor L Naik, GH Malimath Proceedings of the fifteenth DAE-BRNS biennial Trombay symposium on		2019
Effect of 2, 4-dimethylaniline on the fluorescence of 1, 3, 4-oxadiazole derivative MS Thippeswamy, L Naik, GH Malimath Proceedings of the fifteenth DAE-BRNS biennial Trombay symposium on		2019
Studies on dielectric relaxation in relation to viscosity of some anilines, phenol, and their binary mixtures at microwave frequencies CV Maridevarmath, GH Malimath Canadian Journal of Physics 97 (2), 210-215	2	2019
Turn-off fluorescence studies of novel thiophene substituted 1, 3, 4-oxadiazoles for aniline sensing L Naik, IAM Khazi, GH Malimath Sensors and Actuators A: Physical 284, 145-157	10	2018
Photophysical and computational studies on optoelectronically active thiophene substituted 1,3,4- oxadiazole derivatives GHM Lohit Naik , C.V. Maridevarmath , I.A.M. Khazi Journal of Photochemistry & Photobiology A: Chemistry 368 ((2018)), 200–209	26 <b>*</b>	2018
Resonance Energy Transfer Studies from Derivatives of Thiophene Substituted 1,3,4-Oxadiazoles to Coumarin-334 Dye in Liquid and Dye-Doped Polymer Media IAMKGHM Lohit Naik, Narahari Deshapande Brazilian Journal of Physics 47 (6)	7*	2017
Computational and experimental studies on dielectric relaxation and dipole moment of some anilines and phenol CV Maridevarmath, GH Malimath Journal of Molecular Liquids 241, 845-851	24	2017
Study of molecular interactions in antihistamine drug Cinnarizine and Benzene at Different Temperatures CVM G.H. Malimath Der Pharma Chemica 8 (2), 92-97	2	2016
Study of molecular interactions in antidepressant Amitriptyline and Benzene at different temperatures GHMCV Maridevarmath Journal of Chemical and Pharmaceutical Research 8 (2), 237-241,		2016
Static and dynamic model fluorescence quenching of laser dye by carbon tetrachloride in binary mixtures JS Kadadevarmath, GH Malimath, RM Melavanki, NR Patil Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 117, 630-634	42	2014
Solvent effect on the dipole moments and photo physical behaviour of 2, 5-di-(5-tert-butyl-2- benzoxazolyl) thiophene dye JS Kadadevarmath, GH Malimath, NR Patil, HS Geethanjali, Canadian Journal of Physics 91 (12), 1107-1113	23	2013
Role of internal mechanisms in energy transfer processes in organic liquid scintillators GH Malimath, GC Chikkur, H Pal, T Mukherjee Applied radiation and isotopes 48 (3), 359-364	10	1997
SOLVATOCHROMIC BEHAVIOUR OF DONOR-ACCEPTOR SUBSTITUTED 1, 2- DIPHENYLETHENES IN ORGANIC SOLVENTS, REVERSE MICELLES AND POLYMER MATRIX AK Singh, GR Mahalaxmi, GH Malimath Journal of photoscience: an international journal officail organ of the	5	1997
Effect of solvent on the fluorescence quenching of organic liquid scintillators by aniline and carbon tetrachloride TP Giraddi, JS Kadadevarmath, GH Malimath, GC Chikkur Applied radiation and isotopes 47 (4), 461-466	39	1996
Quenching of 2-phenylindole by carbon tetrachloride TP Giraddi, JS Kadadevaramath, GH Malimath, GC Chikkur	2	1996

Indian J. Pure Appl. Phys 34, 224-228

QUENCHING OF 2-PHENYLINDOLE BY CARTON TETRACHLORIDE AND ANILINE IN DIFFERENT SOLVENTS TP Giraddi, JS Kadadevarmath, GH Malimath, GC Chikkur Indian journal of pure & applied physics 34 (4), 244-248	9	1996
Electronic excitation energy quenching of an organic liquid scintillator by carbon tetrachloride in different solvents JS Kadadevarmath, TP Giraddi, GH Malimath, GC Chikkur Radiation measurements 26 (1), 117-121	27	1996
Role of energy migration in anorganic liquid scintillator system in the 20-70 [sup o] C temperature range GH Malimath, GC Chikkur Applied Radiation and Isotopes (International Journal of Radiation …		1994
Role of energy migration in an organic liquid scintillator system in the 20–70° C temperature range GH Malimath, GC Chikkur Applied radiation and isotopes 45 (2), 143-147	16	1994
The role of diffusion, migration and long-range interaction in energy transfer and quenching processes in an organic liquid scintillator BG Math, GC Chikkur, GH Malimath International journal of radiation applications and instrumentation. Part A …	2	1992
Electronic excitation energy transfer from donor to acceptor molecules and between donor molecules in an organic liquid system BG Math, GC Chikkur, GH Malimath Spectrochimica acta. Part A: Molecular spectroscopy 47 (11)	1	1991
Dielectric and ultrasonic Studies on some organic Systems GH Malimath Dharwad		

## Energy transfer and quenching studies in organic liquids GH Malimath Dharwad

# ISSN 0975-413X CODEN (USA): PCHHAX GH Malimath, CV Maridevarmath

#### Profile of Dr. Blaise Lobo

### Professor & Head, UG & PG Department of Physics, Karnatak Science College, Dharwad



#### **Research areas of Prof. Blaise Lobo:**

- 1. Radiation shielding materials
- 2. Study of microstructure and properties of polymeric materials using nuclear techniques and complementary techniques.
- 3. Effect of irradiation on polymeric materials and composites
- 4. Study of conducting polymeric blends
- 5. Optical analysis of polymeric materials/films

### **Research publications:**

Influence of Polyaniline as Filler on the Microstructural Features and Properties of Polycarbonate:		2024
Bismuth Sulfide Nanocomposite		
R Mirji, B Lobo, S Mukherjee, M Ahmed, PMG Nambissan		
Journal of Inorganic and Organometallic Polymers and Materials 34 (3), 1232-1255		
Optical properties of UV-C irradiated polyvinylidene chloride films	<u>1</u>	2023
MB Akkamma, B Lobo		
Radiation Physics and Chemistry 212, 111182		
UV induced changes in bismuth oxychloride-filled polycarbonate composite films		2023
VA Kandagal, B Lobo		
Academia Materials Science 1 (1), 1-19		
Computation of gamma radiation shielding parameters of lead monoxide filled polycarbonate composite films		2023
VA Kandagal, B Lobo		
JSS Journal of Scientific Studies (ISSN 2583-5815) 2 (1), 23-34		
External Bremsstrahlung Studies on Films of Lead Monoxide Filled Polycarbonate Composite		2023
VA Kandagal, B Lobo		
Atom Indonesia 1 (2), 137-143		
Spectroscopic Analysis of Lead Monoxide Reinforced Polycarbonate Composite Films		2023
VA Kandagal, B Lobo		
JSS Journal of Scientific Studies (ISSN 2583-5815) 1 (2), 7-16		
Experimental and computational study of the beta shielding properties of polycarbonate filled with lead nitrate	<u>1</u>	2023
M Chandrappa Koramar, B Lobo		
Radiation Protection Dosimetry 199 (11), 1248-1255		
Experimental investigation of the structural features of polycarbonate (PC) filled with bismuth nitrate	<u>3</u>	2023

Experimental investigation of the structural features of polycarbonate (PC) filled with bismuth nitrate

pentahydrate (BNP) composite films in terms of free volume defects		
R Mirji, B Lobo, D Dutta, SP Masti, MP Eelager		
Applied Radiation and Isotopes 196, 110773		
<u>Variation of optical parameters of physically stacked polyvinylidene chloride films with thickness and wavelength</u> MB Akkamma, B Lobo Materials Today: Proceedings 80, 1671-1676		2023
Morphological, linear and nonlinear optical characteristics of PVA/Ac–PVP blend filled with nanoparticles of titania G Veena, B Lobo Bulletin of Materials Science 45 (4), 195		2022
Structural, AC and DC Electrical Transport Properties of Nano Titania-Polyacrylamide Composite Films G Veena, B Lobo		2022
Indian Journal of Pure & Applied Physics (IJPAP) 60 (3), 227-237 <u>Experimental investigations on Nano Titania-Polyacrylamide Composite Films</u> G Veena, B Lobo		2022
Journal of Scientific Research 66 (1) <u>Optical analysis of polycarbonate–lead nitrate composite films for UV-A shielding applications</u> CK Manjappa, R Mirji, B Lobo Materials Today: Proceedings 60, 93-96	<u>1</u>	2022
Experimental investigations on the beta attenuation properties of lead monoxide–Polycarbonate composite films VA Kandagal, R Mirji, B Lobo Materials Today: Proceedings 49, 2212-2216	1	2022
Thermal degradation kinetics of ethyl vanillin crosslinked chitosan/poly (vinyl alcohol) blend films for         food packaging applications         SS Narasagoudr, Y Shanbhag, RB Chougale, BM Baraker, SP Masti,         Chemical Data Collections 34, 100739	<u>10</u>	2021
Experimental investigations on nano-titania incorporated polyvinyl alcohol - polyvinyl pyrrolidone composite films B Lobo, G Veena Polymers - Plastics Technology and Materials 60 (15), 1697-1717	<u>6</u>	2021

Microstructural features, spectroscopic study and thermal analysis of potassium permanganate filled Z 2021

## PVA–PVP blend films

G Veena, B Lobo Journal of Physics: Condensed Matter 33 (25), 255101

Preparation and humidity sensing behavior of cadmium-zinc ferrite nanocomposite	<u>1</u>	2021
BM Baraker, B Lobo, S Sikarwar, BC Yadav		
Journal of Physics: Conference Series 1921 (1), 012119		
Correction to: Thermal, mechanical, and AC electrical studies of PVA–PEG–Ag <sub>2</sub> S polymer hybrid material	<u>3</u>	2021
SS Devangamath, B Lobo, SP Masti, S Narasagoudr		
Journal of Materials Science: Materials in Electronics 32, 14115-14116		
Linear and non-linear optical parameters of polycarbonate reinforced inorganic bismuth nitrate pentahydrate salt composite	<u>15</u>	2021
R Mirji, B Lobo		
Optical Materials 113, 110862		
AC and DC electrical studies on cobalt chloride doped PVA–PVP blend films		2020
BM Baraker, B Lobo		
AIP Conference Proceedings 2244 (1)		
Preparation and experimental investigations of the spectroscopic, thermal and microstructural properties of polycarbonate filled with bismuth oxychloride B Lobo, R Mirji, A Shiri, C Kumbargoudar, L Kamate, S Marigoudar,	<u>1</u>	2020
AIP Conference Proceedings 2244 (1)		
Optical parameters of epoxy-CoSO <sub>4</sub> .7H <sub>2</sub> O polymer hybrid material	Z	2020
SS Devangamath, B Lobo		
Materials Research Innovations 24 (3), 152-160		
Study of polycarbonate-bismuth nitrate composite for shielding against gamma radiation	<u>33</u>	2020
R Mirji, B Lobo		
Journal of Radioanalytical and Nuclear Chemistry 324 (1), 7-19		
Thermal, mechanical, and AC electrical studies of PVA–PEG–Ag <sub>2</sub> S polymer hybrid material	<u>26</u>	2020
SS Devangamath, B Lobo, SP Masti, S Narasagoudr		
Journal of Materials Science: Materials in Electronics 31 (4), 2904-2917		
Structural, optical and electrical studies on hybrid material of in situ formed silver sulfide in polymer blend matrix	<u>9</u>	2019

SS Devangamath, B Lobo

Journal of Inorganic and Organometallic Polymers and Materials 29, 1466-1475

Positron annihilation studies of free volume changes accompanying the incorporation of lead nitrate in PVA-PVP polymeric blend	<u>10</u>	2019
PB Hammannavar, B Lobo, PMG Nambissan		
Radiation Physics and Chemistry 158, 53-60		
Dielectric relaxation in a cadmium chloride-doped polymeric blend	<u>20</u>	2019
BM Baraker, B Lobo		
Bulletin of Materials Science 42 (1), 18		
Dispersive parameters of oxidized PVA-PVP blend films	<u>12</u>	2019
G VEENA, B LOBO		
Turkish Journal of Physics 43 (4), 337-354		
Study of Polycarbonate (PC) - Bismuth Nitrate (Bi (NO <sub>3</sub> ) <sub>3</sub> ) composites for shielding against gamma radiation		2019
R Mirji, B Lobo		
Proceedings of the fourteenth biennial DAE-BRNS symposium on nuclear and		
AC and DC electrical transport properties of potassium permanganate doped PVA-PVP solid polymer electrolyte	<u>14</u>	2018
G Veena, B Lobo		
Materials Research Express 6 (3), 035315		
Correction to: Multistage thermal decomposition in films of cadmium chloride-doped PVA-PVP polymeric blend	1	2018
BM Baraker, B Lobo		
Journal of Thermal Analysis and Calorimetry 134, 879-879		
Multistage thermal decomposition in films of cadmium chloride-doped PVA-PVP polymeric blend	<u>20</u>	2018
BM Baraker, B Lobo		
Journal of Thermal Analysis and Calorimetry 134, 865-878		
Optical, thermal and microstructural studies of epoxy-CoSO <sub>4</sub> .7H <sub>2</sub> O hybrid material	<u>3</u>	2018
SS Devangamath, B Lobo		
International Journal of Polymer Analysis and Characterization 23 (6), 517-528		
Mechanical and dynamic mechanical studies on energy coholtous sulfate polymer hybride	8	2018
Mechanical and dynamic mechanical studies on epoxy-cobaltous sulfate polymer hybrids	<u>0</u>	2010
SS Devangamath, B Lobo, SP Masti, S Narasagoudr		

Fibers and Polymers 19, 1490-1499

Experimental investigations on potassium permanganate doped polyvinyl alcohol-polyvinyl pyrrolidone	<u>7</u>	2018
blend		
G Veena, B Lobo		
AIP Conference Proceedings 1942 (1)		
Optical, structural and thermal properties of bismuth nitrate doped polycarbonate composite	<u>1</u>	2018
R Mirji, B Lobo		
AIP Conference Proceedings 1942 (1)		
Conductivity measurements on CdCl2 doped PVA solid polymeric electrolyte for battery application	<u>2</u>	2018
BM Baraker, B Lobo		
AIP Conference Proceedings 1942 (1)		
UV irradiation induced microstructural changes in CdCl <sub>2</sub> doped PVA–PVP blend	<u>12</u>	2018
BM Baraker, B Lobo		
Journal of Materials Science: Materials in Electronics 29, 4106-4121		
Thermal and electrical transport properties in films of CdCl2 doped PVA-PVP blend	<u>2</u>	2018
Recent Advances in Materials Science and Biophysics, 381		
STRUCTURAL, THERMAL AND DYNAMIC MECHANICAL PROPERTIES OF EPOXY HYBRIDS		2018
SS Devangamath, BB Lobo		
Recent Advances in Materials Science and Biophysics, 337		
Experimental study of the microstructure and optical properties of PVA-PVP blend filled with lead nitrate	<u>12</u>	2018
PB Hammannavar, B Lobo		
Materials Today: Proceedings 5 (1), 2677-2684		
Spectroscopic Studies on Films of Lead NitrateDoped Polyvinyl Alcohol–Polyvinyl Pyrrolidone Blend	<u>2</u>	2018
PB Hammannavar, B Lobo		
Mater. Sci. Res. India 15 (1), 55-67		
Microstructure of cadmium chloride doped PVA/PVP blend films	<u>16</u>	2018
BM Baraker, B Lobo		
Materials Today: Proceedings 5 (1), 3036-3043		
Optical and microstructural studies on films of Pb(NO3)2 filled PVA - PVP composite	<u>4</u>	2017
P Hammannavar, B Lobo		
IOSP Journal of Applied Physics (IOSP-JAP) Q (6 (Ver 1)) 13-25		

IOSR Journal of Applied Physics (IOSR-JAP) 9 (6 (Ver. 4)), 13-25

Investigation of High Z Components Doped in Polymeric Films, Using 2π Configuration X-Ray Fluorescence Technique	<u>2</u>	2017
PB Hammannavar, B Lobo		
Macromolecular Symposia 376 (1), 1600212		
Study of lead nitrate doped PVA/PVP blend films using EDXRF and complementary techniques	<u>8</u>	2017
PB Hammannavar, B Lobo		
Macromolecular Symposia 376 (1), 1600198		
Analysis of Electrical Measurements on Cadmium Chloride Doped PVA-PVP Blend	<u>16</u>	2017
BM Baraker, B Lobo		
Mapana Journal of Sciences (ISSN 0975-3303) 16 (1), 45-65		
Computation of the mass attenuation coefficient of polymeric materials at specific gamma photon energies	<u>82</u>	2017
R Mirji, B Lobo		
Radiation Physics and Chemistry 135, 32-44		
Dispersion parameters of cadmium chloride doped PVA-PVP blend films	<u>38</u>	2017
BM Baraker, B Lobo		
Journal of Polymer Research 24, 1-10		
24. Radiation shielding materials: A brief review on methods, scope and significance	<u>47</u>	2017
R Mirji, B Lobo		
Proceedings of the National Conference on 'Advances in VLSI and		
Spectroscopic analysis of CdCl <sub>2</sub> doped PVA–PVP blend films	<u>34</u>	2017
BM Baraker, B Lobo		
Canadian Journal of Physics 95 (8), 738-747		
lonic conductivity and free volume related microstructural properties of LiCIO4/PVA/NaAlg polymer composites: Positron annihilation spectroscopic studies	<u>28</u>	2016
T Sheela, RF Bhajantri, PMG Nambissan, V Ravindrachary, B Lobo,		
Journal of Non-crystalline solids 454, 19-30		
Experimental study of PVA-PVP blend films doped with cadmium chloride monohydrate	<u>36</u>	2016
BM Baraker, B Lobo		
NISCAIR-CSIR, India		
Optical, electrical, thermal properties of cadmium chloride doped PVA-PVP blend	<u>11</u>	2015
BM Baraker, PB Hammannavar, B Lobo		

AIP Conference Proceedings 1665 (1)

PLT and DBAR investigations on MPDMAPP doped PVA/PVP blend	<u>1</u>	2015
RF Bhajantri, V Ravindrachary, B Lobo, PK Pujari, SG Rathod, J Naik,		
Journal of Physics: Conference Series 618 (1), 012030		
DBS investigation on films of cobalt chloride doped PVA-PVP blend	<u>13</u>	2015
PB Hammannavar, BM Baraker, RF Bhajantri, V Ravindrachary, B Lobo		
Journal of Physics: Conference Series 618 (1), 012034		
DBAR investigation on films of polypyrrole incorporated polyvinylalcohol doped with ferric chloride	<u>3</u>	2015
B Lobo, BM Baraker, PB Hammannavar, RF Bhajantri, MR Ranganath,		
Journal of Physics: Conference Series 618 (1), 012026		
Inhibition and Quenching of Positronium in Polymeric materials	<u>5</u>	2014
PB Hammannavar, C Hundekar, MY Hurkadli, V Ravindrachary, B Lobo		
International Conference on Materials and Characterization Techniques (ICMCT		
Optical and electrical properties of cobalt chloride doped polyvinylalcohol polyvinylpyrrolidone blend	<u>8</u>	2014
RV Patil, MR Ranganath, B Lobo		
AIP Conference Proceedings 1591 (1), 183-185		
Microstructural studies on Cobalt chloride doped PVA-PVP blend	<u>9</u>	2014
RV Patil, MR Ranganath, B Lobo		
Int J Chem Technol Res 6, 1852-1854		
Electrical and optical properties of ferric doped PVA-PVP-PPy composite films		2013
RV Patil, MR Ranganath, B Lobo		
AIP Conference Proceedings 1512 (1), 578-579		
Preparation and Thermal Analysis of Ferric Doped PVA-PVP-PPy Composite Films	<u>2</u>	2011
RV Patil, MR Ranganath, B Lobo		
AIP Conference Proceedings 1393 (1), 371-372		
Morphological modifications in potassium permanganate doped poly (vinyl alcohol) films	<u>5</u>	2010
M Ranganath, RV Patil, B Lobo		
Proceedings of the International Workshop on Applications of Nanotechnology		
Thermal analysis of potassium permanganate oxidized poly(vinyl alcohol) films	1 <b>*</b>	2010
MR Ranganath, B Lobo	<u> </u>	

NANOCON 2010 International Conference on Nanotechnology: Materials and ...

Changes in the optical properties caused by doping ferric ions in PVA	<u>5</u>	2009
B Lobo, MR Ranganath		
Proceedings of the 54th DAE Solid State Physics Symposium, 479-480		
Experimental investigations on flexible blend films of conductive polypyrrole incorporated in poly (vinyl alcohol)		2009
MR Ranganath, B Lobo		
Solid State Physics (India) 54, 535-536		
Experimental study of optical spectra of PVA-PPy blend films	<u>2</u>	2009
MR Ranganath, B Lobo		
Proceedings of the National Conference on Advances in Nanomaterials, Devices		
Analysis of the Optical Spectra of UV irradiated Fe: PVA	<u>5</u>	2008
MR Ranganath, B Lobo		
Proceedings of the 53rd DAE Solid State Physics Symposium, 589-590		
Experimental investigation of optical band gap in potassium permanganate doped poly (vinyl alcohol) <u>films</u>	<u>5</u>	2008
MR Ranganath, B Lobo		
Proceedings of the International Conference on Materials Science Research		
Experimental investigation of the optical band gap in films of iodine doped polyvinylalcohol - polyvinylpyrrolidone blend	<u>8</u>	2007
MR Ranganath, B Lobo		
52nd DAE Solid State Physics Symposium; Solid State Physics (India) 52, 495		
Study of the UV-Visible absorption spectra of aqueous ferric chloride doped polyvinylalcohol- polyvinylpyrrolidone blend films	<u>4</u>	2007
MR Ranganath, B Lobo		
Abstract Book of the International Conference on Condensed Matter Physics		
lodine-doped polyvinylalcohol using positron annihilation spectroscopy	<u>63</u>	1999
B Lobo, MR Ranganath, TSGR Chandran, GV Rao, V Ravindrachary,		
Physical Review B 59 (21), 13693		
lodine doping and heat treatment studies on some polymers using positron annihilation spectroscopy and thermal analysis	<u>1</u>	1999
B Lobo		
Mangalore		

Phenomenal changes in isotactic polypropylene due to proton irradiation-a positron annihilation study 1997

TSG Ravi Chandran, B Lobo, MR Ranganath, S Gopal, G Padma

# Positron annihilation studies on proton irradiated nitrile rubber 1996

TSG Ravi Chandran, B Lobo, MR Ranganath, S Gopal, V Sreeramalu

Proceedings of the DAE solid state physics symposium. V. 39C

### PREPARATION & XRD CHARACTERIZATION OF FLEXIBLE BLEND FILMS FORMED BY IN-SITU POLYMERIZATION OF PYRROLE IN POLY (VINYL ALCOHOL) MR RANGANATH & BLAISE LOBO

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#### FTIR & XRD STUDIES ON Fe: PVA FILMS

B Lobo, MR Ranganath

#### Preparation and Experimental Studies on Flexible Films of Iodine doped PVA-PVP-PPy Blend

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#### DBAR and DSC Study on UV Irradiated PTFE

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#### 23. Nanostructured Polymeric Materials

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### MICROSTRUCTURAL CHANGES IN POLYVINYLALCOHOL-POLY (VINYLPYRROLIDONE) BLEND CAUSED BY GAMMA IRRADIATION

MR Ranganath, B Lobo

#### Structural and Optical Study of KPVA Films

MR Ranganath, B Lobo

# POSITRON ANNIHILATION STUDY OF MICROSTRUCTURAL CHANGES IN POLYVINYLALCOHOL INDUCED BY ULTRA-VIOLET RADIATION

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# POSITRON ANNIHILATION STUDY OF ULTRAVIOLET IRRADIATION EFFECTS ON POLYVINYLALCOHOL-POLYVINYLPYRROLIDONE BLEND.

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#### Computation of size of spherical and non-spherical voids in semi-crystalline polymeric materials

PB Hammannavar, G Badiger, RF Bhajantri, V Ravindrachary, B Lobo

#### OPTICAL BAND-GAP INVESTIGATIONS IN FILMS OF AQUEOUS FERRIC CHLORIDE DOPED POLYVINYLALCOHOL

MR Ranganath, B Lobo

# ULTRAVIOLET IRRADIATION STUDIES IN POLYESTER USING POSITRON ANNIHILATION SPECTROSCOPY

MR Ranganath, B Lobo

### <u>Trapping Rate of Positrons, DBAR line shape parameters and Calculation of Free Volume Hole Size in</u> <u>Polymeric materials using PALS Data</u>

MB Basavarajeshwari, V Ravindrachary, B Lobo

#### Preparation of Cobalt Chloride doped PVA-PVP Blend films and the Analysis of their Optical Spectra

RV Patil, MR Ranganath, B Lobo

### <u>Research Publications of Dr. (Smt.) Nirupama J. M, Assistant Professor, UG & PG Department of</u> <u>Physics, Karnatak Science College, Dharwad</u>



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Journal of Molecular Liquids 244, 97-102

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Temperature dependent electric properties and magnetoelectric effects in ferroelectric rich	<u>9</u>	2019
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P Chavan, LR Naik, PB Belavi, G Chavan, VT Muttannavar,		
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Materials Chemistry and Physics 117 (1), 46-50		

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Melamine assisted large-scale and rapid synthesis of porous copper oxide nanostructures	<u>9</u>	2022
Emergent materials 5 (4), 1089-1096		
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