

Osmania University

Departmental Information for uploading in the website

Name of the Department: PHYSICS

Name of the college: University College of Science, OU, Hyderabad.

MENU

1. About Department: 1-2 pages information. Departmental Brochure (to view on click)[Annexure I]

2. Programme offered: UG/PG/PhD/others(i) PhD (ii) PG (iii) Post M. Sc ., Diploma

Name of the Programme	(i) PG (M.Sc) with specializations (ii) Research Degree (PhD) (iii) Post M.Sc. Diploma in Radiological Physics
Duration	(i) Two-years (ii) FT- 4 years; PT – 5 years (iii) one –year
Seats sanctioned	(ii) 120 (iii) 30
Fee	As per the Govt. rules
Eligibility	(i) B.S., CPGATE- Entrance examination rank (ii) M.Sc., (Physics), CSIR/SLET/OU Entrance examination rank (ii) M.Sc(Physics) , University entrance (PG diploma) rank
CO/PO/PSO/PEO	Link

*One table for each programme offered. Provide Outcomes separately even if they are part of syllabi to upload and get the link. [Annexure I]

3. Faculty & Staff

Name of the Faculty	Telephone No/s	E-mail	CV
Head of the Department			
Prof. M. Srinivas	9908366857	msrinivas.ou@gmail.com	(to view on click)
Chairperson, BOS			
Sr. Prof. D. KarunaSagar CBOS-Physics	9866145020	dasariks@osmania.ac.in	
Prof. M. Prasad CBOS-Electronics	9866357996	prasad5336@yahoo.co.in	
Professor (Emeritus)			
Professor			
Prof. Md. Shareefuddin	9866589030	shareef1775@gmail.com	
Associate Professor			
Dr. B. Ravindra Reddy	9849671840	ravinderbutreddt@yahoo.com	
Dr. N.V. Prasad	9849553669	nvp_phy@osmania.ac.in	
Dr. V Nathaniel	9849705861	nvasarla@yahoo.com	
Dr. M. Sreenath Reddy	9849936509	marrisr@gmail.com	
Dr. G. Upender	9010726691	upenderb4u@yahoo.co.in	
Dr. Y.Kalyana Lakshmi	8008244664	kalyaniyanapu@gmail.com	
Assistant Professor			
Dr. P. HimaBindu	9603120775	hb.pitta@osmania.ac.in	
Dr. D. Aparna	9346939524	aparna2000@yahoo.com	
Dr. D. Madhuri	9502741727		
Dr. D. Sreenivasu	9849671840	drsriacharya@gmail.com	
Dr. K. Kirana	9966017561	kiranakommuri@gmail.com	
Part-time Faculty			
-	-	-	-

Non-Teaching Staff List with Contact No.

Sl. No.	Name	Designation	Contact No.
1	Mr. K. Ramesh	Lab-Supervisor	9441292552
2	Mr. G. Ravi Prasad	Senior Assistant	8790077064
3	Ms. B. Bramarambha Devi (c)	Library Assistant	9032716627
4	Mr. MohdAslam	Lab- Assistant	8977862878
5	Mr. AftabeAlam	Lab- Assistant	9393531933
6	Mr. K. S. NagarajaRao	Lab- Assistant	7989393824
7	Ms. E. Hemalatha	Lab- Assistant	9395161062
8	Mr. A. Umesh	Lab- Assistant	9849999874
9	Mr. K. Laxmaiah (c)	Lab- Assistant	9705382267
10	Mr. J. Maruthi (c)	Technical Assistant	9248829946
11	Ms. G. Beena Devi (c)	Data Entry Operator	9390965906
12	Mr. A. Lakshmi Deepak (c)	Store Keeper-cum-Care Taker	9652526379
13	Ms. K. Kalavathi	Lab-Attendant	9515900913
14	Ms. P. Umavathi	Lab-Attendant	9912068728
15	Mr. Abdul Kareem	Lab-Attendant	9133725713
16	Mr. Mohd. Yakub Ali	Lab-Attendant	9849295710
17	Mr. ShaikAmjad	Lab-Attendant	9912150155
18	Ms. T. Aruna	Lab-Attendant	6301803003
19	Mr. G. Rajender Prasad	Lab-Attendant	9618149483
20	Mr. D. Ranjith	Lab-Attendant	9441018776
21	Mr. B. RamuluNaik	Lab-Attendant	9908115187
22	Mr. C.M. Sravan Kumar (c)	Lab-Attendant	8309504543
23	Mr. L. Nagaraju (c)	Lab-Attendant	8096035539
24	Mr. P. Budaiah (c)	Watchman- cum-Office Subordinate	9010425913
25	Ms. U. Vimala (c)	Malan-cum-Office Subordinate	9618028535
26	Mr. U. Vittal (c)	Mali	9618028535
27	Ms. M.D. RuksanaBegam (c)	Kamatan	9885499240
28	Ms. S. Indira (c)	Kamatan	9177601214

I. List of well-established laboratories / classrooms / other facilities

S.No.	Laboratory/Classroom/other rooms	Room no allotted	For what it is used	Accommodation Capacity	Dimensions
1	Number of class rooms for M.Sc. students	Room 23 Room 81 Room 53 Room 80 Room 25 Room 79-A Room 21	MSc –I-Sec- A MSc –I-Sec- B MSc-II-SSP MSc-II-App. Ele. MSc-II-Gen Pap. MSc –II-Mat.Sci MSc-II-Nano-Sci	150 70 30 25 200 25 25	1590 SFT 672 SFT 90 SFT 300 SFT 2460 SFT 360 SFT 336 SFT
2	No. of class rooms for Post MSc diploma course	Room 79-B	Post-MSc Diploma	30	620 SFT
3	M.Sc. Laboratories MSc-I Year Optics Lab-1 Optics Lab -2 Heat&Acoustic Lab-1 Heat &Acoustic Lab-2 Electronics Lab-1 Electronics Lab-2 Computer Lab MSc- II Year Lab SSP-Lab-1 SSP-Lab-2 Material Science Lab- E & I Lab Nano Science Lab Applied Electronics Lab VHDL Lab Gen Labs Modern Physics Lab Nuclear Physics Lab Post-MSc Diploma Lab	Room 17 Room 18 Room 14 Room 15 Room 79 C Room 79 D Room 79 E Room 56 Room 52 Room 55 Room 79 F Room 13 Room 80 Room 66 Room 57 Room 50 Room 50	MSc-I year MSc-I Year MSc-I year MSc-I Year MSc-I year MSc-I Year MSc-I year MSc-II year MSc-II Year MSc-II year MSc-II year MSc-II Year MSc-II year MSc-II year MSc-II year MSc-II year Post-MSc Diploma	20 20 20 20 20 20 20 15 15 15 20 20 15 15 20 20 30	600 SFT 380 SFT 600 SFT 380 SFT 620 SFT 220 SFT 630 SFT 600 SFT 400 SFT 600 SFT 600 SFT 360 SFT 320 SFT 650 SFT 600 SFT 600 SFT 600 SFT
4	Staff rooms with desks, computers, cupboards & Lockers	16	-	-	-
5	Faculty developed Research Laboratories	16	-	-	-
6	Departmental Research Labs, Department Facility	4	-	-	-
7	Computer networking Lab	1	-	-	-
8	Non-teaching staff rooms	3	-	-	-
9	Ladies Rest room	3	-	-	-

Broad band high speed Internet available with Wi-Fi facility for all staff and students

II. List of the instruments available for the use of students and research scholars

S.No.	Name of the instrument	Make and model	Funding agency	Used by
1	XRD	Philip Xpert	UGC-SAP	Research students Research Labs
2	SEM	Carl Zeiss	DST-FIST	
3	IR-spectrometer	Schmidzu	DST-FIST	
4	Density-setup	Vibra	DST-FIST	

III. ICT facilities

S.No.	Name of the ICT facility	Available in room no.	Purpose
1	Smart board, e-class room	Room 25	e-based learning
2	Smart board, e-class room	Room 81	e-based learning
3	Smart board, e-class room	Seminar room	e-based learning

IV. Any Other Facilities (Central Facility For Research and Development)

PLD, XPS, FCCS (procured –UGC UPE- CFRD)
 FTIR
 UV VISIBLE Spectrophotometer (DST-FIST)
 DSC/TG/DTA (DST-FIST)
 RAMAN SPECTROMETER (M.Sc Nano Science–DST)
 PARTICLER ANALYZER (DST)
 SEM (DST-FIST)
 SPUTTERING UNIT (UGC SAP)
 VSM(DST)
 MAGNETRON SPUTTERING UNIT (UGC-SAP)
 SPIN COATING UNIT (UGC-SAP)



XPS



PLD

Name of PI	Title of project and duration in Years	Project No Date of start	Amount sanctioned (Rs. Lakhs)	Funding Agency
Prof. M. Srinivas	Tailoring of materials for luminescence emission in UV-region with improved quantum efficiencies for RGB (2014-2018)	EMEQ/472/ 2014 17 July 2014 16 July 2018	24,88,320/-	DST-SERB (Major Project)
Dr. M.V. Ramana Reddy (Rtd.)	Development of Novel Core-Shell Nanostructured gas Sensor for room Temperature Ammonia Sensing (2018-2021)	EMR/2017/002651, 19 March 2018 18 March 2021	42,53,480/-	DST-SERB (Major Project)
Dr.Ch.Gopal Reddy (Rtd.)	Study on Environmental radioactivity levels in areas of Nalgonda District, Telangana State, India (2017-2020) Low Temperature and High Magnetic field 57 Fe Mossbauer and Electrical studies of nano-sized multiferroic hexaferrites (2018-2021)	AERB/CSRP/60/14/2015 12 May 2015 11 May 2018 19-04-2018 18-04-2020	33,62,070/- 7,00,000/-	AERB
Dr. Ch. Sameera Devi	DST Women Scientist (2017-2020)	SR/WOS-A/PM-60/2016	22,30,000/-	DST
Prof. M. Srinivas	Development of Rare-earth Free Nano phosphors and Fabrication of PhosphorConverted Cool-White LED Device (2022-25)	EEQ/2021/000329 21 Feb 2022	47,99,657/-	DST-SERB (Major Project)
Dr. N.V Prasad	Development of Multiferroic tapes for Sensing and Energy Harvesting Applications (2021-Oct 2024)	ARDB/2004 20 Nov 2021	15,71,570/-	ARDB-DRDO
Dr.M.Sreenath Reddy	Soft X-ray absorption spectroscopy and XMCD study of hexa ferrite thin films (2021-24)	CSR-IC-ISUM-50/CRS-333/ 2020-21/791 04 th March 2021	6, 39,000/-	UGC-DAE CSIR
Faculty – Project under sanctioned UPE-FAR	DST-PURSE UGC-UPE-FAR-OU, F 14-5/2012 (NS/PE) Individual faculty research support received	2017-2022	32, 00,000/-	DST-PURSE &UGC-UPE-FAR
Dr. G. Upender	Development of P-n junction heterostructure for photocatalysis and gas sensing applications	SUR/2022/003708 2023-2026	25,00,000/-	DST-SERB-SURE

6. Research Scholars : Working in this academic year

S. No .	Name of the Supervisor/ Co-supervisor	Name of the PhD Scholar Full time/ Part time	Date of registration Registration No.	Availing fellowship Funding agency	Research topic
1	Prof. D. KarunaSagar	M.Venkateswarku Vijayashanthi SaikRaziya G. Neetha	20.9.2018-PT 19.12.19-FT 13.12.19-FT 2023-	- UGC-JRF CSIR-JRF	Optics-Modeling
2	Prof. M. Srinivas	A. Trinath R. Prem Kumar Vemkat Rami Reddy S. Venkateswarlu PuttaShekar S. Shankar Rao M. SrinivasaRao P. Srinivas	30.3.2021-FT 2.12.2022-FT 20.12.22-PT 2023 2023-FT 2023-PT 20.10.23-PT 20.10.23-PT	CSIR-JRF - - SERB-PF -	Luminescence
3	Prof. M. Prasad	J. Thirupathi M. Shruthi T. Naresh A. Sridhar D. Bala Ganesh E. Raju	2.9.2018-PT 2023 2023 28.11.22-FT 28.11.22-FT 9.10.23-PT	-	Glass materials
4.	Prof. J. LaxmanNayak	P. Ramesh U. Dasharatha B. Naresh G. Vinod G. Harikrishna Masood Ahmed N. Anitha	14.9.2018-PT 18.9.2018-PT 16.7.2019-FT 20.11.18-FT 30.3.21-FT 28.3.17-FT 2023		Ferrites
5	Prof. Md. Shareefuddin	T. Satyanarayana T. Kurumurthy B. Srikanth Chary A. Bala Krishna	6.9.2018-FT 12.9.2018-FT 19.3.19-FT 12.12.19-FT		Glasses
6	Dr. B. Ravinder Reddy	K. Sudhakar M. Santosh	23.12.22-PT 13.10.23-PT		Ferrites
	Dr. Ch. Srinivas	K. Sudhakar M.Sarvar V. Srinivas D. Mahendar	5.9.18—PT 2023 13.12.22-PT 16.10.23		Polymers
7	Dr. N. Narsimlu	B. Ravi Kumar	2023		Polymer, glass
8	Dr. N.V. Prasad	T. Susneha V. Venkatesh V. Veena Chary AfreemSulthana	6.9.2018-PT 19.9.18-PT 19.3.19-FT 20.9.18-PT	- - CSIR/JRF -	Electro-ceramics
9	Dr. M. Sreenath Reddy	M. Srinivas Reddy Y. Sreedhar V. Nagender B. Srikanth	20.9.2018-PT 28.9.2018-PT 12.12.19-FT 26.3.21-FT		Radiation Physics , Ferrites
10	Dr. V. Nathanial	P. Rani E. Jyothirmmai K. Venuprasad	27.9.18-FT 20.9.18-FT 18.3.21-FT		Ferrites

		J. Pandari	27.9.18-FT		
11	Dr. G. Upender	D. Madhu K Ramesh A. Siddiqua	28.9.2018-PT 16.12.19-FT 16.10.23-FT	- UGC-JRF DST- Inspire	Glasses semiconductors
12	Dr. Y. Kalyana Lakshmi	K. Ramya K. Rama Krishna	24.9.18-FT 17.12.22-PT		Ferroics
13	Dr. P. HimaBindu	B. Ajay Kumar B.DevenderReddy	22.10.18-PT 2023		Bio-materials glasses
14	Dr. S. Narendrababu	KundanKour	10.9.18-PT	-	Ferroic and polymers
15	Dr. K. Sadhana	M. Suresh V.RaghavendraRao Kolluru	16.7.19-FT 19.10.23-FT		Ferrites
16	Dr. D. Aparna	G. Srikanth Sandhya Rani	2022 2023		Glasses
17	Dr. D. Madhuri	Vijay Kumar Samatha T. Thejaswini	15.12.22 2023 16.10.23		Polymers
18	Dr. D. Sreenivasu	SomireddyBhavani M. Mukteshwar	2023 2023		Glasses and ferrites
19	Dr. Kaleem Ahmed Jaleeli	J Sumathi	23.10.18-FT		Bio-materials

7. Alumni

Alumni members (Batchwise if possible)

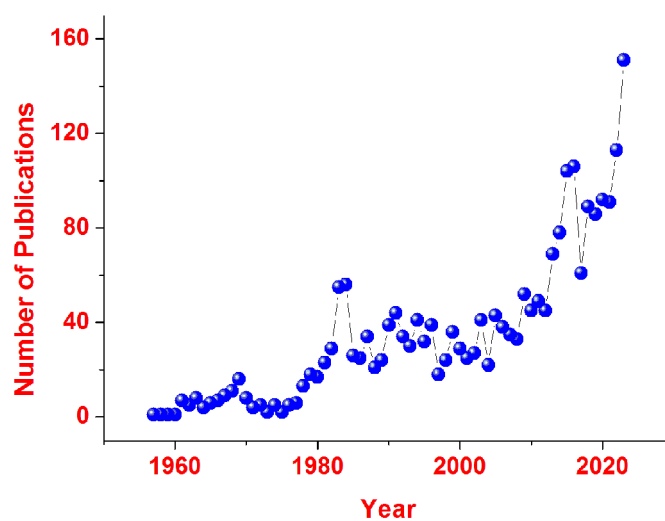
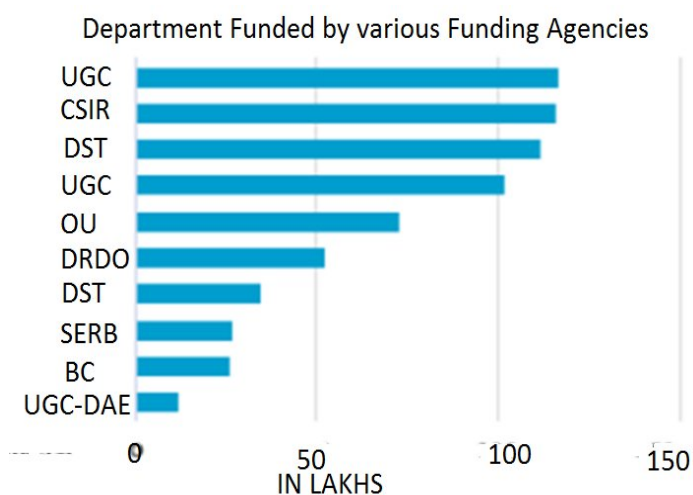
S. No.	Programme name (UG/PG/Ph D/ others)	Batch	Name and Photo (if possible)	Current affiliation/ designation	Official address	Permanent Address Contact E-mail
1	PG	1990	Dr. D. Sreenivasu	Professor	OU	- drsriacharya@gmail.com
2	PG	1994	Dr. Ramdev	Professor	DRDO	- vasu72@gmail.com
3	PG	1996	Dr. K. Srinivas	Scientist-F	DRDO	- vasu72@gmail.com

8. Gold medals for students in the department (FIVE)

Name of the medal	year	Name of the Awardee with fathers Name	Hall ticket No. Month & year	Name of the college
1. Prof. N. RajeshwarRao Memorial Gold Medal -For securing highest marks in all semesters	2018	Shazia Bader MdBadruddin	100716509306 June, 2018	UCS, OU
	2019	KuchibhotlaMahathi D/O K. Naga Mohan Kumar	100717509205 June 2019	UCS, OU
	2020	Saba Arsheen D/O MohdIlyas	100718509314 Nov 2020	UCS, OU
	2021	Tahreem Begum D/O MdJaffar Ali	101119509007 July 2021	UCS, Saifabad
	2022	Ayesha Siddiqua D/O ShaikFeroz	100720509213 Oct 2022	UCS, OU
2. Dr. SistlaSubramanyam and SistlaYasoda Gold Medal -For highest marks in all the special papers	2018	Sarwath Sara D/O Md. Abdul Aleem	100716509205 June 2018	UCS, OU
	2019	KottiaakhilaPriya D/O KY Krishna Rao	105317509002 June 2019	A V College, OU
	2020	Sidra Fatima D/O Md. IlyaMeral	101318509001 Nov 2020	Univ. College for Women, Koti
	2021	Mauram Ravalli D/OM. Ganesh	100719509313 July 2021	UCS, OU
	2022	Ayesha Siddiqua D/O ShaikFeroz	100720509213 Oct 2022	UCS, OU
3. Prof. N. RajeshwarRao Memorial Gold Medal -For securing highest marks in all semesters	2018	Shazia Bader MdBadruddin	100716509306 June, 2018	UCS, OU
	2019	KuchibhotlaMahathi D/O K. Naga Mohan Kumar	100717509205 June 2019	UCS, OU
	2020	Saba Arsheen D/O MohdIlyas	100718509314 Nov 2020	UCS, OU
	2021	Tahreem Begum D/O MdJaffar Ali	101119509007 July 2021	UCS, Saifabad
	2022	Ayesha Siddiqua D/O ShaikFeroz	100720509213 Oct 2022	UCS, OU
4. Y. PurandarHonarary Gold Medal For securing highest marks close to first rank	2018	Sarwath Sara D/O Md. Abdul Aleem	100716509205 June 2018	UCS, OU
	2019	ManchikantiShruthi D/O M Ashok Kumar	116517509003 June 2019	Vasundara PG college
	2020	KeerthiRoja D/O KeerthiSomes	105318509004 Nov 2020	A.V. College
	2021	MasuramRavali D/O M Ganesh	100719509313 July 2021	UCS, OU
	2022	AmanpreetKaur D/O Jaspal Singh	108920509021 Oct 2022	G. Pulla Reddy PG college

9. Milestones of the Department (since inception):

year	Achievements
2002-2007	UGC-DSA Phase-I, UGC-BSR, FIST-DST
2008-2013	UGC-DSA Phase-II
2008-2009	Introduced MSc Nano-Science
2009-2010	Introduced Post-MSc Diploma
2013-2018	UGC-UPE -FAR



10. Contact Us

Head of the Department	Chairperson, BoS (Physics)	Chairperson, BoS (Electronics)
Prof. M. Srinivas Department of Physics University College of Science Osmania University Hyderabad -07 Telephone: 9908366857 E-mail: msrinivas.ou@gmail.com	Sr. Prof. D. KarunaSagar Department of Physics University College of Science Osmania University Hyderabad -07 Telephone: 9866145020 E-mail dasariks@osmania.ac.in	Prof. M. Prasad Department of Physics University College of Science Osmania University Hyderabad -07 Telephone: 9866357996 E-mail prasad5336@yahoo.co.in

RELATED LINKS

11. Notice Boards: General notices / Departmental Circulars / Notifications

S.No.	Date	Title with dates of the events
1	Feb' 2018	Science day Celebrations
2	June2020	Alumini meeting
3	May2022	National Conference on Recent Advances in Nano-materials
4	April 2024	UG-Teachers meeting

12. Activities

S.No.	Date	Celebrations/ Monthly reports / Student activities etc.
1	Feb 2018	National Science Day
2	Mar 2019	Education Tour
3	Feb 23	National Science Day
4	April 2024	University open day

13. Annual reports

1	Annual Report 2017-18	PDF
2	Annual Report 2018-19	PDF
3	Annual Report 2019-20	PDF
4	Annual Report 2020-21	PDF
5	Annual Report 2021-22	PDF
6	Annual Report 2022-23	PDF

*Submit PDF for uploading to get website link

14. Approved publishers

List of publishers (Publishers of books in library/seminars)

S.No.	Publisher	Place	International/National
1	Narosa	Hyderabad	National
2	Chand	New Delhi	National
3	Tata-McGraw Hill	New Delhi	National
4	Springer	India	International

15. Attendance of the student

Semester-wise: Mid-Sem and End Sem Attendance of this academic year- Dept. display board

16. Syllabi and Scheme

Syllabi of all the Programmes and all the courses are displayed in the University web-site

17. Time table

Time tables of all the Programme's - semester-wise of this academic year (Displayed in notice board)

18. Student notices

Timetables, Notices, Guest lectures, Cultural, Festival circulars, Exams, Scholarships, Gold medals

(Displayed in notice board)

19. Learning Resources: Faculty developed their topics taught-

20. Teaching Plans: A separate file is maintained at the Department

Teaching plans for each module /unit /Chapter (hourly teaching distribution of the module)

Programme	Semester	Course	Module
S.No.	Topic	No. of hours	
	--		

*A separate file is maintained at the Department

21. Committees

I. Departmental committees-Academic/Administrative/Technical/ RDC/BoS-UG and PG

II. Students-Departmental Committees-Cultural, Alumni, Placements, Student council members

III. Details of the Student Council

Academic Year:

S. No.	Year and Semester	Class	Name of the student with Roll No.	M/F	Phone No.	E-mail
	2018-19	PG-II-Yr	Baskar G	M	7893074186	Bhaskar5051@gmail.com
	2019-20	PG-II-Yr	S. Navya	F	7995496341	Soma.navya96@gmail.com
	2020-21	PG-II-Yr	D.Satyavardhan	M	9398966351	Satya.physics77@gmail.com
	2021-22	PG-II-Yr	K.Sravanthi	F	9059324723	Sravanthikoppula1315@gmail.com
	2022-23	PG-II-Yr	P.Pandari	M	9346652729	pandaripathlavath@gmail.com
	2023-24	PG-II-Yr	N. Kalyankumar	M	9492286868	kalyankumarn.2@gmail.com

22. Minutes of the meetings

"Minutes of the meetings "are available with the Department.

23. Seminars/Workshops/Guest Lectures

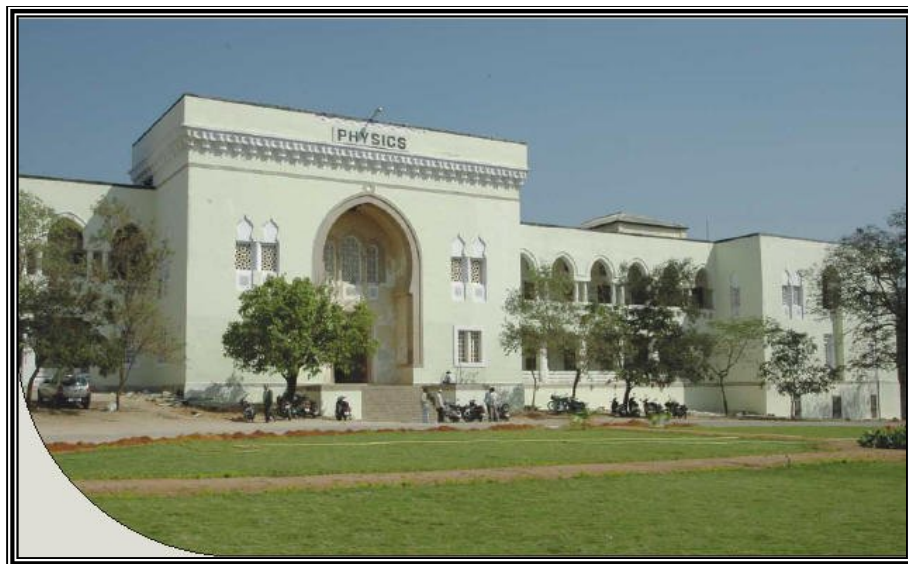
A separate photo-album and brochure available in the Department

24. Best Practices of the department

S.No.	Best Practice
1	Name of the best practice: PPT, Modules, industrial visits Year of practice: : 2010 – till date Objectives: :To nurture students with skill oriented Outcomes of the practice: Students got selected in National Labs for Research Limitations: : Limited infrastructure Is the practice continued: Yes
2	Name of the best practice: Project based learning Year of practice: : 2023 Objectives: To train the students in advanced research Outcomes of the practice: Students got selected over-seas Fellowships (PhD) Limitations: : Infrastructure Is the practice continued: Yes

Annexure I

Department of Physics



About the Department

When Osmania University was established during 1918-1919 year, Physics was one of the first few science subjects that were introduced. In 1950, Professor SuriBhagavantham, a world renowned Physicist, initiated high quality research work both on theoretical and experimental aspects of Ultrasonic, Radio Astronomy, Cosmic rays and Spectroscopy. From then, the Department has grown enormously in strength and diversity and it has emerged as one of the centres of Excellence in Physics in the Country. The Department has four constituent colleges, out of which three constituent colleges offer both B.Sc. and M.Sc. courses with Physics as the main subject. The over-all intake of the students is about 175. Many of our faculty, research scholars and students have won number of prestigious awards such as Von Humbolt, DAAD, Boycat, CV Raman, Telangana Science Academy, Best teachers Award (Govt. of Telanagana) etc.

Currently the Department of Physics, OU is offering M. Sc. (Physics & Applied Electronics) with following specializations:

- (a) Material Science (b) Solid State Physics (c) Electronics & Instrumentation (d) Nano Science
- (e) Astrophysics.

M.Sc. (Physics) offering at constituted colleges with following specializations:

- a) Bio-Physics at Nizam College, OU
- b) Electronics & Communication at Nizam College, OU
- c) Condensed Matter Physics at UCS, Saifabad, OU.

Multi-disciplinary Course offered-Post M. Sc. Diploma in Radiological Physics

The Department also has started a Post M. Sc. Diploma in Radiological Physics in collaboration with AERB from the academic year 2009-2010. This will be a multi-disciplinary course involving the expertise from the departments of Physics and Life Sciences, and Hospitals and Medical Research Centres. Several Radiological

Centres in the city, including MNJ Cancer Hospital and Regional Cancer Research Centre, KIMS, Omega Hospitals and Indo-American Cancer Institute have been collaborating with the Department to conduct the course, and to meet the requirements of radiological and nuclear medicine techniques. Further in view of the urgent need of human resources in the concerned areas, the AERB is interested in such a course to be started at OU keeping in mind the availability of subject experts in radiology and nuclear medicine in Hyderabad, to teach the course and for training.

Research activity at the Department of Physics:

The thrust area of the Department is Materials Science and Solid state physics. Following are the areas of research undertaken by various research groups in the Department.

- a) Ferrites and Nano material
- b) CMR Materials
- c) Ion conduction and polymer electrolytes:
- d) Display Materials:
- e) Glasses:
- f) Thin films and gas sensor materials
- g) Solid State Physics and Materials Science for over three decades.

Major Research Infrastructure Developed:

- 1. FTIR Bruker
- 2. UV-Vis Spectrophotometer Shimodzu
- 3. Scanning Electron Microscope (zeiss)
- 4. X-ray Diffractometer (Powder) Xpert Plus
- 5. Differential Scanning Colorimeter (DSC) Netzsch
- 6. Thermo gravimetric Analyzer (TGA)
- 7. Spectrofluorophotometer RF 6
- 9. Atomic Force Microscope (AFM) Shimodzu
- 10. RF Magnetron Sputtering Unit ENI, Pfizer
- 11. High Vacuum and UHV systems (Local)
- 12. Spin Coating Unit (Local)
- 13. High Temperature Vacuum Furnace
- 14. P-E Loop Tracer Marine India
- 15. Magnetic susceptibility

Research conducted

The Department was one of the earliest Departments in the county to promote research activity in the growth and characterization of single crystals. The research activity taken up by the Department on several aspects of crystal characterization, superconductivity, spectroscopy, high energy physics and X-ray diffraction earned national and international recognition. The Department published over 1700 research papers in seventy different national and international journals, having high impact index which led to the award of more than 260 Ph.D.'s from the Department. Department has produced Scientists of National/International calibre who have brought laurels to the Nation and Institution wherever they are.

For promotion of the academic activity and research in the identified thrust area i.e. , Solid State Physics and Materials Science, UGC has been sanctioning funds continuously under SAP. The Department received a

grant of Rs.54.25 lakhs under UGC-DSA scheme for 5 years duration from 2002 – 2007 . Further an amount of Rs 73.5 lakhs is sanctioned by UGC under DSA Phase-II, for the period 2008-2013. Besides this funding from UGC, the individual staff members have been attracting financial support for their research projects from various organizations like DST, DRDO, DAE, NSC-UGC, BRNS etc. During the last two years, DRDO itself has sanctioned more than rupees one-crore for the individual projects in the Department. Recently AFM costing about 45 lakhs is purchased from the grants received from DRDO under individual projects.

The Department developed central facilities like Liquid Nitrogen Plant, UV spectrometer, DSC, X-ray Diffractometer. The Department also received funding for development of central computing facility under DST-FIST programme. Under this programme, an updated computer facility to cater to the needs of the students of Post-graduation, research scholars and teachers has been established. The teachers of the Department actively participated in the academic programmes like National Seminars, Workshops, refresher Courses etc. The Department has provided Internet facility with access to about 30 nodes distributed to all individual staff members and labs. Under the UGC – X Plan grant, an amount of Rs.12 lakhs was sanctioned to strengthen the department facilities. Further an amount of 50 lakhs is sanctioned by UGC during the past two year under the Infrastructure grant. The Department regularly organizes National Seminars/Symposia/Workshops.



DEPARTMENT AMBIENCE



Facelift of Entrance of the Physics Department



Committee Room



MSc Class rooms



M.Sc e-class rooms

Vision

The Vision of the University (and also Department of Physics) is to generate and disseminate knowledge through a harmonious blend of ancient and modern wisdom, and to serve the society by developing in students heightened intellectual, cultural, ethical, and humane sensitivities; to foster a scientific temper, and to promote professional and technological expertise. Central to this vision is a commitment to regional and national development in consonance with our culture, heritage, and environment.

Mission

- To achieve excellence in teaching and research (in Physics)
- To generate, disseminate and preserve knowledge (of Physics)
- To meet the challenges of a complex, and modern society through informed social outreach
- To empower through knowledge and information
- To develop a responsible and productive citizenry
- To develop, enhance, and improve the quality of human resources
- To cultivate resolute moral and ethical values
- To meet contemporary regional and national needs and anticipate future social and economic development (fulfilling the social responsibility)
- To preserve and promote cultural heritage, humanistic and spiritual values

Milestones of the Department:

The Department was one of the earliest Departments in the county to promote research activity in the growth and characterization of single-crystals, ceramics, thin-films, polymers, nanomaterial, bio-materials etc. The research activity taken up by the Department on several aspects of characterization, superconductivity, spectroscopy, high energy physics and X-ray diffraction earned national and international recognition. The Department published over 2000 research papers in seventy different national and international journals, having high impact index which led to the award of more than 600 Ph.D.'s from the Department. Many of the Alumni of our Department have been working as faculty/Scientist in various National, International Labs/Institutes/Universities.

Programmes offered

Name of the course	Intake	Average no. of students passing out per year	Major areas of placement of students
Post Graduate degrees			R &D Institutions Universities Degree/Junior
I. M.Sc. (Physics)			Lecturer School Teachers Marketing
Solid State Physics	30	20	
Electronic Instrumentation	30	20	
Material Science	30	20	
Nano Science	30	20	
II. M.Sc., Applied Electronics	30	20	R & D Institutes Universities
Research Degrees Ph.D.	50	20	R & D Institutes Universities
Post MSc Diploma Radiological Physics	30	20	Hospitals Nuclear Power plants

List of Faculty (Group Photo Students and Staff)



Infra-structure –Department of Physics

M.Sc. - Solid State Physics - Lab



M.Sc. – Material Science – Lab

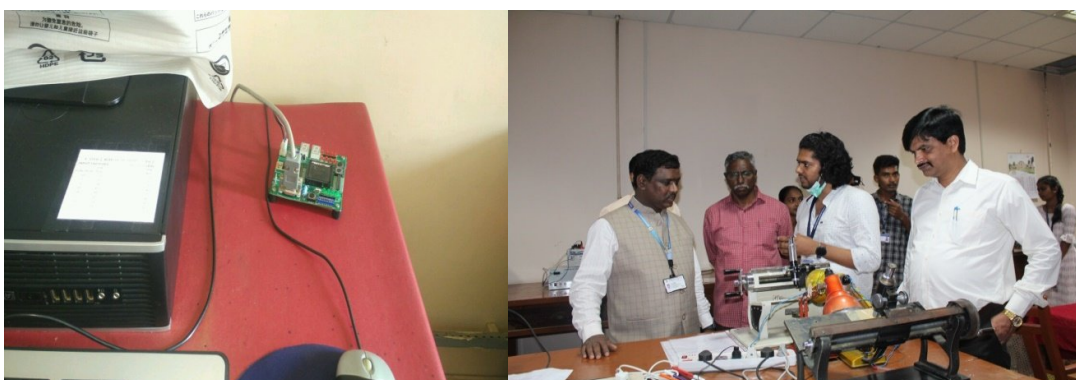


M.Sc. Optics Lab



M.Sc. Instrumentation Lab

M.Sc. Modern Physics Lab



M.Sc.- Nuclear Physics Lab



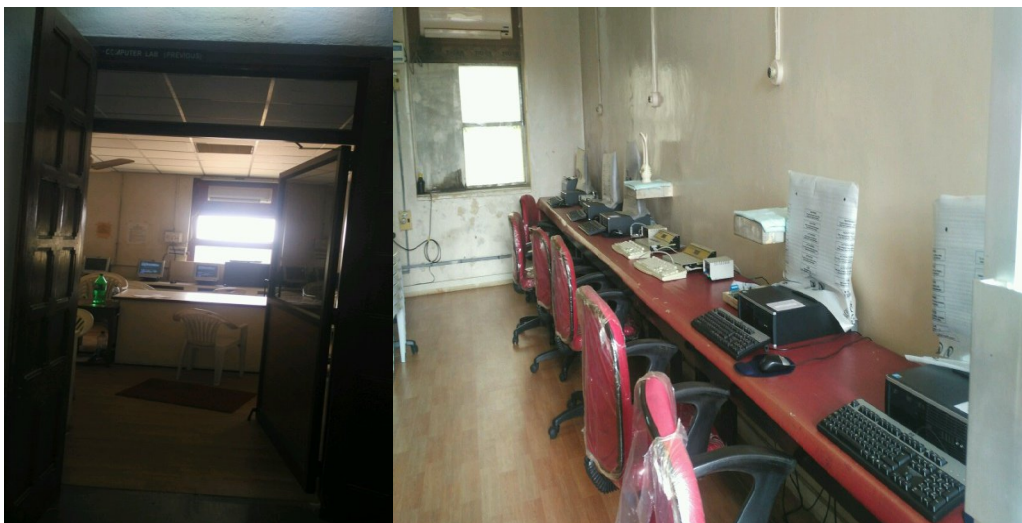
M.Sc. Heat and Acoustic lab



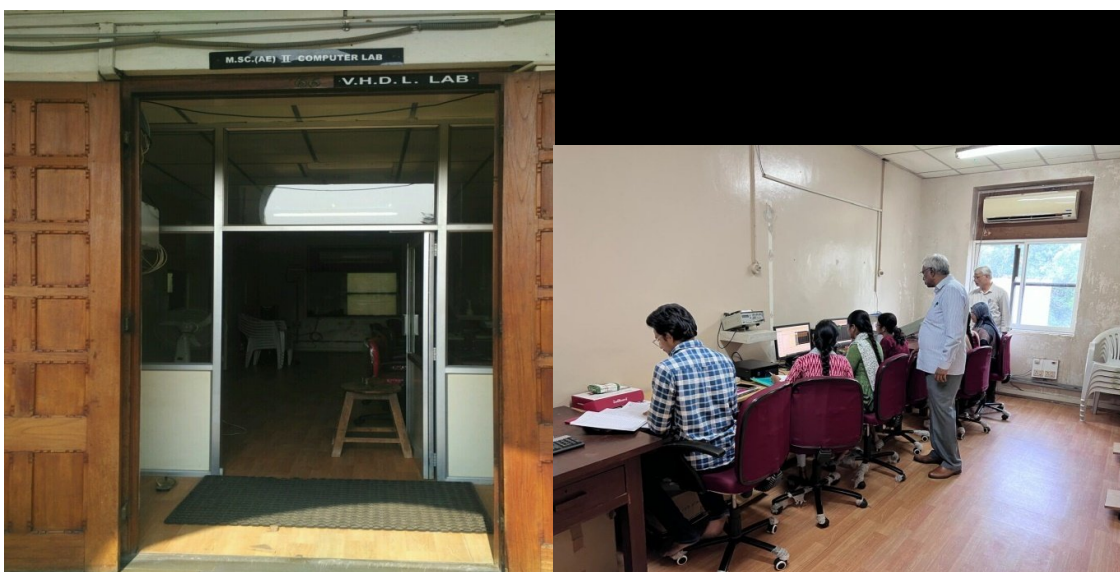
M.Sc. Electronics Lab



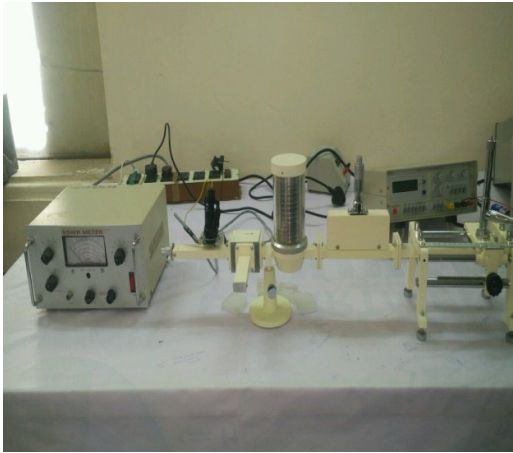
M.Sc. Computer Lab



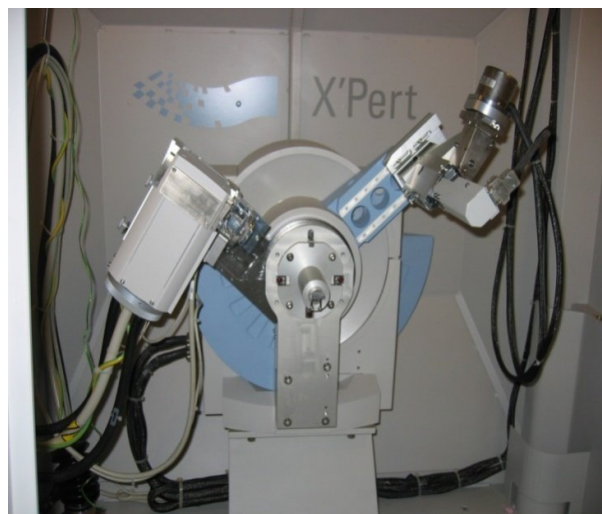
MSc. VHDL Lab



M.Sc. Applied Electronics Lab



Sophisticated /special equipment Photo



Philips X'Pert PRO diffractometer- Purchased under UGC SAP Grant



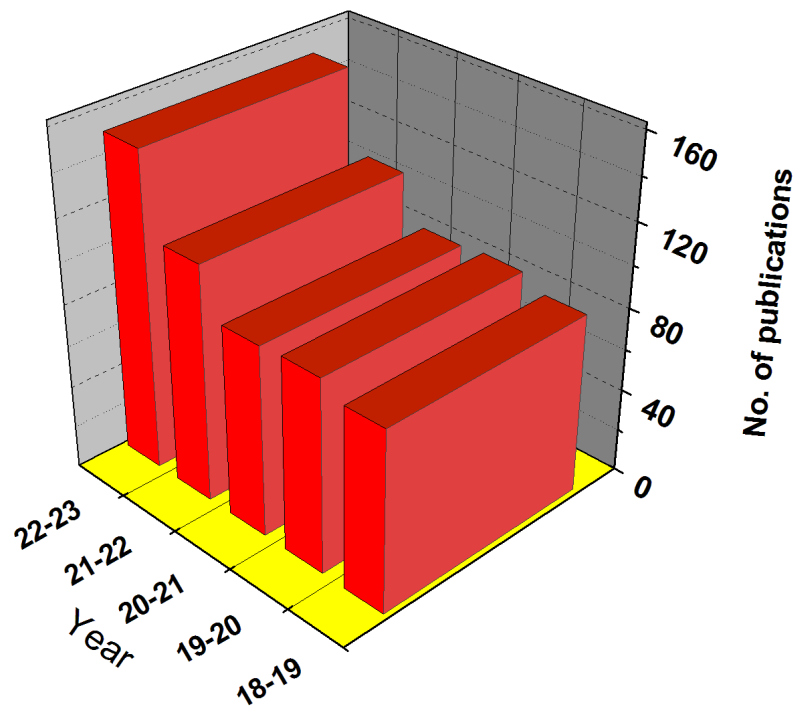
RF Sputtering Unit purchased under UGC SAP Grant



Scanning Electron Microscope

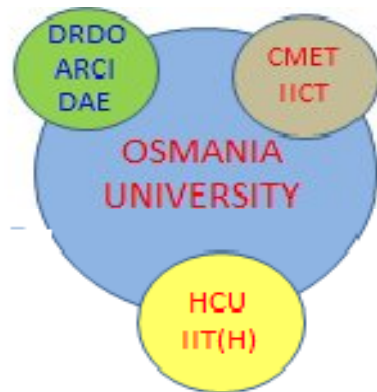
Number of Research publications -National/International

Description	2018-19	2019-20	2020-21	2021-22	2022-23
Numbers of Papers Published:	86	92	91	113	151
Numbers of Books with ISBN:	2	2	3	2	4
Numbers of Journals with ISSN:	86	92	91	113	151
Numbers of Text Books:	2	2	1	1	1



List of publications year wise (3D Plot)

National and International Collaborations:



Department Alumni





Degree College Teachers Inspiration Program

List of Faculty

S. No	Name of Faculty Member	Designation	Highest Qualification	i-10 index
1	Dr. D. KarunaSagar	Sr. Professor	M.Sc., Ph.D	06
2	Dr. M. Srinivas	Professor	M.Sc., Ph.D	08
3	Dr. M. Prasad	Professor	M.Sc., Ph.D	10
4	Dr. J. LaxmanNaik	Professor	M.Sc., Ph.D	05
6	Dr. Md. Shareefuddin	Professor	M.Sc., Ph.D	19
7	Dr. B. Ravinder Reddy	Associate Professor	M.Sc., Ph.D	03
8	Dr. N.V. Prasad	Associate Professor	M.Sc., Ph.D	10
9	Dr. M. Sreenath Reddy	Associate Professor	M.Sc., Ph.D	07
10	Dr. V. Nathaniel	Associate Professor	M.Sc., Ph.D	02

11	Dr. G. Upender	Associate Professor	M.Sc., Ph.D	23
12	Dr. Y. KalyanaLaxmi	Associate Professor	M.Sc., Ph.D	08
13	Dr. P.Himabindu	Assistant Professor	M.Sc., Ph.D	02
14	Dr. D. Aparna	Assistant Professor	M.Sc., Ph.D	01
15	Dr. D. Madhuri	Assistant Professor	M.Sc., Ph.D	02
16	Dr. D. Sreenivasu	Assistant Professor	M.Sc., Ph.D	02
17	Dr. K. Kirana	Assistant Professor	M.Sc., Ph.D	02

Senior Professor Dr. D. KarunaSagar



Education: MSc, PhD.

Doctor of Philosophy:

Thesis title: Studies on the performance of Optical Systems Apodised with Generalized Hanning amplitude Filters

Teaching and Research Experience: 27 YEARS

Research Fields:

- ❖ PSF engineering.
- ❖ Apodization filters.
- ❖ Coherent and incoherent imaging.
- ❖ Diffractive Optics.
- ❖ Imaging and Super-resolution

Number of Research Students Enrolled for Ph.D	Thesis Submitted	Degree awarded
20 (twenty)	-----	16 (Fourteen)

List of Ph.D Degrees awarded with Reference Number under my guidance:

1. Mr Abdul Muhith Ref. No: PHD 10466 (16th January, 2012)
Studies on the performance of Apodised Optical systems with defect of focus under the influence of Primary Spherical Aberration and Astigmatism.
2. Ms. V. Keerthi Ref. No: PHD 29477 (16th April, 2014)
Hyperspectral Image Processing and Analysis.
3. Mr. M. Venkanna Ref. No: PHD 29594 (30th July, 2014)
Studies on the Edge Imaging Characteristics of Aberrated Coherent Optical Systems by Amplitude Filters.
4. Mr. A. NareshkumarReddy Ref. No: PHD 29711 (22nd November, 2014)
Studies on Imaging of Point Object and Composite Image of two object points of asymmetrically apodised optical systems with complex pupil filters.
5. Mr. B. Sambaiah Ref. No: PHD 30019 (27th August, 2015)
Studies on the Super-resolution of Optical Imaging Systems with Amplitude and Phase Filters.
6. Mr. A. Narsaiah Ref. No: PHD 30232 (26th March, 2016)
Studies on the Annular Apodisers for Low sensitivity to Defocus of an Aberrated Optical System.

7. Mr.Kiran Kumar Thota Ref. No: PHD 41037 (04th March, 2017)
Studies on Two-Line Resolution of Aberrated Optical Systems Under Shaping and Shading of the Apertures.
8. Mr. P. Rama Krishna Ref. No: PHD 41651 (30th June, 2018)
Studies on Imaging Characteristics of Aberrated Optical Systems with Non-Uniform Transmission Pupils.
9. Mr. T. VenkatRao Ref. No: P7/PhD/20103/08-10/TV/ECE/2020*
*JNTUHDept. of ECE as a Co-Supervisor (30th March, 2021)
Enhanced Quality of Service and Fast Scheduling Strategies for Optical Burst Switching in WDM Networks
10. Mr.BairysatyanarayanaRef. No: PHD 43609 (29th December, 2022)
Synthesis and Characterization of MgCuZnNanoferrites and MCuZn-NiCuZnNanoferrite Composites for Microinductor Applications.
11. Mr.LachimalaRamprasad Ref. No: PHD 43665 (12th January, 2023)
Studies on Diffracted Field Characteristics of Optical Systems with Variable Apodisation.
12. Mr. T. Mohan Kumar Ref.No: PHD 43747 (06th February, 2023)
Preparation and Characterization of Rare Earth Doped Compound Semiconductors for Opto-Electronic Device Applications
13. Ms. S. Vidya Rani Ref. No: PHD 44576 (20th November, 2023)
Studies on the Performance of Aberrated Optical Imaging Systems with Variable Apodization
14. Ms.Anitha P Ref. No: PHD 44589 (28th November, 2023)
Studies on Light Intensity Distribution at the Focus and Out of Focus Planes of Optical Systems with Complex Pupil Function.
15. Mr.NagarajuGudipoodi Ref. No: PHD 44748 (5th February, 2024)
Impact of Lead Halides on Physical, Optical, FTIR and Raman Studies of CdO-Bi₂O₃-B₂O₃ Glasses: Applications to Radiation Shielding.
16. Ms. N .SabithaRef. No: PHD 44846 (21st March, 2024)
Studies on the point spread functions of aberrated optical systems with defect-of-focus

Areas of Teaching Experience

List of subjects taught:

Assistant Professor :

- Electronic Devices and Circuits
- Electromagnetic Theory
- Quantum Mechanics
- Statistical Mechanics

Associate Professor :

- Microcontroller 8051
- Mobile Cellular Communications
- Digital Image Processing

Professor :

- Digital System Design using VHDL
- Digital Signal Processing and Processors
- Control Systems
- Nano-Photonics
- Modern Optics

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

- Indian Science Congress, Kolkata.
- Optical Society of India (L.627)

Publications: [Google scholar link](#)

<https://scholar.google.com/citations?user=vS2HFCcAAAAJ&hl=en>

Prof . M. Srinivas



EDUCATION QUALIFICATIONS: M. SC., PH.D.

Doctor of Philosophy:

Thesis title: Luminescence Study of Displa Phosphors.

Assistant Professor :

- Electronic Devices and Circuits
- Electromagnetic Theory
- Mathematical Physics
- Electronics

Assistant Prof : Sep 2004 to May 2017.

Associate Prof : June 2017 to June 2019.

Professor : June 2020 to Till Date.

Associate Professor :

- Digital Electronics
- Data Communication
- Modern Optics

Professor :

- Electronics and Instrumentation
- Digital Signal Processing and Processor
- Nano-Photonics

Memberships in Professional bodies

- Life Member of Luminescence Society of India
- Life Member of Indian Science Congress Association
- Life Member of Indian Physics Association
- Life Member of Indian Physics Teachers Association

- Life Member of Materials Research Society of India
- Life Member of Indian Institute of Public Administration (IIPA), New Delhi

Work experience (in chronological order).

- Chairperson, BoS in Physics, Department of Physics, Osmania University, Hyd 22-05-2021 onwards
 - Member of the Departmental Committee (DC) to decide all policy and other matters relating to the teaching arrangements, admissions, examinations, administration, finance and research
 - Member of the Departmental Research Committee (DRC)
 - BOS Member in Physics for post-graduate courses
 - BOS Member in Physics for under-graduate courses
 - BOS Member in Electronics for UG & PG courses
 - Co-Ordinator for Telangana State Eligibility Test (TS-SET) during 2018-2021
 - Governing body member for various UG and PG Colleges under OU affiliation.
 - Selection Committee Member for various UG and PG Colleges under OU affiliation
 - Subject Expert Member for Lecturers selection process for various UG and PG Colleges under OU affiliation
-
- Member in Joint Inspection Committee, CDC, OU, Since 2012
 - BOS Member in Physics for Mahatma Gandhi University (MGU), Nalgonda
 - BOS Member in Physics for Palamuru University (PU), MBNR.
 - BOS Member in Physics for Sathavahana University (SU), KNR

Details of Research Projects being ONGOING / COMPLETED

S. No	Title	Cost in Lakhs	Start Date	End Date	Role	Agency
1	Development of Rare-earth Free Nanophosphors and Fabrication of Phosphor Converted Cool-White LED Device	47,99,657/-	24-03-2022	23-03-2025	PI	DST-SERB
2	Tailoring of materials for Luminescence emission in UV region with improved quantum efficiencies for RGB	25,88,320/-	1-9-2014	31-08-2018	PI	DST-SERB
3	Synthesis and Luminescence Studies of Lanthanide ions doped Inorganic Nano-Phosphors	13,25,800/-	1-4-2014	31-03-2017	PI	UGC

Ph.D. Scholars working under my Supervision

Ph.D. Awarded

1. Dr.K.Srikanth, Title: Influence of A_2O_3 (A = B, Bi, Al, Sb) oxides on Spectroscopic Properties of Vanadyl doped Tellurite glasses. Awarded: 2022
2. Dr.K.Laxminarayana, Title: Influence of A_2O_3 (A = B, Bi, Al, Sb) oxides on Spectroscopic Properties of Vanadyl doped Tellurite glasses. Awarded: 2022
3. Dr.L.Narsimha, Title: Influence of A_2O_3 (A = B, Bi, Al, Sb) oxides on Spectroscopic Properties of Vanadyl doped Tellurite glasses. Awarded: 2023
4. Dr.M.Narasimulu, Title: Photo and Thermoluminescence Studies of Rare Earth Doped Alkaline Earth Ortho Germinate Phosphors. Awarded: 2023

Publications: <https://www.researchgate.net/profile/M-Srinivas-5>

Professor M. Prasad



EDUCATION QUALIFICATIONS: M. SC., PH.D.

Doctor of Philosophy:

Thesis title: "A study of spectroscopic and transport properties of some oxide glasses containing CdO"

Research Experience

Areas of research: Glasses/Glass-ceramics, DSSC, Ferrites, and Polymers.

instrumentation used in conducting their research: XRD, FESEM/EDX, TEM, AFM, XPS, UV-Vis-NIR spectroscopy, DSC/DTA, DC/AC, Dilatometer, EPR, IR, Raman spectroscopies, SERS, and DSSC.

Citation analysis: Total number of publications: 32

Number of PhD's awarded: 05 : PhD's submitted: 01

Areas of Teaching Experience:

SUBJECTS TAUGHT AT M.SC.: I) MATERIAL SCIENCE, II) ENGINEERING MATERIALS, III) EM THEORY

Assistant Prof: May 2007 to May 2017.

Associate Prof: June 2017 to June 2019.

Professor: June 2020 to Till Date.

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS:

Member of Indian Science Congress (ISC)

Publications:

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

Prof. J. LaxmanNaik



Research Interests: Magnetic Nanoparticles, Glass and Ceramics, Nano-ferrites,
Ferroelectric Materials

AwardsandAchievements

S. No.	NameoftheAward/Honor	Awardingagency	Year
1	Youngfacultyaward	VenusInternationalFoundation,madras	2016
2	TeachingExcellence	MarinaResearchLab,Madras	2017
3	AdarshVidyaSaraswatiRash triyaPuraskar	TheGlobalManagementCouncil, Gujarath	2018
4	DKInternationalAward for BestSeniorFacultyAward	DKInternationalResearchLab, Madras	2019
5	FacultyBrandingAward	EETCRS8thFacultyBrandingAwards- 20. Kolkata	2021

AcademicAdministrativePositionsheld:

Programofficer,NSS	2008-2009,UGPC,KakatiyaUniversity.
HostelJoint Director(MenandWomen)	2009-2010,UGPC,KakatiyaUniversity.
Principal	2010-2012,UPGC,KakatiyaUniversity,Wgl.
In-chargeHead,Deptof Physics	2012-2014,Univ.ArtsandScienceCollege, Subedari,HNK.
Joint-DirectorforAdmissions	2015to2017,KakatiyaUniversity.
I/cHead,Dept.ofPhysics,Saifabad-OU	From31.08. 2017to 2019
Chairmen,BoSinElectronics,Dept.of Physics-OU	From21.06.2021
Principal,University Collegeof Science,Saifabad,OsmaniaUniversity,HYD	From03.11.2021

Member/Participation in Bodies/Committees on Education and national development:

Member	Governing Body Member (2008) for Sri Pavani Degree College, Godavarikani.
Member	Syllabus Revision Committee for Physics (2010), Satavahan University, Karimnagar.
Member	Departmental Committee (2012), Department of Physics, Kakatiya University, Wgl
Member	Governing Body Member (2014) for Chanakya Degree College, Niramal.
Member	Governing Body Member (2014) for Sri Vikas Degree College, Khammam.
Member	Departmental Committee (2014), Department of Physics, K.U, Wgl
Member	Departmental Committee (2015), Department of Physics, K.U, Warangal.
Member	Advisory Committee, Degree Online, DOST-2015-16, K.U, Warangal.
Member	Advisory Committee, Directorate of Admissions, KU (2015-16), Online Admission, KUPGCET 2016, Kakatiya University, Warangal.
Member	Online Admission for Degree Online, DOST-2015-16, K.U, Warangal.
Member	Advisory Committee, Directorate of Admissions, KU (2016-17), Online Admission, KUPGCET- 2017, Kakatiya University, Warangal
Member	Advisory Committee, Directorate of Admissions, KU (2015-16), Online Admission, KUPGCET 2016, Kakatiya University, Warangal.
Member	Member in the workload of UG/PGUCSS-OU-2017
Member	Member to solve the issues in the biotechnology-UCSS, OU-2017
Member	Member in anti-ragging committee at UCSS-2018
Member	Member in the constitution of Hostels & mess sub-committee-2018
Member	Member of Departmental Committee, Physics-OU
Member	Member of Departmental Research Committee from 2020
Member	Member, Board of Studies in Physics, Mahatma Gandhi university, Nalgonda.
Member	Member SPACE committee in Dept. of Physics, UCS-OU
Member	Governing body member for VASA VIDEGREE & PG COLLEGE, HYD
member	Member in CALENDER and DAIRY Osmania University Hyderabad. 2021

Research Publications: <https://www.researchgate.net/profile/Prof-J-Laxman-Naik>

Prof. Md. Shareefuddin



Education: MSc, PhD.

Doctor of Philosophy

Thesis title: Transport properties of potassium yttrium fluoride and sodium yttrium fluoride compounds

Instrumentation used in conducting research: XRD, XPS, SEM-EDAX, Raman, Impedance analyzer, VSM, ESR, Thin-film coating units (thermal vapor deposition)

Number of PhD's awarded: 10

PhD's submitted: -

Postdoctoral Fellow: Research Associate CSIR, New Delhi, (1993-1998)

Areas of Teaching Experience:

List of Subjects: Quantum mechanics, EM theory, Mathematical Physics, Electronics and microprocessor, Data Communication, Control System, Digital Communication, Resonance Spectroscopy

Assistant Prof : May 2007-May 2019

Associate Prof : May 2019-May 2021

Professor : May 2021- Till date

Awards / Grants

Pool Research Offer, CSIR, New Delhi (1998-1999)

PROFESSIONAL MEMBERSHIPS: Indian Science Congress Association, Kolkata

Publications: <https://www.researchgate.net/profile/Dr-Shareefuddin>

Dr. Ravinder Reddy Butreddy



Education : M.Sc., M.Phil., Ph.D.

Doctor of Philosophy:

Title: "Ultrasonic Investigations of Alcohol – Ester binary mixtures and Bacterial cultures".

Research Experience:

Research area:

Energy Materials to investigate new materials to enhance Energy storage capacity by applying various Synthesis techniques and environments. Instrumentation: XRD, SEM, TEM, FTIR, UV-Visible, DTA, XPS, and Raman Characterizations; and Conductivity, Dielectric and Cyclic voltammetry measurements techniques.

Areas of Teaching Experience:

Sublets Taught: Quantum Mechanics, Adv. Solid State, Physics, General Solid state Physics, Spectroscopy, Classical Mechanics, Electronics, Waves and Oscillations, Electromagnetic theory, Thermodynamics-Optics, Microwaves, C-Language, Electricity-Magnetism, Modern Physics, Thermodynamics-Optics, Mechanics-Waves & Oscillations and Engineering physics.

Awards : SFRF from IIT Delhi, New Delhi, INDIA.

Grants : UGC-DST Minor and Major Projects executed

Professional Memberships: 1. Member of Electrochemical Society, USA 2. Member of Ion Beam Society of India (IBSI). 3. Life member, Instrument society of India, Hyderabad chapter (ISOI) 4. Member of Ultrasonic Society of India (USI). 5. Member of Alumni Association, Osmania University, Hyderabad, INDIA

Google Scholar link: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Ravi

Dr. N. V. Prasad



Education: MSc, PhD.

Doctor of Philosophy

Thesis title: Studies on rare earth substituted bismuth layered structure ferroelectromagnetic ceramics

Area of research: Electro-ceramics, ferroelectrics, magnetic and magnetoelectric materials

Instrumentation used in conducting research: XRD, XPS, SEM-DAX, Raman, Impedance analyzer, VSM, ME-setups, Thin-film coating units (sputtering)

Number of PhD's awarded: 02

PhD's submitted: 03

Postdoctoral Fellow: Rajaramanna Centre for Advanced Technology, Indore (2001-2003)

Areas of Teaching Experience:

List of Subjects: Quantum mechanics, Solid State Physics, Statistical Mechanics, EM theory, Mobile Communication, Digital Electronics-Microcontrollers, Numerical Methods, Resonance Spectroscopy

Assistant Prof : June 2009-June 2021

Associate Prof : June 2021-to date

Awards / Grants

SERC-DST Young Scientist (2003-2006)

PROFESSIONAL MEMBERSHIPS: Indian Science Congress Association, Kolkata

Publications: <https://scholar.google.com/citations?user=TH3hpEwAAAAJ&hl=en>

Dr. V Nathanial



Education: MSc, MA, B.Ed, PhD.

Doctor of Philosophy

Thesis title: Absorption And Scattering of gamma rays in elements and some composite materials

Research Experience

Area of research: Nano Ferrites, Material Science, Nuclear Physics.

Instrumentation used in conducting their research: XRD, SEM, DRS, VSM, LCR, and Gamma rays spectrometer.

Areas of Teaching Experience

Subjects Taught: Electronics, General Solid State Physics, Embedded Systems and Nano Science.

Assistant Professor : June 2009- June 2021

Associate Professor : June 2021- to date

Awards / Grants

Teaching Excellence Award by Indo Global Summit 2018.

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

Indian Society for Radiation Physics.

Publications: <https://www.researchgate.net/scientific-contributions/V-Nathanial-2142002687>

Dr. M. Sreenath Reddy



Education Qualification: M.Sc, Ph.D

Thesis title:

“Study of indoor Radon/Thoron and Natural Background Radiation Levels in Hyderabad and its Surrounding Areas of Andhra Pradesh, India”.

Research Experience

Environmental Nuclear Radiation and material science

RAD7, Micro survey meter, TL reader, Sample preparation with furnace up to 1400°C.

Number of PhD's awarded: 03

PhD's submitted: 01

Areas of Teaching Experience

1.Modern optics, 2. Nuclear Physics, 3. Advanced Solid State Physics, 4.Classical Mechanics, 5. EM theory 6. DCCN-I , 7.DCCN-II, 8. Microcontrollers and applications, 9.General Solid State Physics, 10.Electronics and 11.Statistical Mechanics.

Assistant Prof: 06.09.2013 to 08.09.2021

Associate Prof: 09.09.2021 to till date

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

- National Executive Member for Indian Society for Radiation Physics (ISRP) for the year 2023-2025 and 2019-2021.
- Received Vice-Chancellor research excellence certificate from Osmania University in 2022.
- Indo-Japan workshop on “Environmental Radon/thoron-2010” held at BARC, Mumbai, on 22nd and 23rd November 2010 (selected only 18 participants from universities).
- Participated in the DAE-BRNS theme meeting RADON-2008 organized by EAD-BARC, Mumbai, during March 11-13, 2008 (Selected only 12 participants from universities across the country).

Grants:

1. Soft x-ray absorption spectroscopy and XMCD study of hexaferrite thin films, by UGC-DAE CSR, Indore, grant: Rs. 6,39,000/- in Dept., of physics, OU in April,2021.
2. Startup grant project sanctioned by UGC, New Delhi. Grant, Rs. 6 lakhs in 2017.

Life membership: IARP, NTSI, ISRP, LSI, INSC and ISOI

Publications: <https://scholar.google.com/citations?hl=en&user=vK1-W3AAAAAJ>

Dr. G. Upender



Education QUALIFICATIONS: M. Sc., Ph.D.

Doctor of Philosophy:

Thesis title: "Influence of some heavy metal oxides on physical, structural, thermal and electrical properties of tellurite glasses"

Research Experience:

Areas of research: Glasses/Glass-ceramics, DSSC, Photocatalysis, Gas Sensing & Surface Enhanced Raman Spectroscopy

Postdoctoral Fellow: UGC-Dr.D.S. Kothari Postdoctoral Fellow, School of Physics, University of Hyderabad, Hyderabad (19.10.2010-12.03.2012).

Scientist: CSIR-CGCRI, Kolkata from 13.03.2012 to 05.09.2013.

Instruments used: XRD, FESEM/EDX, TEM, AFM, XPS, UV-Vis-NIR spectroscopy, DSC/DTA, DC/AC, Dilatometer, EPR, IR, Raman spectroscopies, Nanoclusters films, SPR, SERS and studies, DSSC, Photocatalysis and Gas sensing.

Citation analysis: Total number of publications: 55 (International: 52; National: 03); Total Number of Citations: 1495; The h-index: 23 and i-10 index: 31

Areas of Teaching Experience

Subjects taught at M.Sc.: i) General Solid State Physics, ii) Advanced Solid State Physics

iii) Classical Mechanics, iv) Nuclear Physics

v) Spectroscopy, vi) Crystal Physics

vii) Modern Optics, viii) EM Theory

Awards:

S.No	NameofAward	AwardingAgency	Year
1.	Research Fellowships in Sciences for Meritorious Students (RFSMS)-JRF	UGC	2007-2009
2.	Research Fellowships in Sciences for Meritorious Students (RFSMS)-SRF	UGC	2009-2010
3.	Dr. D.S. Kothari PDF	UGC	2010-2012
4.	Associate Fellow of Telangana Academy of Science, Telangana	Telangana Govt.	2021
5.	Appreciation certificate from Vice-Chancellor	Osmania University	2022
6.	Outstanding Referee for many journals	Elsevier	2013 to till date

GRANTS:

S.No	Title	Cost in lakh	Duration	Role as PI/Co-PI	Agency	Status
1	Synthesisnanocomposites	6.00	2015-2017	PI	UGC, New Delhi	Completed
2	Development ofPhotocatalysis applications	13.20 (EMR/2016/002650)	2017-2020	Co-PI	DST-SERB, New Delhi	Completed
3	Developmentfor gas sensing and photocatalytic applications	29.60 SUR/2022/003708	2023-2026	PI	DST SERB-SURE, New Delhi	Sanctioned

Publications:

<https://scholar.google.co.in/citations?user=zQwZQPQAAAAJ&hl=en>

Dr. Y. Kalyanalakshmi



Education: MSc, PhD.

Doctor of Philosophy

Electrical and magnetic behavior of some monovalent doped CMR materials

Research Experience

Colossal magnetoresistance oxides, magnetotransport phenomenon, Thermoelectric power, Ferrites, Ferrite-manganite composites

Postdoctoral Fellow, Department of Physics, Osmania University, Hyderabad

Areas of Teaching Experience

Solid State Physics (General SSP, Advanced SSP, specialization), Classical Mechanics, Statistical Mechanics

Assistant Prof UG papers: Modern Physics

PG papers: Solid State Physics (General SSP, Advanced SSP, specialization), Classical Mechanics, Statistical Mechanics

Asso Prof Solid State Physics (General SSP, Advanced SSP, specialization), Classical Mechanics, Statistical Mechanics

Awards / Grants

- | | | |
|---------------------------|---|---|
| 1. Research Associate | : | CSIR, Govt. of India; 2011-2014. |
| 2. Senior Research Fellow | : | CSIR, Govt. of India; 2008-2010. |
| 3. Junior Research Fellow | : | UGC-RFSMS, Govt. of India; 2007-2008. |
| 4. Young Scientist Award | : | Dr. K. V. Rao Scientific Society Award 2010 |
| 5. Associate Fellow | : | Telangana Academy of Sciences 2018 |

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

1. Lifemember of Magnetic Society of India
2. Lifemember of Indian Science Congress Association

Publications: <https://scholar.google.com/citations?user=WnQ2arsAAAAJ&hl=en>

Dr. HimaBindu Pitta



Education: MSc, PhD., MSc(Psychology)

Doctor of Philosophy

Thesis title :Characterization of sediments in wells of Krishna-Godavari basin applying natural gamma ray spectroscopy methods

Research Experience

Area of research: NUCLEAR RADIATION PHYSICS, MATERIALS SCIENCE

Instrumentation used in conducting their research: WELL LOGGING TOOL (SCHLUMBERGER), SCINTILLATION AND SEMICONDUCTOR DETECTORS, MULTI CHANNEL ANALYSER, XRD, SEM, BALL MILL

Postdoctoral Fellow: DEPARTMENT OF PHYSICS AND ENGINEERING,
UNIVERSITY OF SURREY & TRUEINVIVO LTD, GUILDFORD, SURREY, UNITED KINGDOM
(October 2018 to September 2019)

Areas of Teaching Experience

PG Level:

1. Solid State Physics
2. Nuclear Physics
3. Digital transformation techniques and Information theory
4. Basic electronics
5. Nanomaterials and devices
6. Properties of Nanomaterials
7. Carbon nanotubes
8. Synthesis and characterization of nanomaterials
9. Mathematical Physics
10. Electromagnetic theory
11. C-Programming

UG Level:

1. Optics
2. Electricity and magnetism
3. Thermodynamics
4. Waves and Oscillations
5. Modern Physics
6. Engineering Physics

Awards / Grants

Name of the award Received	International/ National/ State/University/District/College level	Nature of Award	Month & Year of the Award
Felicitation by Red Cross Society India	State level	Society	September 2022
Vice-Chancellor's Research award	University	Scientific	January 2022
Felicitation by Sneha Group of Organisations	International	Society	December 2021
Guru Spandana by SpandanaEda Foundation	International	Society	October 2021
Visiting Academic Researcher	International, University of Surrey	Research	October 2018-2019
Professor of the year	National Level	Proficiency	October 2018
Alliance clubs International	National Level	Society	2018

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

- Indian Association of Physics Teachers (Life time) since 2016
- Environment and social development association (ESDA) (Life time) since 2019
- Member WICCI, Telangana Chapter, since July 2022
- Life Member IRPS, India since September 2022, LM-1242

Publications:

<https://scholar.google.com/citations?hl=en&authuser=1&user=GvCkBVkAAAAJ>

WEBPAGE: <https://sites.google.com/view/hbpitta/home>

Dr. D. Sreenivasu



Education: MSc, PhD. PGDCA

Doctor of Philosophy

Thesis title: Studies on spectroscopic and transport properties of bismuthate and borobismuthate glasses

Instrumentation used in conducting research: XRD, XPS, SEM-EDAX, FTIR, Raman, Impedance analyzer, ESR, DSC

Number of PhD's awarded: 01

PhD's submitted: 01

Areas of Teaching Experience:

List of Subjects: Electronics, Microwaves, Mobile communications, EM theory, Classical Mechanics, Transmission lines and wave guides, Solid state physics, Fiber optics, Data communication network

Assistant Prof : Sep 2013-Sep 2023

PROFESSIONAL MEMBERSHIPS: Materials Research Society of India, Neutron Scattering Society of India, Physics Teachers Association

Publications: <https://scholar.google.com/citations?user=VDI-g44AAAAJ&hl=en>

Dr. D. Aparna



Education: MSc, PhD.

Doctor of Philosophy

“Pattern Recognition of Acoustic Emission Signals from Piezoelectric Ceramics”

Research Experience

Acoustic Emission Studies, Signal Processing, DC and AC Fatigue studies.
Insitu Monitoring of Acoustic Emission Signals from PZT ceramics.

Areas of Teaching Experience

Subjects Taught: Classical Mechanics, General Solid State Physics, Microcontrollers and Applications, Guided and Unguided media Communication.

Assistant Prof: 2009 till date

Awards /Grants

- Apart from teaching she has been a member on selection committee for lecturers, student projects & posters during Science exhibitions at College Level, District Level and at 30th National Children Science Congress 2022.
- BOS member for Physics and Electronics at UG and PG level.
- As Resource person delivered talks on few topics of electronics, MATLAB and NDT - technique ie Acoustic Emission.

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

Life member of IAPT

Publications: <https://www.researchgate.net/scientific-contributions/D-Aparna-2016270659>

Dr.MadhuriDumpala



EDUCATION: M.Sc., Ph.D.,

Doctor of Philosophy:

Thesis title: A study of Gamma ray interactions in clay bricks in the region 511 to 1333keV

RESEARCH EXPERIENCE:

Area of research: The design and development of eco-friendly, biodegradable functional materials suitable for different applications, such as packing materials for food and medical applications, energy harvesting, and radiation shielding.

Instrumentation used in conducting our research: Gamma Ray Spectrometer, and multi-channel analyzer, FTIR, UV-Vis, TGA, UTM and Ultra-Centrifuges.

AREAS OF TEACHING EXPERIENCE:

LIST OF SUBJECTS:

General physics, Mathematical physics, Classical mechanics, Electromagnetic theory, and materials science.

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

• The Indian Science Congress Associations • Indian Association of Physics Teachers (IAPT) • Indian Association of Radiation Protection. • Indian Society for Radiation Physics.

PUBLICATIONS: GOOGLE SCHOLAR LINK:

<https://www.researchgate.net/profile/Madhuri-Dumpala>

Dr. K. Kirana



Education: MSc,M.Phil. PhD.

Doctor of Philosophy

Thesis title: Synthesis, Characterization and Optimization of Multi-functionality of Ferroelectric Perovskite Composite Materials

Research Experience

Magnetic and multiferroic materials

Areas of Teaching Experience

Subjects Taught: Quantum mechanics, Solid State Physics, Mathematical Physics, Advanced Solid State Physics, Modern Optics,

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

Materials Research Society of India

Research Publications: <https://www.researchgate.net/profile/K-Kirana>

Annexure III-Template

Alumni Registration Form

Department of _____
Osmania University, Tarnaka, Hyderabad- 500 007, TS, INDIA
Batch (_____)

NAME:		Recent Photo
Academic Qualification: Obtained from Department:		
Year	Degree (BE /BTech/ BA/BCom/ BSc (Hons) / BSc/ BBA /BCA/ BEd /LLB/ ME /MTech /MA /MCom /MSc/ MEd / MPE/ LLM/ MBA/ MCA/ PhD /Diploma/ PG Diploma/ Others	University
Additional qualifications		
Current Position:		
Company / Institute	Designation	Working Since
Contact Address:		
Work place:	Residence:	
Tel. Work :	Tel. Res.	
Mobile Work:	Mobile Personal:	
Email Work:	Email Personal:	
Any Additional Information:		

Please fill the form and send as email attachment to _____.

