**BRIEF PROFILE ( Dr. Purna Bose)**

**Name** Dr**.** Purna Bose

**Qualification**

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| Degree | University/Board | Subjects | Year/Division |
| 1 .Hr. Sec. | Central Board of Secondary Education, Delhi. | Phyiscs, Chemistry, Maths,  Sanskrit & English. | 1973- Ist |
| 2. B.Sc. (Hons.) | University of Rajasthan, Jaipur, India. | Physics(Hons.), Chemistry, & Maths. | 1976-- Ist, 5th Position in merit of all subjects |
| 3. M. Sc. | University of Rajasthan, Jaipur, India. | Physics | 1978-- Ist |
| 4. Ph.D. | Pt. Ravishankar Shukla University,  Raipur, India | Solid State Physics | 2002 |

**Got UGC Research Fellowship for research but did not accept it, joined as an Asstt. Prof.**

**Designation** Professor & HOD (Physics), Govt V.Y.T. P.G., Autonomous College,

Durg. (C.G.)

**E.mail :** purna\_bose @hotmail.com

**Specialization in P.G.** Plasma Physics,.

**Specialization in Research** Material Science ( Photoconductivity,

Thin film, Nanomaterial)

**Teaching Experience U.G.** 35 Years

**Teaching Experience P.G.** 19 Years

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| S.No | Name of the college/University | Period | Duration |
| 1 | Govt. College, Banswara, Rajasthan. | 15/1/1979 to 14/6/79 | 5 months |
| 2. | Govt. College Tonk, Rajasthan. | .24/8/1979 to J2/7/80  17/9/80-5/1/81 | 1 year 6 months, 8months. |
| 3 | University of Rajasthan, Maharani s College, Jaipur, | 6/1/1981 to 23/5/83 | 1 Year 8 months |
| 4. | Govt. NCJ College, Dalli Rajhara,  Durg, C.G. | 9/10/1985 to 19 th August 1997 | 12 years |
| 5. | Govt. V.Y.T.P.G.Auto. College,Durg,C.G. | 2o August 1997 till date | 19 years |

**Faculty Achievement :**

1. Member of Board of Studies of SOS of Phy. Pt . Ravi Sankar Shukla Univ. since 2014-15,2015-16,2016-17.

2. Member of Board of Studies of Kalyan College,Bhilai for the session 2013-14,2014-15,& 2015-16, 2015-16, 2016-17.

3. Member of Board of Studies of Digvijay College, Rajnandgaon, for the session 2014-15.

**Resource Person in National Conferences – 02,**

**Lecture delivered at Kalyan College, Bhilainagar on”Modern Aspect of Thin Film of (Cd-Pb)S Deposition” on 9/9/2011..**

**Detail of Research (In brief) Photoconductivity** Studies of

(Cd-Pb)S mixed based and doped films

**Supervision for Ph.D.** 01 Ph.D. thesis submitted

03 registered under supervision

and 1 co-supervision

**Research Publications**  Total Research Papers Published – 16

National Conferences- 9

**Detail of Research Project**

**(i)** One Minor Research Project funded by UGC

Entitled: “Studies of photoconductivity and some other properties of

Chemically deposited undoped and rare earth doped films”

Project No.- 4S/11/20014-2005/(MRP-CRO)/202008/31-03-2005

Duration: 2 years

Amount: 60,000/-,

Status- Completed

**(ii)** One Minor Research Project funded by UGC

Entitled: “Photoconductivity gain, XRD and SEM studies of mixed base and

rare earth doped films by chemical both deposition method.”

Project No.-121/202008/09-10/CRO/31-03-2010

Duration: 2 years

Amount: 1, 30,000/- , Status- Completed

**Research Papers Published in Journals**

1. Mukherjee M.,.Bose P. and Bhushan S.,Radiation, Effects & Defects in Solids (Gordon & Breach, USA) 153(2001)367-377.

“Photoconductivity of chemically deposited La/Nd doped (Cd-Pb)S films”.

2. Bose P., Mukherjee M. and Bhushan S. “Electro-optical studies in chemically deposited Sm/Pr doped (Cd-Pb)S films” Vol.39 (Dec. 2001) 804-809. Indian Journal of Pure and Applied Physics.

3. Mukherjee M.,.Bose P. and Bhushan S., “Electro-optical studies in chemically deposited La/Nd doped (Cd-Pb) S films”,J. Mat. Sc. 13, (2002) 581-584.

4. Bose P.and Bhushan S.: “Effect of annealing on some (Cd-Pb)S photoconducting films”, J. of Ravishankar University, 14 (2001) 41-52. ISSN 0970-5910.

5. Mukherjee M.,.Bose P. and Bhushan S, Indian Journal of Pure and Applied Physics, Effect of CdCl2 on the photoconductivity of chemically deposited neodymium doped (Cd–Pb)S films,2003,Vol.22,51-57

6. Bose P. “Opto electrical studies of rare earth doped (Cd-Pb)S films”, Ultra Scientist of Physical Sciences, 18(3), 375-380 (2006).

7. Bose P.: “Photoconductivity, XRD and SEM Studies of Gd(NO3) 3 doped (Cd-Pb)S films of different concentration”, SHODH AMISKHA AUR MULYANKAN , II (9-10), 1-2 (Oct. Nov. 2009) ISSN 0974-2832.

8. Bose P. , “Photoluminance, XRD and SEM Studies of rare earth doped (Cd-Pb)S films”, Ultra Scientist Of Physical Sciences, 22(1), 35-38 (2010).

9. Oudhia A.,Bose P., Vishakarma V.,Shukla N.,:Exitonic Photoluminesence Emission of Chemically Deposited CdSxSex-1 Films, Calgogenide Letters, 7(7)pp491-496(July 2010).

10. Bose P., Oudhia A., Shukla N Growth and optical properties of nanowires. Recent Research in Sc. and Technology,2012,4(8):135-137,ISSN-2076-5061.

11 Shukla N , Oudhia A.,Bose P.,.Efect of the seed layer modification and pH on alignment and density of ZnO nanowires, International journal of Enggg. And technology,management of applied sciences,(IJETMAS) July 2015,vol.3,Lssue-7, ISSN 2349-4476,impact factor -2.24.

12. Oudhia A.,Bose P.,Shukla N. ,Pateria M. Bichpuria P.’ IJRSE,”Role of Pb2+  ions as the growth and Structure directing agent in (Cd-Pb)S solid solutions”. Vol No..4,Sp Issue No. (01), Dec.( 2015)pp.63-73. ISSN 2319-8354.

13. Shukla N , Oudhia A.,Bose P.,’ IJRSE,”Qptical property of Eu doped ZnO nanowire prepared by wet chemical method on glass substrate”. Vol No..4,Sp Issue No. (01), Dec.( 2015)pp.48-52. ISSN 2319-8354.

14. Shukla N , Oudhia A.,Bose P., Gupta S.,”Application of Europium doped ZnO nanowires as a photocatilist”,GE-IJER,Vol.4, Issue 4,April 2016, ISSN: 2321-1717.

15. Kaur J., Singh R.,Bose P.,Parganiha Y., Shrivastava R., Dubey V., Journal of display Technology, “Estimation of color purity and trapping parameters of samarium doped BaTiO3 phosphor”,- Vol.-12, Issue; 6, 2016.

16. Oudhia A., Shukla N.,Bose P., Lalwani R.,Choudhury A.,”Effect ofvarious synthesis protocol on doping profile of ZnO:Eu Nanowires” Nano Structures & Nano-Objects, 7(2016) pp.69-74.

Paper Published in Seminars / Conferences/Procedings:-

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1. Proceeding of DAE (Department of Atomic Energy) Solid State Physics Symposium held at IGCAR, Kalpakkam,T.N. during Dec.20-24,1999 vol. 42, pp. 441-443.

“Photoconductivity of chemically deposited undoped and Sm/Pr doped (Cd-Pb)S films”.

2. DAE-BNRS Symposium. on spectroscopy of Lanthanides and Actinides (SLA-99) held at BARC, Mumbai during Nov.16-19,1999.

3. National Conference on semiconductor materials and recent technologies held at Pant University, Pantnagar , U.P.during Nov.1-3,1999.

“Photoconductivity of chemically deposited undoped and La/Nd doped (Cd-Pb)S films”.

4. Paper presented at Nat. Seminar on Luminescence and its applications held at Rani Durgavati University, Jabalpur,M.P. during 16-18th Dec.2001, pp 82-86.

“Photoluminescence in La/Nd doped (Cd-Pb)S films”.

5. Paper accepted for presentation in National Workshop on synthesis, Characterization and applications of materials held at National Physical Laboratory, New Delhi during Feb. 6-7.

6. Paper accepted for oral presentation in the 23rd Rare Earth Research Conference (RERC) held during July 13-18, 2002 at Davis, California, USA.

7. Paper presented (invited talk) at the Seminar of St Thomas College, Bhilai on October-5, 2004 on “Nanotechnology”.

8. Paper presented at a Seminar on Role of Physics in Technical Education held at SSCET College , Junwani,’Bhilai on 19th April 2005,

Bose P., “Effect of annealing on some (Cd-Pb)S photoconducting films”.

9.Paper presented and published in the proceeding of National Conference on Recent Trends in Physics of Solids held Govt. Science College, Durg on 11th-12th October, 2011.

Bose P.,Oudhia A., Shukla N., “Optical and physical properties of bulk and nanocrystalline chemically deposited thin film”, pp53-55, ISBN-978-93-81583-24-1.

10. Paper presented at NLSA held at Pt. RSSU, Raipur In 2011

. Choubey P.C., Oudhia A., Bose P., Pandey P., Shukla N. and Vishwakarma V.. ‘PHOTOLUMINESCENCE STUDIES OF RARE EARTH DOPED II-VI COMPOUNDS PREPARED BY MICROWAVE ADDED SYNTHESIS’.

11. Paper presented at National Seminar on Energy Harvesting Materials and Techniques for Sustainable Development held at Govt. V.Y.T. P.G. Autonomous College,Durg on 2nd – 3rd Dec., 2015.

Oudhia A.,Bose P.,Shukla N. ,Pateria M.’,”Role of Pb2+  ions as the growth and Structure directing agent in (Cd-Pb)S solid solution” pp.75 (2015).