

**Dr. Anirudh Yadav**  
yadavanirudh@rediffmail.com



**A) Educational Qualification**

Degree	Year of Passing	University/Institute
Ph.D.	1990	M. D. U. Rohtak
PG	1984	M. D. U. Rohtak
UG	1982	M. D. U. Rohtak
Others		

**B) Career Profile:**

Designation	Institute served	Duration	
		From	To
Lecturer	University College Rohtak	29-10-87	10-3-88
Lecturer	University College Rohtak	4-10-88	31-5-2007
Lecturer	M. D. U. Rohtak	31-5-2007	till date

**C) Projects Undertaken**

Title of the project	Duration	Funding Agency	Status	
			Completed	In progress
EPR & electrical properties of oxide glasses containing +M ions	2 years	DST	Completed	

**D) Publications**

**Research Papers**

Published in Refereed/Peer Reviewed Journals : 20

Published in Conferences/Seminar proceedings : 3

Participation in conferences/seminars: 4

## Annexure -I

### LIST OF PUBLICATIONS

#### Papers Published in International Journals

1. "Solution of the Spin Hamiltonian with Orthorhombic hf and g tensors ( $S = \frac{1}{2}$ ) I. Theory, V.P.Seth, A.Yadav and R.S.Bansal, Physics Stat. Solidi B. 132, 255-259 (1985).
2. "ESR of Vanadyl ions in  $\text{Li}_2\text{O CdO.B}_2\text{O}_3$  Glasses", A.Yadav, V.P.Seth, V.K.Jain and K.K.Sharma, J. Non-Crystalline Solids 79, 247 (1986).
3. "Solution of the Spin Hamiltonian with Orthorhombic hf and g tensors ( $S = \frac{1}{2}$ ). II. Applicatio to  $\text{VO}^{2+}$  Centres in Oxide Glasses", V.P.Seth, A.Yadav and R.S.Bansal, Physica Sta. Solidi b 133 297 (1986).
4. "ESR Study of Vanadium ion in Potassium Succinate", V.P.Seth, V.K.Jain, A.Yadav and R.S.Bansal, Phys. Stat. Solidi b 132, K.139 (1985).
5. "ESR and Optical Spectra of  $\text{VO}^{2+}$  and  $\text{Cu}^{2+}$  in  $\text{K}_2\text{SO}_4.\text{ZnSO}_4$  Glasses", A.Yadav and V.P.Seth , Physics and Chem. Of Glasses ,27, 182 (1986).
6. "Electron Paramagnetic Resonance of  $\text{Cu}^{2+}$  and  $\text{VO}^{2+}$  ions in phosphate glasses", A.Yadav and V.P.Seth, Journal of Materials Science, 22, 239 (1987).
7. "Rhombic Symmetryy Crysalline field and the groundstate wave functions of vanadyl ion complexes', A.Yadav, R.S.Bansall and V.P.Seth, Indian Journal of Pure and Applied Physics. 24 458 (1986).
8. "Electron Spin Resonance of  $\text{Mn}^{2+}$  in  $\text{Tl}_2\text{Co}(\text{SeO}_4)_2.6\text{H}_2\text{o}$  Single Crystals" V.K.Jain, V.P.Seth, R.S.Bansal and A.Yadav, Physica Status Solidi b 138 K55 (1986).
9. "ESR of the vanadyl Ions in Borate Glasses", V.P.Seth, A.yadav and Prem Chand, Journal of Non-Crystalline Solids, 89 75 (1987).

10. "Electron Spin resonance and optical spectra of  $\text{VO}^{2+}$  and  $\text{Cu}^{2+}$  in  $\text{SrO.B}_2\text{O}_3$  glasses", V.P.Seth and A.Yadav, Physics and Chemistry of glasses, 28 109 (1987).
11. "Electron Spin Resonance of  $\text{VO}^{2+}$  and  $\text{Cu}^{2+}$  in lithium Borate Glasses", A.yadav, V.P.Seth and Prem Chand, Journal of Material Science Letters 6 468 (1987).
12. "ESR of Vanadyl Ions in Borate Glasses", A.Yadav, V.P.Seth and Prem Chand. J. Materials Science 23 1014 (1988).
13. "ESR and optical Spectra of  $\text{VO}^{2+}$  and  $\text{Cu}^{2+}$  in  $\text{ZnO-B}_2\text{O}_3$  and  $\text{PbO-B}_2\text{O}_3$  glasses", A.Yadav, V.P.Seth and S.K.Gupta, J. Non-Crystalline Solids 101 1 (1988).
14. "Electrical conductivity and ESR of Lithium Borate glasses containing mixed transition metal oxides", V.P.Seth, A.Yadav and S.K.Gupta, J. Material Science. 23 3495 (1998).  
"ESR of Vanadyl Ions in Borate Glasses", V.P.Seth and A.Yadav, Indian Journal of Pure and Applied Physics 10 101 (1983).
15. "Electron Spin Resonance of  $\text{VO}^{2+}$  in  $\text{Li}_2\text{O-PbO-B}_2\text{O}_3$  glasses", V.P.Seth, A.yadav and Ashok Kumar. J. Non-Cryst Solids 105 91 (1993).  
"Electron Spin Resonance of  $\text{VO}^{2+}$  and  $\text{Cr}^{3+}$  in  $\text{Li}_2\text{O-PbO-B}_2\text{O}_3$  glasses", A.Yadav, V.P.Seth and Prem Chand, Journal of Material Science Letters 10 101 (1991).
16. "Effect of Copper Ions on Electrical Conductivity in  $\text{K}_2\text{SO}_4.\text{ZnSO}_4$  glasses containing Vanadium Ions", A.Yadav and V.P.Seth, Indian Journal of Pure and Applied Physics 31 639 (1993).  
"Effect of Copper Ions on Electrical Conductivity in  $\text{K}_2\text{SO}_4.\text{ZnSO}_4$  glasses containing Vanadium Ions", A.Yadav and V.P.Seth, Indian Journal of Pure and Applied Physics 31 1013 (1993).
17. "The ac conductivity and dielectric properties of Lithium borate glasses containing vanadium and copper ions", A.Yadav and V.P.Seth, Indian Journal of Pure and Applied Physics 33, 746 (1950).  
"The ac conductivity and dielectric properties of Lithium borate glasses containing vanadium and copper ions", A.Yadav and V.P.Seth, Indian Journal of Pure and Applied Physics 33, 746 (1950).
18. "Electron Paramagnetic Resonance in  $\text{CoO.CaO.B}_2\text{O}_3$  Glasses containing vanadium ions", I.Chand , V.P.Seth, D.Prakash, A.yadav and S.K.Gupta, Radaton Effects and Defects in Solids, 138, 185 (1996).  
"Electron Paramagnetic Resonance in  $\text{CoO.CaO.B}_2\text{O}_3$  Glasses containing vanadium ions", I.Chand , V.P.Seth, D.Prakash, A.yadav and S.K.Gupta, Radaton Effects and Defects in Solids, 138, 185 (1996).
19. "Effect of transition metal oxides on electrical properties of  $\text{SrO.B}_2\text{O}_3$  glasses, A.Yadav and V.P.Seth, Indian Journal of Pure and Applied Physics 35, 413 (1997).  
"Effect of transition metal oxides on electrical properties of  $\text{SrO.B}_2\text{O}_3$  glasses, A.Yadav and V.P.Seth, Indian Journal of Pure and Applied Physics 35, 413 (1997).

- 20.“Electron paramagnetic resonance of V<sup>4+</sup> ions in ZnO.B<sub>2</sub>O<sub>3</sub> glasses containing Vanadium and cobalt ions”, A.Yadav, V.P.Seth, I.Chand and S.K.Gupta, Physics Chemistry. Glasses 39 (3) 133 (1998)

### **Annexure – II**

#### Papers Accepted/presented in Conference/Symposia

1. “Effect of transition metal ions on the electrical properties of ionic glasses”. A.Yadav and V.P.Seth. Presented in Solid State Physics Symposium, Bhabha Atomic Research centre, Bombay, Dec. 27-31, 1993. (*Published in Proceeding*)
2. “Electron paramagnetic resonance in CoO.Cao.B203 glasses containing Vanadium Ions’. A.Yadav, V.P.Seth and S.K.Gupta. Presented at Sixth International Conference on the Structure of Non-Crystalline materials, Parah (Czech republic) Aug.29- Sept.2, 1994.
3. “Effect of transition metal ions on dielectric properties of borate glasses”. A.Yadav and V.P.Seth. Accepted for oral presentation at 13<sup>th</sup> University Conference on Glass Science, Rensselaer Polytechnic University, Troy New York, 1280-3590, Aug. (-11, 1995 (USA).
4. “Effect of transition metal ions on electrical conductivity of heavy metal oxide glasses’. A.Yadav, I.Chand and V.P.Seth. Presented at Solid State Physics symposium held at BARC, Bombay (1996), 393. (*Published in Proceedings*)
5. “Effect of Cobalt ions on electrical conductivity of sulphate glasses containing vanadium ions”. A.Yadav, I.Chand, V.P.Seth and S.Khasa. Presented at International Conference on the Physics of Disordered materials held at Jaipur, Jan.27-29 (1997). (*Published in Proceeding*)

"Effect of Cobalt Ions on Electrical conductivity of Sulphate glasses containing Vanadium Ions", A-Yadav, V.P.Seth, I-Chand & S.Khara, 'The Physics of Disordered Materials', NISCOM, New Delhi, 25-27 (1997)