

CURRICULUM VITAE

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- Date of Birth** : December 30 1966
- Academic Qualifications** : Master of Science in Physics
: 1989 Nagpur University 1st Division
Specialization in Solid State Physics and Electronics
Ph.D in Physics
1996 Nagpur University
- Topic of Thesis** :Thermoluminescence And Lattice Defects In Some
Lithium Compounds
- International Languages Known** : English, French
- Total Research Experience** : 17.5 yrs
- Present Employment** : Working as Associate Prof **Institute of Forensic Science**
Nagpur
- Total Post graduate Teaching Experience** : **13 yrs** Teaching '**Quantum Mechanics and Numerical and Computational Physics and Electronics** at MSc. level

Awards:

1)Awarded Junior Research Fellowship in the Scheme entitled %Thermoluminescence and Lattice defects in Li₂O+sponsored by DAE.

2) Passed **NET** conducted by **C.S.I.R** and awarded

a) **Junior Research Fellow** : 1992-1994

b) **Senior Research Fellow** : 1994-1996

c) **Research Associate:** 1996-1997

3) Awarded associateship by **Physical Research Laboratory Ahmedabad** for the work on Development of highly sensitive Quartz and Feldspar based Phosphors for dating applications

Scientific Projects:

- 1) Completed U.G.C Project Entitled "Synthesis and characterization of some luminescent materials in nanoform"

Total Project cost = **98,000**

- 2) Major Project Submitted to B.R.N.S
Title: "**Development of Highly Sensitive O.S.L Phosphors for radiation dosimetry**"

Total Project Cost= **20 lacs**

Project approved and ongoing

- 3) **Title: Development of Lithium based Highly Sensitive Low Z O.S.L Phosphors for radiation dosimetry**

Total Project Cost= **30 lacs**

Grants Brought for the development of various facilities at Institute of Science Nagpur:

- Written project for the development of various facilities at **Institute of Science Nagpur** to **Vidharbha Vaidhanik Vikas Mandal**.

Total Grant received = **48 lacs**

- Written project for the development of **Network Resource Center** at **Institute of Science Nagpur** to **U.G.C.**

Total Grant received = **1.5 lacs**

- Written project entitled "**Computer hardware and maintenance**" under Career oriented certificate courses for undergraduate students scheme by **U.G.C.**
- **Total approved grants =7 lac**

First batch successfully completed the training in April 2008

Ph.D Students: Three students completed and One student submitted the thesis and **four** students are currently working

Achievements and Experience: Annexure I

Present Research Interest: : Luminescence in nanostructured materials and OSL Materials

Publications:

: Annexure II

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ANNEXURE I

Scientific and Technical Achievements:

1) Experience in Instrumentation:

- a) Design and fabricated **TL programmer for thermoluminescence** studies as a part of **MSc** project.
- b) Design and fabricated instruments such as Temperature controller, High voltage regulated power supplies, Stepper motor controllers, Solid state power controllers etc.
- c) Experience in **computer interfacing**.

- Developed **Central Instrumentation Center** at **Institute of Science Nagpur**

2) Experience in vacuum techniques:

- a) Handled vacuum systems.
- b) Design and fabricated vacuum furnace **Temp.range 1000 C at 10⁻⁶ Torr**.
- c) Fabricated high temperature furnace using graphite as heating element.

3) Developed **LiF:Mg,Cu,P** high sensitivity TLD phosphor with simple technology

4) Worked as resource person at **Homi Bhabha Center for Physics Education Mumbai** in **pre olympiad** school held in **97**

5) Guided several **MSc** projects

Computer and I.T Related Experience:

- Passed '**A**' **Level** computer examination conducted by **DOEACC**(certificate awaited)
- Passed **MSCIT** Examination
- Computer networking experience, Done **L.A.N** networking in the **Institute of Science Nagpur**
- Developed Website for **Institute of Science Nagpur**
- Brought Grant for **Network Resource Center** from **U.G.C** at **Institute of Science Nagpur Total Grant = 1.5 lacs**
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Administrative Experience:

- 1) Worked as **Head of the Department of Computer Science Institute of Science Nagpur 2004-2006**
- 2) Worked as Co-ordinator for the **Mahindra British Telecom Campus selection August 2005**
- 3) Worked as liason officer to **Minister for Higher Education during assembly session 2003 at Nagpur**
- 4) Worked as **Scrutiny Officer** at spot valuation center **year 2003**
- 5) Worked in various **NAAC Committees 2002-2003**
- 6) Incharge of **Physics society from 2000-2002**
- 7) Worked in **admission committee for 5 years**
- 8) Coordinated and conducted **educational tour for MSc. Students**

9) Worked in various **purchase committees**

Conference Workshop arranged:

Co-Convener of the two day National conference on **Recent Trends in Basic and Applied Materials** 10-11 January 2009 at Institute of Science Nagpur.

Workshops and Conferences attended:

- ❖ Workshop on **Use of Computers in physics 3-9 Dec. 1992** ,Rani Durgavati University **Jabalpur. Sponsored by ICTP Italy**
- ❖ Workshop on **Radiation Physics 17-19 Dec,1992** Nagpur University **Nagpur.**
- ❖ Popular science programme **“Centenary Celebrations of Discovery of Rontgen rays” 7-8 Oct 1995** **Raman Science Center** and Nagpur University **Nagpur**
- ❖ National Conference on **Luminescence and its Applications 17-19 Jan.1996** Bharathiyar University **Coimbatore.**
- ❖ **V International Conference on Applications of Physics in Medicine and Biology** Giorgio Alberi Memorial **2-6 sept. ICTP Trieste Italy.**
- ❖ College on **Medical Physics Methods,Instrumentation and Techniques in Medical Imaging 9-27 Sept 1996** **ICTP Trieste Italy.**
- ❖ International workshop on **Nanostructured materials JNCASR Bangalore** Feb 2002
- ❖ National symposium on **Synthesis of materials using novel techniques** Kamla Nehru College Nagpur Dec. 2002
- ❖ Participated in Refresher course in **Theoretical Physics Stephans College Delhi Oct. 2002, organized by Indian Academy of Sciences Bangalore**
- ❖ Participated in **All India Refresher course in Experimental Physics Goa University Oct. Nov. 2003, organized by Indian Academy of Sciences Bangalore**
- ❖ Participated in teachers training programme at **Physical Research Ahmedabad May 2003**
- ❖ Presented Paper in **International Conference on Luminescence and its Applications B.A.R.C Mumbai Feb. 2004.**
- ❖ B.R.N.S Seminar . Cum . workshop on **Materials Characterization and Surface Modification in Research and Industry using Ion Accelerators NCCCM BARC Hyderabad Feb. 2005**
- ❖ Workshop on **Nanotechnology and Ion beams March 2005** University of Mumbai.
- ❖ Presented Paper in **National Conference on Luminescence and its Application Feb 2006 Amravati University**
- ❖ Presented Paper in DST sponsored symposium **Nanotrends 2008 Nagpur**
- ❖ Presented Paper in UGC sponsored conference **Recent trends in Basic and applied Materials RTBAM-2009 Nagpur**
- ❖ Presented Paper in **National Conference on Luminescence and its Application Feb 2009 CGCRI Kolkatta .**