

## BIO-DATA

1. **Name** : H.S. Bhatti

2. **Designation** : Professor

3. **Department** : Physics

4. **Date of Birth** : 06.06.1953



5. **Address for correspondence** : Physics Department,  
Punjabi University, Patiala

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6. **Areas of Specialisation** : Laser Physics, Solid State Physics, Time Resolved Laser

Spectroscopy, Nanotechnology

7. **Academic Qualifications :**

S. No.	Degree Held	Year	Board/Univ./ Inst.	Subjects taken
1	B.Sc.	1974	G.N.D.U. Amritsar	Eng., Phys, Chem., Math.
2	M.Sc.	1976	K.U. Kurukshetra	Physics (Electronics)
3	Ph.D.	1983	K.U. Kurukshetra	Laser Physics

## 8. Membership of Professional Bodies/Organisations

- i) Life Member, Indian Laser Association, CAT, Indore
- ii) Life Member, Punjab Academy of Sciences
- iii) Life Member, ISRP, BARC, Mumbai

## 9. Medals/Awards/Honours/Received

- i) Awarded Gold Medal for Research in laser physics in 1996
- ii) Awarded 20th century Award for achievements, 1998
- iii) International WHO's WHO of Contemporary achievements, 1998
- iv) Nominated 'International Man of the Year' 1997-98 by International Biographical Centre, Cambridge, England.
- v) Nominated 'Outstanding People of 20<sup>th</sup> century' 1999 by International Biographical Centre, Cambridge, England.

## 10. Scholarships:

- i) JRF (1976-78)
- ii) SRF (1978-81)

## 11. Details of Experience:

S. No.	Name of the Inst./Employer	Position held	Duration	Major job responsibilities and Nature of experience
1	Vaish College, Rohtak	Lecturer	3 years	UG teaching & research
2	University College, Rohtak	Lecturer	2 years	UG Teaching & Research
3	P.A.U., Ludhiana	Asstt. Prof.	4 years	UG & PG teaching & research
4	P.U. Patiala	Lecturer	4 years	Teaching and Research
5	P.U. Patiala	Reader	8 years	Teaching and Research

6	P.U. Patiala	Professor	2 years	Teaching and Research
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## 12. Published Work

- a. Research Papers      i) National= 17  
    ii) International=11
- b. Conference/Seminar/Presentation      55
- c. Books    Nil

## 13. R & D Projects

- i) UGC Major project

## 14. Invited Talks/Articles

- i) in various colleges/institutions      07
- ii) .....

## 15. Ph.D. students guided/under guidance (Details)

S. No.	Name of the student	Title of thesis	Year of completion
1	Sunil Kumar	Laser induced photoluminescence of single and double doped phosphors	2002
2	Atul Gupta	Laser induced photoluminescence studies of synthesized doped ZnO phosphors	working
3	Rajesh Sharma	Laser induced photoluminescence investigations of doped micro and nano materials	working
4	Karamjit Singh	Laser induced photoluminescence in synthesized micro-and-nano-materials and their morphological characterization	working
5	Dhiraj Kumar	To be decided	
6	Poonam Sharma	To be decided	

**16. M.Phil. students guided: 2**

<b>S. No.</b>	<b>Name of the student</b>	<b>Title of thesis</b>	<b>Year of completion</b>
1	Sukhwinder Singh	Phosphorescence decay measurements of doped phosphors under N <sub>2</sub> laser excitation	2002
2	Rajesh Sharma	Laser Induced parameters of inorganic doped phosphors	2003

**17. List of papers/courses taught at P.G. and U.G. level**

<b>S. No.</b>	<b>Paper</b>	<b>Class</b>
1	Spectroscopy	M.Sc.
2	Solid State Physics	M.Sc.
3	Lasers Physics	M.Sc.
4	Remote sensing	M.Sc.
5	Microwaves	M.Sc.
6	Optics+Electromagnetism+Solid State Physics	U.G.

**18. Technical Proficiency**

Fabricated nitrogen laser, its capacitor part and high voltage power supply. Set up on experimental arrangement for laser induced fluorescence studies at room/liquid nitrogen temperature. Also set up photon counting system for nano- and subnano- seconds lifetime measurements using nitrogen laser. Also used dye lasers for photoconducting studies of single crystals. Synthesized ZnS/CdS/ZnO nanoparticles.

**19. List of papers published**

**Sd/-**  
Prof H S Bhatti