

Bio-Data



Dr. B. H. Pawar
Professor and Head
Department of Physics
Sant Gadge Baba Amravati University
Amravati-444602

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ACADEMIC QUALIFICATION

Name : **Dr. B. H. Pawar**

Designation : Professor and Head, Department of Physics,
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Date of Birth : 09-05-1952

Address (Permanent) : At and post - Adas
Tq - Kaij, Dist - Beed
(Maharashtra)

Qualification:

Degree	Class	Percentage	Year of passing	Remarks
S.S.C.	First	63 %	1969	
H.S.S.C./P.U.C.	First	63 %	1970	
B.Sc.	Second	53 %	1973	
M. Sc.	First	75 %	1975	First class first in order of merit
Ph. D.			1980	Studies in Pulsed Lasers The Nitrogen Laser

EXPERIENCE:

Teaching Experience: 23 Years at Post Graduate level

Research Experience: 30 Years

SN.	Name of Institution	Post occupied/ Designation	Period
1	I.I.T. Kanpur	Post Doctoral Fellow	One Year
2	Physical Research Laboratory, Ahmadabad	Visiting Scientist	Two Years
3	Post Graduate Department J E S College, Jalna.	Ph.D. Guide	Nineteen Years
4	Department of Physics, Amravati University, Amravati.	Professor & Head	From 17-01-2001 till now

Hungarian Government fellowship of three years was awarded in the year 1979.

The fellowship was awarded for the study of LASER PHYSICS

BOOKS PUBLISHED:

- 1] Programming with BASIC
- 2] Programming with FORTRAN

- * **Number of research papers published: 110**
- * **Number of research students completed: 16**
Ph.D. degree
- * **Number of theses submitted for the: 01**
Award of Ph.D. degree
- * **Number of research students working: 11**
- * **Number of Conferences attended: 50**

ADMINISTRATIVE EXPERIENCE

- * Has been working as Professor and Head, Department of Physics, Sant Gadge Baba Amravati University, Amravati since January 2001.
- * Worked as Professor in charge, Computer Center, J.E.S. College, Jalna during the period 1988 to 2000.
- * Worked as Liason Officer at J.E.S. College, Jalna

EXTENSION ACTIVITIES

- * Organized workshops for school teachers and delivered lectures on the subject of Computer Science.
- * The visits of the Department students have been arranged and the visits to Industries and Research Institutes like B.A.R.C., Mumbai, Center for Advanced Technology, Indore has been arranged.
- * The visits of college and school students to the Department of Physics, Sant Gadge Baba Amravati University, Amravati have been arranged and the laboratories were shown to the students. The demonstration of the experiments has been organized for School, College and University students and the interaction between the students and teachers is arranged.

CO-CURRICULAR ACTIVITIES

- * Educational tours of the students have been arranged. Active part was taken in the activity of the National Science Day Celebration. The Popular Science Exhibition were arranged. Several lectures of eminent scientists were organized.

EXTRA CURRICULAR ACTIVITIES

- * During the Celebration of National Science Day the Department of Physics arranged Folk Show. About four manuscripts have been developed and the students of Department of Physics have presented the shows successfully. The manuscripts of the play are related to the theme of Development of Science in India.
- * Invited as chief guest for the inauguration of 'Computer Center' and 'Science Forum' at different colleges in Marathwada and Vidharbha.
- * Invited as chief guest for the inauguration of 'Science Exhibition' and 'Physics Society' at different colleges in Marathwada and Vidharbha.
- * Invited as chief guest at R.L.T. College, Akola under the TRDEA of SGB Amravati University, Amravati.
- * Delivered the talks for Popularization of Science in rural areas in the N.S.S. camps of different colleges.
- * Delivered lectures on different topics related to the computer and science at various colleges.

SOCIAL ACTIVITIES

- * We form an organization named "Physical Society of India". Dr. B.H. Pawar is working as Chairman of the society. There are about 100 members of the society. The society has undertaken the jobs like publishing the journal, arranging the exhibitions, arranging the competitive examinations and vocational guidance classes, Best Researcher Award, Book Writing etc.

EXAMINATIONS

- * Has worked as paper setter, examiner and moderator at graduate and postgraduate examinations. He has worked as examiner of thesis of several Ph.D. Students of Universities like Uttar Maharashtra University, Jalgaon, Shivaji University, Kolhapur, Swami Ramanand Teerth Marathwada University, Nanded, Jivaji University, Gwaliyar.
- * Is working as paper setter of the examination of Public Service Commission of Government of Punjab.
- * Worked as a observer of SET examinations at various centers.

SUBJECT EXPERT

- * Has worked as subject expert on several selection committees constituted for the selection of Professors, Readers and Lecturers in Universities like Uttar Maharashtra University, Jalgaon, Shivaji University, Kolhapur, Swami Ramanand Teerth Marathwada University, Nanded, Ravi Shankar Shukla University, Raipur

(Chhattisgarh), Guru Gasidas University, Bilaspur (Chhattisgarh). Further he has worked as an expert on the selection committees for the promotion of teachers to various posts.

- * Has worked as subject expert on several committees constituted for the selection of Lecturers in various colleges.
- * Has been working as subject expert on research and recognition committee in the subject of Physics of Swami Ramanand Teerth Marathwada University, Nanded

COMMITTEES

- * Has been working as the Chairman, Centralized Post-Graduate Admission Committee since June 2001 to give admissions to 20 departments in the campus of SGB Amravati University, Amravati.
- * Member of Purchase Committee since 2001 of SGB Amravati University, Amravati.
- * Member of B.O.S. in Physics of SGB Amravati University, Amravati.
- * Chairman of P.G. syllabus committee of SGB Amravati University, Amravati.
- * Member of B.U.T.R. of SGB Amravati University, Amravati.
- * Member of Minor Research Project Committee of SGB Amravati University, Amravati.

WORK OF NATIONAL INTEREST

- * We have designed and developed Nitrogen Laser and Carbon Dioxide Laser in our laboratory. The design and construction required very less amount. This activity helped us in developing the technical know how in India and save foreign currency of India.
- * Dr. B.H. Pawar has worked out a model for the development of India. The models consider agriculture, financial, educational, scientific, technological, industrial, social development of India. The details about the activities have been worked out. If the working of the model is planned according to the suggestions given in the model, India can make the progress so that all sided status of the country and people in the country would improve. The financial status of India would be elevated and the country would make the progress in International market.

MOVIE

Production : Vidarbha Film Division
Name of Movie : Chief Guest
Language : Marathi
Number of Songs : 15
Number of Actors : About 50
Duration : About three hours
Present Status : Recording of the Songs and picturisation is going on.
Date of Completion : December, 2006
Producer, Director, Story, Songs ----> Dr. B.H. Pawar

[B.H. Pawar]

PATENTS

Subjects of the patents

- 1) The photosynthesis reaction induced by the UV-A radiation at wavelength 3371°A .
- 2) Theoretical explanation of Gaussian intensity distribution across laser output beam.
- 3) Population inversion time in the cyclic laser discharge.
- 4) Theoretical investigation of the Study of the angle of divergence in the cyclic laser.
- 5) Use of idea of fractional abundance in gas lasers.
- 6) Explanation of radial profiles of ion densities and spectral emission in gas laser discharge.
- 7) Explanation of variation of output power in gas laser discharge based on fractional abundance.
- 8) Explanation of annular shape of laser beam in the CVL.

The applications have been submitted for getting Patents for the above mentioned developments as they are new to the filed.

Salient Features of Research Work:

- * Identified the experimental conditions when the gas lasers emit Gaussian beam.
- * The idea of fractional abundance in the field of gaseous lasers was implemented for the first time.
- * Analytical calculations of spontaneous inversion time of self-terminating lasers were done and the expression for the lifetime was obtained.
- * Analytical calculations of angle of divergence of pulsed lasers.
- * The effect of dimensions of the laser beam on the angle of divergence was investigated.
- * Computation of the radial profiles in the gaseous lasers.
- * Application of principle of fractional abundance in gaseous lasers.
- * The study of variation of gas laser output power.
- * Developing software related to the office work.
- * Developing software related to the scientific problems.
- * Programming in computer languages.
- * Programming of Assembly Language microprocessors 8080/8085 and 8086.
- * Developing automation of the scientific equipments.
- * Design and fabrication of Robot hand and complete Robot (M.Sc. project work)
- * Computation of spatial and temporal profiles of the spectral emission of laser plasma column.
- * Computation of spatial and temporal profiles of the spectral emission of Tokamak plasma column.
- * Development of a computer program for the identification of heart diseases.
- * Development of Computer Program for the diagnosis of diseases.

Major Research project completed:

Title of the Project : Laser Raman Spectroscopy
Outlay of the Project : Rs. 4,45,000/-
Duration : 1992-1995

RESEARCH EXPERIENCE:

Place of work: Physical Research Laboratory, Ahmedabad

Duration: August 1980 to August 1982

Position held: Visiting Scientist

Area of work: Plasma Physics

During the tenure of work at PRL, Ahmedabad Dr. B.H. Pawar did the following work.

1. Design of the plasma machine BETA
2. The design of nuclear reactor TOKAMAK plasma machine
3. The design of Thomson scattering apparatus for the plasma machine

The Thomson scattering apparatus was utilized to measure the electron temperature, electron drift velocity, the magnetic field strength, the density of electrons and profiles of all these parameters in the TOKAMAK machine.

4. The design of spectroscopic technique to measure the plasma ion temperature.

Place of work: Indian Institute of Technology, Kanpur

Duration: November 1979 to August 1980

Position held: Post Doctoral Fellow

Area of work: Laser Raman Spectroscopy

During the tenure at IIT, Kanpur Dr. B.H. Pawar did the following work

1. Design and development of Argon Ion Laser
2. Design of Laser Raman Spectrophotometer
3. Conducting the practical of B. Tech. and M. Tech. courses conducted by IIT, Kanpur.
4. Developed software for performing the calculations of Laser Raman Spectroscopy using FORTRAN-IV language on DEC-10 computer machine available at IIT, Kanpur

LIST OF PUBLICATIONS

01. The concept of fractional abundance explains the nature of radial profiles in the He-Cd⁺ laser discharge.
Pawar et. al. Asian J. Phys. 9 (2), 2000
02. Electron impact excitation produces population inversion on 77 vibrational transitions of first and second positive system of Nitrogen molecule.
Pawar et. al. Asian J. Phys. 9 (2), 2000
03. Experimental measurement of angle of divergence in cyclic laser.
Proc. of 87th session of ISC, Pune-2000.
04. The process of recombination explains high gain and different power saturation in He-Zn⁺ Laser Discharge.
Proc. of INCOLA., Tiruchirapalli, 1-4 March, 2000
05. The idea of the fractional abundance helps in explaining several experimental results in gaseous laser discharge.
Proc. of INCOLA., Tiruchirapalli, 1-4 March, 2000
06. Electron impact excitations producers population inversion-77 vibrational transitions of first and second positive system of Nitrogen molecule.
Proc. of INCOLA., Tiruchirapalli, 1-4 March, 2000
07. The concept of fractional abundance explains the nature of radial profiles in the He-Cd⁺ laser discharge.
Asian Journal of Physics, New Delhi, Vol. 9 No. 2 Apr.-June, 2000
43. Electron impact excitations produces population inversion-77 vibrational transitions of first and second positive system of Nitrogen molecule.
Asian Journal of Physics, New Delhi, Vol. 9 No. 2 Apr.-June, 2000
44. Study of the effect of environmental strain on plant leaves by laser induced fluorescence
Pawar et al. Proc. of NCCS, Shivaji College, Amravati. Feb. 28 to March 2, 2001.
45. Study of irradiation of laser beam on pathogenic bacteria.
Pawar et al. Proc. of NCCS, Shivaji College, Amravati. Feb. 28 to March 2, 2001.
46. Possibility of use of CVL beam for the study of composites.
Pawar et al. Proc. of NCCS, Shivaji College, Amravati. Feb. 28 to March 2, 2001.
47. Temporal evolution of laser output pulse in CVL discharge
B.H. Pawar et al.
National Conf. on "Lasers and their Applications", Dibrugarh, Nov. 5-6, 2001
48. Fluorescence spectra of plant leaves can be used as a tool of stress detection.
B.H. Pawar et al.
National Conf. on "Lasers and their Applications", Dibrugarh, Nov. 5-6, 2001

49. The recombination of ions in Zinc gives very high gain of the medium at wavelength 4924 \AA
B.H. Pawar et al. National Laser Symposium, Dec. 15 –18, 2001, CAT, Indore.
50. The role of Kerr effect and Pockels effect in increasing bit density on optical fiber
B.H. Pawar et. al.
Int. conf. on Broad Band Optical fiber communication tech., Dec. 3 to 7, 2001
51. Design of a LIDAR system for the study of air pollution and aerosols.
B.H. Pawar et. al.
National Seminar on Eco friendly chemical technologies in new millennium,
Feb. 7,8, 2002
52. The potential of laser beam and high voltage pulsed electric field in destroying bacteria., B.H. Pawar et. al.
National Seminar on Eco friendly chemical technologies in new millennium,
Feb. 7,8, 2002
53. Comparative study of laser beam and pulsed electric field for pasteurization of liquid food
B.H. Pawar et. al.
National Seminar on Renewable energy sources and other technologies for rural development. March 9,10, 2002
54. Fluorescence spectra of plant leaves can be used as a tool of stress detection
B.H. Pawar et. al.
XVI National Convention IAPT (Multidimensional impact of Physics in Agriculture)
November 23 to 25, 2001
55. Ultraviolet radiation enhances photosynthesis rate in the plant
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
56. Spatial distribution of densities of energy states in 6328 \AA He-Ne laser
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
57. Study of excitation mechanism in the CVL laser discharge
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
58. Several transitions of nitrogen molecule can amplify the radiation continuously
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
59. Population inversion on several transitions of ions in the laboratory and astrophysical

- plasmas.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
60. Inversion time in the cyclic laser discharge
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
61. Thomson scattering systems for the measurement of electron temperature and drift velocity profiles in the Tokamak plasma.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
62. Angle of divergence in cyclic laser
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
63. The recombination of Zn III ions results in high gain at 4624 \AA
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
64. Identification of reversible and irreversible damages in plants using laser induced fluorescence.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
65. Comparative study of food preservation techniques.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
66. Statistical study of laser energy and power using simple pulse counter.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
67. Measurement of chlorophyll level in the plant leaves by using the synchronous luminescence spectroscopy.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
68. Design of spectrophotometer for the study of synchronous luminescence.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
69. C_{14} dating using selective absorption of laser radiation.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
70. Development of a simple transmission grating using photographic negatives.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004

71. LIDAR for the study of aerosols and pollution in the atmosphere.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
72. Radial profiles of spectral emission of He-Ne laser discharge.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
73. Effect of ultraviolet nitrogen laser radiation on the pathogenic bacteria.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
74. Excitation mechanism, spatial distribution and power saturation in the He-Cd⁺ laser.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
75. Cancer may be caused by wear and tear of muscles because of external agencies.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
76. ZnO thin films synthesis by Sol Gel process for laser applications.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
77. Determination of lifetime of the upper state of the luminescent material.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
78. Fiber optics in sensing several physical parameters.
B.H. Pawar et al
Proceedings of Natl. Conf. On Laser and their applications, Jan.28-30, 2004
79. Distribution of Ions and Excitation states in the He-Ne Laser Discharge.
B.H. Pawar et al
(Proceedings NCMO-2004, Dr. B.A.M.U. Aurangabad, pp 303-306.)
80. Investigation of Reaction Rate of Photosynthesis Induced By Ultraviolet Radiation.
B.H. Pawar et al
(Proceedings NCMO-2004, Dr. B.A.M.U. Aurangabad, pp 475-478.)
81. Effect of Discharge Current and Pressure on the Output Power Variation in He-Ne Laser Discharge.
B.H. Pawar et al
(Proceedings of NLS-4, BARC, Mumbai, pp121-122)
82. The Radial Profile of the Densities and spectral Emission in the He-Ne discharge.
B.H. Pawar et al
(Proceedings of NLS-4, BARC, Mumbai, pp123-124)

83. Reconsideration of Interpretation of the Gain Variation at 5435 and 6328 wavelength in the He-Ne Laser Discharge.
B.H. Pawar et al
(Proceedings of NLS-4, BARC, Mumbai, pp125-127)
84. Study of the Effect of Ultraviolet Laser Radiation on Photosynthesis Rate.
B.H. Pawar et al
(Proceedings of NLS-4, BARC, Mumbai, pp 666-667)
85. Relativistic Electron Beam passed through high pressure nitrogen gas produces longer laser pulses at 3577 A wavelength.
B.H. Pawar et al
(Proceedings of ICR 2005, pp 52)
86. Effect of wavelength on photosynthesis reaction rate.
B.H. Pawar et al
(Proceedings of ICPSBC-2005, pp 69)
87. The study of water and nutrient stresses using fluorescence kinetics.
B.H. Pawar et al
(Proceedings of ICPSBC-2005, pp 70)
88. Photosynthesis induced by UV radiation.
B.H. Pawar et al
(Proceedings of ICPSBC-2005, pp 70)
89. Study of Possibility of determination of medicinal and food values of plants by Synchronous Luminescence Spectroscopy.
B.H. Pawar et al
(Proceedings of ICPSBC-2005, pp 71)
90. Enhancement of chlorophyll levels by using UV radiation for photosynthesis.
B.H. Pawar et al
(Proceedings of NCPS, Pravaranagar)
91. Study of Effect of Photon Energy Dependence of Photosynthesis Reaction Rate
B.H. Pawar et al
(Proceedings of NCPS, Pravaranagar)
92. Synchronous Luminescence Spectroscopy for determination of medicinal and food values of plants.
B.H. Pawar et al
(Proceedings of NCPS, Pravaranagar)
93. Use of fluorescence kinetics for the study of reversible and irreversible water and nutrient stresses on the plants.
B.H. Pawar et al
(Proceedings of NCPS, Pravaranagar)
94. Population inversion time of self-terminating laser transition.

- B.H. Pawar et al
(Proceedings of Jyothirgamaya-05, Kollam, Kerala.)
95. Dependence of angle of divergence of cyclic laser on the discharge parameters
B.H. Pawar et al
(Proceedings of Jyothirgamaya-05, Kollam, Kerala.)
96. Study of recombination process, radial profiles and output power variation in He-Zn⁺ laser.
B.H. Pawar et al
(Proceedings of Jyothirgamaya-05, Kollam, Kerala.)
- 97 Temporal and spatial variation of laser output power in CVL
B.H. Pawar et al
(Proceedings of Jyothirgamaya-05, Kollam, Kerala.)
98. Population inversion can be obtained on several transitions of neon in helium neon laser discharge
B.H. Pawar et al
(Proceedings of ICOL-2005, Dehradun.)
99. Helium-Neon laser discharge emits Gaussian beam at relatively low operating electron temperatures.
B.H. Pawar et al
(Proceedings of ICOL-2005, Dehradun.)
100. The idea of fractional abundance explains the variation in power output of gas lasers.
B.H. Pawar et al
(Proceedings of ICOL-2005, Dehradun.)
101. Gas lasers operated at low electron temperatures emit Gaussian beam (Proceedings of NLS-5).

Papers Published in International Journals

1. Synthesis and characterization of Ppy-PVS, P(NMP)-PVS and their co-Polymer Ppy-P(NMP)-PVS films by galvanostatic method
Int. J. Electrochem. Sci., 2(2007) 270-277

Papers Presented in conferences:

1. UV-visible Radiation Induced Photosynthesis rates in the plant leaves.
(Proceedings of NSSA-2006, PP-67)
2. Investigation of Fluorescence Spectroscopy and Kinetics of plant leaves for the study of effect of stresses. (Proceedings of NSSA-2006, PP-68)
3. Investigation of Time and Space resolved output intensity of Copper Vapour Laser. (Proceedings of NSSA-2006, PP-78)
4. Several Transitions of Molecular Nitrogen can amplify the radiation at the corresponding wavelengths. (Proceedings of NSSA-2006, PP-85)
5. Study of effect of stresses on the internal structure of the plant leaf by fluorescence spectroscopy. (Proceedings of NASMAT-2006)
6. Diagnosis of cancer by Laser Induced Fluorescence and Synchronous Luminescence Spectroscopy. (Proceedings of NASMAT-2006)
7. Cattle Eye Cancer Diagnosis by laser induced fluorescence spectroscopy.
(Proceedings of NCLA-2006, PP 108-109).
8. Study of Water and Nutrient Stresses in the Plant using Fluorescence Kinetics.
(Proceedings of NCLA-2006, PP 110-111).
9. Study of Plant Pigment concentration using Synchronous Luminescence Spectroscopy. (Proceedings of NCLA-2006, PP 112-113).

**LIST OF STUDENTS WHO HAVE WORKED UNDER THE GUIDANCE OF
Dr. B.H. PAWAR AND GOT THE DEGREE OF DOCTOR OF PHILOSOPHY**

SN	Name	Research Topic	Year of Award	Present Status
01	S.P. Bhandari	Excitation mechanism in He-Cd ⁺ laser discharge	1992	Reader in Physics, J.E.S. College, Jalna-431 203
02	L.V. Thakare	Investigation of excitation Processes and radial profiles in the He-Se laser discharge	1993	Lecturer in Physics, Adarsh Mahavidyalaya, Hingoli.
03	D.P. Garud	Investigation of excitation And collisional processes in The pulsed UV and IR nitrogen Laser	1994	Principal, Adarsh Mahavidyalaya, Omerga, Osmanabad
04	R.A. Oswal	Investigation of exciting and De-exciting processes in the Copper vapor laser discharge.	1995	Lecturer in Physics J.E.S. College, Jalna-431 203
05	M.D. Shirsat	Investigation of computer simulation of the electrical mapping of the heart activities.	1996	Reader in Physics, North Maharashtra University, Jalgaon.
06	B.G. Chavan	Investigation of excitation Processes, Inversion life time And angle of divergence in The cyclic lasers.	1997	Yeshwant College, Nanded-431603
07	S.V. Sonar	Investigation of radial and Temporal profiles in the Gaseous laser discharge.	2000	Reader in Physics, J.E.S. College, Jalna-431 203
08	A.N. Jadhav	Spectral emission of heavy Ions in Astrophysical and Laboratory Plasma.	2002	Reader in Physics, Yashwant College, Nanded-431 603
09	A.G. Chauhan	Distribution of electronic States and ions in He-Cd ⁺ Laser discharge	2001	L.B.S. College, Dharmabad
10	A.A. Kakade	The studies of radial Profiles of CVL discharge	2001	K.K.M. College, Manwat
11	R.V. Kathare	Study of Effect of Nitrogen Laser Irradiation on Mico Organisms	2002	K.M.J. College, Washi
12	S.M. Rathod	Investigation of the effect Of the UV irradiations on Micro organism	2002	A.G. College, Pune-4
13	S.N. Keshatti	Investigation of radial Profiles and Annular shape Of output beam in CVL	2003	R.B. Attal College, Georai
14	A.S. Tak	Computer simulation of Fluid flow dynamics of Human body	2003	L.B.S. College, Dharmabad
15	R. N. Khule	Study of laser induced fluorescence	2004	Shri Shivaji College,

		spectra of plant leaves		Kandhar, Nanded
16	S.K. Devhade	Study of excitation Mechanism and various Spatial distributions in He-Ne Laser discharge	2006	Science College, Janephal. Tq. Mehakar Dist. Buldhana.

LIST OF STUDENTS WHO HAVE SUBMITTED THE THESIS

SN	Name	Research Topic	University	Present Address
01	N.S. Mahalle	Investigation of effect of different stresses on laser induced spectra of plant leaves.	Amravati University,	G.S. College,Khamgaon. Dist. Buldhana.

LIST OF STUDENTS WHO HAVE REGISTERED FOR THE Ph.D. DEGREE

SN	Name	Topic	University	Present Address
01	B.S.Munde Submitted	Investigation of laser induced fluorescence to study the plant and animal health.	S.R.T.M. University, Nanded.	F.I.P. Teacher Fellow, Deptt. Of Physics, S.G.B. Amt. Univ. Amt..
02.	K.P.Kadam	Study of electrical behaviour and spectral emission of mole in the liquid and solid interfaces.	S.G.B. Amravati University, Amravati.	F.I.P. Teacher Fellow, Deptt. of Physics, S.G.B. Amt. Univ. Amt..
03.	A.G.Gachche	Diagnosis of cancer using Nitrogen Laser	S.R.T.M. University, Nanded.	Vasantrao Naik Mahavidyalaya, Cidco, Nanded.
04.	D.G.Dabare	Study of the effect of pigments on photo-synthesis rate induced by ultraviolet radiation.	S.G.B. Amravati University, Amravati.	Deptt. of Physics, S.G.B. Amravati Univ. Amravati.
05.	A.P.Pachkawade	Investigation of properties and applications of copper vapour laser.	S.G.B. Amravati University, Amravati.	Arts, Commerce and Science College, Arvi. Dist. Wardha.
06.	S.S.Arsad	Investigation of various mechanisms in the discharge and applications of carbon-dioxide laser.	S.R.T.M. University, Nanded.	Jagruti College, Akola.
07.	L.S.Ravangave	Study of effect of Fertilizers on the polarized laser induced fluorescence spectra.	S.R.T.M. University, Nanded.	Sant Gadge Maharaj College, Loha Dist. Nanded
08.	D.K.Kendre Submitted	Investigation of interaction between biological and medical system using Nitrogen laser radiation.	S.R.T.M. University, Nanded.	Gramin Mahavidyalaya, Vasantnagar, Kotgyal. Dist. Nanded.
09.	G.G.Muley	Growth and Characterization of Laser Materials and Non-linear Crystals.	S.G.B. Amravati University, Amravati.	Deptt. of Physics, S.G.B. Amravati Univ. Amravati.
10.	N.K.Patil	Spatial distribution of the density and emissive power in the Argon ion laser.	S.G.B. Amt. Univ. Amravati.	Deptt. of Physics, S.G.B. Amravati Univ. Amravati.
11.	D.B.Suryawanshi Submitted	Study of possibility of laser therapy in the field of skin diseases.	S.G.B. Amt. Univ. Amravati.	Arts, Comm. and Sci. Coll., Amravati.

Important Workshops Attended :

SN	Name of the workshop	Organized by	Place	Period
01.	Advanced Studies on Quantum Mechanics	Indian Institute of Science, Banglore	Indian Institute of Science, Banglore	Dec. 19-31, 1977
02.	Sixth International Conference on Raman Spectroscopy	Indian Institute of Science, Banglore	Hotel Ashoka, Banglore	Sept. 4-9, 1978
03.	Training Programme on Microprocessors.	U.S.I.C., Marathwada University, Aurangabad & WRIC, University of Mumbai, Mumbai.	Marathwada University, Aurangabad	May 19-31, 1986.
04.	Training Programme on Microcomputers in Instrumentation	U.S.I.C., Marathwada University, Aurangabad & WRIC, University of Mumbai, Mumbai.	Marathwada University, Aurangabad	Oct.24-Nov.5, 1988.
05.	Workshop on gas Lasers: Physics and Technology.	BARC, Mumbai & Institute of Armament Technology, Pune.	Institute of Armament Technology, Pune.	March 21-26, 1988.
06.	International workshop on Lasers and their applications.	Centre for Advanced Technology, Indore.	Centre for Advanced Technology, Indore.	Nov. 12-30, 1990
07.	National workshop on high temperature superconductivity.	Department of Physics, Marathwada University, Aurangabad.	Department of Physics, Marathwada University, Aurangabad.	Feb. 21-23, 1991
08.	International workshop on Crystal Growth of Technologically important materials for device applications.	Crystal Growth Centre, Anna University, Chennai.	Crystal Growth Centre, Anna University, Chennai.	Nov. 8-15, 1991

Workshops/Conferences organized/Conducted :

1. Organized National Conference on **“Laser and Their Applications”** (NCOLA-2004) during January 28-30, 2004 at Department of Physics, Amravati University, Amravati.
2. Worked as **Convener** at **Two day** workshop on **“Scope and Limitations of Post**

Graduate Syllabus of Physics” on July 5-6,2004 at the Department of Physics, Amravati University, Amravati.

3. Worked as **Convener** at University level **one-day** workshop on “Scope and Limitations of B.Sc. III Physics Syllabus” and Amravati University Physics Teachers’ Convention on January 30, 2005 organized by Department of Physics, Amravati University, Amravati and Amravati University Physics Teachers Association.

Conferences/Seminars/Symposia attended

SN	Name of the Conference	Place	Period	Remarks
1	National Conference on Microwaves and Optoelectronics	Dr.B.A.M.U. Aurangabad	June29-30,2004	Delivered invited Talk. Guest of Honour at Inaugural function
2	Regional level Intel Science Talent Discovery Fair.	JNV, Amravati	Sept. 28-29,04	Chief Guest of The Inaugural Function
3.	National seminar on Science and Technology of Thin Films	Rajarshi Shahu College, Latur	Oct.16-17, 2004	Delivered invited talk.
3.	National Seminar on Growth and Characterization of Solid Materials.	L.I.T., Nagpur	Nov 20-21, 2004	Delivered invited talk. Chief guest of valedictory function
4.	National Conference on Probes and Sensors in Electronics	Dayanand College, Solapur	Dec. 17-19, 2004	Delivered invited talk.
5.	Fourth DAE-BRNS, National Laser Symposium`	BARC, Mumbai	Jan.10-13, 2005	Paper presentation
6.	International Conference on Relativity	Amravati University, Amravati	Jan.11-14, 2005	Paper presentation
7	Technical Seminar on Advance Trends in Clinico-Diagnostic and Therapeutic Measures in Veterinary Sciences.	Amravati University, Amravati	Jan.29-30, 2005	Delivered invited talk.
8.	International Conference on Modern Trends in Plant Sciences with special reference to the role of Biodiversity in Conservation.	Amravati University, Amravati	Feb.17-20, 2005	Paper presentation
S9	National Conference on Plant Sciences	Pravaranagar	March.10-12, 2005	Paper presentation
10	State Level Seminar on Recent Trends in Spectroscopy	Washi (Dist. Osmanabad)	March.13-14, 2005	Delivered invited talk.
11.	Fifth DAE-BRNS National Laser Symposium	Vellore Institute of Technology, Vellore (T.N.)	Dec. 7-10,2005	Paper Presentation
12.	National Seminar on Materials for Advanced Technologies	Shivaji University Kolhapur	Jan 23-25,2006	Delivered invited talk