

BIO – DATA

Name : Dr. R. N. Baghel

Date of Birth : 20th May 1952

Designation : Professor in Physics
at Pt. R. S. University, Raipur (C.G.) from Sept 2003

Qualifications : Ph.D. in Physics from IIT, Delhi (1980)
MCA (2002)
Diploma in English (2005)

Membership in Professional Bodies / Societies : Life Member of Various Societies
CSI (Computer Society of India) CSI 018911
ISTE (Indian Society for Technical Education) ISTE 1094
IAPT (Indian Association for Physics Teachers) IAPT L0820
LSI (Luminescence Society of India) LSI 280

Address : GT 8, Block B, University Teachers Quarters,
Pt. Ravishankar Shukla University Campus, Raipur (C.G.)
Pin – 492010
Ph. No. 0771 – 2262739 (R), 098934 – 24482 (M)

Work Experience : 1. Taught Physics in Wilson College, Bombay for one year
(i.e. between 20 June 1980 to 19 June 1981)
2. Taught Physics in Patkar College, Bombay for one year
(i.e. between 20 June 1981 to 19 June 1982)
3. Worked in LASER Division & Instrumentation Division,
R.D.J. Ltd. Baroda, India as a S/w Development Engineer
for 02 years and 06 months between July 82 – Dec 84.
4. Worked as Senior Technical Asstt. (STA) in Dept. of
Physics, R. S. University, Raipur between 29.03.85 to
06.10.87
5. Worked as a Lecturer in Physics in BIT, Durg from Oct
16, 1987 to July 22, 1995. Taught Physics and Computer
Science.
6. Worked as a Reader in Physics in RIT from 24-07-95 to
30-09-2003. Taught Engg. Physics as well as Computer
Science. Headed two Departments at RIT i.e. MCA and
Physics. (i.e. MCA from 11-05-2002 to 30-09-2003.)

7. Worked as a Reader at SOS Physics and Astrophysics in Pt. R. S. University, Raipur (C.G.) from 30-09-2003 to Feb 2010. Now working as a Professor from Feb 2010 till date. Heading the department since Jul. 2013.
8. Worked as an Executive Director in University Institute of Technology, Pt. R. S. University from 13.04.2004 to June 2006.

EXPOSURE TO COMPUTER FIELD

1. Designed, Developed Data Acquisition System (Temperature Scanner based on $\mu p8085$) at R.D.J. Ltd. Baroda
2. Used FORTRAN-IV extensively for research at IIT Delhi.
3. Teaching M.Sc. Students FORTRAN Programming and Numerical Analysis.
4. Expert in Computer Fundamentals and Programming for Examinations of Pt. R. S. University, Raipur.

ACADEMIC QUALIFICATIONS

Exam Passed	Board/University	Subjects	Year	Division
High School	Board of Secondary Education, M.P. Bhopal	Physics, Chemistry, Maths, English, Hindi	1968	75%
Higher Secondary or Prc. degree	Board of Secondary Education, M.P. Bhopal	Physics, Chemistry, Maths, English, Hindi	1969	75%
Bachelor Degree(s)	Pt. Ravishankar Shukla University, Raipur	English PCM	1972	58.5%
Master Degree(s)	Pt. Ravishankar Shukla University, Raipur	M.Sc (Physics)	1974	61.90%
	MP Bhoj Open Univ., Bhopal	MCA	2002	67%
Research Degree	Indian Instt. of Technology, Delhi	Ph.D.(Solid State Physics)	1980	
Diploma in English	Pt. Ravishankar Shukla University, Raipur	Sound and Grammar, Translation, Comprehension	2005	77.5%

TEACHING EXPERIENCE (25 YEARS)

Course Taught	Name of University/College/Institute	Duration
B.Sc	Bombay University 1. Wilson College 2. Patkar College	2 Years 1980-81 1981-82
BE	Pt. R. S. U. Raipur 1. BIT Durg 2. RIT Raipur	8 Years 1987-1995 8 Years 1995-2003
MCA	Pt. R. S. U. Raipur RIT, Raipur	1 Year 2002-2003
M.Sc.	Pt. R. S. U. Raipur SOS in Physics and Astrophysics	7 Years 2003-2010

Total Teaching Experience

- (a) Undergraduate : 18 Years (B.E. – 16 Years, B.Sc. – 2 Years)
 (b) Post-Graduate : 07 Years (M.Sc. – 7 Years and MCA – 1 Years)

PUBLICATIONS

See the Enclosure-01

SEMINARS, CONFERENCES, SYMPOSIA, WORKSHOPS ETC. ATTENDED

Name of the seminar / Conferences/Symposia/Workshop etc.	Name of the Sponsoring Agency	Place and Date
7 weeks course of "Designing Microprocessor based System"	CSI Vadodara Chapter	Baroda from Feb15, 83 to Mar.31, 1983
Workshop on digital Electronics	Phys. Dept. RSU in Collaboration with RSIC Nagpur	RSU Raipur, (C.G.) July1-15, 1985
Seminar on Creativity and Innovation	CSIR Delhi	RIT Raipur, (C.G.) Dec 1-2, 2001

Seminar on Role of Physics in Technical Education	CCOST Raipur Chhattisgarh	Shankaracharya College of Engg.& Tech., Bhilai, (C.G.) 19-04-2005
Attended 2 day workshop on "Redefining Tech Education in the context of Global, National & Local Needs"	CSV Technical University	RIT, Raipur, (C.G.) 2-3 July 2005
Attended Conference on Luminescence NCLA-2006	Luminescence Society of India (LSI)	SGBA University Amravati, Maharashtra, Feb 7-9 2006
Attended Conference Luminescence NCLA 2007	Luminescence Society of India (LSI)	Bharatiar Univ. Coimbatore, Tamil Nadu, Jan 18-20, 2007
Attended an International Conference on Luminescence ICLA 2008	Luminescence Society of India (LSI)	National Physical Laboratory, New Delhi, Feb 13-16, 2008
Attended an National Seminar on Recent Trends in Luminescence	Luminescence Society of India (LSI) Jabalpur Chapter	R. D. University, Jabalpur, (M.P.), India on April 26, 2008

CO-CURRICULAR ACTIVITIES

1. Student Counsellor for Admission in BE 1st Year for 11 years (1995 - 2006) - Actively involved in the counseling for the admission of students for various branches of Engineering for nearly 9 years (since 1995 to 2003) and 2 years (2005, 2006) in University Institute of Technology (UIT).
2. Worked as a Center Superintendent of B.E. 1st to 4th Semester Examination 2006, at University Institute of Technology, Raipur.
3. Worked as an Expert for Interviews of Lecturers in Physics & Computer Science at various Colleges affiliated to Pt. R. S. University, Raipur.
4. Member of Academic Council of Pt. R. S. University, Raipur.
5. Member of Board of Studies of Physics in Pt. R. S. University, Raipur.
6. Member of Governing Body of S. Shankaracharya College of Engineering & Technology, Bhilai.

DECLARATION

The above mentioned information are true the best of my knowledge and Perception.

R. N. Baghel

BIT	:	Bhilai Institute of Technology, Durg (C.G.)
CSI	:	Computer Society of India
IIT	:	Indian Institute of Technology
R.D.J. Ltd.	:	Research and Development Center, Jyoti Ltd. Baroda, Gujrat.
RIT	:	Raipur Institute of Technology, Raipur (C.G.)

List of Publications:**INTERNATIONAL**

1. Transient Behavior of ML Induced by Impulsive Deformation of Fluorescent and Phosphorescent crystals. B. P. Chandra, S. K. Mahobia, P. Jha, R. K. Kuraria, S. R. Kuraria, R. N. Baghel, S.Thaker, J. of Luminescence, V-128 (2008) pp 2028-2047 **ISSN:** 0022-2313 , Impact Factor 1.518 .
2. Strong mechanoluminescence induced by elastic deformation of rare earth doped Strontium Aluminate phosphors. B. P. Chandra, R. N. Baghel, A. K. Luka, T. R. Sanodiya, R.K. Kuraria, S. R. Kuraria, J. of Luminescence 129, (2009), pp 760-766. **ISSN:** 0022-2313, Impact Factor 1.518.
3. Deformation-induced excitation of the luminescence centres in coloured alkali halide crystals. B. P. Chandra, R. N. Baghel, P. K. Singh, A.K.Luka, Radiation Effects & Defects in Solids vol.164, No 9, Sep.2009, pp 500-507. **ISSN:** 1029-4953, Impact factor 0.3
4. Luminescence Induced by Elastic and Plastic Deformation of II-IV Semiconductor at fixed Strain Rates, B. P. Chandra, R. P. Goutam, V. K. Chandra, R. P. Patel, A. K. Luka and R. N. Baghel, in press for publication, Journal of Optoelectronics & Advanced Materials (JOAM),Vol 03,No 11, Nov.2009 pp 1181-1189.
5. Mechanoluminescence glow curve of ZnS:Mn. B. P. Chandra, R. N. Baghel, V. K. Chandra, Chalcogenide Letters Vol. 7, No. 1, January 2010, pp 1-9. **ISSN:** 1584-8663.
6. Infra Red Radiation induced by fracture of Elemental and III-V semiconductors, R. N. Baghel, S. Parganiha, A. K. Baghel, B. P. Chandra, R. K. Kuraria, Shashi R. Kuraria, International J of Pure & Applied Physics, **ISSN** 0973-1776 Vol-6, Number 1 (2010), pp. 71-82.
7. Mechanoluminescence Induced by Elastic and Plastic Deformation of colored Alkali halide crystals at fixed strain rates, B. P. Chandra, R. P. Goutam, V. K. Chandra, D. S. Raghuvanshi, A. K. Luka and R. N. Baghel, Radiation Effects and Defects in Solids – Vol 165,No 12,Dec.2010,pp 907-919.
8. Modeling of transient electroluminescence overshoot in bilayer organic light-emitting diodes using rate equations. V.K.Chandra, B.P.Chandra, M.Tiwari, R.N.Baghel, M.Ramrakhiani, Journal of Luminescence 132 (2012) 1532-1539.

NATIONAL

9. Mechanoluminescence and Thermoluminescence spectra of γ -irradiated NaCl and KCl Crystals, Proceeding of International conference of Luminescence and its Applications. R. N. Baghel, A. K. Luka, B. P. Chandra, Feb.13-16 p 181-184, Organized by LSI and National Physical Laboratory (NPL), New Delhi (2008).
10. Kinetics of Temporal Behavior of Photoluminescence of semiconductor Nanoparticles, R. N. Baghel, V. K. Chandra, National conference on Physics of Nanostructured Functional Material (BITCON 2007) 16-17 March 2007, pp 9-13, Organized by Department of Physics, BIT, Durg Chhattisgarh, India.
11. Dependence of Thermoluminescence on Size of Nanoparticles, Raju Chandrakar, R. N. Baghel, R. P. Patel and B. P. Chandra, Proceeding of National Conference on Luminescence and its Applications (NCLA) 2009, Feb 9-12, 2009, pp Poster 4-8, Organized by LSI, Indian Association for Cultivation of Science, Central Glass and Ceramic Research Institute, Kolkata.
12. Shock Induced Luminescence in Solids, Sanjay Parganiha, S. K. Mahobia, R. N. Baghel and B. P. Chandra, Proceeding of National Conference on Luminescence and its Applications (NCLA) 2009, Feb 9-12, 2009, pp Poster 140-143, Organized by LSI, Indian Association for Cultivation of Science, Central Glass and Ceramic Research Institute, Kolkata.
13. Phenomena of Fluorescence and Phosphorescence, R. N. Baghel and A. K. Luka, Proceeding of National Seminar on Synthesis of Advanced Material and their Applications, 30 March 2010, Organized by Department of Physics in Collaboration with LSI, Mah. Chapter, N. H. College, Bramhapuri, Distt-Chandrapur, Maharashtra, pp 30-38.
14. Fractomechanoluminescence Produced During Impulsive Deformation of II-VI Semiconductor, Sameer Thaker¹, Vineet Kumar Shukla¹ and R.N.Baghel², J. Pure Appl. & Ind. Phys. Vol. 2(3A), 390-397 (2012)
15. Fracto-mechanoluminescence and mechanics of fracture of Solids, B.P.Chandra^a, V.K.Chandrab, P.Jhac, Rashmi Patel^c, S.K. Shendec, S.Thakerd, R.N.Baghele, Journal of Luminescence 132 (2012) 2012-2022
16. Modeling of transient electroluminescence overshoot in bilayer organic light-emitting diodes using rates equations, V.K.Chandra^a, B.P.Chandrab, M. Tiwaric, R.N.Bagheld, M. Ramrakhianic, Journal of Luminescence 132 (2012) 1532-1539
17. Decay of phosphorescence and delayed fluorescence of organic materials, A.K. Lukal, R.N. Baghel² and V.K.Chandra³, Recent Research in Science and Technology 2012, 4(8): 41-43, ISSN: 2076-5061

18. Determination of the trape depth of $(\text{ZnS})_{1-x}(\text{MnTe})_x$ Using thermoluminescence, Deepti Pateriy¹, R.N. Baghell¹, D.P.Bisen¹ and B.P.Chandra², Recent Research in Science and Technology 2012, 4(8): 87-88, ISSN: 2076-5061
19. Phenomena of fluorescence and phosphorescence, R.N.Baghell¹ and A.K.Luka², Recent Research in Science and Technology 2012, 4(8): 20-23, ISSN: 2076-5061
20. Mechanoluminescence induced by elastic and plastic deformation of coloured alkali halide crystals at fixed strain rates, B.P.Chandra¹, R.K.Goutamb, V.K.Chandrac, D.S.Raghuwanshid, A.K.Lukae and R.N.Baghell¹, Radiation Effects and Defects in Solids: Incorporating Plasma Science and Plasma Technology, 2010, 165:12, 907-919

21. ABSTRACTS

1. Mechanoluminescence Induced by elastic Deformation of γ -irradiated KBr Crystals, B. P. Chandra, A. K. Bagre, A. K. Baghel, R. K. Goutam, R. N. Baghel, Proceeding NCLA 2007, Jan 18-20, 2007 Organized by Deptt. of Phys. Coimbtore T.N. India and LSI pp MLP-2.
2. Photoluminescence studies of NanoCrystalline cds film, D. P. Bisen, B. G. Sharma, M. Ramrakhiani, U. S. Patle, N. Bramhe and R. N. Baghel National conference on Physics of Nanostructured Functional Material (BITCON 2007), pp 51. Organized by Department of Physics, BIT, Durg Chhattisgarh, India.
3. Rise and Decay of Electroluminescence in Pulsed Organic Light Emitting Diodes, V. K. Chandra, Manish Tiwari, R. N. Baghel, R. P. Patel and B. P. Chandra, Proceeding of National Seminar on Display Phosphors and Applications, (NSDPA-2008) Nov 10-11, 2008, Organized by Saveetha Engineering College, Chennai.
4. Shock induced Mechanoluminescence in X- Quartz Crystals, R. N. Baghel, S. Parganiha, A. K. Luka, Proceeding National Seminar on Recent Trends on Luminescence (NSRTL-2008) April 26, 2008, Organized by LSI, Jabalpur Chapter and Department of Post Graduate Studies & Research in Physics & Electronics, Rani Durgawati University, Jabalpur pp18.
5. Study of optical Absorption Spectra SHMP Passivated ZnS Nanoparticle, D. P. Bisen, Manmeet Kaur Bhatti and R. N. Baghel, Proceeding of National Seminar on Recent Trends on Luminescence, April 26, p 53, Organized by LSI Jabalpur Chapter and Department of Post Graduate Studies and Research in Physics and Electronics, Rani Durgawati University, Jabalpur 2008
6. "Persistent Photoluminescence of $\text{SrAl}_2\text{O}_4:\text{Eu}$ Nanoparticles", P. Jha, R. Tiwari, D. P. Bisen, D. S. Kshatri, R. N. Baghel and B. P. Chandra, Abstracts of Indo-Russian Workshop on Nanotechnology and Laser Induced Plasma (IRANANO-2009) Organized by Delhi University, New Delhi, India. Nov 24-26, 2009 pp-98.
7. Theoretical Studies on Thermoluminescence of Nanoparticles, R. K. Chandrakar, V. K. Chandra, R. P. Patel, R. N. Baghel and B. P. Chandra. Abstracts of Indo-Russian Workshop on Nanotechnology and Laser Induced Plasma (IRANANO-2009) Organized by Delhi University, New Delhi, India. Nov 24-26, 2009 pp-86.

8. Fracto-Mechanoluminescence of $\text{SrAl}_2\text{O}_4:\text{Eu}^{2+}$ Nanophosphors, P. Jha, R. Tiwari, D. S. Kshatri, M. Ramrakhiani, R. N. Baghel and B. P. Chandra, Program and Abstracts of National Conference on Luminescence and its Applications (NCLA-2010), Feb 9-10, 2010, organized by LSI, Gandhigram Rural Institute, Kalasalingam University, Tamilnadu, India, p-14, 2010.
9. Visualization of Pressure Pulse Produced during Impact of a Load on Solids using Mechanoluminescence, B. P. Chandra, R. N. Baghel, V. K. Chandra, R. K. Chandrakar and S. Parganiha, Abstracts of National Conference on Luminescence and its Applications (NCLA-2010), Feb 9-10, 2010, organized by LSI, Gandhigram, Rural Institute, Kalasalingam University, Tamilnadu, India, p-11, 2010.
10. Kinetics of Fluorescence and Phosphorescence of Solids, R.N. Baghel Abstracts and Souvenir, National Conference on Luminescence and its Applications (NCLA-2011), Feb 7-9, 2011, organized by LSI, Pt.R.S. University, Raipur (C.G), DIMAT Raipur (C.G), pp 37, 2011.