Updated Curriculum Vitae-2017 of Professor P. D. Sahare

Title	Prof.	First Name	P. D.	Last Name	SAHARE
Designation		PROFESSOR			
Date of Birth		22.09.1959			
Address (Office)		DEPARTMENT OF PHYSICS & ASTROPHYSICS, UNIVERSITY OF DELHI DELHI – 110 007			
Address (Res.)		B-63, DDA Flats, Kalyan Vihar, Delhi – 110009			
Phone No	Office	+91-11-27667793			
	Residence	+91-11-27426536			
	Mobile	+91-9811438818			
Email		pdsahare@yahoo.co.in ; pdsahare@physics.du.ac.in ; pdsahare1959@gmail.com			
Web-Page		www.du.ac.in/people			

Educational Qualifications

Degree	Institution	Year
Ph. D.	RTM NAGPUR UNIVERSITY NAGPUR	1990
M. Phil. / M. Tech.	RTM NAGPUR UNIVERSITY NAGPUR	1987
PG (M. Sc. Physics)	RTM NAGPUR UNIVERSITY NAGPUR	1985
UG (B. Sc.)	RTM NAGPUR UNIVERSITY NAGPUR	1983
Any other qualification	Nagpur Divisional Board, Nagpur XIIth Standad	1979

Career Profile

Department of Physics, Nagpur University, Nagpur	Lecturer	1986-87	Teaching and Research
University of Massachusetts, Amherst, USA	Post-Doctoral Fellow	1990-91	Research
Department of Physics, Nagpur University Nagpur	CSIR Research Associate	1991-92	Research and Teaching
RKN College of Engineering, Nagpur	Lecturer	1992-93	Teaching and Research
University of Delhi	Lecturer	1993 -2004	Teaching and Research
University of Delhi	Reader	2004 - 2006	Teaching and Research
University of Pune	Professor	Sept. 2006 – Dec. 09	Teaching and Research
University of Delhi	Professor	Dec. 2009 till date	Teaching and Research

Administrative Assignments

Member of Equal opportunity Cell
Radiation Safety Officer, University of Delhi (2013-15)
Member, Recruitment Committee, University of Delhi
Provost, P. G. Men's Hostel, University of Delhi

Areas of Interest / Specialization

Experimental: Spectroscopy, Luminescence, Radiation dosimetry, Laser materials, Detectors and optical sensors

Subjects Taught

Experimental Methods in Physics, Electronics, Atoms and Molecules, Optics, Lasers, Nuclear Physics

Research Guidance

List against each head (If applicable)

1. *Supervision of awarded Doctoral Thesis*
   - *I) S R Dhakate*
   - *II) Anant Pandey*
   - *III) Vijay Kumar Sharma*
   - *IV) Numan Salah*
   - *V) Ranju Ranjan*
   - *VI) S P Lochab*
   - *VII) Amitansu Pattanaik*
   - *VIII) J S Bakare*
   - *IX) Surender Kumar*
   - *X) Nandkumar Mandlik*
   - *xi) Manveer Singh*
   - *xii) Surbhi Kumari*
   - *xiii) Geeta Rani*
   - *xiv) Nikhil Jha*

2. *Supervision of Doctoral Thesis, under progress*
   - *i) Martina Saran*
   - *ii) Sudhisht Kumar*
   - *iii) Vishnu*

3. *Supervision of awarded M. Phil dissertations **10***
   (at RTM Nagpur University and at University of Pune)

4. *Supervision of M. Phil dissertations, under progress*
   Not any (The course in Physics is not running at Delhi University)

Publications Profile

1. *Books/Monographs (Authored/Edited)*

   One book entitled "TLD Nanophosphors: Synthesis, Characterization and Applications" under review and publication

   Nanotechnology and Laser Induced Plasma, Proceedings, IRNANO-2009.

   Nanomaterials and Nanotechnology, Eds. A. Tiwari and P. D. Sahare, VBRI Press,2011, ISBN: 978-81-920068-3-3.

2. *Research papers published in Refereed/Peer Reviewed Journals in last five years*

   Luminescence Characteristics of $K_2Ca_2(SO_4)_3$: Eu, Tb phosphor , Radiat. Eff. Defects Solids, 159 (2004) 321

   Thermoluminescence and photoluminescence characteristics of sol-gel prepared pure and europium doped silica glasses J. Phys. D: Appl. Phys., 37 (2004) 842

   Pyroelectroluminescence in $LiNaSO_4$: Eu (particle size effect) , J. Phys. D: Appl. Phys., 37 (2004) 2742

   Modifications in TL characteristics of $K_2Ca_2(SO_4)_3$: Eu by ^{7}Li MeV ion beam , J. Phys. D: Appl. Phys. 38 (2005) 3995

   TL and PL in $BaSr(SO_4)_2$:Eu mixed sulphate, phys. stat. solidi (a), 203 (2006) 898

   The influence of high-energy ^{7}Li ions on the TL response and glow curve structure of $CaSO_4$:Dy J. Phys. D: Appl. Phys., 39 (2006) 2684

   Thermoluminescence and photoluminescence study of $Ba_{0.97}Ca_{0.03}SO_4$: Eu , J. Phys. D: Appl. Phys., 39 (2006) 1786

Thermoluminescence and photoluminescence of $LiNaSO_4$:Eu irradiated with 24 and 48 MeV ^7Li ion beam, J. Lum., 121 (2006) 497

TL and PL studies on $CaSO_4$: Dy nanoparticles, Radiat. Measur., 41 (2006) 40

TL, PL and energy transfer in $K_2Ca_2(SO_4)_3$: Eu^{2+}, Ce^{3+} , Radiat. Measur., 41 (2006) 665

Fluorescence quenching of 7-Diethylamino-4-trifluoromethyl Coumarin in presence of acetone, Proc. SPIE 6405 (2006) 640514

Nanocrystalline MgB_4O_7: Dy for high dose measurement of gamma radiation, phys. stat. solidi (a), 204 (2007) 2416

Effect of high-energy $^7Li^{2+}$ ions on the TL behavior of LiF: Mg,Cu,P detectors Radiat. Measur., 42 (2007) 1294

$K_3Na(SO_4)_2$:Eu nanoparticles for high dose of ionizing radiation, P D Sahare, J. Phys. D: Appl. Phys., 40 (2007) 759

Thermoluminescence and photoluminescence study of nanocrystalline $Ba_{0.97}Ca_{0.03}SO_4$: Eu J. Phys. D: Appl. Phys., 40 (2007) 1343

Thermoluminescence of $Ba_{0.97}Ca_{0.03}SO_4$:Eu irradiated with 48 MeV ^7Li ion beam, NIMB, 254 (2007) 231

Thermoluminescence of nanocrystalline LiF:Mg, Cu, P, J. Lum., 124 (2007) 357

A novel optical sensor for ammonia using a laser grade dye—Stilbene 3, J. Phys. D: Appl. Phys., 40 (2007) 7166

Fluorescence quenching of 3-methyl 7-hydroxyl Coumarin in presence of acetone, Spectrochim. Acta: A, 66 (2007) 111

Energy transfer studies in binary dye solution mixtures: Acriflavine + Rhodamine 6G and Acriflavine + Rhodamine B, Spectrochimica Acta: A

Hydrogen peroxide sensor using laser grade dye Rhodamine B, Proc. SPIE 6830 (2007) 68301D

Thermoluminescence of $BaSO_4$:Eu irradiated with 46 MeV Li^{3+} and 150 MeV Ag^{12+} ions, J. Phys. D: Appl. Phys., 41 (2008) 85408

Synthesis and Luminescence Properties of Nanocrystalline LiF:Mg,Cu,P Phosphor, J. Lum. 130 (2010) 258

*Nanocrystalline MgB_4O_7: Dy for high dose measurement of gamma radiation, S P Lochab, A Pandey, **P D Sahare**, R S Chauhan, Numan Salah, Ranju Ranjan, phys. stat. solidi (a), 2007, 204, 2416.*

*Effect of high-energy $^7Li^{2+}$ ions on the TL behavior of LiF: Mg,Cu,P detectors, Numan Salah, S P Lochab, D Kanjilal, **P D Sahare** and V E Aleynikov, Radiat. Measur., 2007, 42, 1294.*

*TL and PL in $BaSr(SO_4)_2$:Eu mixed sulphate, Numan Salah, **P D Sahare**, Pratik Kumar, phys. stat. solidi (a), 2006, 203, 898.*

*Thermoluminescence and photoluminescence of $LiNaSO_4$:Eu irradiated with 24 and 48MeV ^7Li ion beam, Numan Salah, **P D Sahare**, Awadhesh Prasad, J. Lum., 121 (2006) 497*

*Thermoluminescence and photoluminescence study of $Ba_{0.97}Ca_{0.03}SO_4$: Eu**,** S P Lochab, **P D Sahare**, R S Chauhan, Numan Salah and A Pandey, J. Phys. D: Appl. Phys., 2006, 39, 1786.*

*The influence of high-energy ^7Li ions on the TL response and glow curve structure of nanocrystalline $CaSO_4$:Dy, Numan Salah and **P D Sahare,** J. Phys. D: Appl. Phys., 2006, 39, 2684.*

*TL and PL studies on $CaSO_4$: Dy nanoparticles, Numan Salah, **P D Sahare**, S P Lochab, Pratik Kumar, Radiat. Measur., 41 (2006) 40.*

*TL, PL and energy transfer in $K_2Ca_2(SO_4)_3$: Eu^{2+}, Ce^{3+}, Numan Salah and **P D Sahare**, Radiat. Measur., 41 (2006) 665.*

*$K_3Na(SO_4)_2$:Eu nanoparticles for high dose of ionizing radiation, **P D Sahare**, Ranju Ranjan, Numan Salah and S P Lochab, J. Phys. D: Appl. Phys., 2007, 40, 759.*

*Thermoluminescence and photoluminescence study of nanocrystalline $Ba_{0.97}Ca_{0.03}SO_4$: Eu, S P Lochab, **P D Sahare**, R S Chauhan, Numan Salah, Ranju Ranjan and A Pandey, J. Phys. D: Appl. Phys., 2007, 40 1343.*

*Thermoluminescence of $Ba_{0.97}Ca_{0.03}SO_4$:Eu irradiated with 48 MeV ^7Li ion beam, S P Lochab, Numan Salah, **P D Sahare**, R S Chauhan and Ranju Ranjan, NIMB, 2007, 254, 231.*

*Thermoluminescence of nanocrystalline LiF:Mg, Cu, P, Numan Salah, **P D Sahare**, A A Rupasov, J. Lum., 2007, 124, 357*

*A novel optical sensor for ammonia using a laser grade dye—Stilbene 3, **P D Sahare** and Amitansu Pattanaik, J. Phys. D: Appl. Phys., 2007, 40, 7166*

*Fluorescence quenching of 3-methyl 7-hydroxyl Coumarin in presence of acetone, Vijay Kumar Sharma, D. Mohan and **P D Sahare**, Spectrochim. Acta: A, 2007, 66, 111.*

*Energy transfer studies in binary dye solution mixtures: Acriflavine + Rhodamine 6G and Acriflavine + Rhodamine B, **P D Sahare**, Vijay K. Sharma, D. Mohan and A. A. Rupasov, Spectrochimica Acta: A, 69 (2008) 1257–1264, doi:10.1016/j.saa.2007.07.003.*

An approach to produce single and double layer graphene from re-exfoliation of expanded graphite, CARBON, 49 (2011)

Photoluminescence Study of Laser Grade POPOP Dye Incorporated into MCM-41, Adv. Porous Mater., 1 (2012) 1.

Gas sensing behavior of Fluorescein sodium impregnated MCM-41 for Sulphur dioxide, Sensor lett. 11 (2013) 526, doi:10.1166/sl.2013.2830.

Nd doped ZnO as a multifunctional material, J. Rare Earths, 30 (2012) 761, DOI: 10.1016/S1002-0721(12)60126-4

Effects of annealing on the surface defects of zinc oxide nanoparticles, Nano, 7 (2012) 1250022, DOI: 10.1142/S1793292012500221

Thermoluminescence and Photoluminescence properties of $K_2Ca_2(SO_4)_3$: Cu nanophosphor for gamma radiation dosimetry, Ind. J. Phys. Appl. Phys., 50 (2012) 859.

A new approach to produce single and double layer graphene from re-exfoliation of expanded graphite, S.R. Dhakate, N. Chauhan, S. Sharma, J. Tawale, S. Singh, P.D. Sahare, R.B. Mathur, Carbon, 49 (2011) 1946.

Fluorescence quenching of laser grade dye coumarin 440 in presence of hydrogen peroxide, Ind. J. Phys. 2011, 85, 1775

Thermoluminescence and Photoluminescence of $CaSO_4$:Dy Nanophosphor for 6 MeV Energy electron Dosimetry, Radiat. Proct. Environ. 34 (2011) 185, DOI:10.4103/0972-0464.101716.

*Fluorescence quenching of laser grade dye coumarin 440 in presence of hydrogen peroxide, Pattanaik, A., **Sahare, P.D.**, Rani, G. Indian J. Phys. 85 (2011) 1775, doi:10.1007/s12648-011-0194-4*

Thermoluminescence study of $K_2Ca_2(SO_4)_3$:Cu nanophosphor for gamma ray dosimetry, NIMB, 315 (2013) 273-277, DOI:10.1016/j.nimb.2013.05.073

Effect of phase transition and particle size on thermoluminescence characteristics of nanocrystalline $K_2Ca_2(SO_4)_3:Cu^+$ phosphor, Radiat. Measur., 47 (2012) 108, DOI: 10.1016/j.radmeas.2012.10.003

Thermoluminescence and Photoluminescence properties of K2Ca2(SO4)3: Cu nanophosphor for gamma radiation dosimetry, Ind. J. Phys. Appl. Phys., 50 (2012) 859.

High Energy Radiations Dosimetry in the Space, Editorial, J. Astrophys. Arospace Technol. 1 (2012) 1

Preparation and characterization of short length ZnO nanorods and ZnO@ZnS core–shell nanostructures, Nano Commun. Netw. 3 (2012) 197, doi:10.1016/j.nancom.2012.09.003

Elucidation of Mg^{2+} binding activity of adenylate kinase from Mycobacterium tuberculosis $H_{37}Rv$ using fluorescence studies, Biotechnol Appl Biochem, 59 (2012) 429, DOI: 10.1002/bab.1043.

Effect of phase transition and particle size on thermoluminescence characteristics of nanocrystalline $K_2Ca_2(SO_4)_3:Cu^+$ phosphor, Radiat. Measur. 47 (2012) 1083

Preparation and characterization of short length ZnO nanorods and ZnO@ZnS core–shell nanostructures, Nano Commun. Networks 3 (2012) 197-202

Observation of band gap and surface defects of ZnO nanoparticles synthesized via hydrothermal route at different reaction temperature, Opt. Commun. 285 (2012) 5210, DOI: 10.1016/j.optcom.2012.07.125

Redox reactions in Cu-activated nanocrystalline LiF TLD phosphor, NIM B, 289 (2012) 59, DOI: 10.1016/j.nimb.2012.08.003

*Synthesis and dosimetry characteristics of a new high sensitivity TLD phosphor $NaLi_2PO_4:Eu^{3+}$ Singh, Manveer; **Sahare, P. D.**; Kumar, Pratik, Radiat. Measur. 59 (2013) 8-14*

*Thermoluminescence study of $K_2Ca_2(SO_4)_3$:Cu nanophosphor for gamma ray dosimetry Mandlik, Nandkumar; **Sahare, P. D.**; Patil, B. J.; et al., NIMB 315 (2013) 273-277*

*Structural and Spectroscopic Characterizations of ZnO Quantum Dots Annealed at Different Temperatures Rani, Geeta, **Sahare, P. D.**; J. Mater. Sci. Technol. 29 (2013) 1035-1039*

*Effect of phase transitions on thermoluminescence characteristics of nanocrystalline alumina Rani, Geeta; **Sahare, P. D.***, NIMB, *311(2013) 71-77*

*Spectroscopy of Nickel-Doped Zinc Sulfide Nanoparticles Rani, Geeta; **Sahare, P. D.**, Spectro. Lett. 46 (2013) 391-396*

*Optical Studies of Fluorescent Mesoporous Silica Nanoparticles Kumari, Surbhi; **Sahare, P. D.**, J. Mater. Sci. Technol. 29 (2013) 742-746*

*Photoluminescence Study of Laser Grade POPOP Dye Incorporated into MCM-41, Kumari, Surbhi; **Sahare, P. D.**, Adv. Porous Mater., 1 (2013) 114-121*

*Gas sensing behavior of Fluorescein sodium impregnated MCM-41 for Sulphur dioxide, Surbhi Kumari, **P. D. Sahare**, Sensor lett. 11 (2013) 526, doi:10.1166/sl.2013.2830.*

Optical Studies of Fluorescent Mesoporous Silica Nanoparticles, J. Mater. Sci. Technol., 29 (2013) 742

*TL characteristics of Ce^{3+}-doped $NaLi_2PO_4$ TLD phosphor **Sahare, P. D.**; Singh, Manveer; Kumar, Pratik, J. Radioanal. Nucl. Chem. 302 (2014) 517-525*

*Study of the structural and morphological changes during the phase transition of ZnS to ZnO Rani, Geeta; **Sahare, P. D.**, Appl. Phys. A-Mater. Sci. Process. 116 (2014) 831-837*

NaLi2PO4:Eu3+ based novel luminescent red phosphor

***Sahare, P. D.**; Singh, M., Indian J. Phys. 88 (2014) 621-630*

*Structural and photoluminescent properties of Al_2O_3: Cr^{3+} nanoparticles via solution combustion synthesis method, Rani, Geeta; **Sahare, P. D.**, Adv. Powder Technol. 25 (2014) 767-772*

Gd^{3+} incorporated ZnO nanoparticles: A versatile material
*Kumar, Surender; **Sahare, P. D.**, Mater. Res. Bul. 51 (2014) 217-223*

*Study of TL and optically stimulated luminescence of K2Ca2(SO4)(3):Cu nanophosphor for radiation dosimetry, Mandlik, Nandkumar; **Sahare, P. D.**; Kulkarni, M. S.; et al., J. Lum. 146 (2014) 128-132*

*Photoluminescence studies of stilbene laser dye incorporated mesoporous silica nanoparticle (MSN) with sulphur dioxide, Kumari, Surbhi; **Sahare, P. D.**, J. Porous Mater. 21 (2014) 45-52*

*Optically stimulated luminescence (OSL) response of Al2O3:C, BaFCl:Eu and K2Ca2(SO4)(3):Eu phosphors Kumar, Pratik; Bahl, Shaila; **Sahare, P. D.**; et al., Radiat. Prot. Dosim. 167 (2015) 453-460*

*Effect of annealing and impurity concentration on the TL characteristics of nanocrystalline Mn-doped CaF_2 **Sahare, P. D.**; Singh, Manveer; Kumar, Pratik, Radiat. Measur. 80 29-37 (2015)*

Synthesis and TL characteristics of MgB_4O_7:Mn,Tb phosphor
***Sahare, P. D.**; Singh, Manveer; Kumar, Pratik, J. Lum. 160 (2015) 158-164*

Effect of Temperature on Structural and Optical Properties of Boehmite Nanostructure
*Rani, Geeta; **Sahare, P. D.,** Internat. J. Appl. Cer. Technol. 12 (2015) 124-132*

A new high sensitivity Na_2LiPO_4:Eu OSL phosphor
***Sahare, P. D.**; Singh, Manveer; Kumar, Pratik, RSC ADVANCES 5 (2015) 3474-3481*

*Effect of pH on lyoluminescence of $K_3Na(SO_4)_2$:Eu^{3+} phosphor for its application in dosimetry of high-energy radiations, **Sahare P. D.**, Martina Saran, J. Lum. 179 (2016) 254–259*

Dosimetry characteristics of $NaLi_2PO_4$:Ce^{3+} OSLD phosphor
***Sahare, P. D.**; Ali, Neyaz; Rawat, N. S.; et al., J. Lum. 174 (2016) 22-28*

Lyoluminescence dosimetry of high-energy gamma radiation using MgB_4O_7:Mn^{2+}
***Sahare, P. D.**; Srivastava, S. K., J. Radioanal. Nucl. Chem. 307 (2016) 31-36*

3.

a) Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals

b) Research papers published in Refereed/Peer Reviewed Conferences

Redox reactions, Thermoluminescence and photoluminescence in europium activated $BaSr(SO_4)_2$ mixed sulphate. Numan Salah and **P. D. Sahare**. Proceedings of National Seminar on Advanced Materials (NSAM – 2004) held on February 1st, 2004 at Kamla Nehru Mahavidyalaya, Nagpur.

Thermoluminescence characteristics of $CaSO_4$: Dy nanoparticles and their optical properties. Numan Salah, **P. D. Sahare**, S. P. Lochab and R. K. Kale. Proceedings of International Conference on Luminescence and its Applications (ICLA – 2004) held at BARC Bombay during 9-12 February 2004. P142.

Li_5AlO_4:Cu, A promising TLD material. N. B. Ingle, B. K. Katore, **P. D. Sahare**, S. K. Omanwar and S. V. Moharil. Proceedings of International Conference on Luminescence and its Applications (ICLA – 2004) held at BARC Bombay during 9-12 February 2004. P230.

Thermoluminescence and photoluminescence in K3NaSO4:Eu nanoparticles. **P. D. Sahare**, J. S. Bakare, D. G. Wakade, Numan Salah, Rani Jha and Lalhriatzuala. Proceedings of International Conference on Luminescence and its Applications (ICLA – 2004) held at BARC Bombay during 9-12 February 2004. P345.

Preparation and characterization of nanocrystalline MgB_4O_7: Dy for radiation dosimetry using thermoluminescence technique. A. Pandey, **P. D. Sahare**, N. B. Ingle, S. P. Lochab, D. Kanjilal, and S. K.

Omanwar. Proceedings of International Conference on Luminescence and its Applications (ICLA – 2004) held at BARC Bombay during 9-12 February 2004. P354.

Thermoluminescence and photoluminescence characteristics of nanocrystalline $BaSO_4$: Dy Phosphor. Numan Salah, **P. D. Sahare**, J. S. Bakare and S. P. Lochab. Proceedings of International Conference on Luminescence and its Applications (ICLA – 2004) held at BARC Bombay during 9-12 February 2004. P357.

Study of TL and PL in LiF:Mg,Cu,P on 24 MeV ion bean irradiation. Numan Salah, Somrendro Singh and **P. D. Sahare**, Proceedings, NCLA-2005, Bangalore University, Bangalore during 2-4 February, 2005.

Fluorescence quenching of 7-Diethylamino-4-trifluoromethyl Coumarin in presence of acetone, A.Pattanaik, M Nanda, **P D Sahare**, Proceedings of SPIE -- Multispectral, Hyper spectral, and Ultraspectral Remote Sensing Technology, Techniques, and Applications, William L. Smith, Sr., Allen M. Larar, Tadao Aoki, Ram Rattan, Edits., 6405 (2006) 640514-1.

Hydrogen Peroxide Sensor Using Laser grade Dye Rhodamine B, A.Pattanaik, **P D Share,** M. Nanda, Proceedings of SPIE –Advanced Sensor Systems and Applications, Chairs: Yun Jiang Rao, Yanbiao Liao, Gang-Ding Peng, Volume 6830 (2007) 68301D-1

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An Optical Chemical Sensor for Ammonia using a laser grade dye- Coumarin 152A, A.Pattanaik, **P D Sahare**, Page- 336 CONTEMPORARY OPTICS AND OPTOELECTRONICS, Editors: PP Sahu, P Deb, TATA McGraw HILL (2008), ISBN (13 DIGITS)-978-0-07-024888-5

An Optochemical Detection Technique for Potassium Hydroxide, A. Pattanaik, **P D Sahare**, Page- 339, CONTEMPORARY OPTICS AND OPTOELECTRONICS, Editors: PP Sahu, P Deb, TATA McGraw HILL (2008), ISBN: 978-0-07-024888-5

A Sensor for Acetone using a laser grade dye-Malachite green, A.Pattanaik, **P D Sahare**, Page-225, Proceedings of the third International Conference on LUMINESCENCE AND ITS APPLICATIONS, Editors: Santa Chawla, Harish Chander, K V R Murthy, Macmillan India (2008),ISBN 13:978-0230-63468-8

An optical sensor for Hydrogen peroxide using a laser grade dye Stilbene – 3, A. Pattanaik, **P D Sahare**, Page- 303, LUMINESCENCE AND ITS APPLICATIONS, Editors: S Selvasekarapandian, K V R Murthy, V Natarajan, J Malathi, G M Brahmanandhan, D Khanna, Macmillan India (2007), ISBN 13:9780230630543

Photoluminescence of Cu doped sponge-like porous ZnO nanoparticles synthesized via chemical route, AIP Conf. Proc. 1393 (2011) 63, doi:10.1063/1.3653610.

Novel nanostructured zinc oxide ammonia gas sensor, AIP Conf. Proc. 1393 (2011) 219, doi:10.1063/1.3653688.

Synthesis and Luminescent Properties of Li-doped ZnS Nanostructures by Chemical Precipitation Method, AIP Conf. Proc., 1393 (2011) 253.

Effect of Surface Defects on Green Luminescence from ZnO Nanoparticles, AIP Conf. Proc. 1393 (2011) 159, doi: 10.1063/1.3653658.

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Concentration effects on Fluorescence yield for some laser grade Coumarin Dye solutions, A. Pattanaik, **P D Sahare**, M Nanda, Page- 285, *LUMINESCENCE AND ITS APPLICATIONS*, Eds.: S Selvasekarapandian, K V R Murthy, V Natarajan, J Malathi, G M Brahmanandhan, D Khanna, Macmillan India (2007), ISBN 13:9780230630543

Fluorescence quenching of laser grade dye Stilbene – 3 in presence of acetone, A. Pattanaik, **P D Sahare**, A Baghel, Page-31, International Conference on Lasers and Nanomaterials (2006), University of Kolkatta, Kolkota

Fluorescence Quenching of 3-(2′-benzothiazolyl)-7-Diethylamino Coumarin in presence of Acetone, A. Pattanaik, **P D Sahare**, R Ranjan, J Mehra, Page-37, XVI National Conference on Atomic and Molecular Physics (2007), Tata Institute of Fundamental Research, Mumbai

A Chemical Sensor for Ammonia using a laser grade dye – Rhodamine B, A. Pattanaik**, P D Sahare**, P-7(13.15 abstract), National Laser Symposium (2007), M S University, Vadodara, Gujrat

Fluorescence quenching of 7-diethylamino-4-trifluoromethyl Coumarin in presence of Potassium hydroxide, A.Pattanaik, **P D Sahare**, M Nanda, Page-60, Topical Conference on atomic and Molecular Physics (2008), Dept.of Physics, Vallabh Vidyanagar, Gujrat

An Optical sensor for Acetone using Fluorescence quenching of 7-amino-4-methyl Coumarin, A.Pattanaik, **P D Sahare**, J Mehra, Page-61, Topical Conference on atomic and Molecular Physics (2008), Dept. of Physics, Vallabh Vidyanagar, Gujrat

Effect of Concentration of Fluorescence Spectrum of Laser dye –Malachite green, A. Pattanaik, **P D Sahare**, Page-70, International Conference on luminescence and its Applications-2008, National Physical Laboratory, Delhi

On the transfer of electronic excitation energy in liquids using a laser dye –Rhodamine B, A. Pattanaik, **P D Sahare**, M Nanda, Page-71, International Conference on luminescence and its Applications-2008,National Physical Laboratory, Delhi

A simulated study of laser induced fluorescence characteristics for Oxygen molecule, A. Pattanaik, **P D Sahare**, M Nanda, Page-70, International Conference on luminescence and its Applications-2008, National Physical Laboratory, Delhi

Concentration effects on fluorescence yield for laser grade dye Stilbene 420 and Rhodamine B solutions, A. Pattanaik, S.Kumari, S.Kumar, V.Kumar,G Rani, **P D Sahare**, Page-poster78, National Conference on Luminescence and its applications(2009), CGCRI, Kolkota

Thermoluminescence characteristics of nanocrystalline Zirconium oxide doped with copper, J Mehra, **P D Sahare**, R Ranjan & A. Pattanaik, Page-109, International Conference on luminescence and its Applications-2008, National Physical Laboratory, Delhi

Thermoluminescence Studies of copper doped nanocrystalline Aluminium Oxide, J Mehra, **P D Sahare**, R Ranjan & A. Pattanaik,Page-62, Topical Conference on atomic and Molecular Physics (2008), Dept.of Physics, Vallabh Vidyanagar, Gujrat

Thermoluminescence properties of Cu doped nanocrystalline ZnO phosphor, J Mehra, **P D Sahare**, R Ranjan, A. Pattanaik, Page-53, Indo Australia Symposium on Multifunctional Nanomaterials Nanostructures and Applications (2007), Dept. of Physics and Astrophysics, University of Delhi

Thermo luminescence properties of Cu and P doped $LiNaSO_4$ phosphor, J.Mehra, R Ranjan, N,Salah, S P Lochab, **P D Sahare**, A. Pattanaik & A Kumar, Page- 86,Conference on 'Accelerators and low level Radiation Safety' (2007), Inter University Accelerator Center, New Delhi

TL study of $CaSr_{1-x}SO_4$: Eu Phosphors, S P Lochab, **P D Sahare**, N Salah, R S Chauhan, R Ranjan, A Pandey & A Pattanaik, Page-115, 2nd International Conference on Current Developments in Atomic, Molecular & Optical Physics (2006), Dept. of Physics and Astrophysics, University of Delhi

Optical sensor systems for the atmospheric probing of chemical agents in the Vis-IR region, A. Pattanaik, **P. D. Sahare**, Page – 5 , ORAL Presentation Abstract book of Winter College on Optics in Environmental Science(2009)

Concentration effects on fluorescence yield for laser grade dye- Acriflavin, A. Pattanaik**, P. D. Sahare**, 7th Liquid matter conference (2008), Lund University, Sweden

Laser sensor Systems for the detection of chemical agents in Vis-IR Region, A. Pattanaik, **P. D. Sahare**, ORAL Presentation, Proceedings of Workshop for young Scientists on 'Lasers, quantum optics and Biophysics, Gif-

Sur-Yvette, France (2007)

Stilbene Laser dye incorporated Mesoporous Nano silica as Ammonia Sensor, Surbhi Kumari, **P. D. Sahare**, Page 1, Laser and Advanced materials , A proceedings of National Conference on Lasers and Advanced Materials 2012, Editors G.G.Muley ISBN No-978-81-92256-6-1, 29-30 May **2012**.

Concentration Effects On Fluorescence Yield For Laser Grade Dye Stilbene 420 And Rhodamine B Solutions Amitansu Pattanaik, Surbhi Kumari, Surender Kumar, Vipin kumar, Geeta Rani and **P. D. Sahare**, Page 79, Proceeding of National Conference on Luminescence and its applications , Feb 19-21 **(2009)**, Poster presentation.

Optical Gas Sensor of Sulfur Dioxide using Malachite Green Oxalate Salt, Surbhi Kumari, **P. D. Sahare**, Meenakshi Gupta and J. C. Kapoor , Page 104, Proceedings of International Conference on Sensors and related Networks, Editors J.P. Raina, M. Khalid, Z.C Alex, ISBN NO. 978-81-8424-541-7 (vol. I) Dec 8-10, **(2009)** Oral presentations.

Fluorescence Quenching Of Mesoporous Silica Nanoparticles With Ammonia, Surbhi Kumari , **P. D. Sahare**, Meenakshi Gupta, J.C.Kapoor, Page 167, Proceedings of National conference on Phosphors and their Applications, Editors KVR Murthy, B.N.Lakshminarasappa, V.Natrajan, ISBN NO- 978-81-910787-1-8, November 15-16 **(2010)**, Oral presentation.

Optical Gas Sensor of Ammonia using Stilbene 420 dye incorporated alumina porous membrane, Surbhi Kumari, **P.D. Sahare**, Meenakshi Gupta, J.C. Kapoor, Page 157, proceedings of National conference on Safety Technology & Management in Defence, October 27-28 **(2010)**, Oral presentation.

Fluorescence Sensitization Of Mesoporous Nanosilica Particles Using Laser Grade Dye Stilbene–420, Surbhi Kumari, **P. D. Sahare**, Meenakshi Gupta, J. C. Kapoor, page 236, Proceedings of National Conference on Luminescence and its applications, Editors K.Somaiah, Dr,K.V.R.Murthy, Feb. 7-9 **(2011)**, Oral presentation.

Novel Nanostructured Zinc Oxide Ammonia Gas Sensor, Surbhi Kumari, **P. D. Sahare**, Meenakshi Gupta, J.C.Kapoor, page 139, Proceedings of International Conference on Advances in Condensed and Nanomaterials, Editors S.K.Tripathi, Keya Dharambir, Ranjan Kumar, G.S.S.Saini, Feb. 22-26 **(2011)**, Poster presentation.

Sensitization Of Mesoporous Silica Nanoparticles (Msns) By Laser Grade Dye Acriflavin, S. Kumari, **P. D. Sahare**, J.C. Kapoor, M. Gupta, page 91, Proceedings of International Conference on Nanomaterials and Nanotechnology, Editors Ashutosh Tiwari, and P.D.Sahare, ISBN NO- 978-81-920068-3-3, Dec. 18-21 **(2011)**, Oral presentation.

Synthesis and Luminescent Properties of Lidoped ZnS Nanostructures by Chemical Precipitation Method, Rani, Geeta; **Sahare, P. D.**, International Conference on Advances in Condensed and Nano Materials (ICACNM-2011). AIP Conference Proceedings, Volume 1393. AIP Conference Proceedings, Volume 1393, Issue 1, p.253-254

Sensitization Of Mesoporous Silica Nanoparticles (Msns) By Laser Grade Dye Popop, Surbhi Kumari, **P.D. Sahare**, Meenakshi Gupta , Page 513, Proceedings of International Conference and Workshop on

Nanostructured Ceramics and other Nanomaterials, March 13-16,**(2012)**, Oral presentation.
Fluorescence Sensitization Of Mesoporous Silica Nanoparticles (Msns) By Laser Grade Dye Fluorescein Sodium, Surbhi Kumari, **P.D. Sahare**, Proceedings of XIth International Conference on nanostructured materials, Aug. 26 **(2012)**, Oral presentation.

TLD Nanophosphors for Their Applications in TLD and OSL Dosimetry, **P. D. Sahare**, a Key Note Address at 1st Congress on Advanced Materials during 13-17, May 2011 organized jointly by University of Jinan, Jinan

c) Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences

Nanophosphors and Their Applications – A key note address at National Seminar on Recent Trends in Luminescence (NSRTL-2008) organized by Luminescence Society of India (Jabalpur Chapter) and Rani Durgavati University, Jabalpur during 25-26 April 2008. Also chaired a technical session.

Nanocrystalline TLD Phosphors, Invited Talk at National Seminar cum Conference on "Emerging Trends in Physics" (NSC-ETP 2007) held during December 17-19, 2007 at R. K. College, Madhubani, 847211 also chaired a technical session.

4. *Other publications (Edited works, Book reviews, Festschrift volumes, etc.)*

Conference Organization/Presentations (in the last three years)

List against each head (If applicable)

1. *Organization of a Conference*

   National Conference on Luminescence and its Applications 2003 in collaboration with National Physical Laboratory, New Delhi, India

   International Conference on Luminescence and its Applications 2008 in collaboration with National Physical Laboratory, New Delhi, India
   Indo-Russian Workshop on Nanotechnology and Laser Induced Plasma at the University of Delhi, Delhi, India in 2009

2. *Participation as Paper/Poster Presenter*
   Several presentations were made.

Research Projects (Major Grants/Research Collaboration)

"Response of TLD Materials to SHI" sponsored by Inter-University Accelerator Centre, New Delhi
"Development of X-ray radiation diagnostics equipment for investigation of the X-ray emission from laser and discharge produced plasma using TLD and X-ray storage phosphors", Indo-Russian ILTP Project sponsored by DST, Delhi and RAS, Moscow.
"TLD Nanophosphors for Ion-Beam dosimetry" sponsored by Inter-University Accelerator Centre, New Delhi
"Development of Nanophosphors for Space Dosimetry" sponsored by ISRO at University of Pune
"Development of Gas Sensors for Polluting and Fire Extinguished Gases" sponsored by CFEES, DRDO, Delhi
"Modifications by SHI Beam in Wide Band Gap Semiconductor Nanoparticles for Their Applications as Multifunctional Materials" sponsored by IUAC, Delhi
"Comparative Study of Some New Highly Sensitive Micro- and Nanocrystalline TLD/OSL Phosphors Using SHI" sponsored by IUAC, Delhi
"Laser Induced Fluorescence (LIF) based Detection System for Biological Warfare Agents (BWA): Development of prototype of the Cavity and Mesoporous Silica Nano/sub-micro particles as BWA simulators" sponsored by LASTEC, DRDO, Metcalfe House, Delhi

Awards and Distinctions

National Overseas Scholarship to visit USA.
UGC and CSIR Research Associateships.
Distingushed Research Scientist Award -2011, International Association for Advanced Materials (IAAM) URL: www.iiamonline.com
Best Editor Award -2011, International Association for Advanced Materials (IAAM) URL: www.iiamonline.com
Prof. B. T. Deshmukh Award for excellence in research, Luminescence Society of India during the NCLA -2016

Association With Professional Bodies

1. *Editing*
   Associate Editor, Advanced Materials Letters
   URL: www.amlett.com

   Member, Editorial Board,
   Internal Journal of Luminescence and Applications
   luminescence Society of India
   URL: www.ijlaindia.org

   Member, Editorial Board,
   Journal of Astrophysics and Aerospace Technology
   OMICS Publishing Group, USA
   URL: http://www.omicsgroup.org/journals/editorialboardJAAT.php

Lead Guest Editor, Special Issue,
"NanostructuredMaterials: Optical Properties and Applications"
Hindawi Publishing Corporation
URL: http://www.hindawi.com/

Lead Guest Editor, Special Issue,
"Luminescent Phosphors and Their Applications",
Hindawi Publishing Corporation
URL: http://www.hindawi.com/

Associate Editor
International Journal of Chemical Research
Bioinfo Publications
ISSN : 0975-3699 (Print) E-ISSN : 0975-9131 (Online)

Editor-in-Chief
Journal of Luminescence and Applications,
Columbia International Publishing,
URL: http://www.uscip.org/

2. *Reviewing*
Biologicals
IEEE Transactions on Nuclear Science
Indian Journal of Applied Physics
Journal of Luminescence
Journal of Physics and Chemistry of Solids
Journal of Physics D: Applied Physics
NIM B
Radiation Effects and Defects in Solids
Radiation Measurements
Spectra Chemica Acta
Scripta Materialia
Wesleyan Journal of Research
Biological Chemistry
Biotechnology and Applied Biochemistry and many more journals.

3. *Administrative*
Two times 2014-2016, Member and Treasurer,
Governing Body, Kamla Nehru College, August Kranti Marg, New Delhi, 110049.
Handling of several research projects.

4. *Advisory*
Member, Governing Body, MG Institute of Technology and Management, Lucknow, UP, India
Member, Governing Body, Kamla Nehru College, August Kranti Marg, New Delhi, 110049.
Member, Governing Body, Hansraj College (University of Delhi), Mahatma Hansraj Marg, Malkaganj, Delhi, 110007
Member, IQAC, Hansraj College (University of Delhi), Mahatma Hansraj Marg, Malkaganj, Delhi, 110007
Member, IQAC, Rajdhani College (University of Delhi), Rajouri Garden, Delhi
Member, Governing Body, Ramanujan College (University of Delhi), Mahatma Hansraj Marg, Malkaganj, Delhi, 110007

5. *Committees and Boards*
Member, many selection committees of State Public Service Commission, UP and LNM, University, UP

6. *Memberships*
Luminescence Society of India
International Association of Advanced Materials

Indian Physics Association
Life Member, Nuclear Track Society of India

7. *Office Bearer*

President, Luminescence Society of India (Delhi Chapter)
President, International Association of Advanced Materials (South Asian Chapter)
Member, Executive Body, Nuclear Track Society of India

Other Activities

Social work.

--- P D Sahare

Representative list of Publications in Journal (last Five year):

1. Optical Studies of Fluorescent Mesoporous Silica Nanoparticles, Surbhi Kumari, **P. D. Sahare**, *J. Mater. Sci. Technol., 29 (2013) 742*.
2. Gas sensing behavior of Fluorescein sodium impregnated MCM-41 for Sulphur dioxide, Surbhi Kumari, **P. D. Sahare**, *Sensor lett. 11 (2013) 526, doi:10.1166/sl.2013.2830.*
3. Nd doped ZnO as a multifunctional material, Surender Kumar and **P. D. Sahare**, J. Rare Earths, 30 (2012) 761, DOI: 10.1016/S1002-0721(12)60126-4
4. Effects of annealing on the surface defects of zinc oxide nanoparticles, Surender Kumar and **P. D. Sahare**, Nano, 7 (2012) 1250022, DOI: 10.1142/S1793292012500221
5. Thermoluminescence and Photoluminescence properties of K2Ca2(SO4)3: Cu nanophosphor for gamma radiation dosimetry, N.T. Mandlik, J.S. Bakare, **P.D. Sahare**, V.N. Bhoraskar, S.D. Dhole, Ind. J. Phys. Appl. Phys., 50 (2012) 859.
6. Fluorescence quenching of laser grade dye coumarin 440 in presence of hydrogen peroxide, A. Pattanaik, **P.D. Sahare**, G. Rani, Ind. J. Phys. 2011, 85, 1775, DOI: 10.1007/s12648-011-0194-4.
7. A new approach to produce single and double layer graphene from re-exfoliation of expanded graphite, S.R. Dhakate, N. Chauhan, S. Sharma, J. Tawale, S. Singh, **P.D. Sahare**, R.B. Mathur, Carbon, 2011, 49, 1946-1954.
8. High Energy Radiations Dosimetry in the Space, **P. D. Sahare**, Editorial, J. Astrophys Arospace Technol 1 (2012) 1-2
9. Preparation and characterization of short length ZnO nanorods and ZnO@ZnS core–shell nanostructures, Geeta Rani, **P.D. Sahare**, *Nano Commun. Netw. 3 (2012) 197, doi: 10.1016/j.nancom.2012.09.003*
10. Elucidation of Mg^{2+} binding activity of adenylate kinase from Mycobacterium tuberculosis H37Rv using fluorescence studies, Laxman S. Meena, Sanjay R. Dhakate, and **P.D. Sahare**, Biotechnol Appl Biochem *Biotechnol Appl Biochem, 59 (2012) 429, DOI: 10.1002/bab.1043.*
11. Effect of phase transition and particle size on thermoluminescence characteristics of nanocrystalline K2Ca2(SO4)3:Cu^{+} phosphor, **P.D. Sahare**, J.S. Bakare, S.D. Dhole, Pratik Kumar, Radiat. Measur. 47 (2012) 1083
12. Observation of band gap and surface defects of ZnO nanoparticles synthesized via hydrothermal route at different reaction temperature, Surender Kumar, **P.D. Sahare**, Opt. Commun. 285 (2012) 5210 DOI: 10.1016/j.optcom.2012.07.125
13. Redox reactions in Cu-activated nanocrystalline LiF TLD phosphor, Manveer Singh, **P.D. Sahare**, NIM B, 289 (2012) 59, DOI: 10.1016/j.nimb.2012.08.003
14. Novel Nanostructured Zinc Oxide Ammonia Gas Sensor, Surbhi Kumari, **P.D. Sahare**, Meenakshi Gupta, and J. C. Kapoor, AIP Conf. proc., 1393,219 (2011).
15. Sensitization Of Mesoporous Silica Nanoparticles (MSNs) By Laser Grade Dye Acriflavin, Surbhi Kumari, **P. D. Sahare**, Meenakshi Gupta, DOI: 10.5185amlett.2012.icnano.172.
16. Photoluminescence Study of Laser Grade POPOP Dye Incorporated into MCM-41, Surbhi Kumari, **P.D. Sahare**, Adv. Porous Mater., American Scientific Publishers, 1 (2012) 1.

17. Photoluminescence of Cu doped sponge-like porous ZnO nanoparticles synthesized via chemical route, Vipin Kumar and **P. D. Sahare**, AIP Conf. Proc. 1393, 2011, pp. 63-64; doi:http://dx.doi.org/10.1063/1.3653610.
18. Novel nanostructured zinc oxide ammonia gas sensor, Surbhi Kumari and **P. D. Sahare**, AIP Conf. Proc. 1393, 2011, pp. 219-220; doi:http://dx.doi.org/10.1063/1.3653688.
19. Synthesis and Luminescent Properties of Li-doped ZnS Nanostructures by Chemical Precipitation Method, Geeta Rani and **P. D. Sahare**, AIP Conf. Proc., 2011, 1393, pp. 253.
20. Effect of Surface Defects on Green Luminescence from ZnO Nanoparticles, Surender Kumar & **P. D. Sahare**, AIP Conf. Proc. 1393, 159 (2011); doi: 10.1063/1.3653658.
21. Synthesis and Luminescence Properties of Nanocrystalline LiF:Mg,Cu,P Phosphor, **P.D. Sahare**, J.S. Bakare, S.D. Dhole, N.B. Ingale, A.A. Rupasov J. Lum. 130 (2010) 258
22. Nanocrystalline MgB_4O_7: Dy for high dose measurement of gamma radiation, S P Lochab, A Pandey, **P D Sahare**, R S Chauhan, Numan Salah, Ranju Ranjan, phys. stat. solidi (a), 2007, 204, 2416.
23. Effect of high-energy $^7Li^{2+}$ ions on the TL behavior of LiF: Mg,Cu,P detectors, Numan Salah, S P Lochab, D Kanjilal, **P D Sahare** and V E Aleynikov, Radiat. Measur., 2007, 42, 1294.
24. TL and PL in $BaSr(SO_4)_2$:Eu mixed sulphate, Numan Salah, **P D Sahare**, Pratik Kumar, phys. stat. solidi (a), 2006, 203, 898.
25. $K_3Na(SO_4)_2$:Eu nanoparticles for high dose of ionizing radiation, **P D Sahare**, Ranju Ranjan, Numan Salah and S P Lochab, J. Phys. D: Appl. Phys., 2007, 40, 759.
26. The influence of high-energy ^7Li ions on the TL response and glow curve structure of nanocrystalline $CaSO_4$:Dy, Numan Salah and **P D Sahare,** J. Phys. D: Appl. Phys., 2006, 39, 2684.
27. Thermoluminescence and photoluminescence characteristics of nanocrystalline $LiNaSO_4$:Eu phosphor, A Pandey, **P D Sahare**, J S Bakare, S P Lochab, F Singh and D Kanjilal, J. Phys. D: Appl. Phys., 2003, 36, 2400.
28. Thermoluminescence and photoluminescence study of $Ba_{0.97}Ca_{0.03}SO_4$: Eu**,** S P Lochab, **P D Sahare**, R S Chauhan, Numan Salah and A Pandey, J. Phys. D: Appl. Phys., 2006, 39, 1786.
29. Thermoluminescence and photoluminescence study of nanocrystalline Ba0.97Ca0.03SO4 : Eu, S P Lochab, **P D Sahare**, R S Chauhan, Numan Salah, Ranju Ranjan and A Pandey, J. Phys. D: Appl. Phys., 2007, 40 1343.
30. Thermoluminescence and photoluminescence of $LiNaSO_4$:Eu irradiated with 24 and 48MeV ^7Li ion beam, Numan Salah, **P D Sahare**, Awadhesh Prasad, J. Lum., 2006, 121, 497
31. Thermoluminescence of $Ba_{0.97}Ca_{0.03}SO_4$:Eu irradiated with 48 MeV ^7Li ion beam, S P Lochab, Numan Salah, **P D Sahare**, R S Chauhan and Ranju Ranjan, NIMB, 2007, 254, 231.
32. Thermoluminescence of nanocrystalline LiF:Mg, Cu, P, Numan Salah, **P D Sahare**, A A Rupasov, J. Lum., 2007, 124, 357
33. TL and PL studies on CaSO4: Dy nanoparticles, Numan Salah, **P D Sahare**, S P Lochab, Pratik Kumar, Radiat. Measur., 2006, 41, 40
34. TL, PL and energy transfer in $K_2Ca_2(SO_4)_3$: Eu^{2+}, Ce^{3+}, Numan Salah and **P D Sahare**, Radiat. Measur., 2006, 41, 665.
35. A novel optical sensor for ammonia using a laser grade dye—Stilbene 3, **P D Sahare** and A. Pattanaik, J. Phys. D: Appl. Phys., 2007, 40, 7166
36. Fluorescence quenching of 3-methyl 7-hydroxyl Coumarin in presence of acetone, Vijay Kumar Sharma, D. Mohan and **P D Sahare**, Spectrochim. Acta: A, 2007, 66, 111.
37. Energy transfer studies in binary dye solution mixtures: Acriflavine + Rhodamine 6G and Acriflavine + Rhodamine B, **P D Sahare**, Vijay K. Sharma, D. Mohan and A.A. Rupasov, Spectrochimica Acta: A, doi:10.1016/j.saa.2007.07.003, available online from 10 July 2007.
38. Optical and magnetic properties of Cu-doped ZnO nanoparticles, **PD Sahare**, Vipin Kumar, Int. J. Innov. Tech. 3, 2013, 2278-3075.
39. Photocatalytic activity of bismuth vanadate for the degradation of organic compounds Surender Kumar, **PD Sahare**, Nano 8(1), 2017, 1350007.
40. $NaLi_2PO_4:Eu^{3+}$ based novel luminescent red phosphor, **PD Sahare**,; M Singh,; Indian Journal of Physics 88(6), 2016, 621-630
41. Synthesis and dosimetry characteristics of a new high sensitivity TLD phosphor $NaLi_2PO_4:Eu^{3+}$, Manveer Singh, **PD Sahare**, Pratik Kumar, Radiation Measurements 59 2016

42. Study of TL and optically stimulated luminescence of K2Ca2(SO4)3:Cu nanophosphor for radiation dosimetry N Mandlik, **PD Sahare**, MS Kulkarni, BC Bhatt, VN Bhoraskar, SD Dhole, J. Lum. 146, 2016, 128-132
43. TL characteristics of Ce^{3+}-doped $NaLi_2PO_4$ TLD phosphor, **PD Sahare**, Manveer Singh, Pratik Kumar, J. Radioanal. Nucl. Chem. 302(1), 517-525, 2016
44. Synthesis and TL characteristics of MgB_4O_7:Mn,Tb phosphor, **PD Sahare**, Manveer Singh, Pratik Kumar, J. Lum. 160, 2015, 158-164
45. A new high sensitivity $NaLi_2PO_4$:Eu OSL phosphor, **PD Sahare**, Manveer Singh, Pratik Kumar, RSC Advances 5(5) 2015 3474-3481.
46. Optical studies of fluorescent mesoporous silica nanoparticles, Surbhi Kumari, **PD Sahare**, J. Mater. Sci. Technol. 29(8) 742-746 2015
47. Optically stimulated luminescence (OSL) response of Al_2O_3:C, BaFCl:Eu and $K_2Ca_2(SO_4)_3$:Eu phosphors, Pratik Kumar, Shaila Bahl, **PD Sahare**, Surender Kumar, Manveer Singh, Radiat. prot. dosim. 167(4), 453-460, 2015.
48. Thermoluminescence study of $K_2Ca_2(SO_4)_3$:Cu nanophosphor for gamma ray dosimetry Nandkumar Mandlik, **PD Sahare**, BJ Patil, VN Bhoraskar, SD Dhole, Nucl. Instr. Meth. Phys. B 315, 2015, 273-277.
49. Lyoluminescence dosimetry of high-energy γ radiation using $MgB_4O_7:Mn^{2+}$, **PD Sahare**, SK Srivastava, J. Radioanal. Nucl. Chem. 307(1), 2014, 31-36.
50. Dosimetry characteristics of $NaLi_2PO_4:Ce^{3+}$ OSLD phosphor, **PD Sahare**, Neyaz Ali, NS Rawat, Shaila Bahl, Pratik Kumar, J. Lum. 174, 22-28, 2014.
51. Thermoluminescence of nanocrystalline $CaSO_4$:Dy for gamma dosimetry and calculation of trapping parameters using deconvolution method, Nandkumar Mandlik, BJ Patil, VN Bhoraskar, **PD Sahare**, SD Dhole, AIP Conference Proceedings, 1591(1), 2014, 369-371.
52. Effect of annealing and impurity concentration on the TL characteristics of nanocrystalline Mn-doped CaF_2, **PD Sahare**, Manveer Singh, Pratik Kumar, Radiat. Measur. 80 2014 29-37
53. Effect of particle size on the thermoluminescence properties of $Ba_{0.97}Ca_{0.03}SO_4$:Cu, Renuka Bokolia, **PD Sahare**, AIP Conference Proceedings, 1512(1) 2014 446-447.
54. Gas Sensing Behavior of Fluorescein Sodium Impregnated MCM-41 for Sulphur Dioxide, Surbhi Kumari, **PD Sahare**, Sensor Lett. 11(3) 2014 526-530.
55. Thermoluminescence studies of gamma-irradiated Y_2O_3:Eu nanophosphor, NR Jha, RK Kuraria, SR Kuraria, **PD Sahare**, Proceedings of the DAE-BRNS symposium on Nuclear and Radiochemistry, 2014.
56. Effect of pH on lyoluminescence of $K_3Na(SO_4)_2:Eu^{3+}$ phosphor for its application in dosimetry of high-energy radiations, **PD Sahare**, Martina Saran, J. Lum. 179, 2014, 254-259.
57. Radiation Induced Abnormal Reduction of Eu^{3+} and Luminescence Properties of $NaLi_2PO_4$:Eu, Manveer Singh, **PD Sahare**, Pratik Kumar, Shaila Bahl, J. Lum. Appl. 3, 2014, 1
58. Photoluminescence Study of Laser Grade POPOP Dye Incorporated into MCM-41, Surbhi Kumari, **PD Sahare**, Advanced Porous Materials, 1(1), 2014, 114-121.
59. PL/TL characterizations of $Ba_{0.12}Sr_{0.88}SO_4:Eu^{2+}$ mixed sulphate high sensitive nanophosphor using γ-ray as irradiation source for dosimetric application Vipin Kumar, **PD Sahare**, Proceedings of the international conference on nanoscience and nanotechnology, 2014.
60. Study of dosimetric characteristics of nanocrystalline Al_2O_3:C synthesized by thermal plasma reactor, Nandkumar Mandlik, Vijay Varma, VN Bhoraskar, VL Mathe, SV Bhoraskar, SD Dhole, MS Kulkarni, BC Bhatt, **PD Sahare**, Proceedings of the thirty first IARP national conference on advances in radiation measurement systems and techniques, 2013.
61. Thermoluminescence characteristic and phase transition of $K_2Ca_2(SO_4)_3$:Eu nanophosphor at different annealing temperatures, Nandkumar Mandlik, SS Dahiwale, BJ Patil, MS Bhadane, VN Bhoraskar, SD Dhole, **PD Sahare**, Proceedings of the thirty first IARP national conference on advances in radiation measurement systems and techniques, 2013
62. Photoluminescence studies of stilbene laser dye incorporated mesoporous silica nanoparticle (MSN) with sulphur dioxide, Surbhi Kumari, **PD Sahare**, Journal of Porous Materials, 21(1) 2013 45-52.
63. Synthesis of α-$Bi_4V_2O_{11}$ and its Sonocatalytic Activity for the Degradation of Rhodamine B, Surender Kumar, **PD Sahare**, Journal of Luminescence, 1(2) 2013 73-86.

64. Effect of phase transitions on thermoluminescence characteristics of nanocrystalline alumina, Geeta Rani, **PD Sahare**, Nucl. Instr. Meth. Phys. B, 311, 2013, 71-77.
65. Structural and spectroscopic characterizations of ZnO quantum dots annealed at different temperatures, Geeta Rani, **PD Sahare**, J. Mater. Sci. Technol. 29(11) 2013 1035-1039
66. Structural and photoluminescent properties of $Al_2O_3:Cr^{3+}$ nanoparticles via solution combustion synthesis method, Geeta Rani, **PD Sahare**, Adv. Powder Technol. 25(2) 2013 767-772.
67. Spectroscopy of nickel-doped zinc sulfide nanoparticles, Geeta Rani, **PD Sahare**, Spectro. Lett. 46(6) 2013 391-396.
68. Effect of temperature on structural and optical properties of boehmite nanostructure, Geeta Rani, **PD Sahare**, Int. J. Appl. Cer. Technol. 12(1) 2013 124-132
69. Study of the structural and morphological changes during the phase transition of ZnS to ZnO, Geeta Rani, **PD Sahare**, Appl. Phys. A, 116(2) 2013 831-837.
70. Interaction of Nanoparticles in Biological Systems and their Role in Therapeutical Treatment of Tuberculosis and Cancer, Jaishree Meena, Mohit Singh, **PD Sahare**, LS Meena, J. Lum. Appl. 1, 2013, 1
71. Thermoluminescence studies of $CaSO_4$:Eu nanophosphor for electron dosimetry, NT Mandlik, VN Bhoraskar, BJ Patil, **PD Sahare**, SD Dhole, SS Dahiwale, Indian J. Pure Appl. Phys. (IJPAP), 55(6) 2013 413-419
72. Thermoluminescence studies of CaSO4: Eu nanophosphor for electron dosimetry, Nandkumar Mandlik, Vasant Bhoraskar, BJ Patil, Shailendra Dahiwale, PD Sahare SD Dhole, Indian J. Pure Appl. Phys. 55(6) 2017 413-419

(P D Sahare)
Professor
Department of Physics & Astrophysics
University of Delhi, Delhi – 110 007