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Curriculum Vitae of Professor (Dr.) K. P. Singh

Full Name	:	K. P. Singh (Karn Pal Singh)
Date of Birth	:	January 15, 1952
Place of Birth	:	Kailora (Hathras, UP)
Nationality	:	Indian
Present Position/designation	:	Professor
Address for Correspondence	:	Department of Physics Centre of Advance Study in Physics Panjab University, Chandigarh-160014, India
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Educational Qualifications

• Ph.D.	Awarded	Panjab University	1984
• Swedish Dipl.	Awarded	Uppsala University, Sweden	1981
• M.Sc.	First division	Agra University	1975
• B.Sc.	First division	Agra University	1973
• Intermediate	First division	UP Board	1971
• High School	First division	UP Board	1969

Employment

- Professor (re-employed), Panjab University, w.e.f. February 02, 2012 onwards
- Professor, Panjab University, Chandigarh, India, November 2006 – January 31, 2012
- Reader in Physics, Panjab University, Chandigarh, November 1994 – November 2006.
- Senior Lecturer in Physics, DAV College, Sector-10, Chandigarh, August 1986 – Nov. 1994
- Lecturer in Physics, Govt. College for Men, Sector-11, Chandigarh, Sept. 1983 - July 1986.
- Senior Research Fellow (DAE), Panjab University, Chandigarh, Oct. 1981 – Sept. 1983
- Visiting Scientist, Uppsala University, Uppsala, Sweden August 1980 – September 1981
- JRF/Senior Research Fellow (UGC) at Panjab University, Chandigarh, Oct. 1976 – Aug. 1980

Various Responsibilities/Positions held

- Incharge, Cyclotron Accelerator Laboratory (up to 2012), Panjab University.
- Convener, Post Graduate Academic Program Monitoring and Executive Committee (PGAPMEC) for Physics, Panjab University (2010 to 2012)
- Convener, National Theme Workshop on Nuclear Reaction Mechanism, March 17-19, 2010, Panjab University, Chandigarh.
- Coordinator, UGC-NET examination June 2009, Panjab University, Chandigarh.
- Executive Member - Indian Physics Association (IPA), National Body (2008-10)
- Vice President - Indian Physics Association (IPA), National Body (2003-05 & 2005-07)
- Treasurer, Indian Physics Association (IPA), Chandigarh Chapter (2002 – 2003).
- Secretary, Workshop on Regional PIXE Facility, Sept. 17, 1999, Chandigarh
- Secretary, Indian Physics Association (IPA), Chandigarh Chapter (1999-2001).
- Teacher Incharge, Under Graduate Board of Studies in Physics, Panjab University (1995- 2010).
- Member of the committee to prepare common syllabi for the Universities in the state of Punjab and Panjab University, Chandigarh.
- Member, Board of Control in Physics, Panjab University (1995 - 2010)
- Member, Technical Committee, Physics, Panjab University (1995, 2000, 2004,05,06, 2010,11).
- Member, Academic Committee, Physics, Panjab University (1998 & 2002, 2006-08).
- Member, Administrative Committee, Physics, Panjab University (1999, 2003, 2009, 2011).
- Secretary Academic Committee (1998), Secretary Technical Committee (2000, 2005)
- President of Lawn Tennis Club, DAV College, Chandigarh (January 1992- June 1994)
- Member of Purchase Committee, DAV College, Chandigarh (July 1992- November 1994)

Member of Local Organizing Committees for International & National Conferences

- Member, National Advisory Committee on "4th DAE-BRNS Theme Meeting on XFOR Compilation of Nuclear Data" April 4-8, 2011, Chandigarh
- Member of organizing committee for International Conf. on Advances in Condensed and Nanomaterials, Feb. 23–26, 2011, Chandigarh
- Diamond Jubilee National Seminar on "Advances in Physics", Feb. 28 – Mar 01, 2008, Chandigarh
- XV Annual Convention of Indian Association of Physics Teachers, Nov. 2-4, 2000, Chandigarh
- Workshop on 8 UD Pelletron at Panjab University, June 14-16, 2000.
- DAE-BRNS Symposium on Nuclear Physics at Chandigarh, December 27-31, 1999.
- 5th National Workshop on Nuclear Structure Physics at Chandigarh, March 17-20, 1998.
- User's workshop on Accelerator based Mass Spectrometry (AMS) at Chandigarh, Jan. 16-19, 1997.
- User's workshop on direct reactions at VEC Energies, Panjab University, January 19-21, 1995.

Academic Expert at Other Universities

- External expert member of Post Graduate Board of Studies in Applied Physics, Guru Jambheshwar University of Science & Technology w.e.f. March 2013.
- External expert member of Under Graduate Board of Studies in Physics, Kurukshetra University, Kurukshetra w.e.f. 15.03.2012.
- Outside expert for the faculty of Science & Technology Interface, Guru Jambheshwar University of Science & Technology, Hisar - 2010-12.

Resource Person/Invited Lecturers

- Invited talk on "Coulomb Excitation Studies at Panjab University" in "Indo-UK Seminar in Nuclear Physics at ISOLDE", January 22-24, 2014, Chandigarh
- Invited lecture on "Coulomb Excitation Studies using Chandigarh Cyclotron" in regional meeting on low-energy accelerator Physics, Chandigarh (Nov. 7, 2013).
- Invited general lecture on "Applications of Variable Energy Cyclotron at Panjab University" on June 14, 2013 at NIT Jullundur during STC for technical teachers.
- Invited lecture on "Chandigarh Cyclotron and its applications" on May 29, 2013 during UGC Refresher Course on Research methodology in Science & Technology at UIET, PU Chandigarh.
- Invited lectures in Short Term Courses at National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh on the following topics during last several years:
  (i) Nuclear Energy and Power options on January 12, 2015
  (ii) Nuclear techniques and Instrumentation on March 04, 2015
  (iii) Radiations from Accelerators on August 26, 2014
  (iv) Scientific and Industrial uses of Nuclear Radiations, August 29, 2014
  (v) Detectors for Nuclear Radiations on October 22, 2013
  (vi) Accelerators & Accelerator based Nuclear techniques on October 23, 2013
  (vii) Scientific and Industrial applications of radiations on August 31, 2012
  (viii) Transmutation and radiations from accelerators on August 29, 2012.
  (ix) Energy from Accelerators on February 23, 2012, February 11, 2010, November 2008.
  (x) Radioisotopes from accelerators on September 13, 2011.
  (xi) Radio-isotopes from Reactors and Accelerators on October 19-23, 2009.
  (xii) Nuclear Radiations & Their Applications on May 2008.
- Invited lectures on "Course on upgradation of Physics Teachers" held at National Institute of Navodaya Vidyalaya, Chandigarh, November 2002 and October 2003.
- Invited lectures in "Refresher Course in Physics", Panjab University (2002, 2001, 1999, 1995).
- Invited lecture on "Coulomb Excitation by Protons and Heavy Ions" in Regional Conference on Nuclear Physics and Chandigarh VEC (1982 Chandigarh).

Places Visited Abroad

- Visiting Scientist, Uppsala University, Uppsala, Sweden, Sept. 1980 – Aug. 1981.
- Guest Visitor, KVI, Groningen, Netherlands, Sept. 01 – 03, 1981
- Guest Visitor, GSI, Germany, September 04 – 06, 1981.
- University of Birmingham, UK, September 07 – 21, 1981
- Institute of Nuclear Physics, Jülich, Germany, 1993 (two weeks).
- Heavy Ion Laboratory, University of Warsaw, Warsaw, Poland, Dec 06 – 16, 2000, Nov.27-Dec.06, 2001 and Oct. 15-28, 2002 under research project collaboration.

Professional Societies/Associations Membership

- Life Member, Indian Physics Association (IPA)
- Life members of Indian Society of Particle Accelerators (ISPA)
- Life Member, Indian Association of Physics Teachers (IAPT)

Scholarships Held

- Merit scholarships in 1969-71, 1971-73 and 1973-75 during intermediate, B.Sc. and M.Sc. courses.

Teaching experience:

Post graduate teaching for more than 20 years and under graduate teaching for more than 30 years

Courses taught/teaching

- Post M.Sc. Course in Accelerator Physics (Beam Dynamics & Analytical Techniques)
- Nuclear Physics theory and Nuclear Technique to Post graduate classes.
- Laboratory courses to post graduate and undergraduate classes.
- Physics to Post graduate classes of Environmental Sciences.
- Modern Physics, Waves & Oscillations, Optics & Electromagnetic theory, Modern Physics, Mechanics and Nuclear physics courses to undergraduate classes at Panjab University.
- Various courses of Physics theory and practicals at undergraduate level in colleges (1983-1994).
- Taught PG and UG classes as research fellow during the sessions of 1978-79, 1979-80 and 1981-82.

Field of Research: Experimental Nuclear Physics, Proton Induced X-ray Emission (PIXE), Proton Induced Gamma-ray Emission (PIGE), also conducted several experiments on materials modification by proton irradiation.

Research Experience and Current Activities

- Proton Induced X-ray & Gamma-ray Emission techniques for trace elemental analysis.
- Coulomb Excitation Studies using Proton and H.I. beams
- Lifetime measurements by proton induced reactions using Chandigarh Cyclotron
- Lifetime measurement by RDM/DSAM techniques at IUAC, New Delhi.
- Modifications of mechanical, thermal and electrical properties of polymers, and optical properties of amorphous semi-conductors in collaboration with other universities/research groups.

Research Projects handled/in hand

As Principal Investigator:

- Elemental Analysis of coal and fly ash from coal fired thermal power plants using PIXE and PIGE techniques; Funded by DAE-BRNS (April 2015 onwards)
- Radiation Detector Fabrication Laboratory for Nuclear Physics and High Energy Physics Groups; Funding from DST PURSE grant (2010-2013).
- Trace Element Analysis by Proton Induced X-ray Emission (PIXE) Technique at Chandigarh Cyclotron; Funding from DST, New Delhi (2007- 2011)
- Study of Shape Coexistence in Atomic Nuclei, funded by CSIR New Delhi, (2006-09)
- Trace Elements Analysis Using Proton Induced X-ray Emission (PIXE) Technique; Funding from IAEA, Vienna. (2003-2004).
- Nuclear Spectroscopy via Coulomb Excitation; Nuclear Science Centre, New Delhi **(**2001- 2004).
- Electromagnetic Structure of Atomic Nuclei; collaborative research project funded jointly by DST, Govt. of India and KBN, Poland (2000-2003).
- Nuclear Spectroscopy through Coulomb Excitation Technique, UGC (1998-01)
- Coulomb Excitation Studies of nuclei with low-energy Alpha", IUC-DAEF, Kolkata (1997-2001).

As Co-principal Investigator:

- Lifetime Measurements in Ce isotopes using Recoil Distance Method, IUAC, New Delhi (2006-10)
- Systematics of Heavy-Ion Fusion Dynamics – a Theoretical Study, DAE-BRNS, Mumbai (2006-2009)
- Regional Facility for X-Ray Spectrometry at Variable Energy Cyclotron Chandigarh, Department of Science & Technology, (2001-2005)

Ph.D. Thesis supervised/supervising

- Tayeb Kakavand — Thesis title "Study of Nuclear levels Structure Using Charged particle Reactions through Gamma-Ray Studies" (1999).
- Mahdi Hajivaliei — Thesis title "X-Ray Emission Cross Section and Trace Element Analysis Using Proton Induced X-Ray Emission (PIXE) Technique" (1999).
- Prem Singh — Thesis title "Study of Photon atom Interaction and Subsequent Processes in the X-Ray Energy Region" (2004)
- Mumtaz Oswal - Thesis title "Investigation of Ion-atom Collision Processes through X-ray emission and Analytical Applications using X-ray Emission Technique" (2012).
- Isha Gowri, working since 2014 (joint with Prof. S K Tripathi)
- Shashank Singh, working from December 2015.

M.Sc. Projects Supervised on the following topics

- Particle Induced X-ray Emission Study of some Medicinal Plants (2014)
- Elemental Analysis of two Medicinal plants Using Proton Induced X-ray Emission Technique (2013).
- Trace Elements Analysis of water samples using PIXE technique (2011).
- Trace Element Analysis of Soil Samples Using PIXE Technique (2007).
- Study of the characteristics of hyper purity germanium detector (2003).
- Efficiency of Hyper Pure Germanium Detector (2002).

External Examiner

- Evaluated/examined the Ph.D., M.Phil, and M.Sc. thesis/dissertation for various students of Aligarh Muslim University(Aligarh), G.B. Pant University of Agriculture & Technology (Pantnagar), Dr. B. R. Ambedkar University (Agra), National Institute of Technology (Jalandhar), Thapar University (Patiala), Chhatrapati Shahu Ji Maharaj University (Kanpur), Rohilkhand University (Bareilly), Calicut University (Kerala) and Central University of Punjab (Bhatinda).

Conferences/Symposia/Workshops attended

International:

- Indo-UK Seminar in Nuclear Physics at ISOLDE, January 22-24, 2014, Chandigarh (India).
- International Conferences of Advances in Condensed and nanomaterials, Feb. 23-26, 2011, Panjab University, Chandigarh (India).
- International Symposium on Nuclear Physics, Dec. 08-12, 2009, BARC Mumbai (India).
- International Symposium on Nuclear Physics at BARC, Bombay (India), December 18-22, 1995.
- International Symposium on the Perspectives in Nuclear Physics at Madras (India), January 19 - 23, 1987.

National/Regional:

- 4th DAE-BRNS Theme Meeting on EXFOR Compilation of Nuclear data, April 4-8, 2011, Chandigarh
- Contemporary Trends in Nuclear Physics, Oct. 20-21, 2010, AMU, Aligarh.
- National Theme Workshop on Nuclear Reaction Mechanism, March 17-19, 2010, Chandigarh.
- Chandigarh Science Congress (February 26-27, 2009; March 14-15, 2008; March 11-12, 2007)
- DAE-BRNS Nuclear Physics Symposia (IIT Roorkee Dec. 22-26, 2008; Sambalpur Dec. 2007; Mumbai Dec. 2005, Dec. 2004; Mumbai Dec. 2003; Chandigarh Dec. 1999; Pantnagar Dec. 1996; Madras, Dec. 1979; Pune Dec. 1977)
- Diamond Jubilee National Seminar on "Advances in Physics", Feb.28–Mar.01, 2008, Chandigarh
- Workshop on "Nuclear Physics with LINAC beams", Sept. 14-15, 2006, IUAC, New Delhi
- 91st Indian Science Congress, January 2004, Chandigarh

- Workshop on Radiation Detectors, March 14, 2003, NSC, New Delhi.
- National Conference on Recent Developments in Disordered Materials, March 15-16, 2001, Chandigarh
- XV Annual Convention of IAPT, November 2-4, 2000, Chandigarh.
- Workshop on 8 UD Pelletron at Panjab University, Chandigarh, June 16-17, 2000.
- Workshop on "Regional PIXE Facility" at Panjab University, Chandigarh, Sept. 17, 1999
- National Workshop on Nuclear Structure Physics at Panjab University, March 17-20, 1998.
- Users' Workshop on Accelerator Based Mass Spectrometry, Panjab Univ., Chandigarh, 1997
- Workshop on Accelerator Technology at Nuclear Science Centre, Delhi, April 22-24, 1996.
- National Workshop on Direct Reactions at VEC energies, Chandigarh, Jan.19-21, 1995.
- IPA workshop cum seminar on Nuclear Instrumentation for HI laboratories, Bombay, 1986.
- Regional Conf. on Nuclear Physics and Chandigarh Variable Energy Cyclotron, Chandigarh, 1982.

Long Term Courses attended

- International Programme on Physical Sciences for Research & Education, Uppsala University, Sweden, Sept.01, 1980- August 31, 1981.
- Post graduate Summer School on Nuclear Physics at University of Manchester, UK, Sept. 7 - 21, 1981.
- Orientation Course at Panjab University, Chandigarh, March 19- April 15, 1987.

Research Activities:

Cyclotron Laboratory Upgradation:

Since initial stages (w.e.f. 1975), I have been associated with the upgradation and maintenance of Cyclotron Accelerator Laboratory at Panjab University. Several test experiments were conducted by me to establish the experimental capabilities of the accelerator and the facilities for experiments. Coulomb Excitation technique for Nuclear level studies was developed by me at Chandigarh Cyclotron. I completed my Ph.D. on Coulomb Excitation Technique using proton beam from this accelerator. I am associated to this Cyclotron which is the oldest working accelerator in the world.

PIXE and PIGE techniques for elemental analysis:

We are using proton beam of 3 MeV for elemental analysis by PIXE and PIGE techniques. We are working on aerosol, water, soil, archaeological, bio-medical samples. Some samples are also prepared from medicinal plants for PIXE/PIGE analysis. PIGE facility is being used for the detection of light elements such as Li, B, F, Na. Mg, Al, Si and P for which PIXE technique is not suitable. The main thrust of this program is on the elemental analysis of Boron in biological samples, Fluoride in water samples, detection of Al and Si in aerosol samples. We are also using 3 MV Tendetron Accelerator at CCCM, Hyderabad for PIXE experiments.

Modification of polymers and polymer composites by ion beam irradiation

We are also using effect of 3 MeV proton beam irradiation on different kind of polymers. These samples were characterized by different techniques to study the dielectric, mechanical-hardness, thermal, optical structural properties. Several research papers are published from this work.

This work is being done in collaboration with M S University of Baroda, Vadodara.

Coulomb Excitation

Proton induced Coulomb Excitation technique has been used by us for several nuclei in the medium and low mass nuclei. Several nuclei in the low mass, medium mass and rare earth regions have been studied using our low energy Cyclotron. We are also working to have a charged particle detector (position sensitive) for particle-gamma coincidence experiments with heavy ion beams.

Experiments with 15 UD Pelletron at IUAC New Delhi:

Experiments are also being conducted by our Cyclotron group at 15 UD pelletron at IUAC, New Delhi. I am participating in these experiments on nuclear fission and fusion as well as gamma-ray spectroscopy under various projects of our group members. Some experiments on X-ray measurements are conducted at IUAC.

Charged Particle Detectors Fabrication laboratory

We are establishing a charged particle fabrication laboratory in our Cyclotron laboratory. This laboratory will be established under DST PURSE grant. Some of the equipments are already purchased in the first year and rest will be procured in the coming years. Our plan is to first start fabrication of gas detectors for use at IUAC experiments.

Publications of Professor (Dr.) K. P. Singh

Journals:

1. *Radioisotope production facility at Chandigarh VEC;* V.K. Mittal, Gulzar Singh, **K. P. Singh**, D.K. Avasthi, K.C. Jain, S.R. Bahadur, T.S. Cheema, I.M. Govil and H. S. Hans: **Indian Journal of Physics A58, 257 (1984).**

2. *Coulomb excitation of ^{165}Ho*; **K. P. Singh**, D.C. Tayal, Gulzar Singh and H. S. Hans: **Physical Review C31, 1726 (1985).**

3. *Coulomb excitation of ^{133}Cs with protons*; **K. P. Singh,** D.C. Tayal, B.K. Arora, T.S. Cheema and H. S. Hans : **Canadian J. Phys. 63, 483 (1985)**

4. *Coulomb excitation of bromine isotopes with protons*; **K. P. Singh**, D.K. Avasthi, I.M. Govil and H. S. Hans: **Acta Physica Polonica B16, 79 (1985).**

5. *Coulomb excitation of cadmium isotopes with protons*; **K. P. Singh**, D.C. Tayal, Gulzar Singh and H. S. Hans: **Physical Review C31, 79 (1985).**

6. *Coulomb excitation of ^{105}Pd with protons;* D.C. Tayal, **K. P. Singh**, V.K. Mittal, Gulzar Singh and H. S. Hans: **Physical Review C32, 1882 (1985).**

7. *Coulomb excitation of ^{157}Gd;* D.C. Tayal, **K. P. Singh** and H. S. Hans: **Physical Review C33, 368 (1986).**

8. *Coulomb excitation of ^{61}Ni with protons;* D.C. Tayal, C. Singh, **K. P. Singh** and H. S. Hans: **Bull. Am. Phys. Soc. 31, 1303 (1986).**

9. *Low-lying levels in ^{45}Sc;* D.C. Tayal, **K. P. Singh** and H. S. Hans: **Physical Review C34, 1262 (1986).**

10. *Coulomb excitation of Cu and Zn isotopes;* D.C. Tayal, C. Singh, **K. P. Singh** and H. S. Hans: **Bull. Am Phys. Soc. 31, 1303 (1986).**

11. *Level studies in $^{107,109}Ag$ from Coulomb excitation;* **K. P. Singh**, D.C. Tayal, D.K. Avasthi, V.K. Mittal, I.M. Govil and H. S. Hans: **Acta Phys. Slov. 37, 316 (1987).**

12. *Low-lying levels in ^{103}Rh from coulomb excitation*; D.C. Tayal**, K. P. Singh** and H. S. Hans: **Czech Journal of Phys. B38, 1122 (1988).**

13. *Coulomb excitation of low-lying levels in ^{127}I and ^{197}Au;* **K. P. Singh**, D.C. Tayal and H. S. Hans: **Acta Phys. Slov. 38, 13 (1988).**

14. *Coulomb excitation studies in antimony isotopes;* K.C. Jain, **K.P.Singh**, G. Singh, S.S. Datta and I.M. Govil: **Bull. Am. Phys. Soc. 33, No.8, 1781 (1988).**

15. *Coulomb excitation studies of antimony isotopes*; K.C. Jain, **K. P. Singh**, Gulzar Singh, S.S. Datta and I.M. Govil: **Physical Review C40, 2400 (1989).**

16. *Angular distributions in ^{109}Cd;* **K. P. Singh**, D.K. Avasthi and I.M. Govil: **Physical Review C45, 2498 (1992).**

17. *Angular momentum induced deformation of ^{55}Co at 84 MeV excitation;* D.K. Agnihotri, A. Kumar, K.C. Jain, **K. P. Singh**, G. Singh, D. Kabiraj, D.K. Avasthi and I.M. Govil**:** **Physics Letters B 307, 283 (1993).**

18. *Systematics of pre-equilibrium contributions in (n,p) reactions at 14 MeV;* G. Singh, H.S. Hans, T.S. Cheema, **K. P. Singh**, D. C. Tayal, Jahan Singh and Sudip Ghosh: **Phys. Review C 49, 1066 (1994).**

19. *Impact parameter dependence of disappearance of flow and in-mediumnucleon-nucleon cross-section;* Sunil Kumar, Manoj K. Sharma, Rajeev K. Puri, **K.P. Singh** and I M Govil**:** **Physical Review C 58, 3494 (1998)**

20. *Low-lying levels in Cu and Zn isotopes;* **K. P. Singh**, D. C. Tayal and H. S. Hans: **Physical Review C 58, 1980 (1998).**

21. *Level studies of ^{93}Mo via (p, nγ) reaction;* Tayeb Kakavand, **K. P. Singh** and I M Govil: **Acta Physica Polonica, 30 B, 2767 (1999).**

22. *PIXE analysis of ancient Indian coins;* M. Hajivaliei, M.L. Garg, D.K. Handa, K.L. Govil, T. Kakavand, V. Vijayan, **K.P. Singh**, and I.M. Govil: **Oriental Numismatic Studies Vol. 2,168 (1999), Edited by Devendra Handa, Pub: Vedams eBooks (P) Ltd, New Delhi**

23. *PIXE analysis of ancient Indian coins;* M. Hajivaliei, M.L. Garg, D.K. Handa, K.L. Govil, T. Kakavand, V. Vijayan. **K.P. Singh** and I.M. Govil: **Nuclear Insruments. & Methods B150, 645 (1999*).***

24. *K and L X-ray production cross sections and intensity ratios of rare earth elements for Proton impact in the energy range 20-25 MeV;* M. Hajivaliei, Sanjiv Puri, M.L. Garg, D. Mehta, A. Kumar, S.K. Chamoli, D.K. Avasthi, A. Mandal, T.K. Nandi, **K.P.Singh**, Nirmal Singh and I.M.Govil : **Nuclear Instruments & Methods B160, 203 (2000).**

25. *L_1 - L_3 Coster – Kronig yields in $_{77}Ir$, $_{78}Pt$ and $_{83}Bi$* Prem Singh, Ajay Kumar, D. Mehta, **K. P. Singh** and Nirmal Singh: **Nuclear Instruments & Methods, B196, 261 (2002).**

26. *Lifetimes of Levels in ^{71}Ge;* Tayeb Kakavand and **K. P. Singh**: **International Journal of Modern Physics E, Vol. 11, 347 (2002).**

27. *Proton Induced Coulomb Excitation Study of ^{93}Nb;* Tayeb Kakavand and **K. P. Singh**: **Acta Physica Polonica 33 B, 737 (2002).**

28. *Microhardness and radiation damage Studies of Proton Irradiated Kapton Films* Nilam Shah, N. L. Singh, C. F. Desai and **K. P. Singh**: **Radiation Measurements 36, 699 (2003)**

29. *Lifetime Measurements of the Excited States in ^{73}As;* Tayeb Kakavand, M. Hajivalliei and **K. P. Singh**: **International Journal of Modern Physics E, Vol. 13, 1019 (2004).**

30. *Modification of Polyethylene Terephthalate by Proton Irradiation*; N. L. Singh, Nilam Shah,C.F. Desai, **K. P. Singh** and S. K. Arora: **Radiation Effects & Defects in Solids, Vol. 159, 475 (2004)**

31. *Band Structure of the ^{123}Cs nucleus*; Kuljeet Singh, J. Goswamy, D. Mehta, Nirmal Singh, R. P. Singh, S.Murlithar,E. S. Paul, **K. P. Singh**, N. Madhavan, J. J. Das, S. Nath, A. Jhingan, P. Sugathan and R. K. Bhowmik; **Eur. Phys. J. A21, 359 (2004).**

32. *Proton Induced Modifications in Macrofol-DE;* N. L. Singh, Nilam Shah and **K. P. Singh**: **Bull. of Material Science, Vol. 28, 599 (2005).**

33. *Rotational Structures in ^{123}Cs;* Kuljeet Singh, Z. Naik, R. Kumar, J. Goswamy, D. Mehta, N. Singh, P. R. Praahraj, E. S. Paul. **K. P. Singh**, R. P. Singh. S. Murlithar, N. Madhavan, J. J. Das, S. Nath, A. Jhingan, P.Sugathan and R. K. Bhowmik: **Eur. Phys. J. A25, 345 (2005).**

34. *Electrical and Thermal Behavior of proton irradiated polymeric blends;* N L Singh, N. Shah, **K P Singh** and C F Desai: **Radiation Measurements 40, 741 (2005).**

35. *Irradiation effects on the Optical Properties of a Ge-Se-Ag Thin Films;* S K Tripathi, A.Thakur, G. Singh, J. Sharma, V. Sharma, **K. P. Singh**, G.S.S. Saini & N. Goyal: **Journal of Optoelectronics & Advanced Materials, Vol.7, 2095 (2005).**

36. *Proton Induced Changes on the Optical Parameters of a- $(Ge20Se80)_{0.96}Ag_{0.04}$ Thin Film;* S K Tripathi, Anup Thakur, G. Singh, J. Sharma,Vineet Sharma, **K. P. Singh**, G.S.S. Saini N. Goyal; **Journal of Materials Science (Letters), Vol. 41, 1847(2006).**

37. *Study of microhardness and electrical properties of proton irradiated polyether sulfone*; Nilam Shah, Dolly Singh, Sejal Shah, Anjum Qureshi, N.L. Singh and **K.P. Singh**: **Bulletin of Material Science, Vol 30, 477-480 (2007).**

38. *Radiation induced modification of Organometallic compound dispersed polymer composites:* N. L. Singh, Sejal Shah, Anjum Qureshi, **K. P. Singh**, V. Shrinet, P. K. Kulriya and A. Tripathi; **Radiation Effects & Defects in Solids, Vol 163, 169-177 (2008).**

39. *Dielectric and structural modification of proton beam irradiated polymer composite;* Sejal Shah, N. L. Singh, Anjum Qureshi, Dolly Singh, **K. P. Singh**, V. Shrinet, and A. Tripathi: **Nuclear Instruments & Methods, B266, 1768-1774 (2008).**

40. *Modification of polymer composite by proton beam*; Sejal Shah, Anjum Qureshi, N. L. Singh, **K. P. Singh**, and V. Ganesan: **Soft Materials, 6(2), 75-84 (2008).**

41. *Dielectric response of proton irradiated polymer composite films;* Sejal Shah, Anjum Qureshi, N. L. Singh, **K. P. Singh** and D. K. Avasthi:**Radiation Measurements Vol. 43, S603-S606 (2008)**

42. *Dielectric properties and surface morphology of proton irradiated ferric oxalate dispersed PVC films;* Sejal Shah, Dolly Singh, Anjum Qureshi, N. L. Singh, **K.P. Singh**, & V. Shrinet: **Indian Journal of Pure and Applied Physics Vol. 46, 439-442 (2008).**

43. *Structural and chemical modification of polymer composite by proton irradiation*; Sejal Shah, Anjum Qureshi, N. L. Singh, P. K. Kulriya, **K. P. Singh** and D. K. Avasthi: **Surface and Coating Technology, Vol. 203, 2595 (2009).**

44. *AC Electrical Properties of proton irradiated EVA films;* Anjum Qureshi, Sejal Shah, Dolly Singh, N. L. Singh and **K. P. Singh**: **Indian J. Physics 83(3), 1117-1122(2009).**

45. Trace elements of soil samples from mining area*;* Mumtaz Oswal, Harneet Bedi, M. Hajivaliei, Ashok Kumar and **K. P. Singh**: **Nuclear Instruments & Methods B268, 2138(2010).**

46. *Conductivity studies in proton irradiated AgI-Ag2O-V2O5-TeO2 Super-Ionic Glass System;* Poonam Sharma, Dinesh Kumar Kanchan, Meenakshi Pant, **K. P. Singh**: **Materials Sciences & Applications 1, 59-65(2010).**

47. *Effect of proton irradiation on electrical properties of a-As_2S_3;* Sanjeev Gautam, Anup Thakur, D. K. Shukla, H.J. Shin, Keun Hwa Chae, **K. P. Singh**, and Navdeep Goyal: **Journal of Non-Crystalline Solids 357, 2340(2011).**

48. *Theoretical Interpretation of Systematics of Effective Single Particle Level Densities from (n, p) Reactions at 14.8 MeV Energies;* H. S. Hans, Gulzar Singh, Ashok Kumar, **K. P. Singh**, B. R. Behera and Sudip Ghosh: **Physical Review C85, 054614(2012).**

49. *Investigation of major and Trace elements in some medicinal Plants using PIXE:* Rajbir Kaur, Ashok Kumar, Navneet Kaur, B. P. Mohanty, M. Oswal, **K P Singh**, B R Behera, Gulzar Singh, Richa Puri, Shikha Sharma, Sanjiv Kumar, Pritty Rao, and S. Vikramkumar: **International Journal of PIXE Vol. 22, No. 1&2, 113(2012).**

50. *Trace element analysis of aerosol samples using PIXE techniques:* Mumtaz Oswal, Rajbir Kaur, A. Kumar, **K. P. Singh**, Sunil Kumar, B P Mohanty and Sanjeev Kumar: **International Journal of PIXE Vol. 22, No. 3&4, 271-285 (2012).**

51. *Elemental Analysis of Ground Water using PIXE and PIGE techniques*: Rajbir Kaur, Ashok Kumar, B P Mohanty, Mumtaz Oswal, Navneet Kaur, **K. P. Singh**, B. R. Behera, Gulzar Singh, Sanjiv Kumar, Pritty Rao and S. Bikramkumar: **International Journal of PIXE Vol. 22, No.3&4, 259-269 (2012).**

52. *Polarization measurements and high spin structure in ^{131}Ba:* Navneet Kaur, A. Kumar, G. Mukherjee, Amandeep Singh, Varinderjit Singh, Rohit Sandal, Rajbir Kaur, B. R. Behera, **K. P. Singh**, G. Singh, H.P.Sharma, Suresh Kumar, M K Raja, P.V. Madhusudan Rao, S. Mualidhar, R P Singh, Rakesh Kumar, N. Madhvan, C R Praharaj and Z. Naik; **AIP Conf. Proc. 1524, pp109 - 112 (2013).**

53. *Effect of fissility in fission time scales for ^{16,18}O + ^{194,198}Pt systems*: Rohit Sandal, B.R. Behera, V. Singh, A. Kumar, G. Singh, **K. P. Singh**, M. Kaur, K.S. Golda, A. Jhingan, P. Sugathan, M.B. Chatterjee, R.K. Bhowmik, S. Mandal, S. Kalkal, D. Siwal, S. Goyal, E. Prasad, K. Mahata and A. Saxena: **AIP Conf. Proc. 1524, pp167-170 (2013).**

54. *Effect of N/Z in pre-scission neutron multiplicity for ^{16,18}O+^{194,198}Pt systems;* Rohit Sandal, B.R. Behera, Varinderjit Singh, Maninder Kaur, A. Kumar, G. Singh, **K.P. Singh**, P. Sugathan, A. Jhingan, K.S. Golda, M.B. Chatterjee, R.K. Bhowmik, Sunil Kalkal, D. Siwal, S. Goyal, S. Mandal, E. Prasad, K. Mahata , A. Saxena, Jhilam Sadhukhan and Santanu Pal: **Physical Review C87, p014604(2013).**

55. *High spin structure in ^{130,131}Ba*: Navneet Kaur, A. Kumar, G. Mukherjee, Amandeep Singh, S. Kumar, Rajbir Kaur, Varinderjit Singh, B R Behera, **K P Singh**, G. Singh, H P Sharma, Suresh Kumar, M Kumar Raju, P V Madhusudhan Rao, S Murlithar, R P Singh, Rakesh Kumar, N Madhavan, and R K Bhowmik: **Eur. Phys. J. A 50:5 (2014).**

56. *Measurements of* e*vaporation residue excitation functions for the ^{19}F + ^{194,196,198}Pt reactions*: Varinderjit Singh, B. R. Behera, Maninder Kaur, A. Kumar, **K. P. Singh**, N. Madhavan, S. Nath, J. Gehlot, G. Mohanto, A. Jhingan, I. Mukul, T. Varughese, Jhilam Sadhukhan, Santanu Pal, S. Goyal, A. Saxena, S. Santra, and S. Kailas: **Physical Review C 89, p024609 (2014).**

57. *Anomalous deviations from the statistical evaporation spectra for the decay of ^{73}Br and ^{77}Rb compound systems*: Maninder Kaur, B.R. Behera, Gulzar Singh, Varinderjit Singh, Rohit Sandal, A. Kumar, H. Singh, Gurpreet Singh, **K.P. Singh**, N. Madhavan, S. Nath, A. Jhingan, J. Gehlot, K.S. Golda, P. Sugathan, Davinder Siwal, Sunil Kalkal, E. Prasad, S. Appannbabu; **Physical Review C 89, p034621 (2014).**

58. *Effect of N/Z in pre-scission neutron multiplicity for $^{16,18}O+^{194,198}Pt$ systems;* Rohit Sandal, B.R. Behera, Varinderjit Singh, Maninder Kaur, A. Kumar, G. Singh, **K.P. Singh**, P. Sugathan, A. Jhingan, K.S. Golda, M.B. Chatterjee, R.K. Bhowmik, Sunil Kalkal, D. Siwal, S. Goyal, S. Mandal, E. Prasad, J. Sadhukhan, K. Mahata, A. Saxena, Santanu Pal: **EPJ Web of Conferences 66, p03006 (2014).**

59. *Fission excitation function for $^{19}F + ^{194,196,198}Pt$ at near and above barrier energies***;** Varinderjit Singh**,** B.R. Behera**,** Maninder Kaur, A. Jhingan, P. Sugathan, Santanu Pal, Davinder Siwal[4], M. Oswal, **K.P. Singh**, S. Goyal, A. Saxena and S. Kailas**: EPJ Web of Conferences 86, 00052 (2015).**

60. *Study of Lifetimes of Low-lying levels in ^{53}Mn*; **K P Singh**, Mumtaz Oswal, B R Behera, Ashok Kumar and Gulzar Singh: **European Physical Journal A 51:54 (2015).**

61. *Particle-hole configuration in reaction mechanisms for single-particle level densities for target Nuclei in (n,p) reactions at 14.8 MeV energy;* H S Hans, A. Kumar, Shivcharan Verma, Gulzar Singh, B R Behera and **K P Singh**: **Physical Review C92, 034614 (2015).**

62. *Synthesis and characterization of polyaniline as emeraldine salt*.; Isha Gawri, Swati Khatta, **K P Singh** and S K Tripathi: **AIP Conf. Proc., 1728, 020287 (2016).**

Papers in Conferences/Symposia etc:

International Conferences/Symposia:

1. *Fusion excitation function for $^{19}F + ^{194,196,198}Pt$ at near and above barrier energies*: Varinderjit Singh, B R Behera, Maninder Kaur, M. Oswal, K P Singh, A. Jhingan, P Sugathan, Santanu paul, D. Siwal, S. Goyal, A. Saxena and S. Kailas: **FUSION 14, Feb. 24-28, New Delhi, India**

2. *Investigation of fission barriers for compound nucleus with neutron number ≥ 126*: Varinderjit Singh B.R. Behera, Maninder Kaur, N. Madhavan, S. Nath, J. Gehlot, G. Mohanto, A. Jhingan, Ish Mukul, T. Varughese, J. Sadhukhan, Santanu Pal, S. Goyal, A. Kumar, **K. P. Singh**, S. Santra, A. Saxena and S. Kailas: **Proceedings of International Symposium on Nuclear Physics, Vol 58, 538(2013).**

2. *Role of shell closure on nuclear dissipation via evaporation residue cross-section measurement for $^{19}F+^{194,196,198}Pt$ Systems:* Varinderjit Singh, B.R. Behera, Maninder Kaur, N. Madhavan, S. Nath, J. Gehlot, G. Mohanto, A.Jhingan, Ish Mukul, T. Varughese, J. Sadhukhan, S. Goyal, A. Kumar, **K. P. Singh**, S. Santra, A. Saxena and S. Kailas; **International Nuclear Physics Conference (INPC2013) 2-7 June 2013, Firenze, Italy.**

3. *Effect of N/Z in pre-scission neutron multiplicity for $^{16,18}O+^{194,198}Pt$ systems*: Rohit Sandal, B.R. Behera, Varinderjit Singh, Maninder Kaur, A. Kumar, G. Singh, **K. P. Singh**, P. Sugathan, A. Jhingan, K. S. Golda, M. B. Chatterjee, R. K. Bhowmik, Sunil Kalkal, D. Siwal, S. Goyal, S. Mandal,E. Prasad, J. Sadhukhan, K. Mahta, A. Saxena and Santnu Pal; **International Nuclear Physics Conference (INPC2013) 2-7 June 2013, Firenze, Italy.**

4. *Polarization measurements and high spin structure in ^{131}Ba:* Navneet Kaur, A. Kumar, G. Mukherjee, Amandeep Singh, Varinderjit Singh, Rohit Sandal, Rajbir Kaur, B. R. Behera, **K. P. Singh**, G. Singh, H.P.Sharma, Suresh Kumar, M K Raja, P.V. Madhusudan rao, S. Mualidhar, R P Singh, Rakesh Kumar, N. Madhvan, C R Praharaj and Z. Naik; **International Conf. on Recent Trends in Nuclear Physics, Solan (India), Nov. 19-22, 2012.**

5. *Effect of fissility and signature of shell closure in fission times scales for $^{16,18}O$ + $^{194,198}Pt$ systems*; Rohit Sandal, B.R. Behera, V. Singh, A. Kumar, G. Singh, **K. P. Singh**, M. Kaur, K.S.Golda, A. Jhingan, P. Sugathan, M.B. Chatterjee, R.K.Bhowmik, S. Mandal, S. Kalkal, D. Siwal, S. Goyal, E. Prasad, K. Mahata and A. Saxena: **International Conf. on Recent Trends in Nuclear Physics, Solan (India), Nov. 19-22, 2012.**

6. *Invesigation of major and trace elements in some medicinal plants using PIXE;* Rajbir Kaur, A. Kumar, N. Kaur, B. P. Mohanty, M. Oswal, R. Puri, S. Sharma, S. Kumar, P.Rao, S. Vikramkumar, **K P Singh**, B R Behera and G. Singh; **7th International Symposium on Bio-PIXE (BioPIXE 7), Oct.30-Nov. 4, 2011, Tohoku University, Sendai, Japan**

7. *PIGE analysis of water and soil samples;* Rajbir Kaur, M. Oswal, A. Singh, N. Kaur, **K P Singh**, B R Behera, G. Singh and A. Kumar: **International Symposium on Accelerators and Radiation Physics, Feb. 2011, Kolkata**

8. *High Spin Structure in ^{130}Ba* Amandeep Singh ,Navneet Kaur, A. Kumar, Varinderjit Singh,Rohit Sandal, Rajbir Kaur, B. R. Behera, **K. P.Singh**, G. Singh, Aaradhya shukla, H. P. Sharma,Suresh Kumar, M. Kumar Raja, P.V. Madhusudan Rao, S. Muralithar, R.P. Singh, Rakesh Kumar, N. Madhvan, R.K. Bhowmik: **Proceedings of the International Symposium on Nuclear Physics, Vol. 54,p84 (2009).**

9. *Neutron multiplicity measurements for ^{19}F + $^{194,198}Pt$ systems at high excitation energy to understand the fission dynamics*; Varinderjit Singh, B.R Behera, Rohit Sandal, A Kumar, G Singh, **K.P Singh**, S Mandal, D Siwal, P Sugathan, A Jhingan, K.S Golda, M.B Chatterjee, R.K Bhowmik, K Mahata, A Saxena, S Kailas: **Proceedings of the International Symposium on Nuclear Physics, Vol. 54, p344 (2009).**

10. *Fission fragment mass distributions at high excitation energies for $^{16,18}O$ + $^{194,198}Pt$ systems:* Rohit sandal, B. R. Behera, Varinderjit Singh, A. Kumar, G. Singh, **K. P. Singh**, S. Mandal, S. Kalkal, D. Siwal, M. Saxena, S. Goyal, E. Prasad, P. Sugathan, A. Jhingan, K. S. Golda, R. P. Singh, R. K. Bhowmik, M.B. Chatterjee, K. Mahata, S. Santra, A. Saxena: **Proceedings of the International Symposium on Nuclear Physics (2009), p350.**

11. *Excitation Energy Systematics of the Effects Single particle Level Densities in Pre-equilibrium processes in (n,p) Reactions at 14.8 MeV Incident Energies;* Gulzar Singh, H. S. Hans, Ashok Kumar, Gurpreet Singh, B. R. Behera, Rohit Sandal, Varinderjit Singh, **K. P. Singh**: **Proceedings of the International Symposium on Nuclear Physics (2009), p386.**

12. *Environmental applications of XRF technique*; Mumtaz Oswal, Sunil Kumar, Veena Sharma, Rajbir Kaur, A. Srivastava, B. R. Behera, A. Kumar, D. Mehta, M. L. Garg and **K. P. Singh**, **19th Int. Conf. on Ion Beam Analysis (IBA2009), Sept. 7-11, 2009), Univ. of Cambridge, U.K.**

13. *Trace elements of soil samples from mining area;* Mumtaz Oswal, Harneet Bedi, M. Hajivaliei, Ashok Kumar and **K. P. Singh**: **19th Int. Conf. on Ion Beam Analysis (IBA2009), Sept. 7-11, 2009), Univ. of Cambridge, U.K.**

14. *Structural and Chemical modification of Polymer composite by Proton Irradiation*; Sejal Shah, Anjum Qureshi, N L Singh, A. Tripathi, **K P Singh** and D K Avasthi: **15th Int. Conf. on Surface Modification of Materials by Ion Beams (SMMIB-15), Sept. 30- Oct. 05, 2007, Mumbai, India.**

15. *Dielectric and structural modification of proton beam irradiated polymer composite*; Sejal Shah, N. L. Singh, Anjum Qureshi, Dolly Singh, **K. P. Singh**, V. Shrinet, A. Tripathi and C. N. Murthy, **Proceedings. of 18th Int. Conf. on IBA (IBA2007) p.311 (2007) Hyderabad**

16. *Electrical and thermal properties of proton irradiated polypropylene*; Nilam Shah, N. L. Singh, Anjum Qureshi, **K. P. Singh** and D.G.Rathod*:* **Indo-German Conf., Feb. 20-24, 2005, NSC, New Delhi**

17. *Electrical and Thermal behavior of proton irradiated polymeric blends;* N. L. Singh, N. Shah, M.S Gadkari, S. Mukharjee and **K. P. Singh**:
22 Int. Conf. On Nuclear Tracks in Solids, Barcelona, 23-27 August 2004.

18. *Microhardness and radiation damage Studies of Proton Irradiated Kapton Films;* Nilam Shah, N. L.Singh, C. F. Desai and **K. P. Singh**: **21st Int. Conf. on Nuclear Tracks in Solids, Oct. 21-25, 2002, New Delhi**

19. *PIXE analysis of Indian ancient coins*; M. Hajivaliei, M.L. Garg, D.K. Handa, T. Kakavand, V. Vijayan. **K.P. Singh** and I.M. Govil**: Int. Conf. On particle induced x-ray emission and its analytical Applications, Lund, Sweden, June 14-18, 1998.**

20. *Nuclear Structure parameters from coulomb excitation with protons;* **K. P. Singh**, D.C. Tayal, Gulzar Singh and H.S. Hans: **Int. Conf. Nucl. and Part. Phys. Sept 2-7, Beijing, China, 1985, p367.**

21. *Proton induced coulomb excitation of ^{69}Ga;* D.C. Tayal**, K. P. Singh**, Gulzar Singh and H.S. Hans: **Int. conf. Nucl. Phys., Florence, Italy, 1983.**

22. *Coulomb excitation of ^{165}Ho with protons;* **K. P. Singh**, D.C. Tayal, Gulzar Singh and H.S. Hans: **Int. conf. Nucl. Phys., Florence, Italy 1983.**

National Conferences/Symposia etc

1. *Coulomb excitation of ^{181}Ta and ^{97}Au;* **K. P. Singh**, B.K. Arora, T.S. Cheema and H.S. Hans: **DAE Symposium on Nuclear Physics 21 B, 184 (1978).**

2. *Level studies in ^{59}Co and ^{63}Cu from coulomb excitation;* D. P. Navalkele, K. Andhradev, V.U. Patil, R.G. Kulkarni, **K. P. Singh**, B.K. Arora, T.S. Cheema and H.S. Hans:
DAE Symposium on Nuclear Physics 21 B, 191 (1978).

3. *Coulomb excitation studies in ^{111}Cd and ^{133}Cs with protons;* **K .P. Singh**, B.K. Arora, T.S. Cheema and H.S. Hans: **DAE Symposium on Nuclear Physics 22 B, 96 (1979).**

4. *Relative contributions of compound and Coulomb cross sections of (p, p' γ) reactions on ^{69}Ga and ^{103}Rh for 2-5 MeV protons;* D.C. Tayal, **K. P. Singh**, V.K.Mittal and H.S. Hans
DAE Symposium on Nuclear Physics 25, 42 (1982).

5. *Coulomb excitation by protons and heavy-ions;* **K. P. Singh**, D.C. Tayal, B.K. Arora and H.S. Hans: **Regional Conf. Nucl. Phys. and Chandigarh VEC, 1982, p42.**

6. *Gamma-ray spectroscopy in ^{103}Pd;* K.C.Jain, S.S.Datta, D.K.Avasthi, **K.P.Singh**, D.C.Tayal, I.M.Govil and H.S. Hans: **DAE Symposium on Nucl. Physics 26 B,(1983).**

7. *Electromagnetic transition probabilities of ^{105}Pd by Coulomb excitation measurements;* D.C. Tayal, **K. P. Singh**, V.K. Mittal, Gulzar Singh and H.S. Hans:
DAE Symposium on Nuclear Physics 26 B, (1983).

8. *Coulomb excitation of $^{63,65}Cu$;* D.C. Tayal, **K. P. Singh** and H.S. Hans*:*
DAE Symposium on Nuclear Physics 28 B, 358 (1985).

9. *Lifetimes of the levels in tellurium isotopes;* K.C. Jain, **K. P. Singh**, Gulzar Singh, S.S. Datta, V.K. Mittal and I.M. Govil: **DAE Symposium on Nuclear Physics 32 B, (1989).**

10. *Alpha emission in fusion reaction $^{28}Si + ^{27}Al$ at 140 MeV;* D.K. Agnihotri, A. Kumar, **K. P. Singh**, G.Singh, D.Kabiraj, D.K. Avasthi, & I.M. Govil: **DAE Symposium on Nucl. Phys. 35 B, 168 (1992).**

11. *Coulomb excitation of ^{93}Nb*; Tayeb Kakavand, A. Kumar, **K. P. Singh** and I M Govil:
DAE Symposium on Nuclear Physics 39 B, 190 (1996).

12**.** *Gamma -ray spectroscopy in ^{93}Mo;* Tayeb Kakavand**, K. P. Singh**, and I.M.Govil :
DAE Symposium on Nuclear Physics 40 B, 110 (1997).

13. *Impact parameter dependence of disappearing of flow;* Sunil Kumar, M.K.Sharma, R. K. Puri, **K.P. Singh** and I.M. Govil**: DAE Symposium on Nuclear Physics 40 B, 372 (1997).**

14**.** *Study of levels in ^{71}Ge;* Tayeb Kakavand, **K.P. Singh** and I.M. Govil**:**
DAE Symposium on Nuclear Physics 41B, 56 (1998).

15. *Lifetime Measurements of excited states in ^{73}As*; Tayeb Kakavand, M. Hajivaliei, **K.P. Singh**, and I.M. Govil: **DAE Symposium on Nuclear Physics 41B, 28 (1998).**

16. *Dielectric properties of proton irradiated PES*; Nilam Shah, N. L. Singh and **K. P. Singh**:
DAE Solid State Physics Symposium, December 26-30, 2003.

17. *In Beam gamma-Ray Spectroscopy of ^{123}Cs;* Kuljeet Singh, J. Goswamy, D. Mehta, N. Singh**,** **K. P. Singh**, R. P. Singh, S. Muralithar, N. Madhavan, J. J. Das, S. Nath, A. Jhingan, P Sugathan and R. K. Bhowmik: **DAE Symposium on Nuclear Physics, 48B, 78(2003).**

18. *Test Report on MOSAIC Detector*; Prem Singh, T. Czosnyka, A. Kordyasz, P. J. Napiorkowski, M. Zielinska, Nirmal Singh and **K. P. Singh**: **DAE Symposium on Nucl. Phys. 48B, 524 (2003).**

19**.** *Effect of Irradiation on the Optical Parameters of a- $(Ge20Se80)_{0.96}Ag_{0.04}$ Thin Films*;
Gurinder Singh, J. Sharma, A. Thakur, **K. P. Singh**, G.S.S. Saini, N. Goyal and S K Tripathi:
DAE Symposium on Solid State Physics, Vol. 49 (2004), Amritsar, India

20. *Study of proton induced modifications in Polypropylene;* N. L. Singh, Nilam Shah and **K. P. Singh: NCMA – 2004, March 2004, K. U., Kurukshetra.**

21. *Thermal and Spectroscopic Studies of Proton Irradiated polyamide and polyether sulfone;* Nilam Shah, N. L. Singh, **K. P. Singh**, S. Mukherjee and A. K. Rakshit:
National Seminar on Polymers & Applications, Feb 5-7, 2004, Chandigarh

22. *Study of thermal and Structural roperties of proton irradiated PET films*; N. L. Singh, Nilam Shah**, K. P. Singh** and A. K. Rakshit: **DAE-BRNS 14th National Symposium & Workshop on Thermal Analysis, (THERMANS 2004) January 20-22, 2004, Vadodara**

23. *AC Electrical properties of proton irradiated EVA films*; N. L. Singh, Anjum Qureshi, Nilam Shah, Sejal Shah, **K. P. Singh**: **DAE Symposium on Solid State Physics, Vol. 50, (2005).**

24. *Lifetimes of Low-lying States in ^{53}Mn*; **K. P. Singh**, Tayeb Kakavand, Mumtaz Oswal, Ashok Kumar, B. R. Behera and Gulzar Singh: **Indian Particle Accelerator Conference (InPAC-2006), BARC, Mumbai, Nov. 1 – 4, 2006.**

25. *Development of PIGE setup for light trace elements analysis at Cyclotron laboratory, Chandigarh;* **A.** Kumar, Rajbir Kaur, Kamaljit Gill, Mumtaz Oswal, B. R. Behera, G. Singh and **K. P. Singh: Indian Particle Accelerator Conference (InPAC-2006)", BARC, Mumbai, Nov. 1 – 4, 2006.**

26. *Effect of ion beam metal nanoparticle doped polymeric films;* Sejal Shah, Anjum Qureshi, Dolly Singh, N. L. Sýngh, **K. P. Singh**, P. Kularia and A. Tripathi: **DAE Symposium on Solid State Physics 51, 311 (2006), Bhopal, India.**

27. *Study of Low-lying levels in ^{69}Ga*; **K. P. Singh**, Mumtaz Oswal, Ashok Kumar , B. R. Behera and Gulzar Singh: **DAE Symposium on Nuclear Physics, Vol. 51, (2006). Vadodara, India**

28. *Dynamical hindrance to fusion and decay of the compound nucleus ^{64}Zn*; Gulzar Singh, Jagdeep Kaur, Ajay Tyagi, Hardev Singh, Rohit Sandal, Ashok Kumar, B R Behera, **K P Singh**, A. T. Hasan, K S Golda, R P Singh and S K Datta: **DAE Symposium on Nucl. Phys., Vol. 52, p393(2007)**

29. *Study of AC electrical properties of proton irradiated polymer;* Sejal Shah, Dolly Singh, Anjum Qureshi, N L Singh and **K P Singh**: **DAE Symposium On Solid State Physics, Vol. 52, 179(2007)**

30. *Neutron multiplicity and mass distributions measurement to understand the fusion – fission dynamics for the system ^{16}O + ^{194}Pt;* Rohit Sandal, B. R. Behera, R K Bhowmik, M B Chatterjee, R K Choudhury, Sunil Kalkal, S Gautam, K S Golda, A Jhingan, S. Kailas, A. Kumar, S K Mandal, M Oswal, E Prasad, Ranjeet, S Ray, A Saxena, H Singh, R P Singh, **K P Singh**, Gulzar Singh, Varinderjit Singh, P Shidling, P Sugathan*:* **DAE Symposium on Nucl. Phys., Vol. 53, p369(2008)**

31. *Trace element analysis of aerosol samples using PIXE technique;* Mumtaz Oswal, Rajbir Kaur, B.P.Mohanty, Sunil Kumar, Sanjiv Kumar, B.R.Behera, A. Kumar, D.Mehta, M.L.Garg and **K.P.Singh**: **Chandigarh Science Congress IV, Panjab University, March 19 – 21, 2010.**

32. *Study of spectroscopy and Directional correlation ratio of oriented nuclei*; Navneet Kaur, A. Kumar, Amandeep Singh, Varinderjit Singh, Rohit Sandal, Rajbir kaur, B R Behera, **K P Singh**, G Singh, Aradhya Shukla, H P Sharma, Suresh Kumar, M Kumar raja, P V Madhusudan Rao, S Murlithar, R P Singh, Rakesh Kumar, R K Bhowmik and N Madhavan: **Chandigarh Science Congress IV, Panjab University, March 19 – 21, 2010, Page 207.**

33. *Light charged particle emission in fusion reaction at high excitation energy and angular momentum*;Gurpreet Singh, B R Behera, G Singh, Rohit Sandal, Varinderjit Singh, A Kumar, **K P Singh**, H Singh, D Sawal, Sunil Kalkal, N Madhavan, S Nath, A Jhingan, J Gehlot, K S Golda, P Sugathan, E Prasad and A Babu**;** **Chandigarh Science Congress IV, Panjab University, March 19 – 21, 2010.**

34. *High spin spectroscopy of ^{131}Ba*: Navneet Kaur, A. Kumar, Amandeep Singh, Varinderjit Singh, Rohit sandal, Rajbir Kaur, B. R. Behera, **K. P. Singh**, G. Singh, H. P. Sharma, Suresh Kumar, M. Kumar Raja, P. V. Madhusudhan Rao, S. Murlithar, R. P. Singh, Rakesh Kumar, R. K. Bhowmik and N. Madhavan: **DAE Symposium on Nuclear Physics, Vol. 55, p10 (2010).**

35. *Light particle emission in fusion reactions at high excitation energy and angular momentum;*Maninder Kaur, B. R. Behera, Varinderjit Singh, Gurpreet Singh, G. Singh, Rohit Sandal, A. Kumar, **K. P. Singh**, H. Singh, D. Siwal, Sunil Kalkal, N. Madhvan, S. Nath, A. Jhingan, J.Gehlot, K. S. Golda, P. Sugathan, E. Peasad and A. Basu:
DAE Symposium on Nucl. Phys.,Vol. 55, p316 (2010).

36. *Role of N/Z in the pre-scission neutron multiplicity for the $^{16,18}O$ + $^{194,198}Pt$ systems*; Rohit Sandal, B. R. Behera, Varinderjit Singh, A. Kumar, G. Singh, **K. P. Singh**, M Kaur, S. Mandal, S. Kalkal, D. Siwal, M. Saxena, S. Goyal, E. Prasad, P. Sugathan, A. Jhingan, K. S. Golda, R. P. Singh, R. K. Bhowmik, M. B. Chatterjee, R. K. Choudhury, K. Mahata, S. Santra, S. Kailas and A. Saxena: et al:
DAE Symposium on Nuclear Physics, Vol. 55, p318 (2010).

37. *Quantitative analysis of soil samples using PIGE technique*; R. Kaur, M. Oswal, A. Singh, N. Kaur, **K. P. Singh**, B. R. Behera, G. Singh and A. Kumar:
DAE Symposium on Nuclear Physics, Vol. 55, p778(2010).

38. *High Spin structure in ^{131}Ba;* Navneet Kaur, A Kumar, G. Mukherjee, Amandeep Singh, Varinderjit Singh, Rohit Sandal, Rajbir Kaur, **K P Singh**, G Singh, H P Sharma, Suresh Kumar, , M Kumar Raja, P V Madhusudhan Rao, S Murlithar, R P Singh, Rakesh Kumar, N Madhvan, R K Bhowmik:
DAE Symposium on Nuclear Physics, Vol. 56, 420(2011).

39. *Study of fission fragment angular distribution for ^{19}F + $^{194196,,198}Pt$ reactions at near and above barrier energies;* Varinderjit Singh, B.R. Behera, Maninder Kaur, A. Jhingan, P Sugathan, D. Sawal, M. Oswal, S. Goyal, **K. P. Singh**, A. Saxena and S. Kailas;
DAE Symposium on Nuclear Physics, Vol. 57, 400 (2012).

40. *Evaporation residue excitation function measurement for ^{19}F + $^{194,198}Pt$ reactions;*
Varinderjit Singh, B.R. Behera, Maninder Kaur, N. Madhavan, S. Nath , J. Gehlot, G. Mohanto, A. Jhingan, I. Mukul, T. Varughese, J. Sadhukhan, S. Goyal, A. Kumar, **K. P. Singh**, S. Santra, A. Saxena and S. Kailas; **DAE Symposium on Nuclear Physics, Vol. 57, 428(2012).**

41. *Effect of Proton Beam Irradiation on Dielectric and Optical Properties of PMMA/ Silver Nanocomposites:* Vijay Dixit, G.B.Patel, Rita Kumari, N L Singh, S.C.Verma, Ashok Kumar and **K P Singh**; **National Symposium on Solid State Track Detectors and Their Applications (SSNTD-18),** Oct**. 18-20, 2013, Ballabhgarh, Faridabad (India).**

42. *Investigation of fission barriers for compound nucleus with neutron number ≥ 126*: Virinderjit Singh, B R Behera, Maninder Kaur, N. Madhavan, S. nath, J. gehlot, G. Mohanto, A. Jhingan, Ish Mukul, T. Varughese, J. sadhukhan, Santanu paul, S. Goyal, A. Kumar, K. P. Singh, S. santra, A. Saxena and S. Kailas; **DAE Symposium on Nuclear Physics, Vol. 58, 538(2013).**

43. *Study of prescission and postscission charged particle multiplicity in ^{16}O+^{194}Pt*: Kushal Kapoor, A. Kumar, Navneet Kaur, B.R. Behera, **K.P.Singh**, Varinderjit Singh,Gurpreet Kaur, Priya Sharma, Ruchi Mahajan, Hardev Singh, A. Jhingan, P.Sugathan, G. Mohanto, R. Dubey, N. Saneesh, Ish Mukul, B. K. Nayak, A. Saxena, and H.P. Sharma:
DAE Symposium on Nuclear Physics, Vol. 59, 572(2014).

44. *α- particle multiplicity in ^{16}O+^{194}Pt fusion-fission reaction*: Kushal Kapoor, A. Kumar, Navneet Kaur, B.R. Behera, **K.P. Singh**, Gurpreet Kaur, Priya Sharma, Ruchi Mahajan, Hardev Singh, A. Jhingan, P. Sugathan, G. Mohanto, R. Dubey, N. Saneesh, Ish Mukul, Varinderjit Singh, B. K. Nayak, A. Saxena, and H.P. Sharma.
DAE Symposium on Nuclear Physics, Vol. 60, 606(2015).