Evaluative Report of the Department

1. Name of the Department : **PHYSICS**

2. Year of establishment : **in 1947, in Govt. College, Hoshiarpur (Punjab). In August 1958, the department was shifted to the present campus.**

3. Is the Department part of a School/Faculty of the university? : **Yes , Faculty of University.**

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) : **UG, PG, Ph.D**

5. Interdisciplinary programmes and departments involved: **Teaching and research work:**
   M.Tech in Nano Science & Nano Technology and Medical Physics.

6. Courses in collaboration with other universities, industries, foreign institutions, etc. :**NIL**

7. Details of programmes discontinued, if any, with reasons : **M.Phil(2012-2013)**

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : **SEMESTER**

9. Participation of the department in the courses offered by other departments : **Few faculty members are Adjunct faculty in M.Tech. Nano Science & Nano Technology. Teaching is also carried out in Medical Physics**.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	**Filled**	**Actual (including (CAS & MPS)**
Professor	13	8	
Associate Professors	13	5	
Asst. Professors	20	11	
Others		7 (re- employed	

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance : **ANNEXURE I**

Name	**Qualification**	**Designation**	**Specialization**	**No. of Years of Experience**	**N0. of Ph.D./ M.Phil Students guides for the last 4 years**

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors : List attached as **Annexure II**

13. Percentage of classes taken by temporary faculty – programme-wise information: **Nil**

14. Programme-wise Student Teacher Ratio : **B.Sc. 60:1 and M.Sc. 55:1**

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual :

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	**9**	**1**	**3**	**-**
Technical Staff	**24**	**32**	**-**	**-**

16. Research thrust areas as recognized by major funding agencies:
Nuclear Physics (Expt.), Nuclear Physics (Theory), Particle Physics (Expt.), Particle Physics (Theory), Condensed Matter Physics (Expt.), Condensed Matter Physics (Theory).

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise: **ANNEXURE III**

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration

- **IIT, Kanpur; Delhi University, Delhi; Bombay University, Mumbai; M.S. University; Baroda, Kurukshetra University, Kurukshetra; H.P. University, Shimla; IUC, Calcutta; VECC, Calcutta; TIFR, Mumbai ; CAT, Indore; I.U.A.C., New Delhi; P.R.L. Ahmedabad; HNB University, Garhwal, Uttranchal; Deptt. of Earth Sciences, IIT, Roorkee; Indian Neutrino Observatory (INO); IISc (Bangalore), VECC, Saha Instt. Etc., Department of Physics, H.B.T.I., Kanpur; Department of Physics, Jamia Millia Islamia University, New Delhi; Karnataka University, Dharward. T.B.R.L., P.G.I.M.E.R., C.S.I.O., Chandigarh, IISER Mohali etc.**

- b) International collaboration

Royal Military College of Canada, Canada; University of Notre Dame, Uppsala, USA; Fermilab., USA; CERN, Geneva; Bonn University; Germany; University of Leipzig, Germany; Chemistry Deptt., City College of New York (CUNY), New York; Deptt. of Chemistry, Princeton University, New Jersey, U.S.A. KEK, Japan; ICTP, Trieste; Univ. of Illinois, USA; BNL, USA; Univ. of Leipzig, Germany; SUBATECH, Nantes, France; Instt, fur Theoretische Physics, Tubingen, Germany; Instt of Nucleas Studies, Krakow, Poland; Heavy Ion Laboratory, University of Warsaw, Poland; Univ. of Milano, Italy; J.L. Univ, Germany; J.W. Goethe Univ., Frankfurt, Germany; Instt. of Nucl. Physics, Strasbourg, France; etc. University of Wuerzloung, Germany.University of California; Davis, University of Kaiserlautern, Germany, Budhker Institute of Nuclear Physics, Nobosibisk, Russia; LN Gran Sasso, Italy; IJS, Llubjana, Slovenia ; University de Los Andes, Meuda, Venewuela. University Louis Pasteur, Strasbourg, France; GSI, Darnstadt, Germany.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : Same as **ANNEXURE III**

20. Research facility / centre with

    - state recognition : **Yes**
    - national recognition : **Yes**
    - international recognition:

21. Special research laboratories sponsored by / created by industry or corporate bodies : **NIL**

22. Publications:

- Number of papers published in peer reviewed journals (national / international) : **506** + **131(papers published in proceedings of conferences)**
- Monographs
- Chapters in Books :"**Restricted flow in Nano-Channels" (K. Tankeshwar, Sunita Srivastava, Jyoti Sood) in a book "Nanotechnology Research Progress", Editor Julian F.**
  - **Vogel and Felix T. Jung (Nova Publishers. New York, 2009)**
- Edited Books : **3**
- Books with ISBN with details of publishers : **M/s Pearson Publishers, N. Delhi. (2012) (ISBN No.:81-7319-463-7).**
- Number listed in International Database (For *e.g.* Web of Science, Scopus,
  - Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Citation- Index – range /: **Citation: ≥90 ≥ 80 ≥ 70 ≥ 50 ≥ 30 ≥20**
  - **No. of papers : 79 16 19 66 168 191**
- SNIP
- SJR
- Impact Factor – range / average : **0-6**
- h-index

23. Details of patents and income generated : **NIL**

24. Areas of consultancy and income generated : NIL

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : **ANNEXURE IV**

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please specify) : **Same as ANNEXURE IV**

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs): **The faulty at the Assistant Professor level doing their Refresher and Orientation courses in their streams**. **Various workshops/Conferences are conducted in the Department at the international level which are funded by various national and international agencies**.

28. Student projects :

- percentage of students who have done in-house projects including inter-departmental projects : **20% M.Sc. students per year**
- percentage of students doing projects in collaboration with other universities
    - industry / institute : **5% per year**

29. Awards / recognitions received at the national and international level by
    - Faculty : -
    - Doctoral / post doctoral fellows : DST **Ramanujan Fellow(Amandeep Sood) and Young Scientist Award: Dr. Gulsheen Ahuja**
    - Students : **Best Poster award in DAE Symposium (Gaganpreet)**

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.: **ANNEXURE- V**

31. Code of ethics for research followed by the departments | **Punctuality, sincerity towards the system and the research work done by the researchers as per the Supervisor's consents and also assigned teaching duties and maintaining the decorum of the research lab.**

32. Student profile programme-wise: **ANNEXURE- VI**

Name of the Programme (refer to question no.4)	**% of students from the same university**	**% of students from other universities within the State**	**% of students From universities outside the State**	**% of students from other countries**
			116	Nil

33. Diversity of Students

Name of the Programme (refer to question no. 4)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.
NET : 10, CSIR : 37, DST : 15, PU Test: 9, UGC L ship: 17, GATE : 11, M.Phil : 11, DRDO : 1

35. Student progression

Student progression		**Percentage against enrolled**
UG to PG		100%
PG to M.Phil.		Nil
PG to Ph.D.		10%
Ph.D. to Post-Doctoral		Nil
Employed		
□	Campus selection	Nil
□	Other than campus recruitment	yes
Entrepreneurs		

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	30%
from other universities within the State	nil
from universities from other States from universities	40%
outside the country	8%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period **: NIL**

38. Present details of departmental infrastructural facilities with regard to

    a) Library : **Books and Journals, staff, Computers and internet facility**

    b) Internet facilities for staff and students : **WiFi facility available in the whole building**

    c) Total number of class rooms : **9**

    d) Class rooms with ICT facility : 1

    e) Students' laboratories : **7**

    f) Research laboratories **: 1 (HPCC Lab.)**

39. List of doctoral, post-doctoral students and Research Associates

    a) from the host institution/university : **Dr. Hardev Singh, Dr. Devinder Singh, Dr. Suresh Chandra, Dr. Gulsheen, Dr. Amandeep Sood**

    b) from other institutions/universities : **Nil**

40. Number of post graduate students getting financial assistance from the university. **Nil**

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Does the department obtain feedback from : **Responses from students, academic peers and employers, for review and re-design of curriculam. Yes**

    a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

    b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

    c. alumni and employers on the programmes offered and how does the department utilize the feedback?

42. List the distinguished alumni of the department (maximum 10) :
    Prof. A.K. Grover, Vice-Chancellor; Prof. Ajay Sood; Prof. Jagmohan Garg, Vigilance

Commissioner, G.O.I.; Prof. Puroshttam Das Gupta, RRCAT, Director; Mr. Prashzant Szaran, Member, SEBI; Mr. Pradeep Choudhary, Ex. Chief Sec., Haryana; Prof. Bindu A. Bambah, UOH, Hyderabad; Dr. Paramdeep Singh Sahni, ATAT Bell Lab.; Mr. A.K. Dubey, Ex. IAS; Mr. Pyara Ram, Ex.IAS; Dr. Manjit Singh, Director, TBRL.

43. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. : **Refer to Annexure II**

44. List the teaching methods adopted by the faculty for different programmes. :
Tutorials, Computers, Internet information technology, Audio-video aids, 3 LCD, Computer aided packages.

Multi-media facilities are utilized in few class room lectures. New experiments have been introduced in postgraduate and undergraduate classes. Some of the teachers are involved in developing methods and techniques for popularizing science.

By problem solving sessions and mid-semester examination and the end semester examinations

45. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
Periodic assessment through department level meetings and at University level.

46. Highlight the participation of students and faculty in extension activities.

The students participated enthustically in IAPT NSSP 2013, NSSP 2014 through oral and poster presentation. Research scholars and faculty participated in CHASCON programme for the last five years through oral and poster presentation. Faculty periodically visits various colleges and give popular lectures on recent developments in Physics such as Nano-technology higgs particle discovery etc. The 11 inch telescope in the Department is extensively used to popularize the subject of Astronomy. The students from various colleges visits the cyclotron facility for its importance.

48. Give details of "beyond syllabus scholarly activities" of the department.

Apart from the "Beyond Syllabus Scholarly Activities", the department organizes

a) **Dept. Seminars / TPSC (Theoretical Physics Seminar Circuit) Program Seminars / colloquia – Organized more than 70 during 2009-2013 period**
b) **Organizing conferences and Symposia/ One day, two day Seminar / Workshop on recent developments in Physics – 29 programs were held during 2009-13 period.**

c) **Dept. Outreach program – Visits by School and College Students, from Punjab and Chandigarh Colleges / Schools, to Cyclotron and 11inch Telescope**
d) **Actively participates in Academic programs organized by University (such as CHASCON, Academy Programs, Refresher Course etc)**
e) **Faculty actively participate as resource persons at Refresher Courses and Orientation Courses**
f) **Arranges Colloquia on special occasion like Science Day, Noble Lectures etc..**
g) **Lectures under IAPT, IPA (Organizations of Physics Teachers)**

49. State whether the programme/department is accredited/ graded by other agencies? If yes, give details.

No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The faculty actively engaged in Front line Research in all branches of Physics (theory and experiment), such as HIGGS discovery at CERN Laboratory, New results from KEK, Japan, ALICE, DZERO, Fermi Lab U.S.A, IUAC New Delhi. Research work in the areas of Nano-materials and Nano-Technology, Astrophysics, Geo-chronology, Spectroscopy, developing SUSY/SUGRA theories are notable.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths: Publications, Research Projects, collaboration with national and international research departments, organization of seminars and workshops, faculty's personal achievements.

Weaknesses: shortage of teaching as well as administrative staff, lack of space, lack of furniture, lack of special funds.

Opportunities and Challenges

Recruiting fresh, young faculty working in the frontiers of physics is the need of the hour. Then the department shall be in a position to take up new challenges in the area of Nano-Science, Nuclear Science and Complex systems etc. The M.Sc (H.S) in Physics and M.Sc (H.S) Physics-Electronics courses should be designed to attract good talent and turn them into first rate researchers.

The challenge before the department is to keep pace with the expanding horizons of scientific knowledge, through judicious recruitment of faculty and to impart basic knowledge to B.Sc and M.Sc, students so that they can take up Basic Science Research as a career. Strengthening the existing Research Programs is the need of the hour. The Ph.D students should be trained to take up new research problems which have scientific and social relevance.

52. Future plans of the department.

The department is eagerly looking forward to the sanction and arrival of " Tendatron Accelerator" which will boost the basic experimental nuclear physics research. This will enable to train large pool of young researchers in modern nuclear accelerator technology.

The department collectively, shall strive not just to maintain but improve the high standards set so far, of producing technically competent students and quality work in frontier areas of research.

ANNEXURE I

Sr.	Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D./M.Phil students guided for the last four years
2.	Prof. K.N. Pathak	**-do-**	-do -	Condensed Matter Physics	-	
3.	Prof. Nirmal Singh	**-do-**	-- do -	Expt. Nuclear Physics	-	2 Ph.D.
4.	Prof. V.K. Jindal	**-do-**	**Re-employed**	Theoretical/Expt.Condensed Matter	-	3 Ph.D./1 M.Phil
5.	Prof. Suman Beri	**-do-**	- do -	Expt. High Energy Physics	-	5 Ph.D./3 M.Phil
6.	Prof. M.M. Gupta	**-do-**	- do -	Theoretical High Energy Physics	-	3 Ph.D.
7.	Prof. M.M. Aggarwal	**-do-**	- do -	Expt. High Energy Physics	-	3 Ph.D./2 M.Phil
8.	Prof. Keya Dharamvir	**-do-**	- do -	Theoretical/Expt.Condensed Matter	-	2 Ph.D./1 M.Phil
9.	Prof. K.P. Singh	**-do-**	- do -	Expt. Nuclear Physics	-	1 Ph.D.
10.	Prof. J.B. Singh	**-do-**	- do -	Expt. High Energy Physics	-	5 Ph.D./1 M.Phil
11.	Prof. C.S. Aulakh	**-do-**	Professor	Theoretical High Energy Physics	20 yrs.	1 Ph.D./1 M.Phil

12.	Prof. Manjit Kaur	**-do-**	Professor	Expt. High Energy Physics	29 yrs.	4 Ph.D.
13.	Prof. V .P. Singh	**-do-**	Professor	Geochronology	35 yrs.	-
11.	Prof. A.K. Bhati (retd. In 2013)	**-do-**	- do -	Nuclear Condensed Matter Physics,Re.Heavy ion Collission	-	1 Ph.D.
14.	Prof. Devinder Mehta	**-do-**	Professor	Expt. Nuclear Physics	19 yrs.	3 Ph.D./2 M.Phil
15.	Prof. Navdeep Goyal	**-do-**	Professor	Expt. Solid State Physics	18yrs.	2 Ph.D./1 M.Phil
16.	Prof. Rajiv K. Puri	**-do-**	Professor	Theoretical Nuclear Physics	18 yrs.	4 Ph.D./2 M.Phil
17.	Prof. G.S.S.Saini	**-do-**	Professor	Expt.Spectroscopy	14 yrs.	2 Ph..D./1 M.Phil
18.	Prof. C.N. Kumar	**-do-**	Professor	Theoretical Physics	14 yrs.	-/ 1 M.Phil
19.	Dr. K.S. Bindra	**-do-**	Associate Professor	Expt. Nuclear Physics	14 yrs.	-
20.	Dr. S.K. Tripathi	**-do-**	Associate Professor	Expt. Solid State Physics	14 yrs.	7 Ph.D./3 M.Phil
21.	Dr. S. Sahijpal	**-do-**	Associate Professor	Astrophysics & Planetary Sciences	13 yrs.	1 Ph.D.
22.	Dr. Ranjan Kumar	**-do-**	Associate Professor	Condensed Matter Physics	14 yrs.	1 M.Phil
23.	Dr. J.S. Shahi	**-do-**	Assistant Professor	Expt. Nuclear Physics	10 yrs.	1 M.Phil

24.	Dr. Vipin Bhatnagar	**-do-**	Assistant Professor	Expt. High Energy Physics	9 yrs.	1 M.Phil
25.	Dr. Ashok Kumar	**-do-**	Assistant Professor	Expt. Nuclear Physics	15 yrs.	1 Ph.D./1 M.Phil
26.	Dr. Sunita Srivastava	**-do-**	Assistant Professor	Theoretical Physics	14 yrs.	3 Ph.D.
27.	Dr. B.R. Behera	**-do-**	Assistant Professor	Expt. Nuclear Physics	9 yrs.	1 Ph.D./2 M.Phil
28.	Dr. Kuldeep Kumar	**-do-**	Assistant Professor	Theoretical High Energy Physics	8 yrs.	-
30.	Dr. Bimal Rai	**-do-**	Assistant Professor	Geochronology	10 yrs.	-
31.	Er. Manish Dev Sharma	**M.E.**	Assistant Professor	Electronics & Communication	4 yrs.	-
32.	Er.Neeru Chaudhary	**M.Tech.**	Assistant Professor	Instrumentation	4 yrs.	-
33.	Dr. Samarjit Sihotra	**-do-**	Assistant Professor	Expt. Nuclear Physics	8 yrs.	3 M.Phil
34.	Dr. Rajesh Kumar	**-do-**	Assistant Professor	Material Sciences	4 yrs.	-

ANNEXURE II:

Visiting Fellows 2009-2010

Name & Address	Title & Date
Prof. M.Daniel, Centre of Nonlinear Dynamics, Tiruchirapalli.	"Magnetization switching dynamics in nano magnets" (13.01.09)
Dr.Surinder M Sharma, BARC, Mumbai.	"Materials under high pressure" (14.02.09)
Prof. J. Bosse, Institute of Theoretical Physics, Freie, Universitat Berlin, Germany.	"Dielectric properties of Glassy materials" (15.02.09)
Dr.Rajdeep Chatterjee, IIT Roorkee.	"Indirect methods for nuclear astrophysics" (21.03.09)
Dr. D. Tonev, INFN -LBL Italy, Bulgarian Academy of Science	"Life time measurements as a test for existence of chirality" (19.06.09)
Dr. Bansi D. Malhotra NPL, New Delhi	Prospects Of Nano structured Metal Oxides For Biosensors (3.09.09)
Prof. N.D. Haridass CTS,IISC Bangalore	"Y. Nambu and Modern High energy Physics" (25.09.09)
Prof. J.S.Bagla	"Observing early Universe in Hyperfine transition of netural hydrogen" (23.10.09)
Dr. D.P. Rroy TIFR, Mumbai	"Why LHC?" (4.11.09)
Dr. D.P. Rroy TIFR, Mumbai	"Neutrino mass, mixing & Oscillations" (5.11.09)
Mr. Asish Arora TIFR Mumbai	"Experiments on Semiconductor Devices under high Magnetic fields (~8T), at low Temperature (~4K)" (11.11.09)
Dr. Ashok Das Univ of Rochester, USA	"Can we give quantum mechanical description to Pseudo Hermitian Hamitonians" (21.12.09)

Dr. Ranber Singh Max Planck Institute Stuttgart, Germany	"Semiconductor quantum dots as a source… photon pairs" (7.01.10)
Prof. R. Rajaraman JNU, New Delhi	"A Recapitualtion of Indo-US Nuclear Deal … " (21.01.10)
Prof. R. Rajaraman JNU, New Delhi	"An Introduction to Quantum Hall Effect" (22.01.10)
Prof. Sudheshna Sinha IMSc Chennai	"I Inducing Order In A Network Of Chaotic Elements" (25.02.10)
Dr. Harvinder Kaur Jassal, HRI Allahabad	"Throwing light on Dark energy" (25.03.10)

2010-2011

Prof. M.M. Parida NISER, Bhubaneshwar	"From beta decay to double beta Decay through unification" (28 .07. 2010)
Prof. Brajesh C.Choudhary Deptt. of Physics and Antrophysics, Delhi University, Delhi	Department colloquium: "Project X and other blue-sky" experimental proposals (12 .08. 2010)
Dr. Bhaskar Sur Director (Designate), Nuclear Science Division, Scientist & Manager, Applied Physics Branch, AECL Chalk River Nuclear Laboratories, Canada	"An antineutrino detector for monitoring a CANDU reactor" (26.08.2010)
Prof. A.K. Sood, IISC Bangalore,	"Distinguished Lecture under PURSE Grant" (26.10.2010)
Dr. Madavan Nair, Former ISRO Chairman, Bangalore,	"Distinguished Lecture under PURSE Grant" (27.10.2010)
Prof. Subhash H. Behere Deptt. of Physics, Dr. BAM University, Aurangabad	"History of spectroscopy – as depicted on Postal stamps" (12 .11.2010)
Prof. Jasjeet Bagla	"Basics of HPCC"

IISER, Mohali	(12 .11. 2010)
Dr. Bhaskar Sur Director (Designate), Nuclear Science Division, Scientist & Manager, Applied Physics Branch, AECL Chalk River Nuclear Laboratories, Canada	"Basics of HPCC II" (19.11. 2010) "Atomic structure holography using Thermal neutrons" (22 .11. 2010)
Dr. Rajeev Kapri IISER, Mohali	Unzipping an adsorbed polymer and DNA by force"(25 .11. 2010)
Prof. Ingemar Ragnarsson Lund Institute of Technology, Sweden	"Band termination of collective Nuclear rotation " (03 .12. 2010)
Dr. Sanjay Kumar Chamoli Deptt. of Physics & Astrophysics, Delhi University, Delhi.	"The transient field measurements of pico-second lifetime nuclear states at ANU" (07 .12. 2010)
Prof. Sudhakar Panda Harish-Chandra Research Institute, Allahabad	"Search for a unified theory (24.12. 2010)
P rof. K. Trabelsi KEK High Energy Accelerator Organization, Tsukuba,Japan	"Recent Results from Belle KEK B-factory" (07.01 2011)
Dr. Shekhar Mishra Fermi National Accelerator Laboratory, U.S.A.	"Fermilab future physics and accelerator Program" (17.01. 2011)
Prof. Deshdeep Sahdev Department of Physics,, Indian Institute of Technology,Kanpur	"Indigenous technology in a globalised world: A case study" (01 .02. 2011)
Dr. A. Sharma CERN, Geneva Prof. Joerg Aichelin SUBATECH, EMN, France	"Particle detectors for the future" (03.03. 2011) "What strange particles can tell us about hadronic matter and what hadronic Nantes,matter tells us about strange particles" (04.03. 2011)

2011-12

Dr. Sarira Sahu, Instituto de Ciencias Nucleares, Universidad Nacional Autonoma de Mexico, Mexico City.	Effect of resonant neutrino oscillation on TeV neutrino flavor ratio from choked GRBs (8.8.2011)
Dr. Hardev Singh	Intermediate mass fragments emission and iso-scaling in Ca+Sn reactions at 45 AMeV (17.8.2011)
Prof. Dimitri Denisov, DZERO Experiment Spokesman, Fermilab, USA	Experiments at the Tevatron from the discovery of the top quark to search for the Higgs boson (29.9.2011)
Dr. D.K. Avasthi, Inter University Accelerator Centre, New Delhi	Synthesis and engineering of nanocomposites and nanostructures by energetic ions (8.9.2011)
Prof. J.K. Vij, School of Engineering, Trinity College, University of Dublin, Dublin, Ireland	Field induced switching in non-tilted polar orthogonal smectic phases of Bent-Core liquid crystals (15.9.2012)
Dr. S.M. Ahmed, Central Instruments Laboratory, University of Hyderabad, Hyderabad	Success story of Chandrayaan-I (4.10.2011)
Padma Shri Prof. D. Balasubramanian, Eye Institute, Hyderabad	Innovations in biosciences using L.V. Prasad technology (4.11.2011)
Dr. Jayanti Prasad, Inter-University Centre for Astronomy & Astrophysics, Pune.	Doing parallel: Tools, techniques and scope of parallel

	computation in scientific research (4.11.2011)
Dr. Bhaskar Sur, Applied Physics Branch, Atomic Energy of Canada Limited, Chalk River Nuclear Laboratories, Canada	From outer space to inner space – Imaging with cosmic rays (25.11.2011)
Dr. Thokala Soloman Raju, Department of Physics, Karunya University, Coimbatore	Optical similaritons in a graded-index nonlinear-fiber amplifier with an externalsource (2.12.2011)
Dr. Krishan Lal, INSA Sr. Scientist & Former Director, Laboratory, New Delhi	High-resolution x-ray diffraction and reflection studies of crystals, thin films and National Physical surfaces
Prof. Michael Hass, Department of Particle Physics and Astrophysics, The Weizmann Institute of Science, Rehovot, Israel	Astrophysical reactions with stable and radioactive beams (12.3.2012)
Prof. Jim Freeman, Accelerator Laboratory, (FNAL), USA	LHC accelerator status and recent Fermi National physics results (26.3.2012)
Prof. J.N. Nanda Former Visiting Professor (1981-84), P.U., Chandigarh	Atomic explosions in the Earth
Dr. Siba Prasad Das, Dept. of Physics,Viswa Bharati University, Santiniketan (WB)	Signature of neutrinos and Higgses at Large Hadron Collider (11.6.2012)
Prof. Meenakshi Narain, Physics Department, Brown University, Providence, USA	Captured – "The Higgs boson" –Universe's most wanted particle? (20.7.2012)

2012-2013

Prof. Meenakshi Narain, Physics Department, Brown University, Providence, USA	Captured – "The Higgs boson" – Universe's most wanted particle? (20.7.2012)

Prof. J.B. Singh, Department of Physics, P.U. Chandigarh.	Discovery of Higgs particle at Large Hadron Collider and role of Panjab University (06-08.2012)
Prof. Raj Gandhi, HRI, Allahabad	Ultra-high energy neutrinos: Status and puzzles (13.08.2012)
Prof. Meenakshi Narain, Physics Department, Brown University, Providence, USA	Captured – "The Higgs boson" – Universe's most wanted particle? (20.7.2012)
Dr. R. Ramachandran, New Delhi.	The holy grail of particle physics: The search and discovery of the Higgs boson (22.08.2012)
Mr. Ashish Arora, Department of Condensed-Matter Physics and Material Science, TIFR, Mumbai	Polarization resolved optical and magneto-optical studies on III-V semiconductor bulk and quantum well structures (23.08.2012)
Santosh Kumar, Department of Physics, Indian Institute of Technology Bombay, Mumbai	Surface superconductivity and vortex state in superconductors (03.10.2012)
Prof. Avinash Khare, IISER, Pune	Basic constituents of nature (04.10.2012)
Prof. Pushpa Khare, CSIR Emeritus Scientist, IUCAA, Pune	Metal and dust content of the universe as determined through QSO absorption lines (05.10.2012)
Mr. Sukant Saran, Tata Institute of Fundamental Research, Mumbai	Interactive visions: A survey of science-based art (19.10.2012)
Prof. Satpal Singh, School of Medicine, SUNY	From molecules to mind to society: Frontiers of ignorance

at Buffalo, USA	(22.10.2012)
Prof. David Jenkin, Department of Physics, University of York, United Kingdom	New techniques for study of proton-rich and N=Z nuclei (21.11.2012)
Prof. Satyendra Kumar, Department of Physics, Kent State University, Ohio, USA	Liquid crystals: Testing grounds for science and technology (23.11.2012)
Prof. M.S. Sriram, Department of Theoretical Physics, Madras University, Chennai	Contributions to mathematics in ancient India (26.11.2012)
Prof. Ashok Das, Department of Physics and Astronomy, University of Rochester, Rochester NY, USA	Supersymmetry and shape invariance of Legendre equations (24.12.2012)
Dr. Sailajananda Bhattacharya, Physics Division, Variable Energy Cyclotron Centre, Kolkata	Study of Hoyle state decay (01.01.2013)
Prof. Sunanda Benarjee, Saha Institute of Nuclear Physics, Kolkata	Higgs Boson – Have we seen it? (24.01.2013)
Prof. Yehiam Prior, Sherman Professorial Chair in Chemical Physics, Department of Chemical Physics, Weizmann Institute of Science, Rehovot, Israel	Molecular manipulation by ultrafast Laser pulses (06.02.2013)
Prof. Ashoke Sen, Harish-Chandra Research Institute, Allahabad	Search for a unified theory (11.03.2013)

Prof. Sumathi Rao, Harish-Chandra Research Institute, Allahabad	Topological insulators (11.03.2013)
Prof. Santanu Pal, Variable Energy Cyclotron Centre, Kolkata	Nuclear fission: Past, present and future (15.03.2013)

ANNEXURE III : LIST OF RESEARCH PROJECTS

2009-2010

Sponsor	**TITLE**	**Principal Investigator and Research Team**	**Sanctioned Period from**	**TO**
CSIR	"Development of…….....Ion collisions"	Dr. R.K puri	1-11-2006	31-10-2009
DAE	"Systematics in …….Theoretical study"	Dr. R.K. Puri	8-11-2005	31-10-2009
DAE	"Fussion-Fission……..heavy nuclei"	Dr. B.r. Behra	9-5-2010	
DRDO	"Investigation of C60……Absorbing Properties"	Prof. V.K Jindal	5-5-2006	30-09-2009
DST	"Solid State……. ……Ion Tracks"	Ms. Mamta saroch	4-9-2006	03-09-2009
DST	"Oriented nuclei……..heavy elements"	Prof. R.K. Gupta	19-7-2006	20-07-2009
DST	"Characteristics of top quark and search for new particles/phenomena at the Dzero exper;iment at Fermilab"	Prof. Suman Beri	27-8-2007	29-3-2010

DST	Vibrational sensing study of chemical sensing by porphyrins and phthalocyanines	Dr. G.S.S. Saini (PI) Dr. S.K. Tripathi (Co-I)	21 July, 08	20 July, 11
DST	Measurement of Neutral current cross sections at high Energy in e±p interactions at HERA……	Prof. Manjit Kaur PI) Ms. Prabhdip Kaur (SRF) Ms. Inderpal Singh (SRF) Ms. Ritu Aggarwal (JRF)	October 2007	February 11
DST	Trace Element Analysis by Proton Induced X-ray Emission (PIXE) Technique at Chandigarh Cyclotron",	Prof. K.P.Singh	2007	Nov.2011
DST	Clusterization, Thermalization & Correlations in Hot and Dense Nuclear Matter"	Dr. R.K. Puri	2008 onwards	
DST	Study of New Particles with CMS Detector at Large Hadron Collider and Heavy Ion Physics using LHC at CERN – CMS Experiment	Prof. Suman Bala Beri , Prof. J.B.Singh : PI and Prof.M.Kaur and Dr V.Bhatnagar	30-09-2009	31-03 2012
DST	India LHC Grid Collaboration – Enhancement of Regional World wide Computing Grid (WLCG)	Prof.Suman Bala Beri: PI	17-03-2010	31-03-2013
DST	Pre-Operative ……Prototyping"	Prof. M.M. Aggarwal Dr.Ashok Kumar	3136800.00	31.3.2010

DST	"ALICE Operation & Utilization"	Prof. M.M. Aggarwal	11750000.00	31.3.2012
DST	"India LHC …….. GRID (WLCG)"	Prof. M.M. Aggarwal	5827500.00	31.3.2013
DST	"FIST Program"	Chairman, Deptt. of Physics	229,00,000.00	31.3.2013
DST	"A Large Ion……. Utilization"	Prof. M.M. Aggarwal	3400,000.00	31.3.2010
Indo French Center jointly by Indian and French Governments	Dynamics of Multifragmentation"	Dr. R.K. Puri Dr. J Aichelin	Jan. 2010	Jan.2013
ISRO	"The galacetic……..Solar system"	Dr. S. Sahijpal	2-5-2010	
NSC	"Lifetime ……distance method"	Dr. Ashok Kumar	2-1-2007	01-01-2010
NSC	"Dynamics of……..heavy regions"	Dr. B.R. Behra	1-1-2007	01-01-2010
PURSE award project awarded by Panjab Univ. Chandigarh	Symmetry energy and heavy ion collisions.	Dr. R.K. Puri	July 2010 onwards	
UGC	CAS in Physics	1. Prof.M.M. Gupta 2. Prof. C.S.Aulakh CAS Coordinator	9750000.00	31.5.2010 01.6.2010

2010-2011

Sponsor	Title	Funds sanctioned	Duration	Principal Investigator and Researh Team
CSIR	Electronic and Heat Transport Properties of Hetero-Graphenes and Carbon Nanotubes Dynamic impact strength of their nanocomposites	9,30,000.00	1.12.2010 upto 30.11.2013	Prof. .V.K. Jindal
DAE	The Resistive Plate Chamber development of INO project"	14,35,500/-	31.3.2008 upto 31.3.2012	Dr.Vipin Bhatnagar
DST	FIST Program Vide letter No.SR/FST/PSII-019/2008 dated 27.2.2009	229.00 Lacs	27.2.2009 for 5 year	Chairperson of the Department
DST	ALICE – Operation and Utilization	117.50 lacs	30.9.2009upto 31.3.2012	Prof.M.M. Aggarwal
DST	India LHC Grid Collaboration – Enhancement of Regional World wide Computing Grid (WLCG)	58,27,500.00	17.3.2010	Prof. M.M. Aggarwal & Prof.S.B. Beri
DST	Study of New particles with the CMS Detector at the Large Hadron Collider and Heavy Ion Physics using LHC at CERN CMS Experiment	702.32 Lacs	30.9.2009upto 31.3.2012	Prof. Suman Bala Beri and Prof.J.B. Singh
DST	Phenomenology of……precision measurements	11,64,000/-	09-03-2009 upto 08-03-2012	Dr. (Mrs.) Gulsheen Ahuja
DST	Energy Density formalising for	16,07,520/-	11-08-2009	Prof. R.K.

	structuring hot and rotating Nuclear		upto 12-08-2012	Gupta
INDO-FRENCH	Dynamics of Multifragmentation	3,00,000/- + JRF	01-01-2010up to 31-12-2012	Dr. R.K. Puri
INSA	Structural & Dynamical Correlations in Quantum System	2,90,000/-	1.1.2011up to continue for 5 years.	Prof.K.N. Pathak
IUAC	(NSC) Research Project, Normal Deformed and strongly deformed nuclear structures in some Hafnium and Lutetium nuclei"	75,000/- + UFR Fellow	28.8.2011up to 27.8.2014	Prof. Nirmal Singh
NSC	Systematic m measurements --- Super heavy region	75,000/- + JRF	15-05-2010 14-05-2013	Dr. B.R. Behera
NSC	Anomalous deviation… ……evaoporation Spectra	45,000/- + JRF	31-10-2008 30-10-2011	Prof. Gulzar Singh
NSC	Hyperfine interaction studies using PAD techniques	45,000/- + JRF	18-02-2009 17-02-2012	Prof. A.K. Bhati.
P.U.	Lifetime Emeritus Professor PU	15,000/- per year (Lifetime)	10.10.2010	Prof. Nirmal Singh
P.U.	Lifetime Emeritus Professor PU	15,000/- per year (Lifetime)	20.1.2007	Prof. K.N. Pathak
PURSE	"Research in Frontiers of research Theoretical High Energy		upto 2012	Prof. M.M. Gupta

PURSE	Radiation Detector Fabrication Research Laboratory for Nuclear Physics	43,96,250.00	upto 2012	Prof. K.P. Singh
PURSE	Advance PAC Spectrometer Research for the Research in the Border	14,00,000/-	upto 2012	Prof. A.K. Bhati
UGC	CAS in Physics Vide letter No.530/4/CAS/2008 (SAP-1) dated 7.7.2008	97.50 Lacs	1.4.2008 upto 31.3.2013	Dr. C.S. Aulakh Co-ordinator
UGC	Nuclear Structure Studies of certain Nuclei in the A 100-130 Mass Region Using in Beam Spectroscopy	2,90,000/-	4.1.2011 upto 3.1.2013	Prof.Nirmal Singh
UGC-DAE	Spin Distribution measurement a probe to understand reaction mechanism of medium mass systems	75,000/- + JRF	1.7.2010up to 30.6.2013	Dr.B.R. Behera
IUAC	(NSC) Research Project, Normal Deformed and strongly deformed nuclear structures in some Hafnium and Lutetium nuclei"	75,000/- + UFR Fellow	28.8.2011up to 27.8.2014	Prof. Nirmal Singh

2011-2012

Sponsor	Title	Funds sanctioned	Duration	Principal Investigator and Researh Team
CSIR	Electronic and Heat Transport Properties of Hetero-Graphenes and Carbon Nanotubes Dynamic impact strength of	9,30,000.00	1.12.2010 to 30.11.2013	Prof. .V.K. Jindal

	their nanocomposites			
DST	Fermion mass matarices and their compatiability with Flavor mixings	14,50,000	04.07.2012 to 03.07.2015	Dr. Gulsheen Ahuja
-do-	FIST Program Vide letter No.SR/FST/PSII-019/2008 dated 27.2.2009	229.00 Lacs	27.2.2009 to 26.2.2014	Chairperson of the Department
-do-	ALICE – Operation and Utilization	117.50 lacs	30.9.2009 to 31.3.2014	Prof.M.M. Aggarwal
-do-	India LHC Grid Collaboration – Enhancement of Regional World wide Computing Grid (WLCG)	58,27,500.00	31.3.2013	Prof. M.M. Aggarwal & Prof.S.B. Beri
-do-	Study of New particles with the CMS Detector at the Large Hadron Collider and Heavy Ion Physics using LHC at CERN CMS Experiment	702.32 Lacs	30.9.2009 to 31.3.2014	Prof. Suman Bala Beri and Prof.J.B. Singh
-do-	Collaboration by Indian…….	2,33,70,000	31.3.2012 to 31.3.2015	Dr.Vipin Bhatnagar
-do-	Study of Cp-Violation ……..KEK B-Factory	45,10,400	20.12.2011 to 31.3.2016	Prof. J.B. Singh
-do-	Energy Density formalizing for structuring hot and rotating Nuclear	16,07,520/-	11-08-2009 to 20.1.2013	Prof. R.K. Gupta
ISRO	Understanding the birth of the solar system: Theoretical Studies	5,46,000/- for Ist year	19.8.2011 to 18.9.2014	Dr. Sandeep Sahijpal

INDO-FRENCH	Dynamics of Multi fragmentation	3,00,000/- + JRF	01-01-2010 to 31-12-2012	Dr. R.K. Puri
INSA	Structural & Dynamical Correlations in Quantum System	2,90,000/-	1.1.2011 to 31.12.2015	Prof.K.N. Pathak
IUAC	(NSC) Research Project, Normal Deformed and strongly deformed nuclear structures in some Hafnium and Lutetium nuclei"	75,000/- + UFR Fellow	28.8.2011 to 27.8.2014	Prof. Nirmal Singh
NSC	Systematic measurements --- Super heavy region	75,000/- + JRF	15-05-2010 to 14-05-2013	Dr. B.R. Behera
-do-	Anomalous deviation… ……evaoporation Spectra	45,000/- + JRF	31-10-2008 to 30-09-2012	Prof. Gulzar Singh
-do-	Study of Prescission and post scission charged particle emission in heavy ion induced reactions	75,000/- +JRF	07.05.2012 to 06.05.2015	Dr. Ashok Kumar
-do-	Physico-Chemicals studies of Carbon Nano tubes Modified by Swift Heavy Ion In radiation	75,000/- + JRF		Prof. Keya Dharamvir
P.U.	Five year term Emeritus Professor PU	15,000/- per year (Lifetime)	10.10.2010	Prof. Nirmal Singh
-do-	Lifetime Emeritus Professor PU	15,000/- per year (Lifetime)	20.1.2007	Prof. K.N. Pathak
PURSE	Phase – II	56,75,000	Upto 30.9.2012	CHAIRPERSON
UGC	Vibrational dynamics of potential radio protective Antioxidants	12,22,800	01.07.2012 to 30.06.2015	Prof. G.S.S.Saini

-do-	CAS in Physics Vide letter No.530/4/CAS/2008 (SAP-1) dated 7.7.2008	97.50 Lacs	1.4.2008 to 31.3.2013	Dr. C.S. Aulakh Co-ordinator
-do-	Nuclear Structure Studies of certain Nuclei in the A 100-130 Mass Region Using in Beam Spectroscopy	2,90,000/-	4.1.2011 to 3.1.2013	Prof.Nirmal Singh
UGC-DAE	Spin Distribution measurement a probe to understand reaction mechanism of medium mass systems	75,000/- + JRF	1.7.2010 to 30.6.2013	Dr.B.R. Behera

July 1, 2012 to June 30,2013

Sponsor	Title	Funds Sanctioned	Duration	Principal Investigator
ISRO	"Understanding the birth Of the solar system : Theoretical Studies".	5,46,000/-	2011 - 2014	Dr. Sandeep Sahijpal
NSC	"Systematic measurements of Fusion-Fission properties In the near super-heavy region".	6,54,997/-	2010 - 2014	Dr. B. R. Behera
NSC	"Study of Precision and post scission charged particle emission in heavy ion induced reactions".	3,42,108/-	2012 -2015	Dr. Ashok Kumar
UGC	"Vibrational dynamics of potential radio protectiveAntioxidants".	12,22,800/-	2012 - 2015	Prof.G.S.S. Saini
DST	"Fermion mass matrices and their compatibility with Flavor mixings"	18,12,000/-	2012 - 2015	Dr.Gulsheen Ahuja

NSC	"Physico-Chemical studies of Carbon Nanotubes Modified by Swift Heavy Ion Iradiation".	25,000/- + fellowship	2012 - 2015	Dr.Keya Dharamvir
CSIR	"Study isospin effects in heavy ion collisions at Intermediate energies".	80,000/-	2012 - 2015	Prof. R.K. Puri
UGC	"Study of Phase Change Mechanism In GST Nanoparticles For PCRAM Devices".	13,22,800/-	2013 - 2016	Dr.S.K. Tripathi
UGC	"Study of collective flow and related phenomena In intermediate energy heavy ion collisions".	10,10,000/-	2013 - 2016	Prof. Rajeev K. Puri
DST	FIST Program	2.29 lacs	2009 - 2014	Chairperson, Deptt. of Physics
DST	ALICE Operation & Utilization	2,45,00,000/-	2009 - 2014	Prof.M.M. Aggarwal
UGC	Carbon Nanotubes under swift heavy ion irradiation – characterization and simulation	10,22,800/-	2012 - 2015	Dr.Keya Dharamvir
DST	Electrical & optical properties of amorphous Chalcogenides	16,13,813/-	2013 - 2016	Prof.Satya Parkash
DST	India LHC Grid Collaboration – Enhancement of Regional World wide Computing Grid.	58,27,500/-	2010 - 2014	Prof.M.M. Aggarwal & Prof.Suman Bala
Non-Plan	"Lab charges against receipt" Physics & Electronics (Non-Plan)	12,70,000/-	2013 - 2014	Chairperson, Deptt. of Physics
DST	Pre-Operative programme for			Dr.Samarjit

	Indian Participation in the FAIR Project at the GSI, Darmstadt, Germany: Accelerator and Detector – R&D and Prototyping			Sihotra
Non-Plan	Physics	20,02,890.00	2013 -.2014	Chairperson, Deptt. of Physics
INSA	INSA Sr. Scientist Scheme	4,60,000/- per year for 5 year	2011 to 2015	Prof.K.N. Pathak
PU	Professor Emeritus	30,000/-	Lifetime	Prof.K.N. Pathak
PU	Professor Emeritus	30,000/-	Lifetime	Prof.Nirmal Singh
IUAC-NSC	Normal Deformed and strongly deformed nuclear structures in some Hafnium and Lutetium nuclei	5,79,000/-	19.10.11 to 31.10.2014	Prof.Nirmal Singh
UGC	In beam nuclear structure Physics in A^100^130 mass nuclei"	6,38,200/-	2013 - 2016	Prof.Nirmal Singhq
DST	Ramanujan Fellowship	73 lacs	2012 - 2017	Dr.Amandeep Sood
DST	Study of New particles with the CMS Detector at the Large Hadron Colider and Heavy Ion Physics using LHC at CERN CMS Experiment	9,10,35,000/-	2009 - 2014	Prof. J.B. Singh & Prof. Suman Bala Beri.
DST	Collaboration by Indian Physicists on Neutrino Projects	2,33,70,000/-	2012 - 2015	Prof. Vipin Bhatnagar
DST	Study of CP – Violation and Rare B-decays	45,10,400/-	2011-2016	Prof. J.B. Singh

ANNEXURE IV

Committee members

July 1, 2009 to June 30, 2010

Dr. Manmohan Gupta , Chairperson (upto 31st May 2010) Continued as Coordinator, Centre of Advanced Study, Deptt.of Physics, Panjab University; Editor-in-Chief, Research Journal Science, P.U. Chandigarh (upto March 2010); On the panel of referees for many national and international journals; Member of various High level academic and administrative committees at University level; President Physics Section: 4th Chandigarh Science Congress (CHASCON 2010), P.U. Chandigarh; Member of the Physical Sciences Research Committee of the CSIR. President/Convener Physics section: 13th Punjab Science Congress held at P.U. Chd., 7-9th Feb.2010 ;President Physics Section: 4th Chandigarh Science Congress (CHASCON 2010), P.U. Chd.; Member, Academic Council, CDL University, Sirsa; Advisory Committee Member, Academic Staff College, P.U.; Member R.D.C., H.P. Univ., Simla; Convener BoS M.Tech. Nano-Science Nano- technology; Member, PURSE Award Monitoring Committee, P.U. Chd.; Co-ordinator, Choice Based Crecit System Cell, P.U. Chandigarh; Elected President of IAPT (R C 3). Elected President of IPA (Local Chapter).

Dr. C.S. Aulakh Chairperson (w.e.f. 1.6.2010), Director, XXV SERC School, Chandigarh , April2-22, 2010. Organizer, Goran Fest, Split, Croatia, June 9-12, 2010.

Dr. V.K. Jindal Member monitoring committee of UGC for Nanotechnology program, (retd.on 31.1.10) as well as on Governing Council for the Centre for Nanoscience & Nanotechnology, University of Mumbai, Madras and Kolkata. SAP committee of JNU, Delhi and Mysore University, as well as member ARMREB research board of DRDO, and referee of some important research journals in physics, physical chemistry and nanotechnology. Member, managing committee of Indian Neutron Scattering Society (INSC). Completed revisit under Alexander von Humboldt invitation at TU, Munich in August, 2009. Member, National Committee for Fulbright-Nehru Doctoral and Professional Research Fellowships. Member Advisory Committee CHASCON 2010.

Dr. R.K. Puri Member of following Editorial Advisory Board of Journal and Reviewer: Physics Research International (HINDAWI Corp). Electronic Theoretical Physics Journal , Georgian Electronic Scientific Journal: Physics, Georgian Academy of Sciences. Indian Journal of Science and Technology, India. Board of referees of Physical Review C etc. Advances in Applied Research journal of Physics. Energy, Engineering and Economics Policy Florida. American J. Physics. Chinese Physics Letter. International Journal of Modern Physics E. Theoretical and Mathematical Physics. J. Physics G: Nuclear & Particle Physics. Acta Physica Slovaca. Indian J. of Pure and Applied Physics. Papers in Physics. Chinese Journal of Physics. Annals of Nuclear Energy. Asian J Physics (2010). Frontiers of Physics in China. Ukrainian Journal of Physics. Physica Scripta, Royal Swedish Academy of Sciences. Membership: Life member of Indian Science Congress Association (2010). Life member of Indian Physical Society (2010-applied). Life member of Indian Nuclear Society (2010). Life member of Punjab Academy of Sciences (2010). Secretary-Physics Section 4th

Chandigarh Science Congress, Panjab University, Chandigarh March 19-20, 2010. Elected, Secretary, Indian Physics Association Chandigarh Chapter, 2009- Till to date

Dr. C.N. Kumar Managing Editor, PRAYAS IAPT journal

Dr. Kuldeep Kumar Assistant Editor, IAPT Bulletin.

2010-2011

Prof. C.S. Aulakh Co-organizer, ICTP Summer School on Particle Physics, June 6-17, ICTP, Trieste.

Prof. J.B. Singh Member Organizing Committee: International Conference- Lepton-photon 2011, TIFR, Mumbai, Aug 22-27,2011; Member National Committee: Department of Atomic Energy-Department of Science and Technology(DAE-DST) Task Force Committee for International Programme in High Energy Physics; Department of Atomic Energy- Department of Science and Technology(DAE-DST) Task Force Committee for Human Development for High Energy and Nuclear Physics

Dr. Vipin Bhatnagar Member Technical committee for the Smart Class Room Initiative of the University; Incharge of the High Performance Computing Cluster PURSE Lab in the Department.

Prof. Nirmal Singh Awarded Emeritus Fellowship by the University Grants Commission for two years from Jan.3, Emeritus Fellow,UGC 2011; Appointed Book Editor of the two books titled "Radioistopes –Book-I" and Radioistopes-Book-2 by INTECH OPEN ACCESS PUBLISHERS, University Campus STeP Ri Slarka Krautzeka 83/A, 51000, Rijeka, Crotia, May 2011.

Prof. Keya Dharamvir Coordinator, entrance test for Ph.D., Science Faculty, 2010. Member, Academic Council, GGS Indraprastha University, Delhi; Member of Governing Body of Echelon Institute, Faridabad;Member, AUC (Accelerator Users Committee), IUAC (Inter University Accelerator Centre; formerly Nuclear Science Centre), Delhi (a DAE/ UGC inter- university facility), till Jan., 2011.

Prof. G.S.S.Saini Member of editorial board of Journal of Spectroscopy and Dynamics (2010 onward)

Dr. Kuldeep Kumar Assistant Editor , IAPT Bulletin.

2011-2012

Prof. Manjit Kaur Invited to CERN, Geneva, Switzerland for participation in the CMS LHC October –
November 2011, invited to CERN, Geneva, Switzerland Participation in the CMS experiment at LHC February 2012

Dr. S.K. Tripathi Appointed Member of Editorial Advisory Board of "Hybrid Materials" Journal (Germany).

Dr. Vipin Bhatnagar Invited to CERN, Geneva, Switzerland for participation in the CMS Experiment at LHC. June – July, 2011; Invited to CERN, Geneva, Switzerland participation in the CMS Experiment at LHC Nov – Dec, 2011; Invited to CERN, Switzerland participation in the CMS ; Experiment at LHC Jul – Aug, 2012; Grant of DST funded Research Project worth Rs. 2.33 Crores from the Fermiab, USA based Program

Dr. B.R. Behera Chosen as a faculty for DST-SERC School on Modern Trends in Nuclear Structure and Dynamics held at IIT Roorkee from 6-24 February, and physics of radioactive (RIB).

Prof. K. N.Pathak Appointed Mentor and performance auditor of 5 National institutions located in Punjab, Uttar Pradesh, West and Himachal Pradesh

2012-2013

Prof. Manjit Kaur Deputation to CERN, Geneva, Switzerland to participate in CMS collaboration research work : 15 Nov. - 15 Dec. 2012 and 2 – 30 May, 2013; Member, Planning Committee for SERC School in Experimental High Energy Physics to be held in 2013, DST, Govt. of India.

Dr. B.R. Behera Received Certificate of Appreciation from Inter-University Accelerator Centre, New Delhi for the excellent research work done in the field of nuclear physics using ion beams and associated facilities at the Centre; Selected for INVITED SPECIAL SEMINAR at IUAC, New Delhi Appointed as secretary for Physics Section of Chandigarh Science Congress -2013; Appointed as member of National Organizing Committee, for the National Workshop on Surrogate Reactions and its Applications (Surrogate-2013) held at MS- University Baroda during 24-25, January 2013; Appointed as member of National Organizing Committee, for the National Conference in Nuclear Physics (NCNP-2013) held at Sambalpur University during 01-03 March, 2013.

Prof. V K Jindal Member, National Organizing Committee, 58th DAE Symposium ; Member, Organizing Committee and invited speaker in 3rd Conference in Nanomaterials (CN 2014), Shenzhen, China; National Advisory Committee and invited speaker, 1st International Workshop on Advanced Nanomaterials (FIWAN 13) University of Madras; Alexander von Humboldt invited research visit to Technical University, Berlin, Germany (Aug-Oct. 2012); CSIR Emeritus Scientist continued till Jan., 2014.

Prof. Keya Dharamvir Appointed Member of JRM (Joint Review Mission) for Teacher Education in the State of Punjab by HRD Ministry to review Centrally Sponsored Schemes; June 2013; Appointed Thesis Examiner for Addis Ababa University, Ethiopia, and visited 23 – 26 June, 2013.

Prof. Raj K. Gupta Life Time Achievement Award by Organizing Committee of International Nuclear Physics Conference, held at Chitkara University, Brotiwala (HP) India, on 19.11.2012.

Appointed Editorial Manager for online submission and peer review tracking system of Naturwissenschaften Journal on May 15, 2013.

ANNEXURE V

SEMINARS ORGANISED

2009-2010

Title of the Seminar Conference	Place/Date(s)	Participating faculty names who attend the conference	Name
Local Organizing committee of IUCAA Introductory workshop in Astronomy and Astrophysics	Deptt. Of Physics, P.U. Chandigarh. Nov. 19-23, 2009		Dr. K.S. Bindra
Local organizing Committee of PLANEX Workshop	Deptt. Of Physics, P.U. Chandigarh Feb. 1-5, 2010.		- do -
Organising Committee of Student Research Convention	June 22,2210		- d0 -
National Theme Workshop on Nuclear Reaction Mechanism	Deptt. Of Physics March 17-19, 2010		Dr. K.P.Singh
TPSC (Theoretical Physics Seminar Circuit)			Dr. C.N. Kumar,convener; S. Sahijpal, Ranjan Kumar and Kuldeep Kumar

2010-2011

Title of the Seminar/Conference	**Place and Date**	**Participating faculty**	**Name of the Director**
One-day seminar programme on Recent Trends in Physics	P.U. Chandigarh (31 August 2010)	all faculty + visitors + invited speakers + participants	Dr. C.N. Kumar Dr. B.R. Behera Dr. Kuldeep Kumar
Refresher Course in Physics	P.U. Chandigarh (7-27 September 2010)	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Dr. C.N. Kumar
International Conference on Advances in Condensed and Nano Materials (ICACNM)	P.U. Chandigarh 22, 23-26 Feb., 2011	all faculty + visitors + invited speakers + participants	Prof. Keya Dharamvir, Dr. S.K. Tripathi, Dr. Ranjan Kumar, Dr. Sunita Srivastava , Dr. Rajesh Kumar
CHASCON 2011	P.U. Chandigarh (26-28 Febaruary 2011)	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Dr. C.N. Kumar
The 4th DAE-BRNS Theme Meeting on EXFOR Compilation of Nuclear Data	P.U. Chandigarh (4–8 April 2011)	all faculty + visitors + invited speakers + participants	Dr. B.R. Behera, Dr. Ashok Kumar

2011-2012

Title of the Seminar/Conference	**Place and Date**	**Participating faculty**	**Name of the Director**
One-day seminar programme on Analytical Techniques in Nuclear Science	P.U. Chandigarh (January 27, 2012)	all faculty + visitors + invited speakers + participants	Dr. C.N. Kumar Dr. B.R. Behera Dr. Kuldeep Kumar
International Workshop on Structure and Dynamics of Trapped Quantum Gases	P.U. Chandigarh (February 2-4, 2012)	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Dr. C.N. Kumar
One-day seminar programme on Physics with Large Accelerators	P.U. Chandigarh (February 24, 2012)	all faculty + visitors + invited speakers + participants	Prof.Manjit Kaur Dr. Vipin Bhatnagar
CHASCON 2012	P.U. Chandigarh (Febaruary 26-28, 2012)	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Prof. S.K. Tripathi
Workshop on Parallel Computing using HPCC	P.U. Chandigarh (March 2-3, 2012)	all faculty + visitors + invited speakers + participants	Prof. C.S. Auakh Dr. Vipin Bhatnagar Dr. Ashok Kumar Dr. Sunita Srivastava ,
Zonal level master resource persons' training programme on Transit of Venus – 2012	P.U. Chandigarh (April 9-10, 2012)	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Dr. Sandeep Sahijpal

2012-2013

Title of the Seminar/Conference	Place and Date(s)	Participation faculty	Name of the Director
1st IAPT National Student Symposium on Physics	P.U. Chandigarh February 25-27, 2013	all faculty + visitors + invited speakers + participants	Prof. Manjit Kaur Dr. C.N. Kumar
7th Chandigarh Science Congress: CHASCON 2013	P.U. Chandigarh March 1.-3.2013	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Dr. B.R. Behera
Workshop on Parallel Computing using HPCC	P.U. Chandigarh March 21-22, 2013	all faculty + visitors + invited speakers + participants	Prof. C.S. Aulakh Dr. V. Bhatnagar Dr. A. Kumar Dr. S. Srivastava Dr. K. Kumar

ANNEXURE VI

33. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
M.Sc.(H.S.)Physics 2009-2010	160	10	6		
2010-2011	164	10	35		
2011-2012	77	12	34		
2012-2013	299	06	42		
M.Sc.(H.S.)Physics & Elect. 2009-2010	108	02	20		
2010-2011	90	03	17		
2011-2012	60	17	15		
2012-2013	138	01	21		
B.Sc.(H.S.)Physics & Elect. 2009-2010	64	04	18		
2010-2011	44	05	18		
2011-2012	90	07	15		
2012-2013					
M. Phil. 2010-2011	39	04	11		
2011-2012	31	04	11		