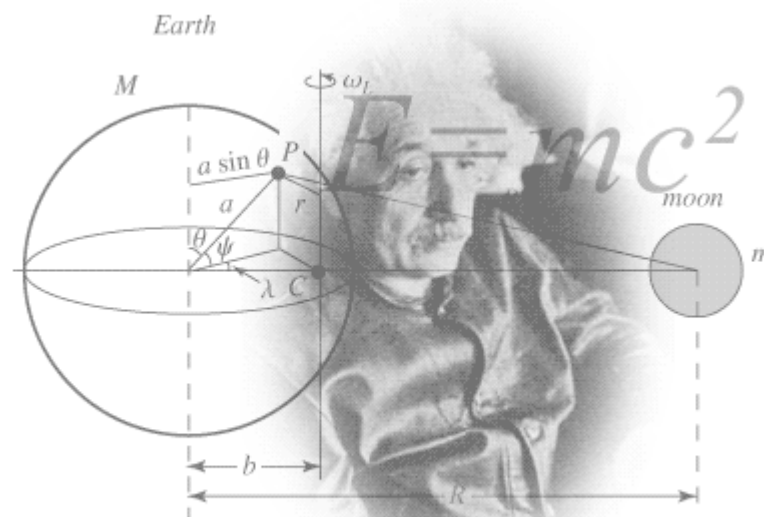


Welcome
to the
Department of Physics



National Institute of Technology
Hamirpur (H.P.) INDIA

<http://www.nitham.ac.in/>

Brief introduction about the department

Department of Physics came into existence as independent department in August, 2009. Previously it one component of Applied Sciences and Humanities since since inception of Regional Engineering College Hamirpur (HP) in 1986. The Physics department has now 05 regular faculty members. The department is involved in development of infrastructure of high quality to fulfill the needs of various engineering main streams. The Department also offers Ph.D programmes and at present there are eight full time and two part time research scholars pursuing research for the Ph. D. degree. The department has one engineering Physics laboratory for undergraduate classes.

Department aims to be a centre of excellence by acting as a facilitator for knowledge generation and dissemination to produce physicist, researchers through rigorous theoretical and experimental training. In the recent developments in science and technology, department has been updated with latest world class equipments available to facilitate the students to have more exposure in technical field. Department besides the Engineering Physics offers various open elective courses like Physics of Semiconductor Devices, Vibrations and Waves, Nuclear Physics, High Energy Physics etc for post graduate and undergraduate students.

Department has state of art laboratory facilities for undergraduate and postgraduate students in the area of theory & simulation, thin films, condensed matter physics, liquid crystals and photonics. Beside this department also have specialization in the field of Nuclear Physics and High Energy Physics. Department is going to start post graduate programmes in five year integrated M. Sc. and M. Tech. in Applied Physics.

Faculty members:

S. No	Name	Designation	Qualifications	Specialization
1.	Dr. Subhash Chand	Assistant Professor & Head of Department	M. Sc., M. Tech, Ph. D.	Condensed Matter Physics (Experiments and Simulations)
2.	Dr. Arvind Kumar	Assistant Professor	M. Sc., Ph. D.	Condensed Matter Physics (Experiments)
3.	Dr. Kuldeep Kumar Sharma	Assistant Professor	M. Sc., M. Phil, Ph. D.	High Energy Physics (Particle Physics)
4.	Dr. Rajesh Kumar Sharma	Lecturer	M. Sc., Ph. D.	Nuclear Physics (Theory)
5.	Dr. Vimal Sharma	Lecturer	M. Sc., M. Phil. Ph. D.	Condensed Matter Physics (Experiments)

Technical Staff:

S. No	Name	Designation
1.	Mr. Bikram Singh	Lab Technician
2.	Mr. Roop Lal	Lab Attendant
3.	Mr. Rakesh Kumar	Lab Attendant (Contract basis)

Courses offered at B. Tech. level:

1. Engineering Physics -I (BS-104) (Compulsory for all engineering branches)
2. Physics of Semiconductor Devices (OE-351) (Open Elective)

Proposed Post-Graduate Programmes

- Integrated M. Sc. Physics (5 Year)
- M. Tech. Applied Physics (2 Year)

Research facilities available

Sl. No.	Equipment Name	Purpose For activity to perform
1.	High Vacuum Coating Unit	For thin film deposition
2.	Electron Beam Coating Unit	For thin film deposition
3.	Source Meter, Electrometer, Picoammeter and Nanovoltmeter (Keithley Make)	For sourcing and measuring current/ voltages, resistances etc
4.	Impedance Analyzer	Impedance analysis at various frequencies
5.	Close Cycle Helium Refrigerator with temperature controller	Attaining low temperature for sample I-V and C-V characterisation
6.	Tubular Furnace with PID controller for heating up to 1200C.	For heating/ annealing materials samples at different heating rates for different timings.
7.	Optical Microscopes.	Microscopic analysis of surfaces
8.	Wet chemical benches	Chemical synthesis of materials presently used for conducting polymers.
9.	Laminar flow bench/ ovens and electronic balance	For working clean environment, heating/ drying and weighing small amount, respectively.

Projects undertaken

Sl. No.	Funding Agency / (Scheme)	Principal Investigator	Title of the Project	Amount (Rs.) lacs
1	AICTE (MODROB) 1999-2000	Dr. Subhash Chand	Modernization of Applied Physics Laboratory -I	6.00
2	AICTE (MODROB) 2000-2001	Dr. Subhash Chand	Modernization of Applied Physics Laboratory -II	5.00

Ph.D. Guidance

S. No.	Name of the Faculty	Name of the Student and affiliated University/ Institute/ Year
1.	Dr. Subhash Chand	<p>Guideded</p> <p>1. Saroj Bala - HPU Shimla (2009)</p> <p>In Progress</p> <p>2. Atul Kapil - NIT Hamirpur</p> <p>3. Indu Sharma - NIT Hamirpur</p> <p>4. Manish Taunk - NIT Hamirpur</p>
2.	Dr. Arvind Kumar	<p>In Progress</p> <p>1. Naresh Kumar - NIT Hamirpur</p> <p>2. Ankita Sharma - NIT Hamirpur</p>
3.	Dr. Kuldeep Kumar Sharma	<p>In Progress</p> <p>1. Ashwani Kumar - NIT Hamirpur</p> <p>2. Nisha Kumari - NIT Hamirpur</p> <p>3. Ravi Kumar - NIT Hamirpur (Part time)</p> <p>4. Hardeep Singh - NIT Hamirpur (Part time)</p>
4.	Dr. Rajesh Kumar Sharma	<p>In Progress</p> <p>1. Shagun Thakur - NIT Hamirpur</p>
5.	Dr. Vimal Sharma	---

List of Registered Ph.D. Scholars

S. No.	Name of Ph.D. Scholar	Regular/ Part Time	Supervisor(s)
1.	Mr. Atul Kapil	REGULAR	Dr. Sbhash Chand
2.	Ms. Indu Sharma	REGULAR	1. Dr. Subhash Chand 2. Dr. J. N. Sharma (Professor Mathematics)
3.	Mr. Manish Taunk	REGULAR	Dr. Subhash Chand
4.	Ms. Nisha Kumari	REGULAR	1. Dr. Kuldeep Kumar Sharma 2. Dr. J. N. Sharma (Maths) (Professor Mathematics)
5.	Ms. Ashwani Puri	REGULAR	1. Dr. Kuldeep Kumar Sharma 2. Dr. J. N. Sharma (Professor Mathematics)
6.	Mr. Shagun Thakur	REGULAR	Dr. Rajesh Kumar Sharma
7.	Mr. Naresh Kumar	REGULAR	Dr. Arvind Kumar
8.	Ms. Ankita Sharma	REGULAR	Dr. Arvind Kumar
9.	Mr. Ravi Kumar	PART TIME	1. Dr. Kuldeep Kumar Sharma 2. Dr. Bhag Chand Chauhan (Asstt Professor, GDC Karsog, Mandi HP)
10	Mr. Hardeep Singh	PART TIME	1. Dr. Kuldeep Kumar Sharma 2. Dr. Rravi Kumar, Professor (Mat. Sc.) NIT Hamirpur

National Conferences/Seminars/Workshops organized

S. No	Name	Designation	Other Collaborators
1.	National Conference on Recent Advances in Innovative Materials (RAIM-08)	February 16-17, 2008	---
2.	Contact Meeting for Popularizing The National Fusion Programme” (CMPNFP-08) (Northern Region)	November 29, 2008	Board for Research in Fusion Science & Technology (BRFST) India.
3.	National Conference on Recent Advances in Condensed Matters Physics (RACMP-09)	May 23-34, 2009	---
4.	National Workshop on Plasma-Surface Interactions and Processing (NWPSIP-09)	May 25-27, 2009	Plasma Science Society of India (PSSI) India.
5.	INS National Seminar on “Nuclear Technology for Nation Building (NTNB-09)	August 08, 2009	Indian Nuclear Society (INS), Mumbai (India)
6.	24th National Symposium on Plasma Science and Technology (PLASMA-09)	December 8-11, 2009	Plasma Science Society of India (PSSI) India. Board for Research in Fusion Science & Technology (BRFST) India.

Glimpses of the events organised by the department



Lamp lighting ceremony of RACMP-09



Professor K. K. Raina Chief Guest during RACMP-09



Professor S. C. Kashyap, IIT Delhi invited speakers



Dignitaries on the dais at the inaugural of RACMP-09

Two day National Conference on “Recent Advances in Condensed Matter Physics (RACMP-09) “ was organized by Department of Applied Sciences and Humanities, N I T Hamirpur (HP) during May 23-24, 2009. The chief guest, Professor K K Raina, School of Physics and Materials Science, TIET Patiala emphasized on the need of collaborative research among different disciplines. In the inaugural lecture NIT Director, Professor I.K. Bhat advised the participating research scholars and faculties to work sincerely and honestly to do the quality research in laboratories to deliver useful output to the community and peoples of the country. Professor S. C. Kashyap, Department of Physics, IIT Delhi, Professor Shyam Kumar, Department of Physics Kurukshetra University, Dr. Gurmel Singh, Professor, Department of Physics, Punjabi University, Patiala, Dr. O. P. Pandey and Dr. Kulveer Singh, School of Physics and Materials Science, TIET Patiala, Dr. S. K. Tripathi, Department of Physics, P.U. Chandigarh, and Dr. S.K.S. Parashar, KIST Bhubneshwar, were present in the conference.



Inaugral Ceremony of National Conference on Recent Advances in Innovative Materials RAIM-08



Invited lecture during RAIM-08



Poster Session during RAIM-08

Two day National Conference on “Recent Advances in Innovative Materials (RAIM-08) “ was organized by Department of Applied Sciences and Humanities, N I T Hamirpur (HP) during February 16-17, 2008. Dr. Chander Parakash, Aditonal Director DRDO-Delhi was present as Chief Guest and Dr. S. M. D. Rao, Institute of Physics Academia Sinica, Taiwan attended the event as Guest of Honour. Dr. S. Mukherjee, FCIPT, IPR, Gandhinagar Dr. Tapanendu Kundu, IIT Bombay, Dr. J. Govindarajan, IPR Gandhinagar, Dr. B. P. Singh, IIT-Bombay, Dr. Sanjeev Bhargav, IIITDM-Jabalpur, Dr. P K Ahluwalia, HPU-Shimla, Dr. S. B. Mazumder, IIT Kharagpur and Dr. Ravi Kumar, IUAC-Delhi had delivered invited talks on various aspects of Materials.

