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## Our Vision

To build a vibrant multicultural learning environment founded on value based academic principles, wherein all involved shall contribute effectively, efficiently and responsibly to the nation and global community.

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Silver Jubilee Year  
2010-2011

## From the Director's Desk

*"The progress during last five years by NIT Hamirpur is unparalleled and exceeds many premiere institutions of the country. Be it faculty development programmes, publications, summer and winter schools, short term training programmes, conferences and etc.... The contribution of NIT Hamirpur has been a benchmark when output is compared in terms of per faculty contribution or when measured in terms of per Rupee invested"*

Prof. Dheeraj Sangi, Professor, IIT Kanpur (2010) states, "If there was an award for the most improved Institute in the country during last few years, it had to be given to [NIT Hamirpur](#). The infrastructure improvement (computers, Internet bandwidth, buildings, and everything else) is taking place at a very rapid pace."



Prof. I. K. Bhat, Director

During my term of five years since Nov. 2005, the institute has witnessed phenomenal growth. The growth has been in terms of Quality of teaching-learning, infrastructure development, laboratories development, establishment of new centres of excellence and in continuing education programmes. NIT Hamirpur which was an Undergraduate teaching institute till 2005, is now recognized as a **quality teaching and research** institution with several Postgraduate programmes and about 230 scholars registered for Ph.D since then. At present, the institute is running six undergraduate, fourteen M.Tech programmes, Doctoral programme besides an MBA programme. The institute has seen exponential growth in terms of the number of faculty position that have been created (about 200) and the faculty enrolled strength has increased from 52 to over 104 within five years. The faculty interviews have been conducted almost every year. This has definitely given boost to academic activities in the campus and is evident from the high ranked AIEEE students opting NIT Hamirpur as their first preference. The strength of students' intake per year to the institution has increased from 285 in 2005 to over 850 in 2010.

**New Centres of Excellence:** Another praiseworthy initiative of the institution has been in starting of new centres of excellence in Material Science & Engineering and Energy & Environment, TIFAC Core in Transformer Diagnostics, Altair Design Center, VLSI and MEMS centers. The institute has started new M.Tech and Ph.D programmes in these areas. This will help the institute to be ready for meeting the future requirements of the society in these thrust areas of our country.

**Extension activities:** As a part of the extension services towards the teaching community and students, more than 33 Conferences (National and International), 133 Summer Schools and 41 Training Programs, 100 Community Development Programs and 34 Tribal Development Programs were organized during the last 5 years. The Faculty Development Training Programmes of the Institutes have been most sought ones and has attracted faculty from far off places like Kerala, Karnataka, Tamil Nadu, Sikkim, Bihar, Orissa, North East etc.

**ICT Facilities:** Internet has become lifeline of any academic institution in present time. NIT Hamirpur has most dynamic website that is updated daily. Internet connectivity has increased from mere 2 Mbps to 202 Mbps since Nov 2005. This will help the students, researchers and faculty in their research pursuits as most of the journals and data is available online. Facility of internet and VOIP telephony has been extended to the hostels and residential areas for better

**Research:** Introduction of M.Tech and Ph.D programmes in 2006 at NIT Hamirpur has given boost to the research output of the institute. The total number of research & development sponsored projects in the institution have seen a ten-fold increase to a total number of about thirty projects as against three in 2005. More projects are being submitted to various funding agencies. The research papers published in International journals is 690 and in conferences 880 during last five years.

**Infrastructure:** With the expansion in terms of increase in intake and starting of new Postgraduate and Ph.D programmes, there was a great stress on infrastructure. It was due to the thoughtful and envisioned planning that during successive years the institute was in a position to accommodate all the students and faculty on campus. The increase has been almost three times, but still institute was in a position to accommodate all the students in the new hostels (Vindiyachal, Neelkanth) and new world-class classroom complex was built. A 1500 student capacity mega-hostel (Amarnath Hostel) is in planning stage after which it is expected that there will not be any shortage in near future. The 23 classrooms Vivekanand Lecture hall Complex with all audio and video facilities is unique. A training hostel with capacity of 160 is in the advanced stage of construction and likely to be completed in another a few months time. To meet out requirements of additional space in the departments, one floor was added to existing buildings of all the departments. New buildings for Architecture Department, Computer Centre, Estate Office, Central Store, Bank & Post Office were built. **The total constructed area which was about 35,000 Sqm in 2005 is now approximately over 1,25,000 Sqm and another 75,000 Sqm is going to be completed in another three months.** There has been purposeful planning and priority given to works like Hostels, Canteen that are related with students.

**Laboratories:** The laboratories in all departments have been revamped and new laboratories for Postgraduate and Ph.D students are in place in the institution. New equipments have been added to all the existing laboratories as well. Especially Material Science, Energy & Environment with the proposed state of the art laboratories will be among the best in the world. The Computer Centre has been equipped with state of the art cluster of Ccell, Intel, Optron blades and SAN & NAS storage system. This gives NIT Hamirpur an edge for boosting its research related infrastructure. Institute has unique combined solution for voice and data.

**Collaboration:** During last five years NIT Hamirpur has been a leader in collaborating with academic institution and industries within and outside the country. Institution has signed two dozen "Memorandum of Understanding" with institutions/industries within India and abroad. Institute has conducted workshops and training programmes at NIT Hamirpur and at the premises of institutions with which it has signed MOUs for developing their faculty and thus contributing to the development of country through these "Training the Trainer Programmes".

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### Student training within and outside the country:

Students training programmes has been given top priority. Such training exposes students to the real world industry related open problems. The institute has been instrumental in starting a new scheme for providing financial support to the students who are going abroad for training so that more and more students are encouraged to go abroad for getting such an exposure. This unique initiative besides many other student related schemes has made students more career oriented. If you talk to students at NIT Hamirpur or to Alumni outside Hamirpur, who has visited NIT Hamirpur in recent past, all of them have all the praise for the developments and the initiatives taken during last few years.

Every institution is known by the outcome i.e. the students of the institution that pass out. All eligible NIT Hamirpur students are getting 100% placement and some of them even have two jobs in their hands before leaving the institution. More than 85% students get scholarship and in 2009-10, the institute has disbursed more than Rs.2 crores of scholarship through various schemes. Alumni of the institute are placed at strategic positions in MNCs, Government and other industries in India and abroad. During last four years the several Alumni chapters have been opened. Some of these are at Shimla, Delhi, Bangalore, Kolkata, Dubai, Mumbai, Singapore, USA etc. This year during summer of 2010 IIT Kanpur has adjudged NIT Hamirpur student the best intern at IIT Kanpur.

Institution made its presence felt for the first time entering into top 25 institutions in the country in a survey conducted by Data Quest and other surveys conducted. Institute is consistently featuring in top twenty-five institutions in the country for the third consecutive year in such surveys. Regarding "Technical Education Quality Improvement Programme (TEQIP)" of MHRD, the performance of NIT Hamirpur assessed by World Bank Auditors and it was ranked highest with a score of 9.6 on a 10 point scale and was ranked No.1 amongst all participating institutions numbering more than 125. At the end of my five year term I feel quite contented to see the institution transforming and improving its brand image.

All this has been possible by the untiring effort of most of the faculty, Staff and Students. I wish them all the best in near future and hope it continues its journey with the same pace. I will fail if I do not acknowledge the efforts put in by Dr. Rajiv Kumar Sharma, Coordinator of the Institute newsletter who has taken pains to bring out this news letter.

Jai Hind  
Prof I.K Bhat  
Director NIT Hamirpur

## Convocation 2010



NIT, Hamirpur, organized its 4<sup>th</sup> Convocation on 10<sup>th</sup> July, 2010. On the eve of 4th Convocation, Prof. D.P.Agrawal, Chairman, U.P.S.C. & Dr. P. G. Periasamy, Chairman, Dharani Group of Industries were invited as Chief Guest and Guest of Honour, respectively. Besides these dignitaries, Hon'ble Chairman, Board of Governors, Members of Board of Governors, Senate, distinguished invitees, Faculty members and Staff of NIT, Hamirpur, and Graduants, Post Graduants and Ph.D. Scholars of Year 2009-2010 and their Parents, were also present in the Convocation ceremony.

At the very outset, Hon'ble Chief Guest, Guest of Honour and Chairman, Board of Governors & all Dignitaries congratulated the graduates, Post Graduates & Ph.D. Scholars for their overall performance, Research work, disciplined behavior during their stay in Campus during the period of their academic achievements. All the Graduates, Post Graduates & Ph.D. Scholars who passed out in the year 2009 and 2010 were conferred Degrees. Degrees have been awarded to **579 Graduates, 64 Post Graduates and 08 Ph.D. Scholars** by Prof. D.P.Agrawal, Chairman, U.P.S.C. on this occasion. During the eve of 4th Convocation, Director's Medals were awarded to Mr Syamsundara Rao Saikam, M. Tech., Department. of Electrical Engineering (Power System) for the year 2009, B. Tech./B.Arch. (i) Mr. Akhil Gupta, Department of Computer Science & Engineering for the year 2009 & (ii) Miss Aditi Sharma, Department of Electronics & Communication Engineering for the year 2010, Best Student Award for the year 2009 (i) Mr. Abhinab Pradhan, Department of Electronics & Communication Engineering & (ii) Mr. Tejaswi Gautam, Deptt. of Mechanical Engineering. and for the year 2010 to Mr. Akshay Milap, Department of Computer Science & Engineering were given by the Chief Guest. Subsequently, Director's Medals to the M. Tech. candidates for obtaining highest CGPI in the respective disciplines for the year 2009 were given by the Guest of Honour to (i) Mr. Syamsundara Rao Saikam, Electrical Engg. (Power System), Mr. Tejender Thakur, Mechanical Engineering. (Thermal Engg. CFD & HT), Ms. Neha Agarwal (in absentia), Electronics & Communication Engineering (VLSI DA&T) and Mr. Rajesh Sharma, Computer Science & Engineering. Similarly, Chairman distributed Director's Medals among the B. Tech./B. Arch. candidates for obtaining highest CGPI in their respective disciplines for the year 2009 & 2010 to (i) Miss Shveta Khera (CED), Mr. Ankit Sood (EEE), Mr. Ashish Paman (MED), Mr. Sandeep Kumar Sharma (E&CE), Mr. Akhil Gupta (CSE) & Ms. Swati Sharma (B. Arch.) for the year 2009 and Mr. Narendrajit (CED), Miss Urvi (EEE), Mr. Rohit Sharma (MED), Miss Aditi Sharma (E&CE), Miss Sneha Kelwa (CSE- in absentia) and Mr. Arjun Uppal (B. Arch.).

Finally, Chairman Board of Governors signed the Scroll and Miss Aditi Sharma, administered the Oath to all Degree recipients by repeating the Oath word by word. Thereafter, Hon'ble, Chairman, Board of Governors, NIT, Hamirpur, declared the 4<sup>th</sup> Convocation closed.

## NIT Hamirpur Ranking

Top 50 Engineering colleges June, 28, 2010

20	Manipal Institute of Technology	P	Manipal	146.6	144.6	134.8	154.9	109.4	690.3
21	College of Engineering (COEP)	G	Pune	147.8	150.3	134.0	138.8	111.0	682.0
22	Institute of Technolgy, Nirma University	P	Ahmedabad	145.4	119.1	126.7	131.1	129.7	652.0
23	NIT	G	Hamirpur	138.7	141.8	104.8	130.4	130.9	646.6
24	Thapar Institute of Engg & Technology	P	Patiala	127.1	144.2	112.1	145.2	115.1	643.7
25	IIIT	G	Gwalior	140.7	148.0	117.0	119.9	113.5	639.1



## Short Term Courses



Participants of AICTE sponsored Summer School on "Nanoscience & Technology (NANO-2010)"



Participants of STC on Energy Efficient Building Systems"  
26 – 30 July, 2010



Director Prof I.K Bhat addressing participants of IE-10



Participants of short term course on Power Quality Problem & Mitigation Methods (PQM-2010)

AICTE sponsored Summer School on "Nanoscience & Technology (NANO-2010)" was organized jointly by Centre for Material Science and Engineering, Departments of Physics, Mathematics, and Chemistry, NIT Hamirpur w.e.f. from 31st May to 4th June 2010. The programme was inaugurated by Hon'ble Director, NIT Hamirpur Prof. I. K. Bhat. More than 100 applications were received from all parts of the country and about 60 participants attended the school. The eminent scientists and academicians: Prof. B. P. Singh (IIT Bombay), Dr. Fouran Singh (IUAC, New Delhi), Dr. A. S. Prakash (CERI, Madras), Dr. O. P. Pandey (Thapar Univ. Patiala), Dr. M. L. Sharma (ICON Analytical Equipments, Chandigarh), Dr. R. J. Choudhary (UGC-DAE CSR Indore), Dr. S. B. Majumdar (IIT Kharagpur), Prof. S. I. Patil (Univ. of Pune), Prof. P. K. Ahluwalia (HPU Shimla) and Dr. R. K. Moudgil (Kurukshetra University), visited NIT Hamirpur to deliver expert talks during this summer school.

Coordinators: Prof. Ravi Kumar, Dr. Kuldeep Sharma, Dr. Ramesh Vats, Dr. Prem Felix, Dr. Vimal and Dr. Jaspreet Randhawa.

The one week 26-30 July 2010, AICTE-MHRD sponsored Summer School on "Energy Efficient Building Systems" was inaugurated by the Chief-Guest Prof. I.K. Bhat, Honorable Director, NIT Hamirpur (H.P.), in presence of the Guest-of-Honor Dr. S.S. Bhatti, former Principal, CCA, Chandigarh. More than 40 participants from all parts of the country attended the Summer School.

Course Coordinators: Arch I.P Singh

A 5-day long course from 15-19 July 2010 on Intelligent Environment was jointly organized by Deptt of Architecture, Civil and Computer Science Engineering Departments. The course was sponsored by AICTE/MHRD. More than 40 participants from all parts of the country attended the Summer-School on Intelligent Environment Coordinators: Dr. (Mrs.) Kamlesh Dutta, Ar Neetu Kapoor

One-Week AICTE Summer School on Power Quality Problem & Mitigation Methods (PQM-2010) organized by EED NIT Hamirpur HP, was inaugurated on 5th June 2010. Prof Y. R. Sood Dean IRD&C cum Off. Director was the chief guest. He appraised the participants about various developments and activities of NIT Hamirpur HP. Dr. Ashwani Kumar Chandel highlighted the importance of power quality (PQ) in today's scenario and briefed about the summer school. 40 participants from Gujarat, Haryana, Rajasthan, Uttaranchal, UP, HP, etc. have registered for the course. Around 20 expert lectures related to various aspects of Power Quality problems & mitigation techniques were delivered during the course.

Coordinators Prof. Y.R. Sood, Dr. A.K. Chandel, Dr. R.K. Jarial and Dr. Rajeevan Chandel

A two days workshop on "Science & Technology of GEMS Manufacturing (GEMS-2010)" was organized jointly by Centre for Material Science and Engineering, Departments of Physics and Mathematics, NIT Hamirpur during July 23-24, 2010. The programme was inaugurated by Hon'ble Director, Prof. I. K. Bhat. More than 40 participants attended the workshop. The course was designed for knowledge updation of the participants in the area of science & technology of gems manufacturing. Lectures on advanced topics related to various aspects of gemstone manufacturing, cutting, polishing, and gemstone grading were delivered during the workshop by eminent academicians Prof. S. K. Sarangi, Director, NIT Rourkela), Prof. I. K. Bhat (Director, NIT Hamirpur), Prof. B. P. Singh (IIT Bombay) and Prof. Ravi Kumar (HOD, CMSE, NIT Hamirpur). Coordinators: Prof. Ravi Kumar, Dr. Kuldeep Kumar Sharma, Dr. Rajesh Kumar, Dr. Ramesh Kumar Vats, Dr. Vishal Singh and Dr. Vimal Sharma (photograph on pp 8)





Chief Guest Prof. Kapoor addressing participants of INS-10



Dr. R.L Chauhan, Chairman BOG addressing participants of STC on Condition Monitoring of Plant and Machinery



Director Prof I.K Bhat inaugurating STC on Advances in Power Generation, Operation and Control

AICTE/MHRD sponsored Summer School on "Implementing Cisco IOS Network Security IINS-10 (5-10 July, 2010)" being organised by the Department of Computer Science & Engineering, NIT Hamirpur was inaugurated by Prof. M.K. Kapoor, professor from IIT Kanpur and former vice chancellor Thapar University. Mr. Ananth, Technical Manager, Cisco Systems India and the coordinator of the course, was the guest of Honour for the function. The programme started with the lighting of lamp seeking blessings of almighty God. About 25 participants from all over the country have attended the school.

Coordinators Dr. (Mrs.) Kamlesh Dutta, Mr. Ananth, Dr. R.K. Dutta and Mr. Pardeep Singh

AICTE-MHRD sponsored summer school on Condition Monitoring of Plant and Machinery was inaugurated by Dr. R. L. Chauhan, Chairman BOG on 21-06-2010 and it was attended by more than 30 external participants from different parts of the country. The school was planned with an aim to provide exposure to the participant about the importance of condition monitoring and the participants were also given exposure on the latest equipments during the practical sessions. The experts of the course included eminent personalities from IIT Delhi and other institutes of importance.

Course Coordinators: Dr Rajesh Sharma, Prof. Rakesh Sehgal, Dr Suresh Dhiman

The department of Electrical Engineering organized an AICTE/MHRD sponsored summer school titled "Advances in Power Generation, Operation and Control" during July 12-16, 2010. The program was inaugurated on July 12, by Prof I. K. Bhat, Director NIT Hamirpur. Forty-five numbers of participants from technical institutions spread across INDIA attended this school. Course contents included diverse topics relevant in the area of power generation, operation and control. Resource persons included faculty members from department of Electrical Engineering and eminent experts invited from outside institutions for instance Dr R. Jha, NIT Jalandhar, Dr Ashwani Kumar Sharma, NIT Kurukshetra, Dr J. S. Dhillon, SLIET Longowal and Dr Barjeev Tyagi, Indian Institute of Technology, IIT Roorkee. The course contents were well received by the participants. The valedictory function was organized on July 16, 2010.

Course Coordinators: Dr R. N. Sharma, Dr Sushil Chauhan; Course Co-coordinators: Dr Veena Sharma, Sh. Bharat Bhushan Sharma)

## Community Development Programmes



Inauguration of STTP on Power Operated Tools , Jobs prepared by participants

Central Workshop of NIT Hamirpur has organized community development programme on "Application of Power Operated Tools" (Metal Cutting & Wood Working) from 5<sup>th</sup> July 2010 to 9<sup>th</sup> July 2010. The five day course was designed for the newly appointed technical staff of NIT and for the workshop staff of various Govt./Private engineering Colleges/Polytechnics situated in the Distt. Hamirpur. About 30 participants attended this course. Prof. A. Kalanidhi chairman of "C STAR" and former Vice Chancellor of Anna University was the chief guest on the occasion. Hon'ble Director Prof. I.K Bhat distributed the certificates to the participants and inspected the jobs prepared by the participants.

Coordinators Prof. Rakesh Sehgal, and Er.P.K Sood





Director Prof I.K Bhat inaugurating community programme on *Application Based utilization in Non Renewable sources*



Inauguration of community programme on *Modern Surveying Tools and Techniques*



Inauguration of community program on "Opportunities and Challenges in Science and Technology"



Two day Faculty Orientation Program for PGP Group of Institutions at Namakkas

Department of Mechanical Engineering, NIT, Hamirpur has organised a community programme on *Application Based utilization in Non Renewable sources* held from 02 to 08<sup>th</sup> August, 2010. The programme was inaugurated by Prof. I K Bhat, Director NIT Hamirpur. Prof. Sunand Kumar, Head, Department of Mech Engineering, Prof. S.S Chandel Head Energy Centre were also present during inaugural function. In the five day long course details were provided about various non renewable energy sources and their applications to the participants.

Coordinator: Sh Debashish Das

Department of Civil Engineering, NIT, Hamirpur has organised a community programme on *Modern Surveying Tools and Techniques* held from 05<sup>th</sup> to 09<sup>th</sup> Sep. 2010 for Diploma Engineering students. The programme was inaugurated by Prof. I K Bhat, Director NIT Hamirpur. Prof. Raman Parti, Head, Department of Civil Engineering, introduced the participants about the Civil Engineering Department and the course. This was followed by the lectures in which the various types of modern survey equipment and technologies were introduced with latest surveying techniques in the industry and given the hands on practice on GIS Basics.

Coordinators: Dr. Vijay Kumar Bansal, Er Chander Prakash and Er. Sunil Sharma

Department of Applied Chemistry has organised one week community development program on "Opportunities and Challenges in Science and Technology" for higher Secondary School Children of Hamirpur district. Prof. Susheel Chauhan, Dean Academic was Chief Guest of the function. The course was of one week 14-18 June, 2010. Each day 30 children from three different schools registered and participated. Lecture schedule and laboratory session was same for all the five days. Children passionately participated and shown interest in attending such sort of programs in future. Dr. Ajay Lakhanpal, Principal, Govt. Post Graduate College Hamirpur was the Chief Guest of the valedictory function on 18<sup>th</sup> June 2010. In totality, 134 students from all the schools were present along with their teachers.

Community development programme on Active learning in Science and career counseling was organized on 29<sup>th</sup> June to 3<sup>rd</sup> July 2010 by Vinod Kumar, Manoj Sharma, Rajesh Kumar, Pawan Kumar, Arvind kumar and Himanshu Sharma

Hon'ble Director Prof I.K Bhat inaugurated Rastriya Madhymik Shiksha Abhiyan Sponsored Master Trainers Training Programme in Collaboration with NIT Hamirpur for school teachers from 12-16 July 2010. Teachers from Government schools of Himachal Pradesh participated in the five day long course.

Two day Faculty Orientation Program was conducted for PGP Group of Institutions Namakkas on 19<sup>th</sup>-20<sup>th</sup> Oct. 2010 by the Team from NIT Hamirpur, which was led by Prof. I.K.Bhat (Director NIT Hamirpur), Prof. Sushil Chauhan (Dean Academic) and Prof. Lalit K. Awasthi (Dean Student Welfare). Prof. I.K. Bhat delivered talks on (1) Role of a Teacher (2) ABET Criteria (3) Learning Objectives, (4) Active Learning. Prof. Lalit K. Awasthi deliver talks on (1) Learning Style (2) Bloom's Technology (3) Need of Research and Development in Engineering Institutions. Prof. Sushil Chauhan deliver talk on (1) Course Planning & Academics at NIT Hamirpur. Three hundred & fifty faculty members were benefited by this program .



## Seminars/Training Workshops

Prof. Swapna Baneerjee, Prof. JN Bandopadhyaya and Faculty of NITH during the inauguration of ERA-2010



Inauguration of Two days workshop on Emerging Research Area in VLSI & Electronics Engineering

Two days workshop on Emerging Research Area in VLSI & Electronics Engineering (ERA-2010) was inaugurated on 20<sup>th</sup> May 2010 in E&CE Dept. NIT Hamirpur by the Chief Guest- Dr. Swapna Baneerjee, Prof. E&CED, IIT Kharagpur. Dr. J.N. Bandopadhyaya, Prof. CED IIT Kharagpur was the guest of Honour. Prof. Vinod Kapoor, Dr. Rajeevan Chandel, Prof. Raman Parti, Dr. Subhash, Dr. A.K. Chandel, Er. Gargi Khanna, Faculty of ECE and participants of the workshop graced the ceremony. Sixty participants registered and benefited from the workshop organized under SMDP-II, MDC, CCE & ECE. Prof. S. Banerjee delivered the inaugural technical expert lecture on Ultrasonography-the Green Technology, she also delivered on Low Power Embedded System Design.

Coordinators Dr. Rajeevan Chandel, Dr. Ashwani Kumar Chandel and Er. Gargi Khanna



Director Prof I.K Bhat addressing participants in workshop on Altair hyper works

Three days SPICE Workshop was organized from 1<sup>st</sup> to 3<sup>rd</sup> Oct 2010 under SPEC, E&CED NIT Hamirpur.. The participants developed their soft skills in SPICE, which is versatile EDA software. Electrical and electronics circuit simulation was taught in detail. Over 100 students benefited from the expert lectures and hands-on-practice lab sessions in OrCAD and TANNER EDA Tools. Prof. Vinod Kapoor, Head and faculty members of E&CED were present at the inaugural session.

Dr. (Mrs.) Rajeevan Chandel and Er. Rohit Dhiman along with the SPEC Team coordinated the workshop.

Five days workshop cum training program on Altair hyper works was organized by Deptt of Mechanical Engg . NIT Hamirpur for B.Tech and M.Tech students from 06-10 September 2010. Programme was inaugurated by Prof I.K Bhat, Director NIT Hamirpur. Sh Sumit, Industry manager and Pawan kumar , Managing Director Altair India , Mr Iaxmi Narayan and Mr Rajesh Krishna experts from company delivered lectures and handled practical sessions on Altair Hypermesh , Computer aided engineering and simulation software platform . The program was organized for B.Tech. and M.Tech students . 100 students were benefitted from the programme.

Coordinator Dr Rajesh Sharma, Dr Amar Patnaik

Two day Workshop on Research Methodology & Quantitative Techniques with Software Applications-2010 (4-5 September, 2010) by Department of Management and Social Sciences at National Institute of Technology Hamirpur.

A three week DST sponsored “SERC school on Nano Optics” was organized jointly by the Department of Physics, NIT Hamirpur & IIT Bombay, w.e.f. Sept.13 – Oct. 01, 2010. About 55 participants from different institutions across the country attended this SERC School. Hon’ble Director Prof. I. K. Bhat inaugurated the school on Sept. 13, 2010. During this School eminent scientists & distinguished academicians from India & abroad : Prof. Selvakumar V. Nair (University of Toronto, Canada), Prof. Prinda Vasa (University of Oldenberg, Germany), Prof. Kailash Rustagi, Prof. Bhanu Paratap Singh, Prof. S. Dhar, Prof. Punit Parmananda, Prof. R. Vijaya, Prof. R. Verma, ( all from IIT Bombay), Planning & organizing committee: Prof. I. K. Bhat (Patron), Prof. KRustagi (Chairman), Prof. B. P. Singh (Director, SERC School), Dr. Kuldeep Sharma (Co-Director), Prof. A. S. Vengurlekar, Prof. D.N.Rao, Dr. Amitava & Dr. Bipin Joshi, (DST representatives), Prof. T. Kundu (IITB), Prof. Ravi Kumar, Dr. Subhash Chand , Dr. Arvind Kumar, Dr. Rajesh Kumar, Dr. Vimal Sharma, Dr. Vishal Singh, Dr. Jaspreet kaur Randhawa (NITH)



Inaugural of Workshop on Science and Technology of Gem Manufacturing



Inaugural of DST sponsored “SERC school on Nano Optics”



## Publications (International/National Journals )

- A.S. Singha and Thakur Vijay K "Synthesis and Characterization of Short Optiva Fiber Based Polymer Composites,. Polymer-Composites, 31 (1),459-470, 2010
- A.S.Singha and Thakur Vijay K "Physico-Chemical and Mechanical Characterization of Natural Fiber Reinforced Polymer Composites" Iranian Polymer Journal Vol 19, No. 1, 03-16, Jan. 2010
- Piar Chand & Yogesh Gupta "Knowledge, Belief & Attitude among Students of National Institute Of Technology" Journal of Community Guidance & Research, Vol.27, No.2, July 2010, pp.260-273, published by Neelkamal Publications Pvt. Ltd., Koti, Hyderabad-500095.
- A.S.Singha and Raj K. Rana " Graft Copolymerisation of Methyl methacrylate onto Agave americana Fiber and evaluation of their Physico-chemical peoperties"International Journal of Polymer Analysis and Characterization, Vol. 15 (1), 27-42, 2010
- A.S.Singha and Thakur Vijay K "Mechanical, Morphological and Thermal Characterizations of Compression Molded Polymer Biocomposites International Journal of Polymer Analysis an Characterisation, Vol 15,87-97,2010
- Rajeevan Chandel, Devesh P. Singh, R. Banta, R. Karan and P. Bhatt, "A Comparative Analysis of Voltage-Scaled Two Operand Binary Adders", Journal of Active and Passive Electronic Devices, UK, Vol. 5, No. 3-4, pp. 295-309, 2010.
- Sandeep Singh Gill, Rajeevan Chandel, Ashwani K. Chandel, "Genetic Algorithm Based Approach to Circuit Partitioning", International Journal of Computer and Electrical Engineering, Vol. 2, No. 2, pp. 1793-8163, 2010.
- Kango, Saurabh and Sharma, R. K. 2010, "Studies on the Influence of Positive Roughness on the Performance of Journal Bearing" Journal of Tribology and Surface Engineering, Vol. 1 (3/4), pp.
- Kango, Saurabh and Sharma, R. K. 2010, "Studies on the influence of surface texture on the performance of hydrodynamic journal bearing using power law model" Int. Journal of Surface Science and Engineering, Vol. 4 pp.505-524
- Chauhan, A., Sehgal, R., and Sharma, R. K., 2010, "Thermo hydrodynamic Analysis of Elliptical Journal Bearing With Different Grade Oils" Tribology International, Vol. 43 pp. 1970-77
- J.N. Sharma and D. Kaur: "Modelling of circumferential waves in cylindrical thermoelastic plates with voids". Applied Mathematical Modelling, 34(2), 254-265 (2010)
- J.N. Sharma, P.K. Sharma and S. K. Rana: "Flexural and transversal wave motion in homogeneous isotropic thermoelastic plates by using asymptotic method", Journal of Sound and Vibration, 329(7), 804-818 (2010).
- Sunil, Prakash Chand and Amit Mahajan "The effect of suspended particles on Marginal stability of magnetized ferrofluid with internal angular momentum" "Heat Transfer Research" (USA), 41(2), 167-186 (2010).
- Sunil, Poonam Sharma and Amit Mahajan: "Nonlinear ferroconvection in a porous layer using a thermal non-equilibrium model". "Special Topics & Reviews in Porous Media" (USA), 1(2), 105-121 (2010).
- Sunil, Prakash Chand and Amit Mahajan: "Effect of suspended particles on marginal stability of a double-diffusive magnetized ferrofluid with internal angular momentum". "Chemical Engineering Communications" (UK), 197(12), 1553-1570 (2010). (2010).
- S.Kumar, Ramesh Kumar Vats, V.Singh and S.K.Garg: "Some Common Fixed Point Theorems in Intuitionistic Fuzzy Metric Spaces" "Int. Journal of Math. Analysis", 4(26), 1255-1270 (2010).
- J. N. Sharma, P.K. Sharma, and S.K. Rana, "Extensional wave motion in homogenous isotropic thermoelastic plate by using asymptotic method". Applied Mathematical Modelling, 35(1), 317-327 (2011).
- Y.R Sood, Randhir Singh, "Optimal Model of Congestion Management in Deregulated Environment of Power Sector with Promotion of Renewable Energy Sources" published in Renewable Energy - An International Journal,, Impact Factor 1.663, Volume 35, Issue 8, August 2010, Pages 1828-1836.
- Jashandeep Singh, Yog Raj Sood and Piush Verma, "Review of different prorated models which detects the effect of accelerated stresses on power transformer insulation" published in International Journal of Computer and Electrical Engineering (IJCEE), ISSN: 1793-8198 (Online Version); 1793-8163 (Print Version), Vol. 2, No. 4, August 2010 pp.569-574.
- Yog Raj Sood, "Feasibility Assessment of Simultaneous Bilateral and Multilateral Transactions", publication in International Journal of Electrical Power & Energy Systems, Elsevier Science, Volume 32, Issue 8, 2010, pp. 879-885. ISSN: 0142-0615, Impact Factor 1.163.
- Jashandeep Singh, Yog Raj Sood, Piush Verma, "History of Transformer and its Insulating Material", published in Electrical India, Vol 50, 8, 2010, pp 30-38.
- Naveen Kr. Sharma, Yog Raj Sood, R. K. Jarial, "Recent Development in Condition Monitoring of Power Transformer", published in Electrical India, Vol 50, No 8, August 2010, pp 40-49.
- Amarjeet Kaur, T.P. Sharma, "AFDEP: Agreement Based CH Failure Detection and Election Protocol for a WSN", Springer Communications in Computer and Information Science, 2010, vol. 101, part 1, 249-257, DOI: 10.1007/978-3-642-15766-0\_36.
- Mukesh Kumar Jha, T.P. Sharma, "A New Approach to Secure Data Aggregation protocol for Wireless Sensor Network," *International Journal on Computer Science and Engineering (IJCSSE)*, issue 5, vol. 2, pp. 539-543, 2010.
- D.S Jaswal and P.C.Sharma "University Libraries:organizations & functions, Challenges and changes in librarianship. edited by A.Amudhavalli and Jasmer B.R. Publishing Corporation ,New Delhi,2010
- D.S.Jaswal Digital Libraries, Challenges and changes in librarianship by A.Amudhavalli and Jasmer Singh,B.R. Publishing Corporation ,New Delhi,2010
- Parkash,Saroj Kaushik,Kamlesh Dutta,and D.S.Jaswal. Cost estimation model for Digitization of multilanual libraries Challenges and changes in librarianship.. edited by A.Amudhavalli and Jasmer ,B.R. Publishing Corporation New Delhi,2010
- B.B.Sharma, I. N. Kar " Contraction Theory Based Recursive Design of Stabilizing Controller for a Class of Nonlinear systems Control Theory and Application IET vol. , no.6, June, 2010 pp 1005-1018
- Manju Sharma & Lalit Awasthi, "Realistic Approach towards Quantitative Analysis and Simulation of EEHC-Based Routing for Wireless Sensor Networks", *Published in Volume 7, Issue 1, No 1, pp 47-57, January 2010.*
- Prashant Kumar, Naveen Chauhan, LK Awasthi, Narottam Chand "Proactive Approach for Cooperative Caching in Mobile Adhoc Networks", *IJCSI International Journal of Computer Science Issues*, Vol. 7, Issue 3, No 8, pp 21-27 May 2010.
- Lalit K Awasthi, Manoj Misra, Ramesh C Joshi, "A Weighted Check Pointing Protocol for Mobile Distributed System", *International Journal of Ad Hoc and Ubiquitous Computing*, Volume 5, Number 3, Pages:137 – 149, 2010
- Gupta and Lalit K. Awasthi, "IndNet: A P2P Community Network Connecting the IT Industry and Academia in India", *International Journal of Networking and Virtual Organizations (IJNVO)*, Vol. 7, No. 1, pp. 63-79, 2010, Inderscience Publishers.
- Gupta, Lalit K. Awasthi, "PArch: A Cross-Organizational Peer-to-Peer Framework Supporting Aggregation and Exchange of Storage for Efficient Email Archival" *International Journal of Business Information Systems (IJBIS)*, Vol. 5, 1, pp. 102-116, 2010.
- Rajiv Kumar Sharma, Pooja Sharma "System failure behavior and maintenance decision making using, RCA, FMEA and FM", *International Journal of Quality in Maintenance Engineering*, Vol. 16 (1), (2010) pp.64 – 88
- Amar Patnaik, Mukesh Kumar, Bhabani K. Satapathy, Bharat S. Tomar, (2010) Performance sensitivity of hybrid phenolic composites in friction braking: Effect of ceramic and aramid fibre combination, *Wear*, 269(11-12), pp.891-899.
- Siddhartha, Amar Patnaik, Alok Satapathy, Amba D. Bhatt, (2011). A Study on Modified Mechanical and Wear Characteristics of Epoxy-Particulate Filled homogenous composites and their Functionally Graded Materials. *Journal of Tribology (Transactions of ASME)* 133, pp. 1-11.



- Bhabani K. Satapathy and Amar Patnaik, (2009). Wear performance analysis and optimization of flyash-enhanced aramid fibre reinforced polymer matrix composites, *Research Journal of Textile and Apparel* 14(3), pp.35-46.
- Amar Patnaik, Sachin Tejyan, Amit Rawal, (2010). Solid Particle Erosion Behavior of Needle-punched Nonwoven Reinforced Composites. *Research Journal of Textile and Apparel*, 14(3), pp.12-22.
- Alok Satapathy, Alok Kumar Jha, Sisir Mantry, S. K. Singh and Amar Patnaik, (2010), Erosive Wear Performance Analysis of Jute-Epoxy-SiC hybrid composites, *Journal of Composite Materials*, vol. 44(13), pp. 1623-1641.
- Sandhyarani Biswas, Alok Satapathy and Amar Patnaik, (2010). Effect of Ceramic Fillers on Mechanical Properties of Bamboo Fiber Reinforced Epoxy Composites: A Comparative Study, *Advanced Materials Research*, 123-125, pp. 1031-1034.
- Amar Patnaik, Ritesh Kaundal, Alok Satapathy, Sandhyarani Biswas, and Pradeep Kumar, (2010). Solid Particle Erosion of particulate filled Short Glass Fiber Reinforced Polyester Resin Composites, *Advanced Materials Research*, 123-125, pp. 213-216.
- Amar Patnaik, Alok Satapathy, Sandhyarani Biswas (2010). Effect of Particulate Fillers on Erosion Wear of Glass Polyester Composites: A Comparative Study using Taguchi Approach, *Malaysian Polymer Journal*, 5( 2), pp 49-68.

## (International/National Conferences)

- Sandeep Singh Gill, Rajeevan Chandel, Ashwani K. Chandel, P.S. Sandhu, "Simulated Annealing based Delay Centric VLSI Circuit Partitioning", 3rd IEEE International Conference on Computer Science and Information Technology (ICCSIT), pp. 1-4, 9-11 July 2010
- Pradeep Kumar, Performance assessment and maintenance of masonry arch bridges, *Proceedings of 34<sup>th</sup> Symposium on Bridge and structural Engineering Italy*, pp 818-819-Vol 97
- Amarjeet Kaur, T.P. Sharma, "Clustering Algorithms in Wireless Sensor Networks: A Survey", in the *proceedings of International Conference on Informatics, Cybernetics, and Computer Applications (ICICCA2010)*, Bangalore, India, 19th -20th July, 2010.
- Naveen Chauhan, L.K. Awasthi, Narottam chand and Ankit Chugh "A Distributed Weighted Cluster Based Routing Protocol for MANETs", International Conference on Advances in Communication, Network, and Computing – CNC 2010, Oct 04-05, 2010 in Calicut, Kerala, India
- Kamal Kant and Lalit K. Awasthi, "A Multicast Routing Protocol for Manets Based on Node Stability", International Conference on Advances in Communication, Network, and Computing – CNC 2010, Oct 04-05, 2010 in Calicut, Kerala, India.
- Kamal Kant and Lalit K. Awasthi, "Multicast Routing Protocol for MANETs Based on Node Stability", SRIJAN-2010, May 08, 2010, MAIMT Jagadhri, Yash Pal, A. J. Singh, and Lalit k. Awasthi, "QoS in Wireless Sensor Network with Node-to-Node Activation Scheme" in International Conference on Data Management pp 46-59, 11-12 March 2010.
- Amarjeet Kaur, T.P. Sharma, "AFDEP: Agreement based CH Failure Detection and Election Protocol for a WSN," in the *proceedings of International Conference on Advances in Information and Communication Technologies (ICT 2010)*, Kochi, Kerala, India, Sep 07-09, 2010.
- Mukesh Kumar Jha and T.P. Sharma "Secure Data Aggregation in Wireless Sensor Network: A Survey" in the *proceedings of International Conference SRIJAN-'10* MAIMT, pp. 92, 8th MAY 2010
- Pamita Awasthi and Priyanka Sharma presented paper entitled "Computer Aided Designing of Juvenile Hormone Analogues as a potential pesticides based on ligand-receptor interaction- A Docking Study" , 634-639, Vol-II, 12-15 July 2010- at International Conference on Bioinformatics & Computational Biology, , L V, Nevada, U.S.A.
- Amarjeet Kaur, Vaibhav Pandey, T.P. Sharma, "Fault Tolerance Techniques for Cluster Head in WSN: A Review", in the *proceedings of 3<sup>rd</sup> National Conference on Wireless Communication and VLSI Design (NCWCVD-2010)*, Gwalior, India, 27th -28th March 2010
- .Mukesh Kumar Jha, Amit Jaiswal, T.P. Sharma "A survey on wireless sensor networks", in the *proceedings of national conference on ETCSIT*, Faridabad, pp. 192-196, 24 April 2010.
- Debasish Das, Rahul Makade, "The review of recent advances in Micromachining", "Modern Rapid Prototyping Technology for Aerospace Industry", Proceeding of National conference on Recent Developments in Manufacturing Technology, May, 08-09, 2010 at NIT Agartala.
- Sandeep , Puneet New Urbanism –An approach towards developoing Indian contemporary cities, *Proceedings of 34<sup>th</sup> Symposium report on Bridge and structural Engineering, Italy* pp 798-799
- Debasish Das, Rahul Makade, "Review of SOLAR UPDRAFT TOWER", Proceeding of National conference on Global Trends in Mechanical Engineering, April, 16-17, 2010, Rayat & Bahra Institute of Engineering & Bio-Technology, Mohali campus.
- Debasish Das, Rahul Makade, "A Review of Biomass Gasification System", Proceeding of National conference on Global Trends in Mechanical Engineering, April, 16-17, 2010, Rayat & Bahra Institute of Engineering & Bio-Technology, Mohali campus
- A.S.Singha, Rosilda Selvin, Hsiu-Ling Hsu and Vijay Kumar Thakur "Hierarchal Structured Nanozeolite Beta as Novel Catalyst for Petroleum Industry " 7th International Symposium on Fuels And Lubricants (ISFL-2010), New Delhi w.e.f March 09-12, 2010
- Amar Singh Singha, Vijay K. Thakur, Raj K. Rana and Ashwinder K. Rana "Analysis of Mechanical, Morphological and Thermal Properties of Bio Fibers/ PF Polymer Composites" Second International Conference on Polymer Processing and Characterisation (ICPPC-2010) organized by institute of Macromolecular Science and engineering (IMSE), Kottayam, Kerala 2010)
- A.S.Singha, "Biomass reinforced Polymer Composites" IL-62, Page61, ICPPC-2010, held at Kottayam, Kerala (INDIA)
- Naveen Kumar Sharma, Yog Raj Sood, Raj Kumar Jarial, "Dissolved Gas Analysis: A Effective Tool of Condition Monitoring of Power Transformer" presented and published in the proceedings of National Conference on Recent Trends in Electrical & Electronics Engineering (RTEEE-2010), May 14-15, 2010, Haryana College of Technology & Management, Kaithal (Haryana).
- Naveen Kumar Sharma, Nishant Prakash, Yog Raj Sood "Smart Techniques for diagnosis in Power Transformer" published in the proceedings of (RTEEE-2010), May 14-15, 2010, Haryana College of Technology & Management, Kaithal (Haryana).
- Prashant Kumar Tiwari, Yog Raj Sood "A New Method for Minimization of Transmission Losses using Optimization", published in the proceedings of (RTEEE-2010), May 14-15, 2010, , Kaithal (Haryana).
- Jashandeep Singh, Yog Raj Sood and Piush Verma, "Effect of aging on Breakdown voltage and moisture of power transformer" published in the CD soft copy of the proceeding (RTEEE-2010), May 14-15, 2010, Kaithal (Haryana)
- Jashandeep Singh, Yog Raj Sood and Piush Verma, "History of Transformer and its Insulation Oil" published in the CD soft copy of the proceeding of, RTEEE-2010 Kaithal (Haryana)
- Naveen Kumar Sharma, Prashant Kumar Tiwari, Yog Raj Sood, "Renewable energy status in India" published in the proceedings of (RTEEE-2010), May 14-15, 2010, Haryana College of Technology & Management, Kaithal (Haryana).
- Sanjay Kumar, Yog Raj Sood, "Electrical energy conservation in India achievements problems and their solution", published in the proceedings of (RTEEE-2010), May 14-15, 2010, Haryana College of Technology & Management, Kaithal (Haryana).
- Prashant Kumar Tiwari, Naveen Kumar Sharma, Yog Raj Sood, "Genetic Algorithm Based Approach for Optimal Location of FACTS Devices in Power System (ICEPES-2010), August 26-28, 2010, at MANIT Bhopal (M.P.).
- P. Srikanth, KA Naik, Ashwani Kumar Chandel, "Analysis of Power Electronic Converter Fault Using Time-Frequency Resolution" Published in the proceedings of the National Conf on Control of Power Electronic Drives and System (CPEDS 2010), 30-31 May 2010.



- Piush Verma, Y.R.Sood and Jashandeep Singh, “Effect of Greenhouse Gases on Climate Change”, published at 13<sup>th</sup> Punjab Science Congress, 7-9 Feb, 2010, PU Chandigarh, pp. 31
- Sanjay Sharma, Y. R. Sood, Alok Kumar, Govind Murmu, “Energy conservation achievements problems during urbanization in India: An oriented approach to save earth from Global warming”, International Conference on Electrical Power Energy Systems (ICEPES-2010), August 26-28, 2010, at MANIT Bhopal (M.P.)
- Naveen Kumar Sharma, Prashant Kumar Tiwari Yog Raj Sood, “Condition Monitoring and Diagnosis of Power Transformers Using Different Techniques: A Technical Review”, (ICEPES-2010), at MANIT Bhopal (M.P.),
- Sandeep Singh Gill, Rajeevan Chandel, Ashwani Kumar Chandel, “Swarm Intelligence based Circuit Partitioning”, Asia Pacific Conference on PG Research in Microelectronics & Electronics, Shanghai China, September 22 – 24, 2010.

## Courses, Seminars, Workshops and Training Programmes Attended

- Prof I.K Bhat attended Green Building Congress organised by CII at Chennai, 7-9th Oct, 2010.
- Dr. Rajeevan Chandel and Dr. Ashwani Kumar Chandel attended AICTE Summer School Intelligent Environment IE-10, 15-19 July 2010.
- Dr. Pardeep Kumar and Arch Sandeep Kumar attended 34<sup>th</sup> Symposium on Bridge and structural engineering at Venice, Italy from 22-24 Sept 2010
- Dr. Rajeevan Chandel attended AICTE/ MHRD sponsored STC on Science and Technology of Gem Manufacturing (GEMS-2010), by CMS NIT Hamirpur and SBNIT Surat on 23-24 July 2010.
- Er. Gargi Khanna attended Comsol Workshop at IIT Delhi, March 2010.
- Coventorware Workshop (NPMAS) was attended by Er. Dhrub Solanki and Er. Atul M.Tech VLSI Design students at CARE IIT Delhi on 6-7 March 2010.
- Mentor Seminar was attended by Er. Dhananjai and Er. Diwakar Singh M.Tech VLSI Design students at Mentor Graphics' premises Noida on 8-9 March 2010.
- Synopsys TCAD Seminar was attended by Er. Gaurav, Er. Ashutosh Nandi, Er. Sandeep Sharma and Er. Pankaj M.Tech VLSI Design students, E&CE NIT Hamirpur at ATI New Delhi on 12-13 March 2010.
- Sh D.S Jaswal attended NDEST-AICTE Workshop and 7th Annual Meet at IIT Kharagpur on 13-15 Jan, 10
- Sh D.S Jaswal attended ETTLS-2010, 2nd Inter Symposium on Emerging Trends & Tech in Libraries and Information, JUIT Waknaghat on 3-5 June, 2010
- Dr. R. K. Jarial attended Workshop on Familiarization of IPR, Institute of Plasma Research, Gandhinagar Ahmedabad 8-9 July, 2010
- Dr. R. K. Jarial attended Workshop on Gems & Technology, NIT Hamirpur 23-24<sup>th</sup> July 2010
- Prof Y.R Sood attended International Conference on Electrical Power Energy Systems, August 26-28, 2010, at MANIT Bhopal (M.P.)
- Sh Manoj Sharma attended National Workshop on *Analytical Techniques for Research* (21 - 27th June, 2010) org by Indian Commerce Association at Shimla.

## Expert Lectures Delivered

- Prof. I. K. Bhat, Director NIT Hamirpur delivered an Expert Lecture on “Secrets of Success” to the participants of the Workshop ERA-2010
- Prof I.K Bhat delivered Key note address in "Hyper Works Technology Conference 2010 (HTC-2010, INDIA)", 4-6th August, 2010, Bengaluru.
- Dr. Rajeevan Chandel delivered lecture on “Course Planning and Lesson Preparation for Effective Teaching”, in CSP on e-Learning, CSED on 6 Jan 2010.
- Dr. Rajeevan Chandel delivered an expert lecture on “SPICE-an EDA tool for Engineering Applications”, in annual Technical Festival NIMBUS-2010 on 24 Feb 2010 at NIT Hamirpur HP.
- Dr. Rajeevan Chandel, delivered an Expert Lecture on “VLSI & MEMS Design Issues” in Workshop on Emerging Research Areas in VLSI and Electronics Engineering (ERA-2010) on 21 May 2010.
- Dr. Rajeevan Chandel, delivered an Expert Lecture on “E-Gadgets and Equipments”, in CSP on Safe Handling of Electrical Devices, EED, June 2010.
- Dr. Rajeevan Chandel, delivered an Expert Lecture on “Smart Materials” in AICTE Summer School IE-10, on 15 July 2010.
- Dr. Rajeevan Chandel delivered a talk on Introduction to VLSI Design and Test and Role of SMDP-II, for faculty and students on, 27 August 2010.
- Dr. Rajeevan Chandel delivered an Expert Lecture on Signal Processing using MATLAB in STTP on MATLAB, EED September 2010.
- Dr. Rajeevan Chandel delivered Expert Lectures on 1 Oct 2010 on “Applications of SPICE in Electronics & Electrical Engineering”, in SPICE Workshop by SPEC E&CED held from 1<sup>st</sup> to 3<sup>rd</sup> Oct 2010.
- Prof. Vinod Kapoor, delivered an Expert Lecture on Optical Fiber Communication on 20-5-2010 in ERA-2010.
- Dr. Kamlesh Dutta, delivered an Expert Lecture on Security in Embedded Systems to the participants of ERA-2010.
- Dr. Ashwani Kumar Chandel delivered lecture on ‘Design of Modern Cooling System for Transformers’ in STTP on 27 February 2010.
- Dr. Ashwani Kumar Chandel, delivered an Expert Lecture on “Solution of MOOP Problems” on 21-5-10 in ERA-2010.
- Dr. Ashwani Kumar Chandel delivered Expert Lectures on MATLAB using the STTP on MATLAB, EED Sep 2010.
- Er. O.P. Rahi delivered an Expert Lecture on MATLAB in STTP on MATLAB, EED Sep 2010.
- Er. Gargi Khanna, delivered an Expert Lecture on “Low Power VLSI Design” to the participants of ERA-2010.
- Dr Pamita Awasthi delivered expert lecture on “Research & Development Project- Plan, Design and Methods” on faculty development program at MBS College of Engineering and Technology, Jammu.
- Dr Pamita Awasthi delivered expert lecture on Expert lecture on “Interaction of anthraquinone based anticancer drug mitoxantrone and its analogues with DNA” at Department of Chemical Sciences, University of California Riverside.
- Dr Pamita Awasthi delivered expert lecture on Expert lecture on “Computer Aided Design and synthesis of JHA as potential pesticides” at Department of Biomedical engineering, University of California Riverside
- Sh D.S Jaswal Delivered expert lecture on “Library as Information Source” at Nalanda college of Education Hamirpur on 5th Aug, 2010 for B.Ed Students of IGNOU contact programme.
- Dr Rajesh Sharma delivered lectures on 1. NDT, 2. Oil Analysis in Summer School on Condition Monitoring of Plant and Machinery w.e.f. 21-25 June, 10
- Sh Manoj Sharma delivered expert lectures on Fundamentals of Econometrics and Research Methodology in two day Workshop on Research Methodology & Quantitative Techniques with Software Applications (4-5 September, 2010) at NIT Hamirpur
- Prof Lalit awasthi delivered expert talk on “From IPv4 to IPv6”, Hindu Girls’ College, Jagadhri, UGC sponsored National Conf, 14.10.2010.
- Prof Lalit awasthi delivered expert talk on “Wireless Sensor Networks” MHRD & AICTE Sponsored Program on Instrumentation & Signal Processing at Department of Instrumentation & Control Control, NIT Jalandhar during 14 Jan, 2010.
- Dr Pardeep Kumar delivered expert lecture on (1) Earthquake resistant design (2) Earthquake resistant design codes at training program on risk resistant Building codes organized by HIPA, Shimla from 18-21 Oct 2010



- Prof Y.R Sood delivered expert lecture on “Safe handling of Electrical Appliances”, delivered in training course under Services to Community on, “Safe Handling of Electrical and Electronics Gadgets by Rural Citizens” from 17<sup>th</sup> to 21<sup>st</sup> May 2010 at NIT Hamirpur.
- Prof Y.R Sood delivered expert lecture on Power quality Problems and “Deregulated Power Industry- An Introduction”, delivered on June 6, 2010 in MHRD/AICTE Summer School on “Power Quality Problems and Mitigation Methods”, from June 5-9, 2010 at NIT Hamirpur.
- Prof. I.K. Bhat delivered talks on (1) Role of a Teacher (2) ABET Criteria (3) Learning Objectives, (4) Active Learning.. Prof. Lalit K. Awasthi delivered talks on (1) Learning Style (2) Bloom’s Technology (3) Need of Research and Development in Engineering Institutions. Prof. Sushil Chauhan delivered talk on (1) Course Planning & Academics at NIT Hamirpur. 350 faculty members were benefited by this program of 02 days ( Faculty Orientation Program conducted for PGP Group of Institutions Namakkas on 19<sup>th</sup>-20<sup>th</sup> Oct. 2010)
- Prof Rakesh Sehgal delivered expert lecture on Oil analysis-An effective condition monitoring tool”, in AICTE/MHRD summer school on Condition Monitoring of Plant & Machinery June 21-25, 2010, NIT Hamirpur (H.P.)

## Expert Lectures Organized

- The Department of Management and Social Sciences organized an expert lecture on “Entrepreneurship and Self-employment” by Sh. R.C. Chopra, Ex-Director, Ministry of MSME, Government of India for MBA students on 27<sup>th</sup> August, 2010. Mr. Chopra emphasized on the importance of entrepreneurship in the present era of LPG. He focused on building and developing an attitude towards self-employment and being far-sighted in one’s approach.
- Dr. Swapna Baneerjee, Prof. E&CED, IIT Kharagpur delivered an expert lectures on Ultrasonography-the Green Technology and Low power Embedded System Design in ERA-2010
- Coca Cola, Tanishq, ITC, Nirma, LG, Sahara Airlines are the few examples out of the numerous ones accommodated by Prof. B. B Goyal, a faculty member at U.B.S Chandigarh, during a guest lecture at NIT Hamirpur on the topic BLUE OCEAN MARKETING STRATEGY . He enlighten the students on this systematic approach accustomed by Companies to create strong profitable growth in the future in respect to head – to-head competition resulting in a bloody ‘red ocean’ of rivals fighting over a shrinking profit pool. The students gained a pool of knowledge from the lecture and learned the practicalities of this strategy to compete with the increasing competition from the world’s emerging economies & its corollary to reduce cost structure.
- Prof R.P Tandon delivered expert lecture on Smart Materials to students and Faculty on 10.9.2010 Org. by Deptt of Physics NIT Hamirpur
- A lecture on Theory of self similar Fractals by Prof Andrey Tetenov from University of Russia , Chairman of Analysis was delivered to students and Faculty of NIT Hamirpur , Organized by Deptt of Mathematics NIT Hamirpur

## Foreign Visits and Rewards & Recognitions

- Dr Pamita Awasthi attended One week program at Prof. John Cooke Laboratory (24<sup>th</sup> July to 30 July, 2010) at the division of Cardiovascular Medicine Research Center and visited HTBS center, Department of Chemical and System Biology, Stanford University, Stanford U.S.A
- Dr Pamita Awasthi Visited to bio-molecular modeling and design lab. (biomodel) lab at the Department of Biomedical Engineering, University of California, Riverside
- Dr Amar Patnaik visited Korea and conducted Session Chair in “The third International conference on Multi-Functional Materials and Structures (MFMS-2010), September 14-18, 2010/ on 15<sup>th</sup> September 2010.
- Dr.Pardeep Kumar and Arch Sandeep Kumar attended 34<sup>th</sup> Symposium on Bridge and structural engineering at Venice , Italy from 22-24 Sept 2010
- Dr. Pamita Awasthi visited UCR Stem Cell center and Core facility, Deptt of cell biology and neuroscience, Univ of California, Riverside.
- Dr. Pamita Awasthi visited Department of Chemical Sciences, University of California, Riverside
- Dr. Pamita Awasthi visited Lawrence National Science Laboratory Berkeley, U.S.A
- Dr. Rajeevan Chandel is Expert cum Member E&CE, BOS HPU, and Shimla 2010.
- Dr. Rajeevan Chandel is Reviewer for IEEE Conference APCCAS 2010 and for International Symposium on VLSI Design and Test, VDAT-2010
- Dr. Rajeevan Chandel is Evaluator for SIMAD R&D Project, Israel 2010.
- Dr. Amar Patnaik, received award on Bharat Shiksha Ratan Award from Global Society for Health and Educational Growth, New Delhi, 2010.
- Financial assistance provided by CSIR, UGC to Dr. Pamita Awasthi, Dept of Applied Chemistry, NIT-Hamirpur (H.P) for foreign visit
- Prof Y.R Sood Chaired a technical session on “Soft Computing” on August 27, 2010 in International Conference on Electrical Power Energy Systems (ICEPES-2010), August 26-28, 2010, at MANIT Bhopal (M.P.).
- Prof Y.R Sood appointed Member Technical Paper Review Committee, International Conference on System Dynamics and Control (ICSDC 2010), Manipal Institute of Technology, Manipal, Karnataka State, August 19-22, 2010
- PhD thesis awarded to Mohit Dhiman entitled “Development, Characterization and Parametric Optimization of Wear Resistant Piston Alloys” , Supervisors: Prof. Rakesh Sehgal, Prof. I.K. Bhat NIT Hamirpur & Dr. D.K. Dwivedi, IIT Roorkee
- Realizing the technical acumen of students of NIT Hamirpur, Institute of Plasma Research, Gandhinagar allocated various technical projects to the students of the institute who have to work out in the teams cutting across department lines to deliver the results to the problems in a time-bound manner.
- Six students from the institute participated in “The Dynamic Design Competition” organized by University of Bristol, UK in collaboration with The British Council, India. After getting through in the tough preliminary rounds, the team stood first in the “Best Presentation Category” in the finals held at IIT Roorkee which saw the best institutes in India vying for the top honors.
- NIT Hamirpur also played host to one of the part episodes of ‘Challenge Chatni’, an initiative of DST, Govt of India in collaboration with the Television Programme Company, New Delhi. The students presented their solutions to the basic problems combining different fields of Engineering. Different teams who suggested the best solution for a particular problem participated in the National Finals of the series organized at Tumkur near Bangalore where the students of NIT Hamirpur with maximum winning entries was adjudged the “**Best College of the Country**” award.
- Six third year students of Department of Computer Science are working on an international coding project known as “Massidea.org” funded by European Union and European Social Organization
- Nine students from the institute went abroad during the summer of 2010 for their summer internships . N. Shasank (Mori Seiki Private Limited, Iga, Japan), Shashank Singh (Laurea RED labs, Helsinki, Finland), Sudhir Verma (Technical Unive, Dortmund, German, Tarun Sharma (OVGU Magdeburg, Germany, Vikash Agrawal (Regensburg Univ of Applied Sciences, Germany), Apurv Jain (Univ of Stuttgart, Germany), Abhishek Rai (Univ of Postdam, Germany), Anshul (Technical University, Berlin, Germany) and Debanjan Chaudhari (Emerio Corp, Singapore)



## Student Activities

- Institute celebrated the Independence Day with great fervor and gaiety. On this Occasion Hon'ble director unfurled the National flag. A parade was presented by the NCC students and security staff
- The **14<sup>th</sup> Healing Breath Workshop** is conducted in five days from 7<sup>th</sup> Sept. to 11<sup>th</sup> Sept. in NIT campus. Full time "The Art of Living" teacher Mrs. Kamlesh Barwal and Miss Arundhti trained by Sri Sri Ravi Shankar, founder of 'The Art of Living', had come to NIT Hamirpur to conduct and facilitate these five days workshop. 68 students had taken part in the workshop. The highpoint of the course is Sudarshan Kriya practice, a healing breathing method patented by Sri Sri Ravi Shankar. Dr. Sunil and Dr. Rajesh Sharma where the main faculty coordinators of this workshop along with the good team of volunteers.
- **Hindi Divas** was organized by Hindi club at NIT Hamirpur, marking the celebration of us being Indians and bonded through our national language The HINDI CLUB of Cultural Clubs of NIT-Hamirpur organized Hindi Divas **ABHYUDAY 2010** on 13th and 14th of September, 2010. India might be a land of beautiful contrasts spanning over 3200 km in length and 3000 km across breadth. It might harbor 20 different national languages and 120 crore people who speak over 2000 different dialects. Yet proudly we all say in unison "*hindi hai hum*". On 13<sup>th</sup> Sept, debate competition, video making competitions and poster designing competition on nationalistic themes marked the breaking of ice. On 14<sup>th</sup> Sept, dance and music competition at open air theatre successfully completed the two day event. A special event, for the first time "online essay competition" was also organized. Closing ceremony of ABHYUDAY 2010 was done on the eve of 15th September in institute auditorium.
- Students along with Faculty members participated in Tree plantation in the Campus on 15-08-2010
- The Local Students' chapter of ISTE at NIT Hamirpur organized a series of technical and soft skill events and also coordinated in hosting 'Challenge Chatni' at NIT Hamirpur. On the basis of these activities organized by the society, ISTE National Headquarters at IIT Delhi has sent an invitation to the Institute asking the Chapter to apply for "Best Student Chapter of the Year" award.
- **SPICE Workshop Session** by Dr. (Mrs.) Rajeevan Chandel



SPICE Workshop 2010 Session in progress



Independence Day Celebrations



Participants of Healing Breath Workshop



Tree Plantation by Director Prof I.K Bhat , Faculty and Students on Independence Day



Hindi Divas Celebrations by Hindi club at Auditorium NIT Hamirpur



## New Central Facilities Inaugurated



Chairman UPSC Prof. D P Agrawal Chairman, BOG Dr R.L Chauhan and Prof. I K Bhat , Director NIT Hamirpur inaugurating the newly constructed five storeyed Neelkanth Boys Hostel in NIT, Campus on 10/07/2010.

Prof. I K Bhat, Director , NIT Hamirpur inaugurating the newly constructed extension building of Estate office On 16-07-2010

Prof I K Bhat, Director, NIT Hamirpur inaugurating the newly constructed Aravalli Trainees Hostel, Type II Block on 16-07-2010

## Alumni Activities



45 Alumni of Shimla Local chapter met in Hotel Holiday Home on 15<sup>th</sup> Sept 2010. Prof. I.K. Bhat Hon'ble Director NIT Hamirpur was the Chief Guest of the function. Dean S&AA , President Alumni Affairs were also present during the function. Prof. I.K. Bhat Laying Foundation stone of New Residential Complex Faculty Houses on September 17, 2010 and IRC centre, Meditation Hall on 16-10-2010



## Foundation Stones

## Forthcoming Programs -Conferences/Workshops/ STC

- STC on VLSI Design & EDA Tools Dec 2010, E&CED.
- One Day Workshop on Cloud Computing on 26th Oct., 2010 by CS&E department
- Silver Jubilee Alumni Meet to be organized on 13th-15th Aug. 2011
- 55<sup>th</sup> Congress of the Indian Society of Theoretical and Applied Mechanics - ISTAM, 18-21 Dec., 2010 By Mathematics Department
- International Conference on Urbanism and Green Architecture By Architecture Department
- International Conference on Advances in Computing and Communication (December, 2010 )By CS&E Department
- National Conference on Advances in Polymer Science and Technology - (APST-2010) By Chemistry Department
- Books Exhibition from 25th October to 27 October, 2010 at NIT Hamirpur (H.P).

For more details of programs, please visit, institute website, [www.nith.ac.in](http://www.nith.ac.in)

### From Chief Editors desk

On the behalf of Editorial team members I take this opportunity to thank all the Deans, Heads, Coordinators, Faculty, Non-teaching staffs and students who have been associated with the Institute NEWSLETTER in past and all those who are associated with it in present for their efforts in bringing out the Volume 2 , 2010 Newsletter in the best possible manner. Good wishes to all NITHians past present and regards to all readers,

**Dr. Rajiv Kumar Sharma**  
Coordinator , Institute Newsletter  
Mechanical Engg Deptt, NIT Hamirpur

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