



ANNUAL REPORT 2011-12

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Central University of Punjab, Bathinda

(Established vide an Act of Parliament in 2009)

Central University of Punjab-City Campus





Central University Of Punjab

Bathinda

(Established vide an Act of Parliament in 2009)

ANNUAL REPORT 2011-12

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1. University at a glance

1.1 From the Vice Chancellor's Desk



Central University of Punjab, Bathinda is an upcoming educational institution of higher learning in this otherwise educationally backward region of Punjab. Starting from a scratch in 2009, the university has made a quantum jump by initiating several innovative programmes both in science and humanities. The university remains committed to its ideals of interactive, experiential techniques, scientific temperament and socially relevant teaching and research initiatives. The transit City Campus of the university is an excellent example of the most suitable, pollution free and eco-friendly environment with all the necessary facilities of any institution of higher learning including a state of the art Computer Centre, well furnished modern laboratories, air-conditioned lecture rooms and a modern library with self issue and return facility. Beautiful landscaping with lush green lawns, power wind mills and solar powered street lights speak of our commitment towards a green campus.

In consultation with experts from prestigious institutions across the country, five more Centres of Study were established during the year 2011-12 namely, Environmental Law; Economic Studies; Human Genetics; Computer Science and Technology; and Museology, Archaeology and Conservation. New academic programmes have been introduced in the Centres for Biosciences, Chemical and Pharmaceutical Sciences, Environmental Science and Technology, Comparative Literature, Economic Studies and Environmental Law. In infrastructural strides, the university has set up three laboratories for holding practical classes in Environmental Sciences, Biosciences and Molecular Genetics. Consolidation of existing laboratories with new equipment such as Nano Drop, Automated Karyotyping Work Station, Atomic Absorption Spectrometer, UV Spectrophotometer, Refrigerated Circulatory Water Baths, CO₂ Incubators, Rotavapors etc. have been continued to facilitate research and exploration.

The ingeniousness and innovation inherent in our curricula has attracted students not only from Punjab but also from eleven other states of India including far off states like West Bengal, Andhra Pradesh and Tamil Nadu. The number of applicants has shown a steep rise of 88.6% in the year 2011-12 as compared to the previous year. The faculty published 47 research articles in peer reviewed Indian and international journals, made 42 presentations in several conferences and received five extramural research grants this year. Several eminent scholars from diverse fields were invited to deliver lectures and enrich the knowledge of faculty and students. Apart from the academics, the university gave due importance to extracurricular activities. On different occasions competitions like photography and painting were organized.

Construction of boundary wall and preparation of master plan for the main campus of 500 acres situated at village Ghudda on Bathinda-Badal road, are in progress. Once completed, the university will be a model of higher education in Malwa region of Punjab.

We have been able to achieve the objectives envisioned by the planning forums and statutory bodies of the university for the year, but a lot remains to be accomplished. In the coming years we plan to expand further by establishing new Schools and Centres of Studies. We have already veered towards engineering domain this year and envisage the commencement of more courses in engineering and physical sciences in the coming years. Signing Memorandums of Understanding with other institutions to establish a framework for greater inter-institutional cooperation is also on the cards.

I hope the university will soon carve out a niche among the finest academic bodies of the world while maintaining its national character and global outreach through its instructional and research programmes.

Jai Rup Singh

Prof. Dr. Jai Rup Singh
Vice Chancellor



Officers of the University

Vice-Chancellor



Prof. Dr. Jai Rup Singh

Dean Academic Affairs



Prof. Dr. P. Ramarao
Ph.: 0164-2864105

e-mail: daa@cup.ac.in, ramaraop@cup.ac.in

Dean Student's Welfare



Prof. Dr. P. S. Ramana
Ph.: 0164-2864119

e-mail: paramjitramana@yahoo.co.in.

Professor-in-charge Examinations



Prof. Dr. R. G. Saini
Ph.: 0164-2864121

e-mail: coe.cup@gmail.com

Registrar



Col. (Retd.) Jagdev Kartar Singh
Ph.: 0164-2864106

e-mail: registrar.cup@gmail.com

1.3 Executive Summary

After two years of planning, the year 2011-12 was the year of execution. The Centers of Study established in 2010-11 were further strengthened in terms of infrastructure and research facilities. Five new Centers of Studies were added to the list namely; Centre for Environmental Law, Centre for Economic Studies, Centre for Computer Science and Technology, Centre for Museology, Archeology and Conservation, and Centre for Human Genetics.

The university has succeeded in expanding its base which is evident from the facts and figures of the Entrance Examination for admission to academic session 2011-12. In the year 2010-11, the number of candidates who applied for admission to various courses was 255 and of these 198 candidates appeared for the Entrance Examination. Whereas in 2011-12, the number of candidates who applied for admission increased to 481 and the number of candidates who appeared in the Entrance Examination increased to 361. This shows the popularity of programmes offered by the university. Other than Punjab, the students came from eleven more states including Andhra Pradesh, Bihar, Chandigarh, Delhi, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Kerala, Rajasthan, Uttar Pradesh and West Bengal indicating really a cosmopolitan character.

The University Library has been equipped with RFID (Radio Frequency Identification) and Electromagnetic Security Systems and has facility for Self-issue, Self-return and Self-renewal of books. Library has 10,130 books on its racks, subscribes to 61 national and international print journals and 7,400 full text online journals. The university now has an air-conditioned auditorium with most modern audio-visual equipment and seating capacity of about 250 persons.

A well equipped Molecular Genetics Laboratory has been setup and the existing research laboratories have been strengthened with latest equipment like Nano Drop, Refrigerated Circulatory Water Baths, UV-Visible Spectrophotometer, Automated Cytogenetics Workstation, Atomic Absorption Spectrometer, Trace Metal Analyzer, Ultra Low Deep Freezers etc.

Academicians, educationists and scientists of national and international repute were invited to deliver lectures on current issues like environmental pollution, cancer, Constitution of India, radiations and their use for peace, foreign relations of India, regional migration, endangered Sikh heritage etc. The university organized a National Seminar on Environment and Health and a panel discussion on World Cancer Day. Important occasions like Republic Day, Independence Day, Foundation Day of the university, Biodiversity Day and 'Constitution Day' were observed with zeal.

The faculty published 47 research articles in peer reviewed national and international journals and made 42 presentation in conferences.





The City Campus of Central University of Punjab

1.4 Central University of Punjab: A Beginning

Established under the Central Universities Act in 2009, the Central University of Punjab, Bathinda (CUPB) in the Malwa region is fast growing educational institution of higher learning supported by Government of India in an educationally backward area of Punjab. The university started functioning on February 28, 2009 with Prof. Dr. Jai Rup Singh as the first Vice Chancellor. Initially, Camp Office of the university was established at Vice Chancellor's residence situated at Civil Station, Bathinda. In October 2009, the university started functioning from 37 acre renovated premises of abandoned Bathinda Cooperative Integrated Cotton Ginning and Spinning Mills. The renovated premises now called "City Campus" indeed provide pollution free and eco-friendly atmosphere to the students and staff. The main campus of the university will come up on a 500 acre site near village Ghudda on Bathinda-Badal road, 22 kms away from the City Campus.

This campus located 5 Km away from the main bus terminal of Bathinda city is an excellent example of transformation of a barren site into a humming university campus with all the facilities of an ideal institution of higher learning in record time. During the year 2011-12 a sea change has been seen in the growth of this young university.



1.5 Objectives, Mission and Vision of University

The Objectives of the University are

- To disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit.
- To make special provisions for integrated courses in humanities, social sciences, science and technology in its educational programmes.
- To take appropriate measures for promoting innovations in teaching-learning process and interdisciplinary studies and research.
- To educate and train manpower for the development of the country.
- To establish linkages with industries for the promotion of science and technology.
- To pay special attention to the improvement of the social and economic conditions and welfare of the people, their intellectual, academic and cultural development.

The Mission of the University is

- To offer a wide range of instructional and research facilities across integrated and cross-disciplinary studies.
- To promote innovation in teaching, learning, evaluation, research and consultancy services.
- To create an ignited workforce responsive to regional, national and global needs in tune with the requirements of academics, industry, business and administration.
- To participate in the problems and concerns of the surrounding community and the civil society.

The Vision of the University is

- To uplift and upgrade the standards of teaching, learning and research to global levels of excellence.
- To create international bench marks in research, patents and consultancy services.
- To strategize to become a global epicenter of knowledge, culture, skills and technologies.
- To develop a scientific temper and a performance culture of pro-active decision making.
- To act as a catalyst of change by setting high benchmarks in infrastructural growth, in academic and co-academic excellence, in learning and evaluation, in social interfacing with the stakeholders, in human resource development, in safety and security systems, in process management, and in seamless integration with the surrounding communities.
- To cross-pollinate with new ideas, new technologies, new platforms and new world views.
- To continue expanding and exploring, locally, nationally and globally.



1.6 Statutory Bodies of the University

The governing bodies of the Central University of Punjab, namely the Executive Council, Academic Council and Finance Committee were constituted by the Visitor. However, Planning Board, Building Advisory Committee and Financial Investment Advisory Committee were constituted by the Vice Chancellor. The constitution of each of these committees is given below:

A. Executive Council

- 1. Prof. Dr. Jai Rup Singh**
Vice Chancellor (Ex officio Chairman)
Central University of Punjab
Bathinda.
- 2. Secretary** (Ex officio member)
Ministry of Human Resource Development
Department of Secondary and Higher
Education Government of India
Shastri Bhawan, New Delhi.
- 3. Principal Secretary** (Ex officio member)
Department of Higher Education
Government of Punjab
Mini Secretariat Sector 9
Chandigarh.
- 4. Prof. Dr. Seyed E. Hasnain**
(Former Vice-Chancellor,
University of Hyderabad)
Kusuma School of Biological Sciences
Indian Institute of Technology
Hauz Khas, New Delhi.
- 5. Prof. Dr. K. K. Talwar**
President
National Academy of Medical Sciences
Ansari Nagar, Mahatma Gandhi Marg
New Delhi.
- 6. Prof. Dr. K. B. Powar**
Former Vice-Chancellor
Shivaji University, Kolhapur
15, Marvel Memories, Ramnagar Colony
Bavadhan, Pune.
- 7. Prof. Dr. H. P. Dikshit**
(Former Vice Chancellor, IGNOU, New Delhi)
Director General
School of Good Governance and Policy Analysis
C-403-404, 4th Floor, Narmada Bhawan
59, Area Hills Bhopal.
- 8. Prof. Dr. Pankaj Chandra**
Director
Indian Institute of Management
Bannerghatta Road
Bengaluru.
- 9. Prof. Dr. S. C. Saxena**
Director
Indian Institute of Technology
Roorkee.
- 10. Prof. Dr. Moin Uddin**
Pro Vice Chancellor
Delhi Technological University
Shahbad Daultapur
Main Bawan Road, Delhi.
- 11. Prof. Dr. G. K. Chadha**
Chief Executive Officer, South Asian University
CRS Language Lab, JNU Old Campus
Aruna Asaf Ali Road
New Delhi.
- 12. Col. (Retd.) Jagdev Kartar Singh**
Registrar (Ex officio Secretary)
Central University of Punjab
Bathinda

B. Academic Council

- 1. Prof. Dr. Jai Rup Singh**
Vice Chancellor (Ex officio Chairman)
Central University of Punjab
Bathinda.
- 2. Prof. Dr. N. K. Ganguly**
(Former Director General, ICMR)
Biotechnology Fellow and Advisor
Translational Health Science Technology
Institute National Institute of Immunology
Aruna Asaf Ali Marg, New Delhi.



- 3. Prof. Dr. Deepak Pental**
(Former Vice Chancellor, Delhi University)
Department of Genetics, University of Delhi
South Campus
New Delhi.
- 4. Dr. Sudarshan Iyengar**
Vice Chancellor
Gujrat Vidyapith
Ahmedabad.
- 5. Prof. Dr. D. P. Singh**
Former Vice Chancellor
Banaras Hindu University
Varanasi.
- 6. Prof. Dr. Vijay Khole**
(Former Vice Chancellor, University of Mumbai)
Chief Academic Advisor
Kohinoor Education Trust, Kohinoor Corporate Office
Senpatio Bapat Marg, Dadar (W)
Mumbai.
- 7. Prof. Dr. Veer Singh**
Vice Chancellor
NALSAR University of Law, Hyderabad.
- 8. Prof. Dr. Gurjeet Singh**
(Former Vice Chancellor, Rajiv Gandhi National
Law University, Patiala)
Director General, National Law School and
Judicial Academy, Guwahati.
- 9. Prof. Dr. N. Sathyamurthy**
Director
Indian Institute of Science Education and Research
Mohali.
- 10. Prof. Dr. K. N. Pathak**
(Former Vice Chancellor, Panjab University)
Professor Emeritus, Panjab University
Chandigarh.
- 11. Prof. Dr. K. K. Aggarwal**
Former Vice Chancellor
Guru Gobind Singh Indraprastha University
Partap Ganj, Delhi.
- 12. Prof. Dr. D. S. Rathore**
(Former Vice Chancellor Himachal Pradesh Krishi
Vishwavidyalaya)
15/15, Indira Nagar, Lucknow.
- 13. Prof. Dr. Harjit Singh**
Professor Emeritus
Department of Chemistry, Guru Nanak Dev
University, Amritsar.
- 14. Prof. Dr. V. Krishnan**
Hon. Professor, Jawaharlal Nehru Centre for
Advanced Scientific Research, Bengaluru.
- 15. Prof. Dr. Mushahid Hussain**
Professor of Physics
Jamia Milia Islamia
Delhi.
- 16. Prof. Dr. A. K. Sood**
Professor of Physics
Indian Institute of Science
Bengaluru.
- 17. Prof. Dr. Indu Banga**
Professor Emeritus
Department of History, Panjab University
Chandigarh.
- 18. Prof. Dr. Abhai Man Singh**
(Former Professor of Physics and Director South
Campus Delhi University)
405-A, IIA Apartments, B-7, Vasundhara Enclave
Delhi.
- 19. Prof. Dr. R. K. Bedi**
Department of Physics,
Guru Nanak Dev University, Amritsar.
- 20. Prof. Dr. Partha P. Majumdar**
Director, National Institute of Biomedical
Genomics, Netaji Subhas Sanatorium
(T.B. Hospital), 2nd Floor, P.O. N.S.S. Kalyani.
- 21. Prof. Dr. Javeed Alam**
(Retd. Prof. of European Studies, University of
Hyderabad)
102, Sai Saraswati Residence, Ravindranagar
Sitafal Mandi, Hyderabad.
- 22. Col. (Retd.) Jagdev Kartar Singh**
Registrar (Ex officio Secretary)
Central University of Punjab
Bathinda



C. Finance Committee

- 1. Prof. Dr. Jai Rup Singh**
Vice Chancellor (Ex Officio Chairman)
Central University of Punjab
Bathinda.
- 2. Shri J. S. Raju**
Joint Secretary and Director General
National Literacy Mission Authority
Ministry of Human Resource Development
Department of School Education and Literacy
Shastri Bhawan, New Delhi.
- 3. Prof. Dr. S. K. Salwan**
(Former Vice Chancellor, Punjab Technical
University, Jalandhar)
Dr. B.D. Nag Chaudhari, DRDO Chair
Distinguished Professor and Chairman
Armaments Research Board Government of
India, Ministry of Defence, Defence Research
and Development Organization
4th Floor, DRDO Bhawan, Rajaji Marg,
New Delhi.
- 4. Prof. Dr. H. P. Dikshit**
(Former Vice Chancellor, Indira Gandhi National
Open University)
Director General, School of Good Governance
and Policy Analysis
C-403 -04, 4th Floor, Narmada Bhawan
59, Arera Hills, Bhopal.
- 5. Shri N. S. Rattan**
(Former Vice Chancellor, Punjabi University
Patiala) 168, Sector 33 A, Chandigarh.
- 6. Shri Naveen Soi**
Director, Department of Higher Education
Ministry of Human Resource Development
Shastri Bhawan, New Delhi.
- 7. Dr. Shakeel Ahmad**
Deputy Secretary
University Grants Commission
Bahadur Shah Zafar Marg, New Delhi.

D. Planning Board

- 1. Prof. Dr. Jai Rup Singh**
Vice Chancellor (Ex Officio Chairman)
Central University of Punjab
Bathinda.
- 2. Prof. Dr. Seyed E. Hasnain**
(Former Vice Chancellor, University of
Hyderabad)
Kusuma School of Biological Sciences Indian
Institute of Technology Hauz Khas
New Delhi.
- 3. Prof. Dr. K. B. Powar**
(Former Vice-Chancellor
Shivaji University, Kolhapur)
15, Marvel Memories, Ramnagar Colony
Bavadhan, Pune.
- 4. Prof. Dr. S. K. Salwan**
(Former Vice Chancellor, Punjab Technical
University, Jalandhar) Dr. B.D. Nag Chaudhari,
DRDO Chair Distinguished Professor and Chairman
Armaments Research Board, Government of
India, Ministry of Defence Defence Research And
Development Organization, 4th Floor DRDO
Bhawan, Rajaji Marg, New Delhi.
- 5. Prof. Dr. P. P. S. Kapur**
(Former Pro-Vice Chancellor, Guru Nanak Dev
University, Amritsar)
10-C, Rajguru Nagar, Ferozpur Road
Ludhiana.
- 6. Prof. Dr. P. Ramarao**
Dean, School of Basic and Applied Sciences
Central University of Punjab
Bathinda.
- 7. Prof. Dr. Harjit Singh**
Professor Emeritus, Department of Chemistry
Guru Nanak Dev University, Amritsar.
- 8. Prof. Dr. Ashwani Kumar**
Department of Microbiology
University College of Medical Sciences
Delhi.
- 9. Dr. R. S. Khandpur**
Director General
Pushpa Gujral Science City, Jalandhar -
Kapurthala Road, Kapurthala.

E. Building Advisory Committee

1. **Prof. Dr. Jai Rup Singh**
Vice Chancellor (Ex-officio Chairman)
Central University of Punjab, Bathinda.
2. **Prof. Dr. Moin Uddin**
Pro-Vice Chancellor, Delhi Technological
University
Shahbad Daulatpur, Main Bawan Road, Delhi.
3. **Prof. Dr. Gurjeet Singh**
(Former Vice Chancellor Rajiv Gandhi
University of Law, Patiala)
Director General, National Law School and
Judicial Academy
6, Bhuban Road, Uzan Bazar
Guwahati .
4. **Prof. Dr. P. Ramarao**
Dean, School of Basic and Applied Sciences
Central University of Punjab, Bathinda.
5. **Mr. S. L. Kaushal**
(Former Chief Architect, Punjab)
2865, Sector 42 – C, Chandigarh.
6. **Mr. Jit Kumar Gupta**
Director, College of Architecture
IET Baddal
District Ropar.
7. **Prof. Dr. S. S. Behl**
Department of Architecture
Guru Nanak Dev University, Amritsar.
8. **Prof. Dr. T. S. Sidhu**
Principal
Giani Zail Singh College of Engineering and
Technology, Dabwali Road, Bathinda.
9. **Er. T. S. Chahal**
Superintending Engineer
PWD, B&R, Bathinda.
10. **Dr. Prabhjot Kaur**
Department of Architecture
Giani Zail Singh College of Engineering and
Technology, Dabwali Road, Bathinda.
11. **Prof. R. K. Deora** (Up to July 30, 2011).
Special Officer
Central University of Punjab, Bathinda.
12. **Prof. Dr. R. G. Saini** (From August 01, 2011)
Coordinator, Centre for Biosciences
Central University of Punjab, Bathinda.
22. **Col. (Retd.) Jagdev Kartar Singh**
Registrar (Ex officio Secretary)
Central University of Punjab, Bathinda

F. Financial Investment Advisory Committee

1. **Prof. Dr. Jai Rup Singh**
Vice Chancellor (Ex-officio Chairman)
Central University of Punjab, Bathinda.
2. **Prof. Dr. S. S. Johl**
Former Vice Chancellor
Punjabi University, Patiala.
3. **Mr. N. S. Rattan, IAS (Retd.)**
Former Vice Chancellor
Punjabi University, Patiala.
4. **Dr. R. S. Khandpur**
Director General, Pushpa Gujral Science City
Jalandhar-Kapurthala Road, Kapurthala.
5. **Mr. B. S. Rattan**
Retired Commissioner Income Tax, Patiala.
6. **Prof. R. S. Bawa,**
Former Registrar, Guru Nanak Dev University
Amritsar and Director, Amritsar College of
Engineering & Technology, Amritsar.
7. **Prof. P. Ramarao,**
Dean, School of Basic and Applied Sciences
(Member, Planning Board)
Central University of Punjab, Bathinda.
8. **Prof. R. K. Deora** (Up to July 30, 2011)
Special Officer (Member Secretary).
Central University of Punjab, Bathinda.
9. **Prof. Dr. R. G. Saini** (From August 01, 2011)
Coordinator, Centre for Biosciences
Central University of Punjab
Bathinda.



1.7 Meetings of Statutory Bodies

The meetings of statutory bodies of the university were held on following dates during 2011-12

Sr.No.	Name of the statutory body and number of meeting	Place of meeting	Date of meeting
Executive Council			
1.	Fifth meeting	Bhai Vir Singh, Sahitya Sadan New Delhi	September 17, 2011
2.	Sixth meeting	Bhai Vir Singh, Sahitya Sadan New Delhi	March 25, 2012
Academic Council			
3.	Third meeting	Central University of Punjab Bathinda	March 10, 2012
Finance Committee			
4.	Third meeting	Bhai Vir Singh, Sahitya Sadan New Delhi	November 12, 2011
5.	Fourth meeting	Bhai Vir Singh, Sahitya Sadan New Delhi	March 24, 2012
Building Advisory Committee			
6.	Fifth meeting	Central University of Punjab Bathinda	January 31, 2012
Financial Investment Advisory Committee			
7.	Second meeting	Central University of Punjab Bathinda	May 09, 2011
8.	Third meeting	Central University of Punjab Bathinda	October 31, 2011



3rd Finance Committee Meeting
November 12, 2011

5th Executive Council Meeting
September 17, 2011



5th Building Advisory Committee Meeting, January 31, 2012



**3rd Academic Council Meeting
March 10, 2012**



**3rd Academic Council Meeting
March 10, 2012**



**4th Finance Committee Meeting
March 24, 2012**



**6th Executive Council Meeting
March 25, 2012**



2. Academics

2.1 Schools and Centers of Studies and the Programmes Offered

Five new Centers of Study were established under five different Schools during 2011-12. The number of course programmes offered during 2011-12 increased from 4 to 10. The academic programmes offered during the year under report are given in the table below:

Sr.No.	Name of the School	Name of the Centre	Academic Programme Offered
1.	School of Basic and Applied Sciences	Centre for Biosciences	M.Phil.-Ph.D. Integrated Programme
			M.Sc. Programme
		Centre for Chemical and Pharmaceutical Sciences (Established during 2011-12)	M.Pharm.-Ph.D. Integrated Programme
			M.Sc. Medicinal Chemistry
2.	School of Environment and Earth Sciences	Centre for Environmental Science and Technology	M.Phil.-Ph.D. Integrated Programme
			M.Sc. Programme
3.	School of Global Relations	Centre for South and Central Asian Studies	M.Phil.-Ph.D. Integrated Programme
4.	School of Health Sciences	Centre for Human Genetics	No teaching programme offered by this centre
5.	School of Languages, Literature and Culture	Centre for Comparative Literature	M.Phil.-Ph.D. Integrated Programme
		Centre for Museology, Archaeology and Conservation (Established during 2011-12)	No teaching programme offered by this centre
6.	School of Social Sciences	Centre for Development Economics (Established during 2011-12)	M.Phil.-Ph.D. Integrated Programme
7.	School of Legal Studies and Governance	Centre for Environmental Law (Established during 2011-12)	LL.M.-Ph.D. Integrated Programme
8.	School of Engineering and Technology	Centre for Computer Science and Technology (Established during 2011-12)	No teaching programme offered by this centre



2.2 Staff of the University

2.2.1 Faculty

School of Basic and Applied Sciences



Centre for Biosciences

Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
1.	Prof. Dr. R. G. Saini* 	Professor and Centre Coordinator Genetics of host-parasite relationships in different plant-pathogen systems. Handled 18 externally funded research projects at Punjab Agricultural University. Has supervised the work of 29 students and published nearly 260 research papers in peer reviewed scientific journals and conference proceedings.	25.11.2010
2.	Dr. Felix Bast 	Assistant Professor Molecular evolution, phylogeography and comparative genomics of algae. Received INSPIRE faculty award to work on chemical and phylogenetic diversity of seaweeds in Indian subcontinent. Has published six research articles and authored one book.	22.05.2010
3.	Dr. Sanjeev Kumar 	Assistant Professor Molecular mechanism and physiological stress tolerance in chickpea (<i>Cicer arietinum</i> L) and soybean (<i>Glycine max</i>). Stress physiology and gene expression. Has published 16 research articles.	25.05.2010







Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
4.	Dr. Pankaj Bhardwaj* 	Assistant Professor Molecular characterisation of tea germplasm for diversity and metagenomics. Has expertise in DNA sequencing and experience of working on 96 Capillary DNA Sequencer ABI 3730 XL and Next Generation Sequencer. Has published six research articles and four abstracts in national and international conferences.	07.05.2011
5.	Dr. Sandeep Singh* 	Research Associate Transcriptional regulation. Free radical metabolism in cancer and oncogenic elements in environment. Has published six research articles in national and international journals.	03.10.2011

Centre for Chemical and Pharmaceutical Sciences


6.	Prof. Dr. P. Rama Rao 	Professor and Dean Receptor mechanisms in normal and diseased conditions. Diabetes and cancer relationship, regulatory toxicology. Guided more than ten Ph.D. and 48 M.Pharm./M.Sc. (Pharma) students. Participated in more than 38 scientific meetings/conferences. Member of national and international bodies and won 13 awards and honours in academics.	01.01.2010
7.	Dr. Raj Kumar 	Assistant Professor Design and synthesis of novel small heterocycles as anticancer, anti-malarial and xanthine oxidase inhibitors. Synthesis and methodology development of small bioactive molecules. Has published 27 research articles and attended 17 scientific conferences/seminars/symposia.	19.04.2011



Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
8.	Dr. Vikas Jaitak* 	Assistant Professor Chemical investigation of bioactive compounds from natural resources. Development of SOPs for standardization of natural product formulations. Semi-synthesis of NCE's from natural bioactive compounds.	04.07.2011
9.	Dr. Ajit Vikram* 	Assistant Professor Molecular association between metabolic syndrome and prostatic diseases. Pharmacological evaluations and toxicity assessment of novel chemicals and drugs. Has published 26 research articles and attended seven conferences.	04.07.2011- 02.01.2012
10.	Dr. Virender Singh* 	Assistant Professor Morita-Baylis-Hillman chemistry, medicinal chemistry and asymmetric synthesis using transition metals and N-heterocyclic carbenes.	16.03.2011- 15.03.2012
11.	Dr. Rahul Shrivastava* 	Assistant Professor Synthesis and application of calixarene based molecular receptors for molecular recognition. Supramolecular chemistry, molecular organization and recognition and host guest chemistry. Has published five research articles and attended three conferences.	31.12.2010 - 20.04.2012

School of Engineering and Technology

Centre for Computer Science and Technology

Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
12.	Er. Meenakshi Mittal 	Assistant Professor Neural network method to predict the protein structure. Structure-function relationship of proteins leading to drug discovery and uncovering of biological information. Has published eight research articles.	30.09.2011

School of Environment and Earth Sciences

Centre for Environmental Science and Technology

13.	Dr. Sunil Mittal 	Assistant Professor Study of water pollution and waste water management. Development of plant based bio herbicides. Has published eight research articles.	02.03.2010
14.	Dr. J. Nagendra Babu* 	Assistant Professor Supra-molecular chemistry. Inclusion phenomenon and supra-molecular catalysis. Environmental analytical chemistry. Has published 12 research articles and attended seven conferences.	10.01.2011
15.	Dr. Puneeta Pandey* 	Assistant Professor Environmental chemistry, geographic information system (GIS) application for vulnerability assessment of water resources in Punjab. Air and water pollution. Study of urban heat island formation in relation to aerosols. Has published five research articles and attended four conferences.	16.03.2011



Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
16.	Dr. M. S. Dhanya 	Assistant Professor Environmental microbiology, waste management. Stress response of microbes to climate change. Biodiversity conservation. Has published four research articles and attended eight conferences.	21.03.2011
17.	Dr. K. N. Yogalakshmi 	Assistant Professor Biological wastewater treatment, membrane technologies, bioreactors and nutrient removal, microbial fuel cells, solid waste management, environmental microbiology. Has published three research articles and attended six conferences.	20.04.2011

School of Global Relations

Centre for South and Central Asian Studies

18.	Prof. Dr. R. L. Hangloo 	Professor and Dean Published more than 50 research articles, authored seven books, seven book reviews, won more than 20 distinctions/awards and attended several national and international conferences.	01.01.2011-30.06.2011
19.	Dr. Sandeep Kaur 	Assistant Professor International trade, agriculture and human development. India's trade with South and Central Asia. Handling research project, "Socio-economic externalities of Guru Nanak Dev Thermal Power Plant in Bathinda" funded by Indian Council of Social Sciences. Has published eight research articles.	25.05.2010



Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
20.	Dr. V. J. Varghese 	Assistant Professor Modern South Asian history, transnational migrations from South Asia, making of modern subjectivities and regional modernity in South Asia. Published 12 research articles, two books, edited three special issues of a journal, handled five research projects. Presented more than 30 papers at International/National conferences.	01.07.2011
21.	Dr. Ripudaman Singh* 	Assistant Professor Worked on trends in regional disparities in India, area development studies and regional planning. Has published six research articles.	20.05.2010 - 19.05.2011
22.	Dr. Suneel Kumar* 	Assistant Professor Ethnic politics, trans-national organized crime and human rights in South and Central Asia. Has published 12 research articles.	01.10.2010 - 09.07.2011

School of Health Sciences




Centre for Human Genetics

23.	Mr. I. K. Sukheja* 	Assistant Professor A zoologist by training. Joined this university after superannuating from D.A.V. College, Bathinda.	05.03.2012
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Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
24.	Dr. Anjali Singh* 	Research Associate Genetic epidemiology, molecular anthropology and human population genetics. Published ten research papers, and attended six conferences.	15.07.2011

School of Languages, Literature and Culture**Centre for Comparative Literature**

25.	Prof. P. S. Ramana** 	Professor and Dean Literary and cultural theory and criticism; translation theory and practice. Supervised ten Ph.D. and more than 35 M.Phil. students. Published more than 40 research articles, seven books of criticism and translation and attended several conferences.	01.04.2011
26.	Dr. Zameerpal Kaur 	Assistant Professor Poetics and literary theories, textual analysis, Indian poetics and linguistic tradition. Modern Punjabi poetry, Punjabi folklore and culture. Inter-disciplinarity of literature. Has published eight research articles, authored two books and attended 14 conferences.	21.10.2009
27.	Dr. Amandeep Singh* 	Assistant Professor Diasporic fiction, comparative study of Punjabi and English diasporic novels. Published two research articles and two review articles.	18.09.2010



Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
28.	Dr. Rajinder Kumar 	Assistant Professor Hindi fiction, contemporary discourses (Dalit and Gender) and culture studies. Has published 20 research articles, authored three books and attended six conferences.	14.03.2011
29.	Dr. Neetu Purohit* 	Research Associate Indian women writers and their narrative techniques.	08.08.2011
30.	Dr. Alpna Saini 	Assistant Professor Literary theory with special focus on theories of subjectivity, drama and theatre, translation studies, film studies. Poststructuralist theory and culture studies. Published one book, 20 research articles, two book reviews and two film reviews.	14.10.2011

Centre for Museology, Archeology and Conservation

31.	Dr. Subash Parihar* 	Associate Professor Indo-Islamic and Sikh art and architecture of North-Western India. Has published 47 research articles, authored six books, participated in 23 exhibitions and won Punjab Lalit Kala Akademi Award and 15 other awards.	01.09.2011
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**School of Social Studies****Centre for Economic Studies**

Sr. No.	Name	Designation and Specialization	Date of Joining/Leaving
32.	Dr. Angrej Singh Gill* 	Assistant Professor † Development economics (with special emphasis on economics of education and agriculture). Macro economics, micro economics, Indian economy and Punjab economy. Has published seven research articles and attended three conferences.	18.03.2011- 30.08.2011

School of Legal Studies and Governance**Centre for Environmental Law**

33.	Dr. Tarun Arora* 	Assistant Professor Enforcement of environmental protection laws in India with special reference to the State of Punjab. Has published 21 research articles, edited seven books and attended 20 conferences.	18.03.2011- 17.03.2012
34.	Dr. Deepak Kumar* 	Assistant Professor Environmental law, constitutional governance, fundamental rights, information technology law and agricultural laws. Presented papers in 12 conferences.	22.03.2011

* Faculty on contractual basis

** On deputation from Punjabi University

Sixteen members of the faculty joined university service during the year 2011-12 (one professor, one associate professor, eleven assistant professors and three research associates) raising the faculty strength to 34. The services of nine assistant professors who were initially appointed on contractual basis were regularized during the year 2011-12.

2.2.2 Non-teaching Staff

Sr. No.	Name	Designation	Date of Joining/Leaving
1.	Col.(Retd.) Jagdev Kartar Singh	Registrar	05.09.2011
2.	Mr. Ajit Singh*	Officer on Special Duty (Finance)	19.09.2011-31.01.2012
3.	Prof. R.K. Deora*	Special Officer (Exams)	01.08.2009 -30.07.2011
4.	Mr. Gurtej Singh Sra*	University Engineer	01.09.2010
5.	Dr. V.K. Anand*	Incharge University Library	01.06.2011-30.11.2011
6.	Dr. B.K. Nagpal*	Medical Officer	26.05.2010
7.	Ms. Shweta Arora	Assistant Registrar	07.07.2009
8.	Mr. C.L. Bansal*	Accounts Officer (Part time)	09.02.2011
9.	Mr. Rajbir Singh*	Sports Officer	31.01.2011
10.	Mr. Gurmail Singh*	Accountant	01.06.2009
11.	Mr. Ravipal Singh*	Landscape Officer	09.06.2011-12.10.2011
12.	Mr. Khushpreet Singh Brar*	Assistant Librarian	28.12.2011-29.02.2012
13.	Mr. Vivek Goyal	Assistant	11.03.2010
14.	Mr. Suresh Kumar	Assistant	03.10.2011
15.	Mr. Bhupinder Singh	Junior Professional Assistant	01.01.2010
16.	Mr. Amrik Singh*	Assistant	04.05.2011
17.	Mr. Rohit Rastogi*	Data Entry Operator	03.07.2009
18.	Mr. Maghi Singh*	Technician Stores	29.05.2010
19.	Ms. Poonam Rani*	Computer Operator	01.07.2009
20.	Mr. Pritpal Singh*	Computer Operator	23.08.2010
21.	Mr. Nivedan Salwan*	Computer Operator	25.08.2010
22.	Mr. Tarsem Singh*	Assistant Estate Supervisor	15.01.2011
23.	Ms. Sona Rani*	Junior Technical Assistant	22.03.2011
24.	Ms. Jyoti*	Junior Technical Assistant	16.03.2011



Sr. No.	Name	Designation	Date of Joining/Leaving
25.	Mr Ashwani Kumar*	Junior Technical Assistant	16.03.2011
26.	Ms. Amanraj Kaur Brar*	Computer Laboratory Attendant*	20.08.2010 -22.02.2012
27.	Mr. Gopal Singh Soni*	Laboratory Technician	30.08.2011
28.	Mr. Bahadur Singh*	Junior Technical Assistant	12.09.2011
29.	Mrs. Navjyoti Singla*	Computer Operator	14.12.2011
30.	Mrs. Karamjit Kaur Sidhu*	Computer Operator	19.12.2011
31.	Mr. Sukhpinder Singh*	Computer Operator	20.12.2011
32.	Mr. Sweet Singh*	Campus Manager and Security Officer	15.10.2011
33.	Mr. Darshan Singh*	Driver	14.01.2009
34.	Mr. Balraj Singh*	Driver	28.09.2011
35.	Mr. Subhash Chander*	Electrician	21.12.2011
36.	Ms. Monika Kansal*	Library Trainee	20.03.2012
37.	Mr. Vakeel Singh*	Library Trainee	09.09.2011 - 08.03.2012
38.	Mrs. Monika*	Library Trainee	12.09.2011-11.03.2012

* On contractual basis

Eighteen persons joined the university service on different non-teaching posts during the year 2011-12. The services of three non-teaching employees who were initially appointed on contractual basis were regularized during 2011-12.

2.3 Admissions to Academic Programmes

The third entrance examination for admission to eleven academic programmes offered by the university during academic session 2011-12 was held on July 16, 2011 at ten locations across the country. Only limited number of candidates successful in the entrance examination were called for interview and that were conducted with the help of subject matter experts invited from other universities in the region. The candidates for admission to M.Phil.-Ph.D. Integrated Programmes also submitted a summary of research proposal to be followed by them if they were selected for admission. Of the 361 candidates who appeared in the entrance examination, only 68 were successful in getting admission. The details of academic programmes offered and the number of candidates admitted to each of these programmes is given in the following table:



Sr.No.	Programme	Number of Candidates Appeared in Entrance Examination	Number of Candidates Called for Interview	Number of Candidates Admitted
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Integrated Programme

1.	M.Phil.-Ph.D. Integrated Programme in Biosciences	76	50	09
2.	M.Phil.-Ph.D. Integrated Programme in Environmental Science and Technology	27	50	09
3.	M.Phil.-Ph.D. Integrated Programme both in Biosciences and Environmental Science and Technology	63*	--	--
4.	M.Pharm.-Ph.D. Integrated Programme in Pharmaceutical Sciences (Medicinal Chemistry)	58	25	08
5.	M.Phil.-Ph.D. Integrated Programme in South and Central Asian Studies	28	28	08
6.	M.Phil.-Ph.D. Integrated Programme in Comparative Literature	30	30	10
7.	M.Phil.-Ph.D. Integrated Programme in Development Economics	28	27	05
8.	LL.M.-Ph.D. Integrated Programme in Environmental Law	21	20	05

Total		331	230	54
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Post Graduate Programmes

1.	M.Sc. in Biosciences	12	19	08
2.	M.Sc. in Environmental Science and Technology	05	12	04
3.	M.Sc. both in Biosciences and Environmental Science and Technology	07*	--	--
4.	M.Sc. in Chemical Sciences	05	04	02
5.	M.A. in South and Central Asian Studies	01	--	--

Total		30	35	14
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Grand Total		361	265	68
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*: were considered for admission to both Biosciences and Environmental Science and Technology programs.



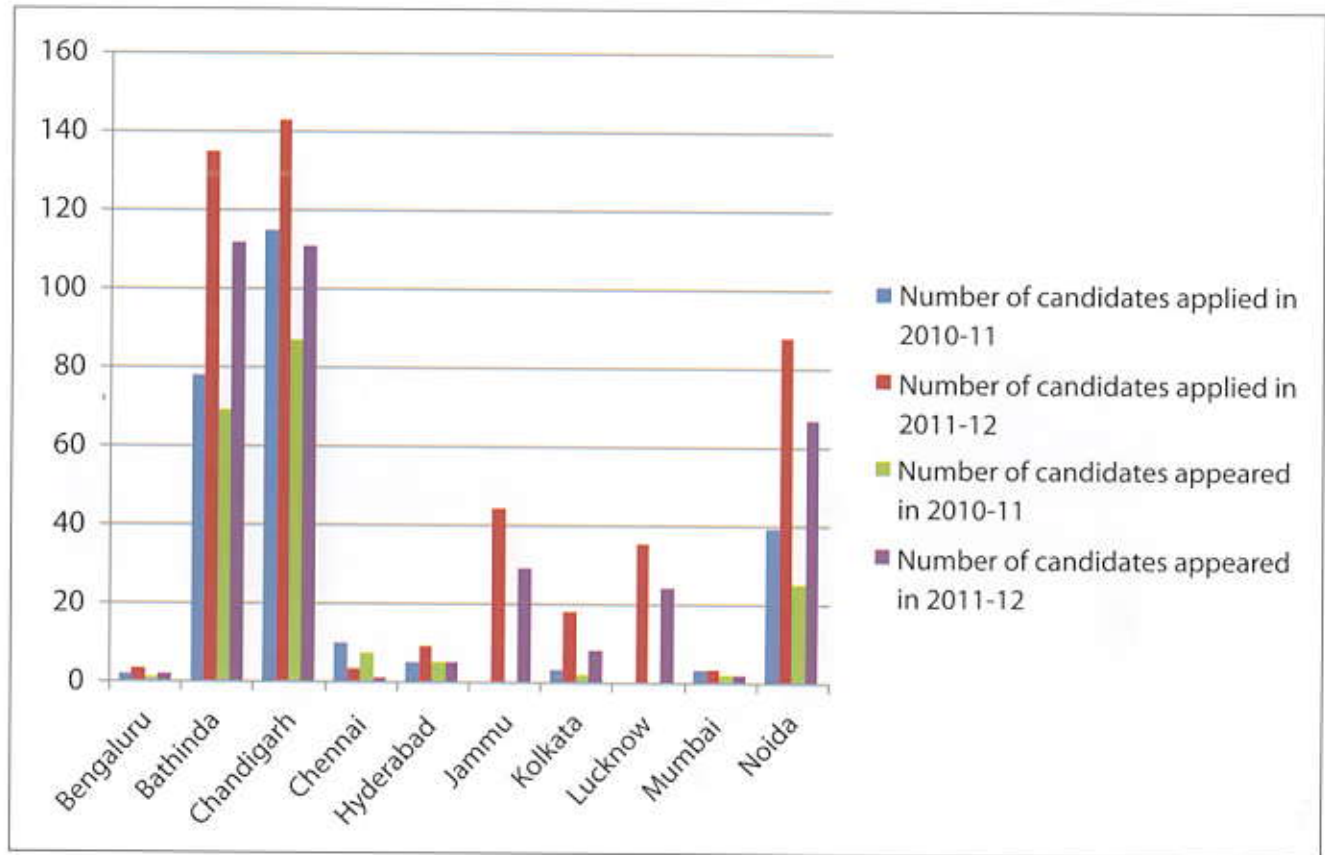
There was an increase in the number of candidates who applied for admission to programmes offered during the academic session 2011-12 as compared to those offered during the academic session 2010-11. A comparison of the number of candidates who applied and those who appeared for entrance examinations conducted on July 25, 2010 for admission to academic session 2010-11 and that held on July 16, 2011 for admission to academic session 2011-12 at different centers across the country is given below:

Location of Centre	Number of Candidates Applied for the Entrance Examination		Number of Candidates Appeared in the Entrance Examination	
	2010-11	2011-12	2010-11	2011-12
Bengaluru	02	03	01	02
Bathinda	78	135	69	112
Chandigarh	115	143	87	111
Chennai	10	03	07	01
Hyderabad	05	09	05	05
Jammu	-	44	-	29
Kolkata	03	18	02	08
Lucknow	-	35	-	24
Mumbai	03	03	02	02
Noida	39	88	25	67
Total	255	481	198	361

In comparison to the year 2010-11, an increase of 88.6% in the number of applications received and 82% increase in the number of candidates who appeared for the entrance examination in 2011-12 was seen. There was a rise in the number of candidates appearing from the examination centers at Chandigarh, Bathinda and Noida as compared to 2010-11. The entrance examination during 2011-12 was held at ten centers across the country as compared to 2010-11 when the entrance examination was held at only eight centers. The centers at Jammu and Lucknow were added for the first time in the list of examination centers during 2011-12.



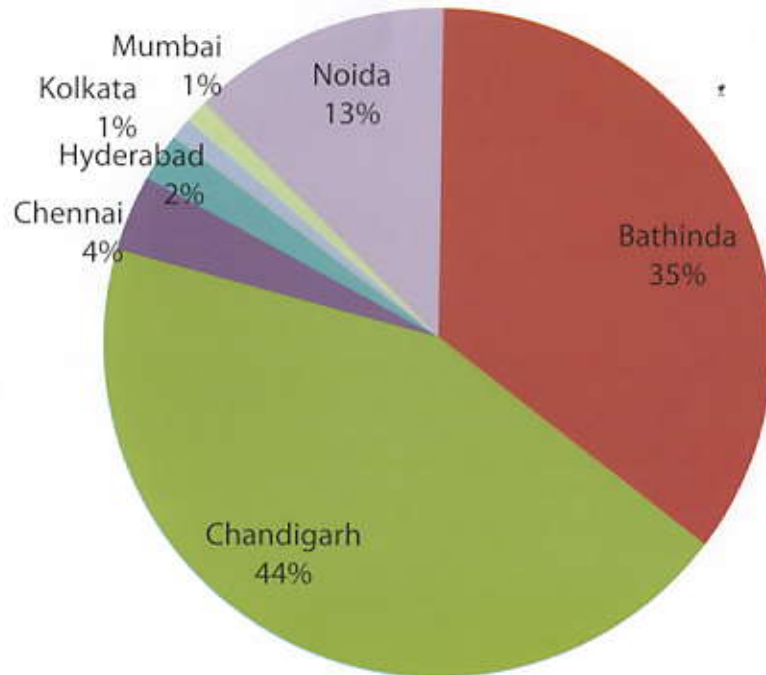
Entrance examination in progress at City Campus, Bathinda on July 16, 2011.



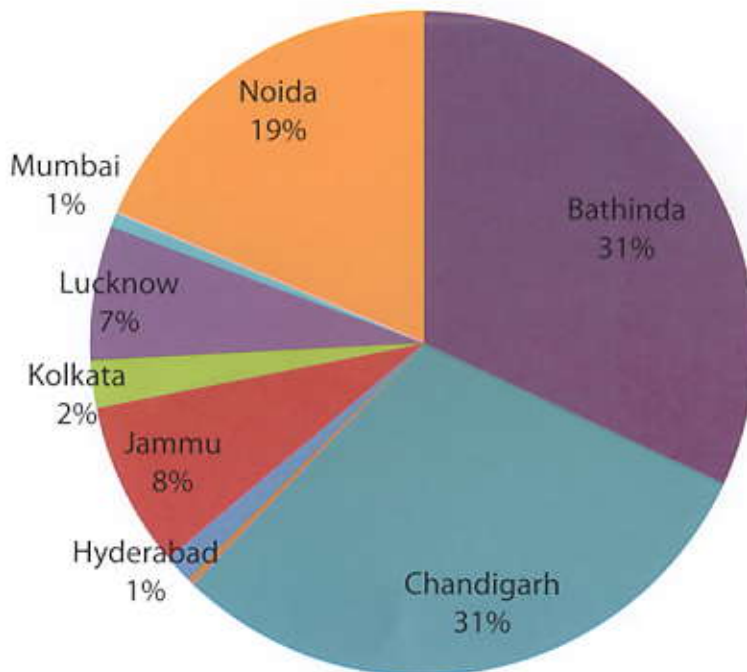
Centre-wise graphic representation of candidates who applied for admission and those who appeared in the entrance examination for academic sessions 2010-11 and 2011-12



Centre-wise Distribution of Candidates for Entrance Examination in 2010-11



Centre-wise Distribution of Candidates for Entrance Examination in 2011-12



Pie diagrams showing center-wise distribution of candidates who appeared in the entrance examinations held in 2010-11 and 2012.

Interview Sessions in Progress

Centre for Chemical and
Pharmaceutical Sciences



Centre for Environmental
Science and Technology



Centre for Development Economics



Centre for Biosciences

2.4 The Semester System

In order to promote academic excellence, the university has adopted semester system for all academic programmes. The course contents have been designed in a way to provide qualitative knowledge in interdisciplinary aspects stimulating an urge to excel as world class leaders with creative and competitive spirit. The students under this system are continuously evaluated in terms of home or library assignments, project work, field training, laboratory exercises, term tests etc. University follows a Choice Based Credit System which enhances learning opportunities, horizontal intra- and inter-centre mobility and inter-institutional transferability of students. The system provides flexibility for students to complete the programme over an extended period of time and compatibility of educational programmes all over the country.



2.5 Student Support Services

- | | | |
|-----|---------------------|---|
| 1. | Academics | <ul style="list-style-type: none">➤ State of the art air-conditioned class rooms enabled with latest visual aids.➤ State of the art conferencing and tele-conferencing infrastructure.➤ Modern Computer Centre with over 100 workstations and 1 Gigabyte internet connectivity.➤ University seminar series featuring invited talks by eminent scholars from across the world in all disciplines. |
| 2. | Student Welfare | <ul style="list-style-type: none">➤ Grievance redressal.➤ Counselling.➤ Cultural activities. |
| 3. | Anti - Ragging Cell | <ul style="list-style-type: none">➤ A ragging- free environment. |
| 4. | Physical Fitness | <ul style="list-style-type: none">➤ Air-conditioned Fitness Centre with modern equipment.➤ Facilities for indoor and outdoor sports. |
| 5. | Health Care | <ul style="list-style-type: none">➤ Free medical services to students |
| 6. | Library | <ul style="list-style-type: none">➤ Well maintained, automated air-conditioned Central Library with over 10,000 books and subscriptions (online as well as print) to top international and national journals. |
| 7. | Transport | <ul style="list-style-type: none">➤ Free shuttle bus facility between the city of Bathinda and the City Campus of the university. |
| 8. | Scholarships | <ul style="list-style-type: none">➤ Scholarships to all research students (Rs.3,000 for M.Phil. and Rs.5,000 for Ph.D. students per month.➤ Working contingency of Rs. 8,000/-per annum to students in Humanities and Rs. 10,000/-per annum to the students in Science. |
| 9. | Hostels | <ul style="list-style-type: none">➤ Hostels for girls and boys with air-conditioned reading room and computing facility with internet access. |
| 10. | Language Laboratory | <ul style="list-style-type: none">➤ A Language Laboratory has been established in the Centre for Languages, Literature and Culture with twenty computers and latest software to improve the communication skills of students. |
| 10. | Other Utilities | <ul style="list-style-type: none">➤ ATM of State Bank of Patiala, Canteen-cum-Mess. |



The University Fitness Centre



University Health Centre



Language Laboratory



Students boarding the university bus for a visit to the City



2.6 Achievements

2.6.1 Vice Chancellor

Publications

Following peer reviewed research articles were coauthored by the Vice Chancellor:

- 1 Been, L. F., Ralhan, S. K., Wander, G. S., Mehra, N. K., **Singh, J. R.**, Mulvihill J. J., Aston C. E. and Sanghera D. K. (2011). Variants in KCNQ1 increase type II diabetes susceptibility in South Asians: A study of 3,310 subjects from India and the US. *BMC Medical Genetics* **12**: 18.
- 2 Kaur, A., Kaur, S.P., Singh, A. and **Singh, J. R.** (2012). Karyotypic findings in chronic myeloid cases undergoing treatment. *Indian J. Human Genetics*: **18**: 66-70.
- 3 Mahajan, S., Kaur A. and **Singh J. R.** (2011). Cytogenetic investigations in mentally challenged individuals. *Int. J. Human Genetics* **11**: 93-98.
- 4 Mahajan, S., Kaur, A. and **Singh, J. R.** (2012). Ring chromosome 22: A review of the literature and first report from India. *Balkan J. Med. Genet.* **15**: 55-60.
- 5 Marino, T., Ramus, M. D., Cibis, W. G., Rowsey, J. J., Roy (Sr.), H., Singh, D., **Singh, J. R.**, Talevera, F. and Vanita, V. (2012). Prenatal diagnosis for congenital malformations and genetic disorders. <http://emedicine.medscape.com/article/1200683-overview>.
- 6 Sanghera, D. K., Been L. F., Ralhan, S., Wander, G. S., Mehra, N. K., **Singh, J. R.**, Ferrell, R. E., Kamboh, M. I., Aston, C. E. (2011). Genome-wide linkage scan to identify loci associated with type 2 diabetes and blood lipid phenotypes in the Sikh diabetes study. *PLoS ONE* **6**: e21188. doi: 10.1371/journal.pone.0021188.

Awards and Honours

Received prestigious Dr. V. R. Khanolkar Oration Award of the National Academy of Medical Sciences (INDIA) for the year 2010-11 in recognition of his outstanding contributions in the field of medical sciences on October 16, 2011.

New Memberships of Academic Bodies during 2011-12

- Member, Board of Governors, Punjab Technical University, Jalandhar.
- Member, Central Sector Projects Coordination Committee, Government of Punjab, Chandigarh.
- Member, Governing Board, Information and Library Network Centre (INFLIBNET), Ahmedabad.
- Member, National Academic Advisory Committee, XXXVI Indian Social Science Congress.

Invited Lecture/Presidential Address/Oration/Inauguration of Seminar/ Workshop/Conference and presence as Chief Guest

9th Annual "Lok Rang 2011", People's Forum, Baargari, Kotkapura, April 16, 2011.



Current Status of Genetic Diseases. Annual Day Celebrations, Manipal Life Sciences Centre, Manipal University, Manipal, April 29, 2011.

National Conference on Latest Advancements in Science, Engineering and Research 2011, Baba Farid College of Engineering and Technology, Bathinda, May 26, 2011.

National Seminar on Environment and Health, Central University of Punjab, Bathinda, September 27, 2011.

Oration Lecture 'Congenital Cataract: From Phenotype to Genotype' during NAMS 51st Annual Conference at Bhubaneswar, October 16, 2011.

Annual Prize Distribution Function, Sri Harkrishan Public School, Bathinda, November 30, 2011.

Rahul Kaushal Memorial Art Festival, Bathinda, February 17, 2012.

International Mother Language Day, Punjabi Sahitya Sabha, Bathinda, February 20, 2012.

International Workshop on "Urbanization of Peri-urban Regions: Challenges and Opportunities for Security of Water, Food and Liveability of Future Cities", Maharana Pratap University of Agriculture and Technology, Udaipur, February 21, 2012.

Sufi Music Evening and Mata Jaswant Kaur Best Children Book Award, North Zone Cultural Centre, Punjabi Sahitya Academy, Ludhiana, March 15, 2012.

National Seminar on Contemporary Issues in Human Biology in the 21st Century, Punjabi University, Patiala, March 31, 2012.

Participation in other Academic Meetings

Ranbaxy Science Foundation Round Table Meeting on "Targeted Therapy in Malignancy: Where the future is", All India Institute of medical Sciences, New Delhi, November 12, 2011.

Meeting of the UNESCO Keizo Obechi Research Fellowship Programme 2012, University Grants Commission, New Delhi, March 1, 2012.

2.6.2 Faculty

Publications

The faculty published 47 research articles in peer reviewed journals and contributed 42 research articles in national/international conferences/seminars/symposia/workshops during the period under report.



A. Research Papers

Biosciences

- 1 Khan, M. A., Zargar, S. M. and **Saini, R. G.** (2011). A novel hypersensitive stripe rust (*Puccinia striiformis* Westend f. sp. *Tritici*) resistance gene in bread wheat cultivar cook effective in India. *Journal of Phytotherapy* **3**: 44-46.
- 2 **Saini, R. G.** and Sharma, P. (2011). Genetics of durable resistance to leaf rust in bread wheat cultivars Capelle Desprez and Pari 73. *Journal of Phytotherapy* **3**: 312- 317.
- 3 Sharma, H., Kumar, R., Sharma, V., Kumar, V., **Bhardwaj, P.**, Ahuja, P. S. and Sharma, R. K. (2011). Identification and cross species transferability of 112 novel unigene derived microsatellite markers in tea (*Camellia sinensis* L.). *American Journal of Botany* **10**:3732/ajb.1000525.
- 4 Raina, S. N., Ahuja, P. S., Sharma, R. K., Das, S. C., **Bhardwaj, P.**, Negi, R., Sharma, V., Singh, S. S., Sud, R. K., Kalia, R. K., Pandey, V., Banik, J., Razdan, V., Sehgal, D., Dar, T. H., Kumar, A., Bali, S., Bhat, V., Sharma, S., Prasanna, B. M., Goel, S., Negi, M. S., Vijayan, P., Tripathi, S. B., Bera, B., Hazarika, M., Mandal, A. K. A., Kumar, R. R., Vijayan, D., Ramkumar, S., Chowdhury, B. R. and Mandi, S. S. (2012). India hybrid tea - an extraordinarily important event in the rapid origin and evolution, and widespread expansion of modern commercial tea-genetic structure and diversity among 1644 accessions and clones inferred by AFLP markers. *Genetic Resource and Crop Evolution* **59**: 1527-1541.
- 5 Berger, J. D., **Kumar, S.**, Nayyar, H., Street, K. A., Sandhu, J. S., Henzell, J. M. and Clarke, H. C. (2012). Temperature-stratified screening of chickpea genetic resource collection reveals very limited reproductive chilling tolerance compared to its annual wild relatives. *Field Crops Research* **129**: 119-129
- 6 Kaushal, N., Gupta, K., Bhandhari, K., **Kumar, S.** Thakur, P. and Nayyar, H. (2011). Proline induces heat tolerance in chickpea (*Cicer arietinum* L.) plants by protecting vital enzymes of carbon and antioxidative metabolism. *Physiology and Molecular Biology of Plants* **17**: 203-213.
- 7 **Kumar, S.**, Gupta, D. and Nayyar, H. (2011). Comparative response of maize and rice genotypes to heat stress: status of oxidative stress and antioxidants. *Acta Physiologiae Plantarum* **34**: 75-86.
- 8 **Kumar, S.** Kaur, R., Kaur, N., Bhandhari, K., Kaushal, N., Gupta, K., Bains, T. S. and Nayyar, H. (2011). Heat-stress induced inhibition in growth and chlorosis in mungbean (*Phaseolus aureus* Roxb.) is partly mitigated by ascorbic acid application and is related to reduction in oxidative stress. *Acta Physiologiae Plantarum* **33**: 2091-2101.

Chemical and Pharmacuetical Sciences

- 9 Nepali, K., Agarwal, A., Sapra, S., Mittal, V., **Kumar, R.**, Banerjee, U. C., Gupta, M. K., Satti, N. K., Suri, O. P. and Dhar, K. L. (2011). *N*-(1,3-diaryl-3-oxopropyl) amides as a new template for xanthine oxidase inhibitors. *Bioorg. Med. Chem.* **19**: 5569-5576.
- 10 Nepali, K., Singh, G., Turan, A., Agarwal, A., Sapra, S., **Kumar, R.**, Banerjee, U. C., Satti, N. K., Gupta, M. K., Suri, O. P. and Dhar, K. L. (2011). A rational approach for the design and synthesis of 1-acetyl-3,5-diaryl-4, 5-dihydro(1*H*) pyrazoles as a new class of potential non-purine xanthine oxidase inhibitors. *Bioorg. Med. Chem.* **19**: 1950-1958.
- 11 Kumar, N., Nepali, K., Sapra, S., Bijjem, K. R. V., **Kumar, R.**, Suri, O. P. and Dhar, K. L. (2011). Effect of nitrogen



insertion on the antitussive properties of menthol and camphor. *Med. Chem. Res.* DOI 10.1007/s00044-011-9560-1.

Kondaskar, A., Kondaskar, S., **Kumar, R.**, Fishbein, J., Muvarak, N., Lapidus, R., Sadowska, M., Edelman, M., Bol, G., Vesuna, F., Raman, V. and Hosmane, R. (2011). Novel, broad spectrum anti-cancer agents containing the tricyclic 5:7:5-fused diimidazodiazepine ring system. *ACS Med. Chem. Lett.* **2**:252-256.

Jaitak, V., Bandna, Kaul, V.K., Das, P., Kumar, N. and Singh, B. (2011). One pot multicomponent Michael-Thorpe Ziegler reaction of aryl methyl ketone. *Synthetic Communication* **41**:2727-2737.

Guleria, S., Saini, R., **Jaitak, V.**, Kaul, V. K., Lal, B., Rahi, P., Gulati, A. and Singh, B. (2011). Volatile oil composition and antimicrobial activity of the essential oil of *Heracleum thomsonii* (Clarke) from cold desert western Himalaya. *Natural Product Research* **25**: 1250-1260.

Guleria, S., Saini, R., **Jaitak, V.**, Kaul, V. K., Lal, B., Singh, B., Kiran, Babu, G. D. and Singh, R. D. (2011). Comparative studies of volatile oil composition of *Rhododendron anthopogon* by hydrodistillation, supercritical carbon dioxide extraction and head space analysis. *Natural Product Research* **25**: 1271-1277.

Kaul, K., **Jaitak, V.** and Kaul, V. K. (2011). Review on pharmaceutical properties and conservation measures of *Potentilla fulgens* Wall. Ex Hook. A medicinal endangered herb of higher Himalaya. *Indian Journal of Natural Products and Resources* **2**: 298-306.

Environmental Science and Technology

Singh, M., Kumar, D., **Pandey, P.**, Kumar, K., Jain, V. K. (2011). Ambient noise levels due to dawn chorus at different habitats in Delhi. *Environment and We: An International Journal of Science and Technology* **6**: 123-134.

Comparative Literature

Kaur, Z. (2012). Contribution of Punjabi Sufi poets to Punjabi literature. *Maulana Azad Journal of the English Language and Literature* **4**:62-73, ISSN 0974-9268.

Kumar, R. (2011). Hindi upnyas ka naya daur (Edit.), Lokgeet Parkashan, Chandigarh, ISBN 978-93-5017-774.

Kumar, R. (2011). Bhagat sain ki vani mein guru avem satsang ka mahatav. *Shabad Sarokar* **3**: 48-50, ISSN 2229 4732.

Kumar, R. (2011). Hindi ke Anchalik Upnyas : Dharmik suptata se chetanta tak, *Chintan Srijan* **3**: 56-63, ISSN 2229-7227.

Kumar, R. (2011). Bhagat sain : Jiwan va sahitya ka mulyankan, *Shabad Sarokar* **31**:31-35, ISSN 22294732.

Kumar, R. (2012). Bhagat sain ki vani mein Ishwar ki samkalpna, *Shabad Sarokar* **34**: 28-30, ISSN 22294732.

Kumar, R. (2011). Hindi ke anchalik upnyaso mein nari jivan se sambandhit samsyayen, *Punjab Sorabh, Bhasha Vibhag* **3**: 48-55.

Kumar, R. (2012). Anchalik upnyas aur dalit vimarsh. *Hashiye ki Awaz* **2**: 28-31.



Kumar, R. (2012). Dalit vimarsh ke ayine mein jeenkathi tatha anya kahanian. *Himprasth* **1**: 54-56.

Saini, A. (2011). Recovering a theory of subjectivity: Some explorations in indian philosophical tradition, *south Asian Ensemble* **3**: 90-95.

South and Central Asian Studies

Nanda, P. and **Kaur, S.** (2011). Globalization of finance : India's experience of capital flows, *International Journal of Global Economy* **3**: 121-137.

Kaur, S. and Nanda, P. (2010). Export and import potentials of Pakistan to other SAARC countries in gravity panel data models, 1981-2005, *Applied Econometrics and International Development* **11**: 179-196.

Kaur, S. and Nanda, P. (2010). India's trade with Central Asia: Trends and prospects, *International Journal of Central Asian Studies* **15**: 251-276.

Kaur, S. (2011). Determinants of export services of USA with its Asian partners, *Eurasian Journal of Business and Economics* **4**: 101-117.

Kodoth, P. and **Varghese, V. J.** (2011). Emigration of female domestic workers from Kerala: Gender, state policy and the politics of movement, CDS working paper 445: Centre for Development Studies, Trivandrum. Pp 48.

Devika, J. and **Varghese, V. J.** (2011). To survive or flourish? Minority rights and Syrian Christian community assertions in the 20th Century Travancore/Kerala, *History and Sociology of South Asia*. **5**(2): 103-128.

B. Book Chapters and Books

Biosciences

Bast, F. (2011). *Monostroma: The Jeweled Seaweed for Future*. Lap Lambert Academic Publishing GmbH & Co. KG, 66121, Saarbrücken, Germany. ISBN: 978-3-8473-2710-3.

Chemical and Pharmaceutical Sciences

Jaitak, V., Kaul, K., Gupta, A. P., Kaul, V. K., Singh, V., Singh, B. and Ahuja, P. S. (2011). *Stevia rebaudiana - a natural substitute for sugar*. Genetic Resources, Chromosome Engineering, and Crop Improvement: Medicinal Plants, Ed. Ram J. Singh: *University of Illinois, Urbana, USA*. CRC Press USA : 885-910.

Comparative Literature

Ramana, P. S. (2012). *A Reader*, Ed. Kartar Singh Duggal: Sahitya Akademi, New Delhi. pp 400.

Ramana, P. S. (2012). *Selected Short Stories of Mohan Bhandari*, Trans. Punjabi University Publication Bureau, Patiala. pp 217.

Ramana, P. S. (2011). *Selected Short Stories of Waryam Singh Sandhu*, Trans. Punjabi University Publication Bureau, Patiala. pp 205.

Saini, A. (2012). *Subjectivity as a locus of conflicts in Girish Karnad: a Discussion of his Plays* published by Lambert Academic Publishing, Germany. pp 64.



South and Central Asian Studies

Kaur, S. (2011). Indo - SAARC Trade: Emerging trends and potential 2011, Deep & Deep Publishers, New Delhi. pp 250.

Rajan S. I., **Varghese, V. J.** and Jayakumar, M. S. (2011). *Dreaming mobility and buying vulnerability: Overseas recruitment practices in India*, New Delhi. Routledge. pp 233.

Varghese, V. J. and Rajan, S.I. (2011). Governmentality, social stigma and quazi citizenship: Gender negotiations of migrant women domestic workers from Kerala, S. I. Rajan and Marie Percot (eds.), *Dynamics of Indian migration: Historical and current perspectives*, New Delhi. Routledge: 224-48.

Quershi, K., **Varghese, V. J.**, Osella, F. and Rajan, S.I. (2011). Transnationalism and ambivalence: the Punjab-UK linkage, P. Pitkänen, A. İçduygu and D. Sert (eds) *Migration and Transformation: Multi-Level Analysis of Migrant Transnationalism*, Dordrecht/London: Springer, 13-62.

C. Book Reviews

Comparative Literature

Saini, A. (2011). Book review of *Seven Plays on Sikh History* by Sant Singh Sekhon in *South Asian Ensemble* **3**: 113-114.

Saini, A. (2011). Book review of performing women/performing womanhood: Theatre, politics and dissent in North India by Nandi Bhatia, *South Asian Ensemble* **3**: 131-134.

D. Film Reviews

Comparative Literature

Saini, A. (2011). Film review of Prakash Jha's *Aarakshan*, *South Asian Ensemble* **3**: 132-133.

Saini, A. (2011). Bloodless violence: a film review of Maqbool Khan's *Lanka*, *The Daily Post* **1 (139)**: 3.

E. Papers presented by faculty in Conference/Seminar/Symposium and Workshop

Biosciences

Bast, F. (2012). DNA barcoding discovers substantial divergence within interbreeding populations of green alga, *Monostroma*. International Algal Summit, Indian Phycological Society, Teri, New Delhi. Feb 21-22, 2012.

Environmental Science and Technology

Dhanya, M. S. and **Saini, R. G.** (2011). Ethno-medicinal use of plant species in Malwa region of Punjab. National Seminar on Recent Trend on Environment and Development. Society for Environment and Development, H.N.B. Garhwal University, Srinagar, Garhwal. August 6-7, 2011.

Dhanya, M. S., Prasad, S. and Joshi, H. C. (2011). Fermentable sugar recovery from corn stover by hot water and subsequent acid pretreatment. 4th International Congress of Environment Research, Sardar Vallabhbhai



National Institute of Technology, Surat. December 15-17, 2011.

Dhanya, M. S., Prasad, S. and Joshi, H. C. (2012). Biological pretreatment by *Trichoderma reesei* for fermentable sugar recovery from corn stover. 99th Indian Science Congress, KIIT University, Bhubaneswar. January 3-7, 2012.

Mishra, D. and **Dhanya, M. S.** (2012). Biofertilizer, a viable option for sustainable agriculture. National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for India, Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi. March 2-4, 2012.

Sharma, A. and **Dhanya, M. S.** (2012). Bioplastics - A better friend for environment and sustainable development. National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for India, Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi. March 2-4, 2012.

Yogalakshmi, K. N. (2011). State of the art: A mini review on bioelectrochemical systems (BES) for wastewater treatment. National Conference on Recent Trends in Environment and Development. Society for Environment and Development, HNB Garhwal University, Srinagar Garhwal. August 6-7, 2011.

Kaur, J. and **Yogalakshmi, K. N.** (2011). Wastewater from agro-based industries: A potential source for irrigation in India. 4th International Congress of Environmental Research, Sardar Vallabhbhai Patel National Institute of Technology, Surat. December 15-17, 2011.

Bhatti, A. and **Yogalakshmi, K. N.** (2012). A mini review on *Trichoderma* fungi - A potential biocontrol agent for phytopathogens. National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for India, Banaras Hindu University, Varanasi. March 2-4, 2012.

Randhawa, J. S. and **Yogalakshmi, K. N.** (2012). A mini review on Uranium bioremediation - exploration of recombinant DNA technology in bioremediation of Uranium. National Seminar on Strategies for Mitigation of Environmental Degradation and Climate Change, Guru Jambheshwar University of Science & Technology, Hisar. March 2-3, 2012.

Randhawa, J. S. and **Yogalakshmi, K. N.** (2012). Genetically modified bacteria: An emerging tool for Uranium bioremediation. National Conference on Materials Science, DAV College, Jalandhar. March 2-3, 2012.

Randhawa, J. S. and **Yogalakshmi, K. N.** (2012). An insight into genetically engineered bacteria mediated Uranium bioremediation. National Conference on Environment and Sustainable Development, Central University of Gujarat, Gandhinagar. March 2-3, 2012.

Pandey, P. (2011). Assessing the summer-time urban heat island over Delhi: A case study of micro-level climate change. Second National Research Conference on Climate Change, Organized by Centre for Science and Environment, IIT Delhi and IIT Madras. November 5-6, 2011.

Yogalakshmi, K. N. and Pandey, P. (2012). A micro review on Quorum Quenching - A potential tool to control membrane fouling. National Seminar on Strategies for Mitigation of Environmental Degradation and Climate Change held at Guru Jambheshwar University of Science and Technology, Hisar. March 2-3, 2012.

Pandey, P. and Yogalakshmi, K. N. (2012). A mini-review on predicting biomass burning using geospatial technology as a tool. National Seminar on Strategies for Mitigation of Environmental Degradation and Climate Change, Guru Jambheshwar University of Science and Technology, Hisar. March 2-3, 2012.

Comparative Literature

- Ramana, P. S.** (2011). The need and significance of translation of Canonical Colonial Literature. Seminar and discussion on H S Gill's Translation of two of Shakespeare's plays, Punjabi Bhawan, Ludhiana. September 17, 2011.
- Ramana, P. S.** (2011). Importance of literature for human rights. UGC Sponsored Seminar on Human Rights and Human Development, Government Mohindra College, Patiala. November 18, 2011.
- Ramana, P. S.** (2012). Literature in society: The question of artistic freedom and responsibility. 28th International Punjabi Vikas Conference, Punjabi University, Patiala. February 1-3, 2012.
- Ramana, P. S.** (2012). Ideological location of ethics and morals. Government Rajindra College, Bathinda. February 9, 2012.
- Ramana, P. S.** (2012). Institutions, texts and contexts: Politics of location and culture in three narratives about marriage. UGC sponsored National Seminar on Literature, History and Culture, DAV College, Abohar. February 25, 2012.
- Kaur, Z.** (2011). Punjabi alochna vich Bharti-Kaav shastri alochna da sarup. World Punjabi Literature Conference, Department of Punjabi Literary Studies, Punjabi University, Patiala. November 15-16, 2011.
- Kaur, Z.** (2012). Rasa Theory of Indian Aesthetics, International Conference on Indian Art Forms. Indira Kala Sangit Vishavidyalaya, Khairagarah. February 26-28, 2012.
- Kaur, Z.** (2012). Bharat Muni's Sringer Rasa: Presenting the erotic as power. UGC sponsored National Seminar on De-Stereotyping Indian Body and Desire, Department of English, Southfield College, Darjeeling. March 12-13, 2012.
- Purohit, N.** (2012). Jhumpa Lahiri's Unaccustomed Earth, International Conference on Indian Art Forms, Department of English, Theatre and Sanskrit, Indira Kala Sangit Vishavidyalaya, Khairagarah. February 26-28, 2012.
- Kumar, R.** (2012). Hindi ke aanchalik upnyas aur hashiye ke log, National Seminar on Writings from the Margins, School of Humanities and Social Sciences, Gautam Buddha University, Noida. March 23-24, 2012.
- Kumar, R.** (2012). Hindi ke aanchalik upnyas aur Punjab ka yogdan, National Seminar on Hindi Literature of Non-Hindi States, Department of Hindi, Layalpur Khalsa College for women, Jalandhar. March 2-3, 2012.
- Singh, A.** (2011). Ecological concerns in contemporary Punjabi literature, National Seminar on Ecological Crisis, Department of Distance Education, Punjabi University Patiala. September 8-9, 2011.
- Singh, A.** (2012). Diasporic Punjabi literature and ecocriticism: New perspectives of analysis, National Seminar on Punjabi Language, Literature and Culture: New Perspectives of Analysis in the context of subaltern and diaspora, Punjabi University, Patiala. January 11, 2012.
- Saini, A.** (2011). Revisiting the mythical patterns of Mahabharata, Summer School on Mahabharata as a Conceptual Resource, Indian Institute of Advanced Studies, Shimla. June 26, 2011.
- Saini, A.** (2011). Exploring the silences and the scars in Mahesh Dattani's selected plays. International Seminar



on Decolonising the stage; Paradigm practice and Politics, Banaras Hindu University, Varanasi. November 15-17, 2011.

Saini, A. (2011). Probing alternate sexuality in Mahesh Dattani's *A Muggy Night* in Mumbai. International Seminar on Mainstreaming gender; Issues and Challenges, Women's Studies Centre, Punjabi University, Patiala. November 25-26, 2011.

Saini, A. (2012). Girish Karnad's *Wedding Album: The Mythical Discourse of Culture*. National Seminar on Major Issues in post-colonial English Literature, Baba Farid College, Bathinda. March 1-2, 2012.

South and Central Asian Studies

Varghese, V. J. (2011). From the Pristine to the Peccant: Agricultural expansion, migration and the production of new subjects in South India, 1920-70, International Conference on 'Assessing the Complexities of South Asian Migration', Wilfred Laurier University, Waterloo, Ontario, Canada. May 19-21, 2011.

Varghese, V. J. (2011). He Selected Me: migration, marriage and desertion of wives in Indian Punjab, International Conference on Assessing the Complexities of South Asian Migration, Wilfred Laurier University, Waterloo, Ontario, Canada. May 19-21, 2011.

Varghese, V. J. (2012). Gender and mobility: past and present of emigrations of women from India, National Seminar on Human Rights and Women, Department of History, Guru Nanak Girls College, Ludhiana. January 21, 2012.

Varghese, V. J. (2011). Transnational discontents: Migration, marriage and desertion of wives in Indian Punjab, National Institute of Advanced Studies, under its Mobilities and Transnationalism lecture series, Indian Institute of Social Science Campus, Bangalore. November 9, 2011.

Environmental Law

Kumar, D. (2011). Sustainability of fresh water resources: Legal and institutional mechanism in India" National Conference on 'Recent Trend in Environment and Development' organized by Society for Environment and Development (India) and supported by Petroleum Conservation Research Association, Ministry of Petroleum and Natural Gas, Government of India, HNB Garhwal University, Srinagar Garhwal. August 5-6, 2011.

Kumar, D. (2012). Agriculture structure and climate change: Some challenges and policy framework, National Seminar on 'Environment Development and Human rights', Shri Guru Gobind Singh University, Inderprasth, New Delhi. January 19-20, 2012.

Kumar, D. (2012). Bio-medical waste and policies in India, National Seminar on 'Emerging Trends in Law and Social Justice', Department of Law Guru Nank Dev University, Amritsar. February 4-5, 2012.

Kumar, D. (2012). Ethical and cultural policies for the protection of environment in Hindu religion, National Seminar on Environmental Pollution and the Sustainable Development: Statutory Realities, Social Chaos and Scientific Challenges, N. M. P. G. Law College, Hanumangarh (Rajasthan). February 25-26, 2012.

Kumar, D. (2012). "Environmental management: Hindu religious and ethical consciousness", in Inter-faith National Conference on Environment Management at G.S.S.D.G.S Khalsa College, Patiala. March 24, 2012.

2.6.3 Participation of faculty in Conference/Seminar/Symposia/Workshop/Meeting

Centre for Biosciences

Dr. Anjali Singh

National Seminar on Contemporary Issues in Human Biology in the 21st Century, Department of Human Biology, Punjabi University, Patiala. March 31- April 1, 2012.

Centre for Chemical and Pharmaceutical Sciences

Dr. Raj Kumar

UGC sponsored seminar on Green chemistry, GHG Khalsa College, Gursar Sadhar, Punjab. February 24-25, 2012.

3rd NIPER-(RBL)-CDRI symposium on medicinal chemistry and pharmaceutical sciences, Central Drug Research Institute, Lucknow. March 3-5, 2011.

Centre for Environmental Science and Technology

Dr. M.S. Dhanya

National Conference on Environment and Biodiversity of India, North Eastern Centre for Environmental Education and Research, New Delhi. December 30-31, 2011.

4th International Congress on Environment Research, Sardar Vallabhbhai Patel National Institute of Technology, Surat. December 15-17, 2011.

99th Indian Science Congress, Kalinga Institute of Industrial Technology University, Bhubaneswar. January 3-7, 2012.

Dr. Puneeta Pandey

National Conference on 'Recent Trends in Environment and Development', HNB Garhwal University, Srinagar Garhwal. August 6-7, 2011.

Second National Research Conference on Climate Change, Indian Institute of Technology, New Delhi. November 5-6, 2011.

National Seminar on Environmental Pollution and Bioremediation Jawaharlal Nehru University, New Delhi. December 28-29, 2011.

Centre for Comparative Literature

Dr. Alpna Saini

15-day Summer School on Mahabharata as a conceptual resource, Indian Institute of Advanced Studies, Shimla. June 12-27, 2011.

Dr. Rajinder Kumar

National Seminar on Writings from the Margins, by School of Humanities and Social Sciences, Gautam Buddha University, Noida. March 23-24, 2012.



National Seminar on Hindi Literature of Non-Hindi States, Department of Hindi, Loyalpur Khalsa College for Women, Jalandhar. March 2-3, 2012.

Dr. Amandeep Singh

National Seminar on Ecological Crisis, Department of Distance Education, Punjabi University, Patiala. September 8-9, 2011.

Centre for South and Central Asian Studies

Dr. Sandeep Kaur Bhatia

UGC sponsored SAP Seminar on Punjab Economy: Economic distress and development processes, Punjabi University Campus, Guru Kashi College, Talwandi Saboo. December 23-24, 2011.

Dr. V. J. Varghese

International Conference on Assessing the Complexities of South Asian Migration Wilfrid Laurier University, Waterloo, Ontario, Canada. May 19-21, 2011.

2.6.4 Awards and Honours

Dr. Deepak Kumar Chauhan, received Young Scientist Award, 2011 by the Society for Environment and Development (India), Ministry of Petroleum and Natural Gas, Government of India for research excellence on Sustainability of Fresh Water Resources: Legal and Institutional Mechanism in India.

Dr. Felix Bast, received INSPIRE Faculty Award 2012 of the Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi.

Dr. J. N. Babu, received Fast Track Young Scientist grant 'Synthesis and evaluation of calixarene capped quantum dot for sensing organic analytes' from the Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi.

Dr. Raj Kumar, Chaired a session at UGC sponsored seminar on Green Chemistry GHG Khalsa College, Gursar Sadhar. February 24-25, 2012.

Dr. Sandeep Kaur Bhatia, was awarded Indo-Canadian Shastri's Scholar Travel Subsidy Grant for 2011-12 for her participation in International Conference at Wilfrid Laurier University, Waterloo, Ontario, Canada.

Dr. Sunil Mittal, received Fast Track Young Scientist grant 'Bioherbicidal potential of immobilized (encapsulated/entrapped) formulations of essential oil from leaves of plant *Callistemon viminalis*' from the Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi.

Dr. V. J. Varghese, was awarded Indo-Canadian Shastri's Scholar Travel Subsidy Grant for 2011-12 for his participation in International Conference at Wilfrid Laurier University, Waterloo, Ontario, Canada.



2.7 M.Phil. Dissertations Submitted

Following ten M.Phil.-Ph.D. Integrated Programme students of the academic session 2009-10 submitted their M.Phil. dissertation:

Sr.No.	Name and Registration Number of the Student	Title of Dissertation
Biosciences		
1.	Pushpendra Singh- CUP/MPh-PhD/SBAS/ BIO/ 2009-10/02	To Study the Effect of Insulin and Metformin in PC-3 Cell Line.
2.	Prateek Sharma- CUP/MPh-PhD/SBAS/ BIO/ 2009-10/03	Evaluation of Breast Cancer Cell Lines (MCF-7 & T47D): Influence of Insulin and Metformin on Growth Parameters.
Environmental Science and Technology		
3.	Upma Vaid- CUP/MPh-PhD/SEES/ EVS/ 2009-10/01	Absorption Studies for the Removal of Hexavalent Chromium using Fly Ash of 'Waste to Energy Power Plant'.
4.	Anamika Das- CUP/MPh-PhD/SEES/ EVS/ 2009-10/02	Effect of Natrium Fluoride on Growth and Physiology of Crop Plants.
5.	Gajendra Singh Vishwakarama- CUP/MPh-PhD/SEES/ EVS/ 2009-10/03	Phytotoxic Potential of Essential Oil from Leaves of <i>Eucalyptus Tereticornis</i> against Rice (<i>Oryza Sativa</i>) and its Weeds <i>Echinochloa Crus-Galli</i> and <i>Cyperus Rotundus</i> .
6.	Manohari Kumari- CUP/MPh-PhD/SEES/ EVS/ 2009-10/04	To Study the Effect of BT (<i>Bacillus Thruingiensis</i>) Cotton Cultivation on Soil Health.
Comparative Literature		
7.	Yeshpal- CUP/MPh-PhD/SLLC/ CPL/ 2009-10/02	A Study of U.R. Anantha Murthy's Novel Samskara in the Context of Indian Philosophy of Charvaka.
8.	Kamaljeet Kaur- CUP/MPh-PhD/SLLC/ CPL/ 2009-10/03	Autobiography as a Social Critique: A Study of Madhopuri's Changiya Rukh and Valmiki's Joothan
9.	Poonam Pahuja- CUP/MPh-PhD/SLLC/ CPL/ 009-10/04	The Binding Vine and The Bluest Eye: A Comparative Study from a Feminist Perspective.
South and Central Asian Studies		
10.	Gurpreet Kaur- CUP/MPh-PhD/SGR/ SCA/ 2009-10/02	Foreign Direct Investment in South Asia: Trends and Prospects.



2.8 Academic Activities

A. Seminars and other activities organized during 2011-12

1. A National Seminar on "Environment and Health" was organized on September 27, 2011 that was inaugurated by **Dr. V. M. Katoch**, Director General, Indian Council of Medical Research, and Secretary, Department of Health Research, Government of India. An eminent immunologist, **Prof. N. K. Mehra**, Head, Department of Transplant Immunology and Immunogenetics, All India Institute of Medical Sciences was the Guest of Honour for the event. On this occasion dignitaries from the region like **Mr. Baljit Singh Bir Behman**, Mayor of Bathinda City, **Dr. Daljit Singh**, a renowned Eye Surgeon from Amritsar, **Dr. G. P. I. Singh**, Director Principal, Adesh Institute of Medical Sciences, Bathinda, **Dr. S. S. Gill**, Vice Chancellor, Baba Farid University of Health Sciences, Faridkot and **Dr. M. S. Kang**, Former Vice Chancellor, Punjab Agricultural University, Ludhiana were present.

The technical session was co-chaired by **Drs. S. S. Gill** and **M. S. Kang** and several issues relating to environmental pollution of Bathinda region and its impact on human health particularly, the congenital abnormalities and high incidence of cancer in local populations and the remedial measures to alleviate these problems were also discussed at length. Prof. Moin Uddin, Pro Vice Chancellor, Delhi Technological University, Delhi, Dr. Arun Srivastava, South Asia correspondent of Salem News, Oregon, USA, Dr. S. G. Kabra, Director, Legal Affairs and Medical Audit, SDM Hospital, Jaipur, Dr. D. C. Kar, Scientific Officer, Bhaba Atomic Research Centre, Trombay and Dr. Raj Kumar, Senior Soil Scientist from Punjab Agricultural University, Ludhiana also delivered lectures with special emphasis on environmental pollution and its impact on human health. Twenty seven posters covering theme of the seminar were presented by students and faculty of the university and other educational institutions in the region.





Glimpses of the National Seminar on Environment and Health, September 27, 2011



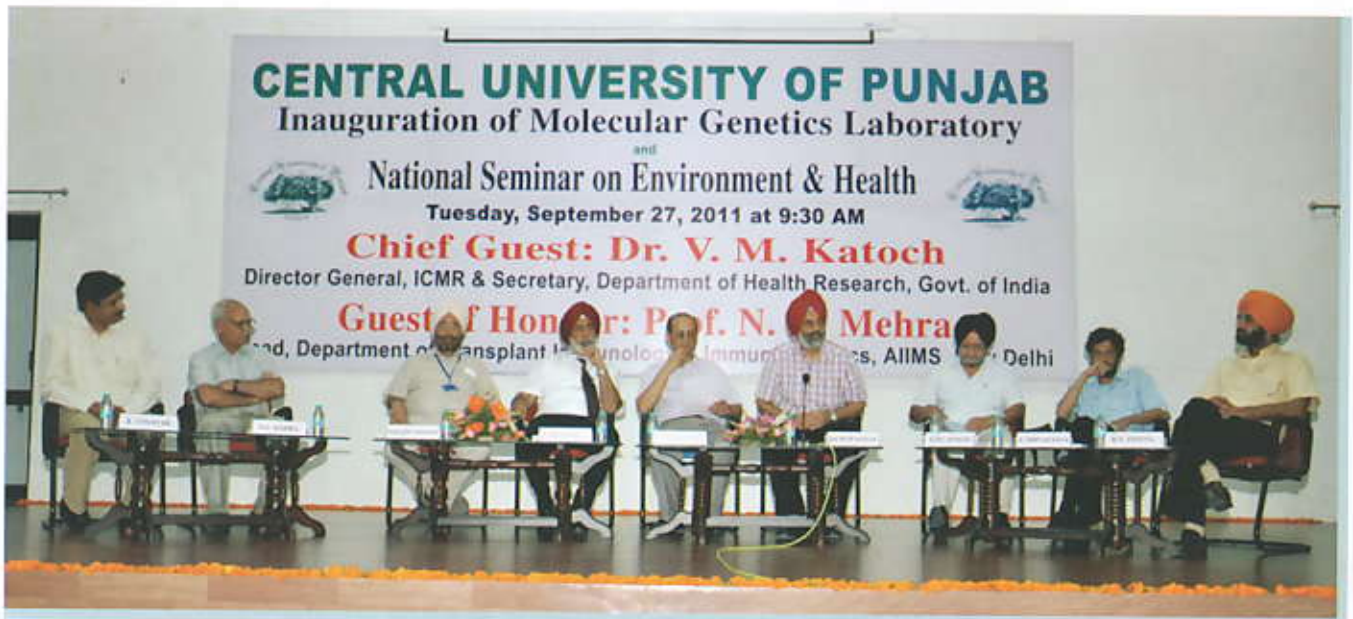
A student presenting bouquet to Dr. V. M. Katoch, Director General, Indian Council of Medical Research



Vice Chancellor presenting memento to Dr. V. M. Katoch, Director General, Indian Council of Medical Research



Vice Chancellor presenting memento to Dr. S. S. Gill, Vice Chancellor, Baba Farid University of Health Sciences, Faridkot



Panel Discussion During the Seminar on Environment and Health



- 2. **Ms. Martin Le Cam**, French painter, photographer and poet: organized an exhibition of her paintings on October 10, 2011.



French artist Martine Le Cam addressing the students and faculty of Central University of Punjab



Mr. Samuel John giving a live performance at City Campus of the university

3. Screening of art film: November 21, 2011.

Punjabi art film "Attu Khoji" was screened to create an interest in meaningful cinema. The director of the film, Rajeev Sharma spoke about the falling standards of commercial Punjabi cinema. He informed that his film was inspired by a literary character in real life involving sexual harassment by a senior Police Officer and the resulting suicide committed by a student some twenty years back in Chandigarh. The lead actor, Samuel John was also present and he laid stress on the need to be socially and morally involved in order get justice. Later Mr. Samuel John gave a live performance at the City Campus along with a co-artist.

4. Constitution Day Lecture: November 24, 2011.

Prof. Mool Chand Sharma, Vice Chancellor, Central University of Haryana delivered 'Constitution Day



Prof. Mool Chand Sharma, Vice Chancellor, Central University of Haryana delivering 'Constitution Day Lecture'



Lecture' that was organized to commemorate the adoption of Constitution of Independent India in 1949. Prof. Mool Chand Sharma, a legal luminary, began his lecture by appreciating the success of constitutional democracy in India while in most of its neighboring countries, the experiment with democracy has not been successful. Prof. Sharma also highlighted the changed global scenario where the economic and political autonomy of every nation is being compromised by the multinational corporations and economic interests. He expressed the need for a more equalitarian and just economic and political society.

5. Road Safety Week: January 1 – 7, 2012.

The Road Safety Week was observed at the City Campus of the university from January 1 – 7, 2012. The theme of Road Safety Week was '**Accident Brings Tears Safety Brings Cheers**'. Mr. Sukhraj Singh an officer of the Punjab Police Traffic Wing, delivered a lecture on road safety on January 5, 2012.

6. World Cancer Day: February 3, 2012.

On this occasion a special lecture Radiations in Health Care - Atoms for Peace was delivered by **Dr. B. R. Mittal**, Professor and Head, Department of Nuclear Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh. **Dr. Santokh Singh**, Chief Surgeon from S. Waryam Singh Memorial Hospital, Amritsar, spoke on the role of radiations especially, the depleted uranium in causation of cancer. **Dr. Bhola Singh Sidhu**, also a Surgeon from Parvati Devi Hospital, Amritsar, delivered the lecture on "Surgical intervention and other prospects of cancer treatment". **Dr. Navdeep Singh**, an Oncologist from Ludhiana Medicity, spoke on "Recent advances in the treatment of metastatic cancer". **Dr. Daljit Singh**, a leading and world renowned Ophthalmologist from Amritsar, talked about "Alternate treatment remedies available for the prevention and cure of cancer". **Dr. Paramjit Singh Raja**, a Radiotherapist from Baba Farid University of Health Sciences talked about the role of Baba Farid University of Health Sciences in creating awareness on cancer and on "Prevention and treatment of Cancer" at early stages.

In the afternoon, a panel discussion was held on "Prevention and treatment of Cancer" in which eminent panelists Dr. B. R. Mittal, Dr. Santokh Singh, Dr. Bhola Singh Sidhu, Dr. Navdeep Singh, Dr. Daljit Singh, Dr. Paramjit Singh Raja, Dr. G. P. I. Singh from Adesh Institute of Medical Sciences, Dr. Rajesh Vashisht an oncologist and Prof. H. S. Bhatia from Guru Nanak Dev University, Amritsar discussed different aspects of cancer like its causes, types, diagnosis, treatment and social problems. All the panelists stressed on early detection of cancer for its prevention.



Panelists on the dais

Dr. B.R. Mittal delivering his lecture



*Prof. Dr. Jai Rup Singh, Vice Chancellor
presenting memento to the panelists*



Dr. Daljit Singh



Dr. Santokh Singh



Dr. G. P. I. Singh



Dr. Bhola Singh Sidhu



Dr. Paramjit Singh Raja



Dr. Navdeep Singh



Dr. B. R. Mittal



Dr. Rajesh Vashisht



Prof. H. S. Bhatia



B. Interdisciplinary Guest lectures organized at the university

Twenty lectures covering diverse topics of interest to all the faculty and students of the university across different disciplines were organized during the period under report to strengthen inter-disciplinary approach being followed in defining research areas. The speakers and the topic of their lecture are enlisted below:

Sh. Bal Anand, IFS (Retd.): Foreign Relations of India: Present Implications and Probabilities - April 26, 2011.

Dr. A.K. Saxena, Director, Central Drug Research Institute, Lucknow: QSAR and Molecular Modeling Studies in Antihistamines (H1) - May 3, 2011.

Prof. R.L. Hangloo, Dean School of Global Relations, Central University of Punjab, Bathinda: Pakistan during the Cold War and After - May 21, 2011.

Mr. P.C. Hota, IAS (Retd.), Former Chairman, Union Public Service Commission: Challenges of 21st Century - May 28, 2011.

Prof. P.S. Ramana, Dean, School of Languages, Literature and Culture, Central University of Punjab, Bathinda: Cultural Identity - May 28, 2011.

Prof. P. Rama Rao, Dean School of Basic and Applied Sciences, Central University of Punjab, Bathinda: Bed to Bench - June 11, 2011.

Dr. Daljit Singh, Renowned Eye Surgeon: Role of Fugo Blade in Glaucoma Surgery and Oculopathy - July 17, 2011.

Dr. M.S. Bakshi, Associate Professor, Department of Chemistry, Wilfrid Laurier University, Waterloo, Ontario, Canada: Bionanomaterials and their Application in Nanotoxicology - August 5, 2011.

Dr. Margaret Walton-Roberts, Director, International Migration Research Centre, Wilfrid Laurier University, Waterloo, Canada: Contrasting Regional Migration and Diaspora-led Transformation in Punjab and Kerala - Is it Evidence of Migration-led Development? - September 13, 2011.

Prof. Dr. Mohinder Singh, Member, National Commission for Minority Educational Institutions: Endangered Sikh Heritage - October 28, 2011.

Prof. Dr. Naresh Kochher, U.G.C. Emeritus Fellow, Department of Botany, Panjab University, Chandigarh: Seismicity in North Western Himalaya - November 18, 2011.

Prof. Dr. Naresh Kochher, U.G.C. Emeritus Fellow, Department of Botany, Panjab University, Chandigarh: Importance of Radon as Precursor and Chemical Quality of Good Water in Parts of SW Punjab in Relation to Incidence of Cancer - November 18, 2011.

Prof. Dr. Mool Chand Sharma, Vice Chancellor, Central University of Haryana: Indian Democracy on Cross Roads - November 24, 2011.

Dr. Devinder Singh Sandhu, Executive Chairman, Cancer Elimination Council of India: Cancer in the Elderly - December 13, 2011.

Prof. Dr. Harish Puri, Retired Professor, B. R. Ambedkar Chair, Department of Political Science, Guru Nanak Dev University, Amritsar: Human Rights - December 8, 2011.

Prof. Dr. A.K. Saluja, Vice Chair, Department of Surgery, University of Minnesota: New Therapies of Pancreatic Cancer - December 9, 2011.



Prof. Dr. Jagbir Singh , Retired Profesor, University of Delhi: Indian Knowledge Tradition - February 10, 2012.

Dr. U.S. Tondon, Chief Scientist, Planning and Performance Division, Council of Scientific and Industrial Research, New Delhi: Microchips that Stimulate and Sustain IT - their Fabrication and Manifestation - March 5, 2012.

C. Special lectures for students by guest faculty

Faculty from other premier institutions of the country was also invited frequently to deliver special lectures to the students of different Centers of Study of the university. Following is the detail of such lectures:

Prof. Dr. Gurjeet Singh, Director General, National Law School and Judicial Academy, Guwahati: Research Methodologies - November 9, 2011.

Prof. Dr. Gian Singh, Professor of Economics, Punjabi University, Patiala: Development Economics - March 26, 2012.

Prof. Dr. Balwinder S. Tiwana, Department of Economics, Punjabi University, Patiala: Development Economics - March 29 & 30, 2012.



Sh. Bal Anand, Indian Foreign Services (Retd.), delivering a lecture on 'Foreign Relations of India: Present Implications and Probabilities'



Dr. A.K. Saxena delivering lecture on QSAR and Molecular Modelling Studies in Antihistamines (H1)



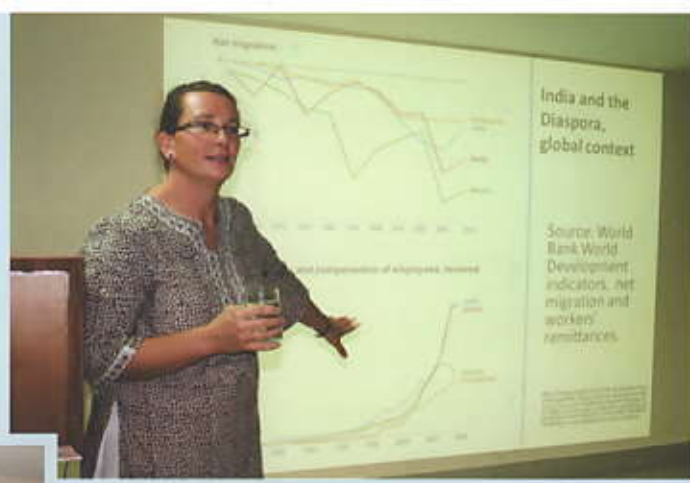
Mr. P.C. Hota, Indian Administrative Services (Retd.) delivering lecture on 'Challenges of 21st Century'



Dr. Daljit Singh, Renowned Eye Surgeon delivering a lecture on 'Role of Fugo Blade in Glaucoma Surgery and Oculopathy'



Dr Margaret Walton-Roberts, Director, Wilfrid Laurier University, Waterloo, Canada: delivering lecture on "Contrasting Regional Migration and Diaspora-led Transformation in Punjab and Kerala"



Prof. Dr. Mohinder Singh, Member, N.C.M.E.I. delivered a lecture on 'Endangered Sikh Heritage'

Prof. Harish Puri, delivering a lecture on 'Human Rights'



Prof. A.K. Saluja, delivering a lecture on 'New Therapies of Pancreatic Cancer'



Prof. A.K. Saluja, delivering a lecture on 'New Therapies of Pancreatic Cancer'



Dr. Devinder Singh Sandhu, Executive Chairman, Cancer Elimination Council of India, delivering a lecture on 'Cancer in the Elderly' on December 13, 2011.



Prof. Dr. Jagbir Singh (Retd.), University of Delhi, delivering a lecture on 'Indian Knowledge Tradition'

Dr. U.S. Tondon, Chief Scientist, Planning and Performance Division, CSIR, New Delhi, delivering a lecture

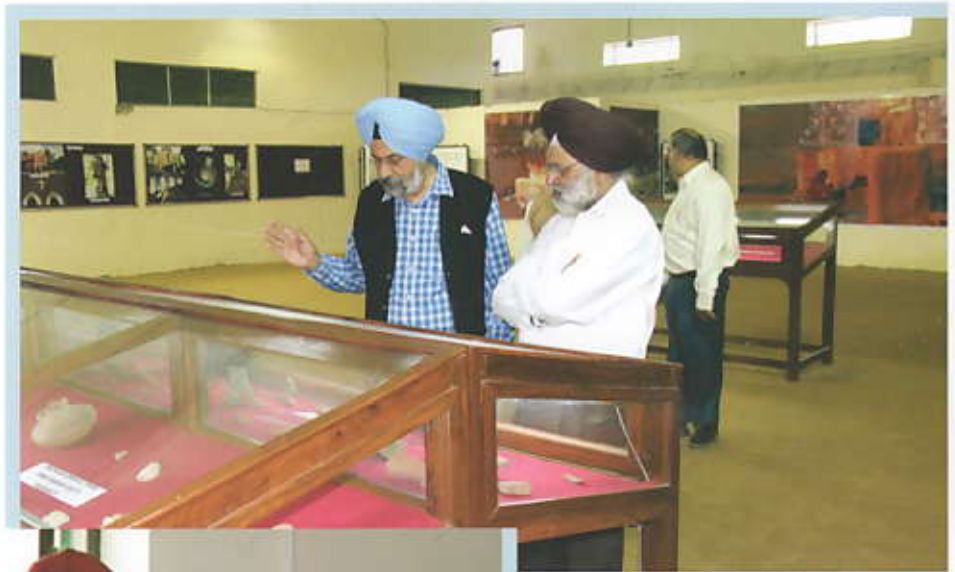




D. Important Visitors

Several eminent personalities visited the Central University of Punjab and participated in the development process of the university. Some of the important visitors are given below:

Prof. Dr. B.S. Dhillon,
Vice Chancellor, Punjab
Agricultural University,
in the museum on
November 2, 2012



Prof. Dr. Rajneesh Arora,
Vice Chancellor, Punjab
Technical University,
visited the Central
University of Punjab
on September 26, 2011



**Canadian Consulate General
Mr. Scott Slessor** looking at a
New Campus design model of
the university during his visit
on August 2, 2011





3. *Extracurricular Activities*

3.1 First Cultural Programme: May 14, 2011.

First Cultural Programme of the university was organized on May 14, 2011 in the new University Auditorium created by renovating a dyeing shed of the abandoned Bathinda Cooperative Integrated Cotton Ginning and Spinning Mills. S. Baljit Singh Bir Behman, Mayor of Bathinda city was the chief guest. The programme started with the invocation by students of the university followed by a cultural programme, in which the students exhibited their talent in the form of skits, mime, group songs, geet, ghazal and a one act play. Traditional folk dance 'Giddha' was performed by the girl students.



A student welcoming the chief guest S. Baljit Singh Bir Behman, Mayor of Bathinda City



Invocation by the university students



A scene from one-act play



A scene from another students' performance

Trinjan by girl students





3.2 Tree Plantation at the Main Campus site: August 06, 2011.

Tree plantation along the entire boundary wall of the Main Campus of the university at village Ghudda started on August 06, 2011 when the Vice Chancellor, Prof. Dr. Jai Rup Singh and Prof. Dr. Pushpinder Jai Rup Singh planted the first saplings of Neem (*Azadirachta indica*). This was followed by plantation of three rows of Neem, Jamun (*Eugenia jambolana*) and Drek (*Melia azedarach*) along the boundary wall by other senior faculty members, the University Engineer and the Divisional Forest Officer, Bathinda. Several other members of the teaching and non-teaching staff also participated in tree plantation to make the beginning of "Greening" the Main Campus of the university.



Vice Chancellor, Prof. Dr. Jai Rup Singh planting Neem sapling



Er. G.S. Sra, the University Engineer Planting a sapling



Prof. P. S. Ramana, Dean Students' Welfare watering the sapling



Prof. R. G. Saini, Prof. In-charge Administration planting a sapling



3.3 Independence Day Celebrations: August 15, 2011.

The 65th Independence Day was celebrated with great zeal and enthusiasm on August 15, 2011 in the city campus of the university. All the faculty members, staff and students participated in the celebrations. The national flag was hoisted by the Vice Chancellor, Prof. Dr. Jai Rup Singh. The Vice Chancellor reminded the audience about the freedom struggle and the sacrifices made by the countrymen in achieving freedom. He advised the students to fight against the social evils present in the society in the form of illiteracy, poverty and ignorance.



Glimpses of the Independence Day Celebrations



3.4 Establishment of Genetic Heritage Park

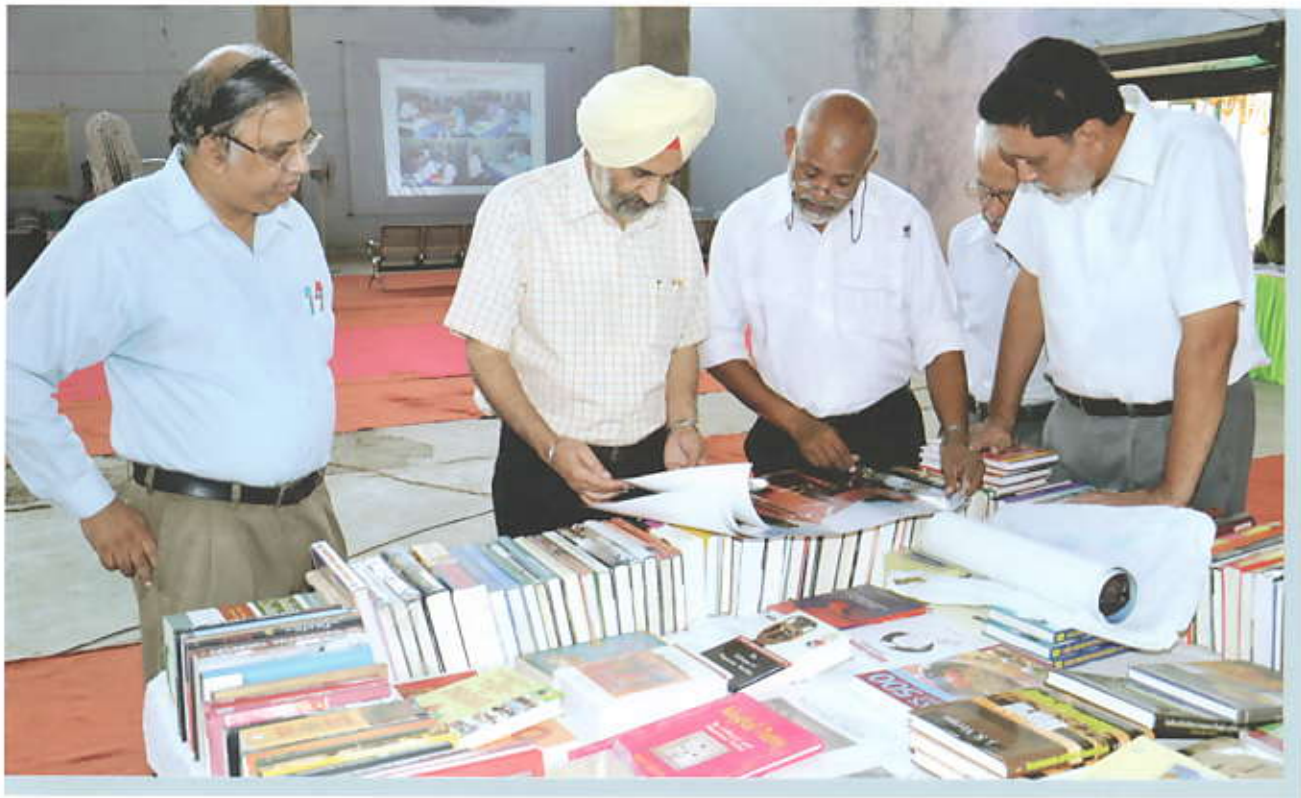
A Genetic Heritage Park has been established in a six-acre piece of land at the City Campus to preserve rare and endangered species of trees and plants from Malwa region of Punjab. To begin with, saplings of Imli (*Tamarindus indica*), Lasuda (*Cordia dichotoma*), Phalsa (*Grewia asiatica*), and Phalahi (*Acacia modesta*) were planted on September 9, 2011 at the site.



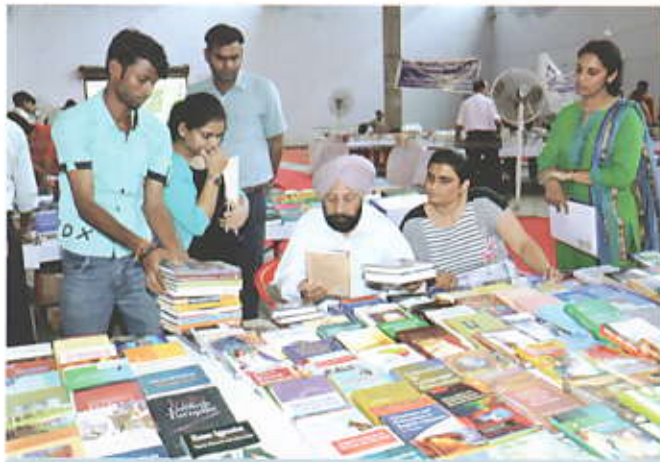
Planting of saplings in the Genetic Heritage park

3.5 Third Book Exhibition

A two day book exhibition was organized at the city campus of the university on September 19-20, 2011. This was the third exhibition organized at the city campus of the university and was inaugurated by Dr. S. S. Dhillon, an Environmentalist and Consultant to the Punjab State Council for Science and Technology and Former Dean Academic Affairs, Punjabi University, Patiala. More than 40 publishers, distributors and suppliers of books displayed more than 50,000 book titles in the exhibition. Many experts from other universities namely Dr. Surjit Lee from Punjabi University, Patiala, Prof. (Retd.) Dr. Pushpinder Kaur, from Guru Nanak Dev University, Amritsar, Dr. Joginder Singh a leading agricultural economist from Punjab Agricultural University, Ludhiana and Dr. Dinesh Grover, Former Head, Department of Computer Science and Electrical Engineering of Punjab Agricultural University, Ludhiana were among the experts invited to help the faculty to select books for the University Library. The faculty of the university also selected books to be purchased for their teaching work.



Vice Chancellor, Prof. Dr. Jai Rup Singh on visit to a book stall



Invited experts and members of the faculty selecting books for the University Library



3.6 Republic Day Celebrations

The Central University of Punjab, Bathinda celebrated 63rd Republic Day in an impressive ceremony. All the students, teaching and non-teaching staff of the university along with the other employees gathered with a lot of passion and fervor at the City Campus. The Vice Chancellor, Prof. Dr. Jai Rup Singh, inspected the parade of the security staff, took the salute and hoisted National Flag. In his speech, he reminded all those present of the great sacrifices of great Indians for achieving freedom for the nation and for setting up of the largest democracy in the world. He stressed the role of literary and education in successful functioning of a democracy. The national anthem was sung by students of the university. A student from Jharkhand sang a melodious patriotic song in his mother tongue adding a vernacular tinge and a national character to the celebrations. The Registrar of the university, Col. (Retd.) Jagdev Kartar Singh proposed the vote of thanks.





3.7 Foundation Day Celebrations

The university celebrated its third foundation day as Science Day on February 28, 2012. The week long celebrations started on February 27, 2012 with the organization of an on the spot painting and photography competition in which students from various educational institutions of Bathinda and surrounding areas participated. The paintings and photographs of the participants were later displayed as an exhibition that was inaugurated by Prof. Dr. S. S. Gill, Vice Chancellor, Baba Farid University of Health Sciences, Faridkot on February 28, 2012. Dr. S. S. Gill also presided over the Science Day Celebrations and delivered a key-note address on this occasion. The Vice Chancellor, Prof. Dr. Jai Rup Singh, stressed upon the need to develop scientific temperament in life. The students of the university presented a cultural programme comprising of mime, skit, one act play and giddha. The week long celebrations concluded on March 6, 2012 with the staging of a play 'Nion Jarh' written by Sh. Ajmer Singh Aulakh who was also the Chief Guest on this occasion.



Prof. S. S. Gill, Vice Chancellor, Baba Farid University of Health Sciences, inaugurating the Photography and Painting Exhibition on February 28, 2012.



Chief guest going through the painting exhibition



Students presenting cultural programme on Science Day



4. *Infrastructure Development*

4.1 University Museum

The Centre for Museology, Archeology and Conservation has established a museum of history and culture of the Malwa region of Punjab. It houses vast collection of archaeological exhibits, including that of Harappan Civilization excavated from Malwa region of Punjab. It also comprises photo gallery section on the history of Central University of Punjab and the history of the Bathinda region. The archaeological section showcases the finds from various historical sites like Dhalewan, Sirkap, Marar, Bhana, Lakhimire wala, Rohira etc. of the Malwa region and from the site of Kali Bangan in Rajasthan. The photographs of folk arts and crafts of the region and historical coins are also on display. The models from different architectural firms displaying designs of Main Campus of the university that has to be built at village Ghuda are also a part of this museum. The museum is being continuously expanded and more permanent galleries are being added. This museum is a special attraction for all visitors to the university.



Academic Council members discussing New Campus Models in the University Museum



Members of Academic Council in the University Museum after a meeting on March 10, 2012



4.2 Science Laboratories

Existing science laboratories are well equipped for handling practical classes of courses offered by the university as well as to carry out high end research in science subjects. Three more science laboratories with ultra modern equipment have been set up in Hall No. 5 to support practical classes of new courses started during academic session 2011-12.



A well equipped Molecular Genetic Laboratory was established that has been inaugurated by Dr. V. M. Katoch, Director General, Indian Council of Medical Research, and Secretary, Department of Health Research, Government of India. This new laboratory will go a long way to study the causes of increased incidence of genetic abnormalities and cancer in Malwa region of Punjab. Research and teaching in different disciplines of science has been strengthened by adding new equipment. Centre wise details of the new facilities added to the science laboratories is given as below:

A. Centre for Biosciences

New infrastructure has been built for research in the field of animal and plant cell culture, RNA/DNA and protein analysis, metagenomics, histopathology, molecular cytogenetics and bioinformatics. Many new equipments have been added like Nano drop, Refrigerated circulatory water baths, CO₂ incubators, UV-Visible spectrophotometer, Ultra low deep freezers and Milli-Q water purification system.



Dr. V. M. Katoch inaugurating Molecular Genetic Laboratory



A student working on spectrophotometer



M. Phil. students working on DNA sequencer



Newly setup Science Laboratories



Animal Cell and Tissue Culture Laboratory



A researcher in Tissue Culture Laboratory



A practical class in session in Biosciences Laboratory



B. Centre for Environmental Science and Technology

Centre for Environmental Science and Technology has well equipped laboratory with all modern facilities required for testing water, soil and waste materials. New equipment like Atomic Absorption Spectrometer, Trace Metal Analyzer etc. have been added to the existing infrastructure for environmental monitoring.

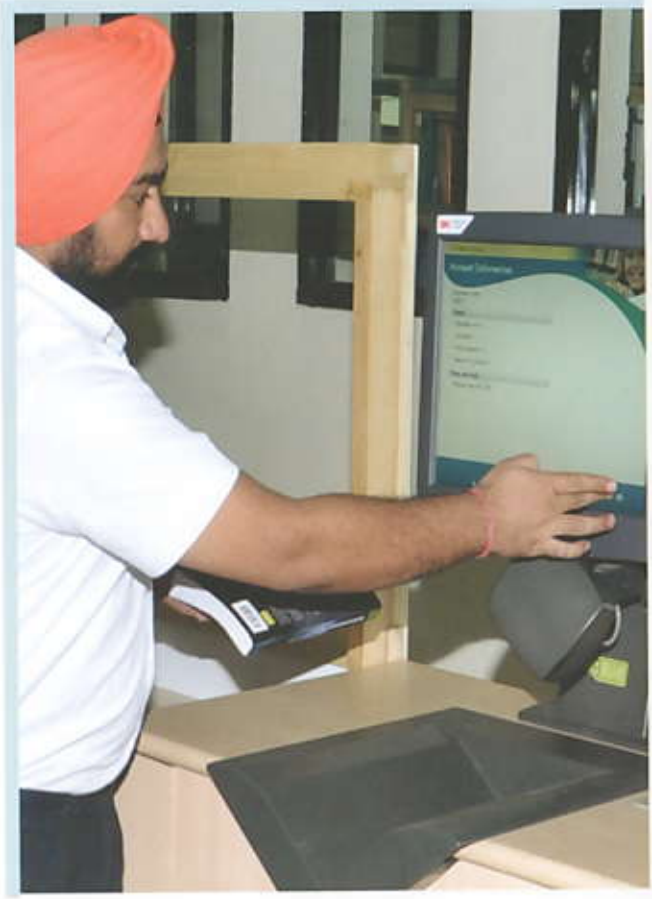


A view of Environmental Science Laboratory

4.3 University Library

The air conditioned library of Central University of Punjab is located at a central place in Academic Block in close vicinity of the class rooms, Computer Centre, laboratories and the faculty rooms. This is the first library in the region which is equipped with RFID system (Radio Frequency Identification) facilitating Self-issue, Self-return and Self-renewal of books. The library is also fitted with sophisticated Electro Magnetic security system.

The University Library has 10,130 books on its racks and a subscription to 61 National and International print journals, 7,400 full text online journals of Science Direct, Springer, J-STOR, Wiley-Blackwell, Taylor and Francis, Project Muse and Science Online under 'UGC Infonet Programme'. The university has access to periodical collection of 22 university libraries in India through JCCC/UGC Infonet. This service has in built facility to request for the periodical articles from other university libraries of India. The University Library also has access to World Bank E-Library and membership of DELNET and British Library.



Radio Frequency Identification System (RFID system) and Self issue, return and renewal counter



Stack Area



Reading Hall

Under the National Mission on Education through Information and Communication Technology (NMEICT), the university is connected to National Knowledge Network through high speed internet connectivity provided by the Ministry of Communication and Information Technology, Government of India. This network facilitates the access of faculty and students of the university to e-libraries, high performance computers such as GARUDA, Global Research and Development Network, GLORIAD (Indo-U.S. Initiative), TIEN 3 (Indo-European Initiative) etc. A reprographic service, with latest photocopying machines and sophisticated scanners is available for the readers.



4.4 University Auditorium

An abandoned dyeing hall of Bathinda Cooperative Integrated Cotton Ginning and Spinning mills has been renovated and given a complete face lift to transform it into an air-conditioned auditorium to organize seminars, conferences and symposia in the university. The auditorium has a seating capacity of 250 persons and it is equipped with state-of-the-art remotely operated multimedia projectors, tablet PCs (Apple iPad) and 5.1 surround sound system.



Outer view of the University Auditorium



Inside view of the University Auditorium

4.5 Bamboo Huts

For providing open sitting place to the students, five bamboo huts have been erected at different locations in the City Campus. These huts have been provided with comfortable benches so that the students can enjoy sitting in the green lawns of the City Campus.



A Bamboo Hut close to the Canteen-cum-Mess

4.6 University Canteen-cum-Mess

The seating capacity of the Canteen-cum-Mess has been increased from 40 to 200 to accommodate increased number of students after admissions to the course programmes offered during academic session 2011-12.



University Canteen-cum-Mess

4.7 Supporting Infrastructure

- City Campus remains well lit at night time as two high mast lights have been strategically installed.
- Campus Nursery has been established to raise plants for beautification of the City Campus as well as raising nursery for greening of the Main Campus of the University to come up at village Ghudda.
- Seventy per cent of the work on construction of boundary wall of the Main Campus has been completed.



Under construction boundary wall of the Main Campus of the University

4.8 Exhibition of Main Campus Design models

The process to identify an architectural firm to develop the Main Campus of the university to be built at village Ghudda started in 2010. Finally the architectural firms submitted their proposed models of the Main Campus of the university in November 2011. All these models were displayed for gathering public opinion on the choice of the architectural firm on November 11, 2011. The exhibition of models was inaugurated by S. Baljit Singh Bir Behman, Mayor of Bathinda city and it was open to students, staff of the university and people from nearby places. A large number of students from several educational institutions of Bathinda and villagers from surrounding areas visited the university campus. Public opinion with respect to each model for its suitability was recorded by a team of faculty.



City Mayor S. Baljit Singh Bir Mehman gazing at a model along with Vice Chancellor

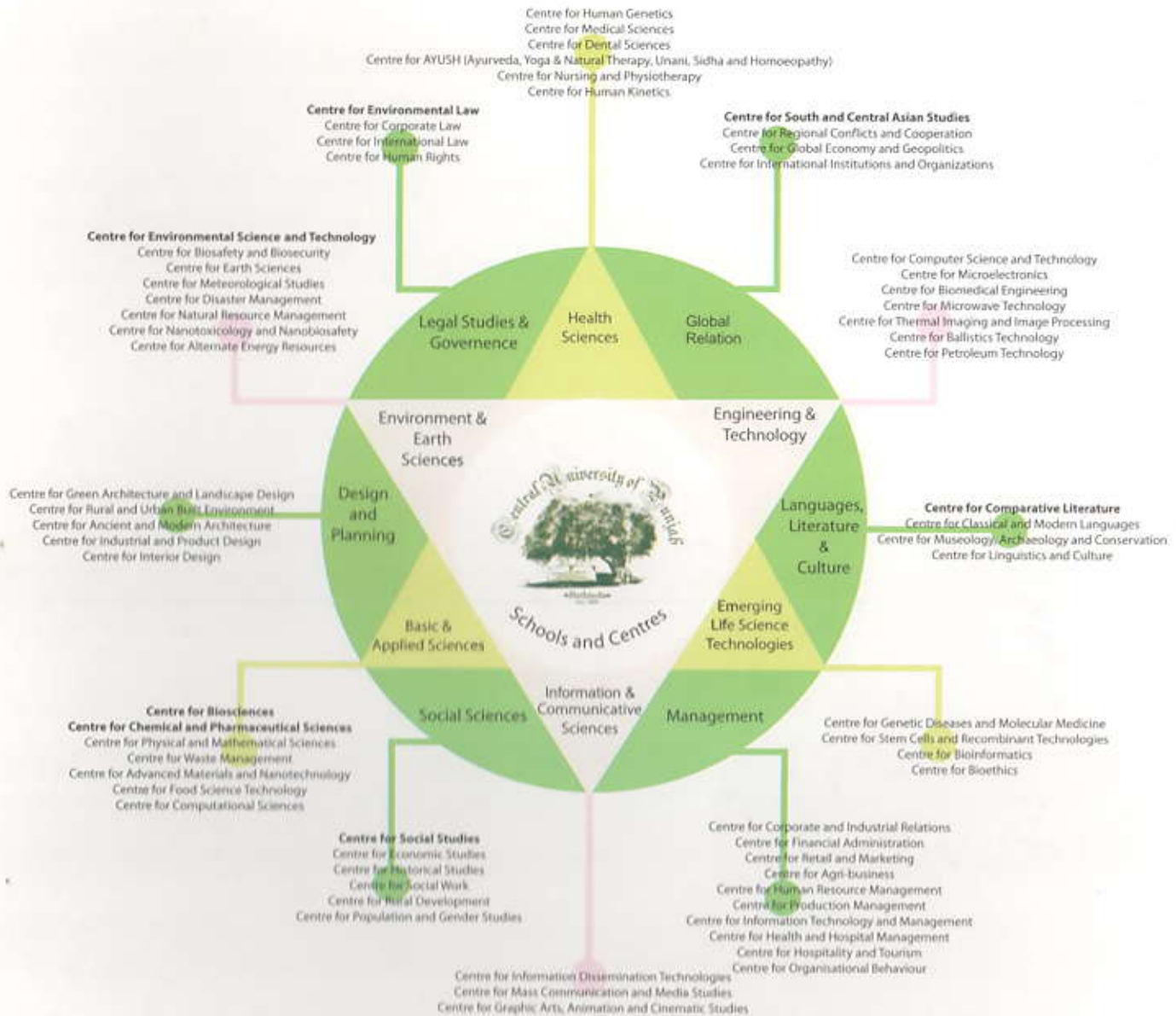
Students of the nearby schools looking at the models

Villagers looking at the models



Participants of the 3rd meeting of Academic Council

Central University of Punjab, Schools and Centres of Studies





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