

Department of
Science and **T**echnology
Haryana



....promoting

Science & Technology in the State

HSCST

Haryana

**HARYANA
STATE COUNCIL
FOR SCIENCE &
TECHNOLOGY (HSCST)**

Department of
Science & Technology,
Government of Haryana,
Bays 35-38, Sector-2,
Panchkula - 134 109

The Department of Science & Technology has been implementing a number of schemes to popularize science in the State of Haryana.

Department has embarked upon a number of new initiatives in order to bridge gaps, wherever it exists, and to address new emerging issues.

This brochure has been designed to capture essence of all the schemes and I hope that this will succeed in establishing a smooth interface with all the stakeholders.

S. S. Prasad, IAS
Financial Commissioner &
Principal Secretary to Govt. of Haryana
Science & Technology Department

HSCST

About Department of Science & Technology

The Department of Science & Technology (DST) Haryana was created in March 1983 and since then it has been instrumental in implementing a number of schemes pertaining to promotion of Science & Technology in the State. DST is making continuous efforts to promote Research and Development activities and playing a catalytic role in the state in close co-operation with concerned line Departments, district administration, research & academic institutions and other State and Central Government agencies.

The major aims and objectives of the Department are:

- To promote Science & Technology in the State.
- To inculcate scientific temper among the youth of the State.
- To identify technologies suitable for the progress of the State.
- To encourage research in key areas of Biotechnology.
- To utilize Remote Sensing and Geographical Information System (GIS) techniques in the State.

Department of Science & Technology functions through its following two organizations:

1. Haryana State Council for Science & Technology (HSCST)

- Established in 1986 as an autonomous body, a registered society, under Societies Registration Act 1860.
- To advise the State Government on policies and measures for promoting Science & Technology in the State.
- To implement the policies and plans of the State Government agencies towards promotion of Science & Technology in the State.

2. Haryana Space Application Centre (HARSAC), Hisar

- Established in 1986 as an autonomous body of Department of Science & Technology, Haryana.
- Premier agency for utilization and application of satellite data in various sectors.
- Nodal agency for all Remote Sensing (RS), Geographical Information Systems (GIS) and Global Positioning Systems (GPS) related activities.



Activities

The Department is engaged in activities related to Science popularization and promotion through following multifarious activities and its organizations at Hisar and Kurukshetra.

Haryana Space Application Centre (HARSAC), Hisar

- Working to harness space technology and geo-informatics for developmental planning of the state.
- Completed more than 85 projects.
- 34 projects worth Rs.15.17 crores are currently ongoing.
- Running training programs for college/ university/ school teachers, students and Government officials.
- Started M. Tech. (Geo-informatics) course during 2009-10 in collaboration with Guru Jambheshwar University of Science & Technology, Hisar.
- Working on a very prestigious project regarding preparation of GIS based large-scale digital maps for all the towns of Haryana and mapping up of all infrastructure and natural resources of the State.
- Recently launched a major project on Space based Information Support for Decentralized Planning (SIS-DP) in collaboration with Indian Space Research Organization (ISRO).

Please refer to the website of the Centre at www.harsac.org for details.





Centre for Plant Biotechnology (CPB), Hisar

- Established in year 2000 with funding from Department of Biotechnology (DBT), Government of India (GOI) for the first five years.
- Taken over by State Government in 2005.
- Multiplies rare and elite planting material (Sugarcane, Bamboos, Banana, Aloe vera, Stevia, Jatropha) through tissue culture techniques and carries out biotechnological activities of the State.
- Prepared 4.30 lac Jatropha seedlings under National Bio-Diesel Mission and planted on 210 hectares land in Haryana.
- Multiplied elite Bamboos obtained by GOI from Thailand and planted on 70 hectares of Forest Department land at Yamuna Nagar.
- A Centre of Excellence on "DNA testing and diagnostics facility for research and application in Haryana" is being set up at a cost of Rs.233.85 lacs.
- Planning to create divisions of Plant Tissue Culture, Plant Molecular Biology, Plant Transformation and Transgenics.
- Imparting training to B.Tech. / M.Sc. / Ph.D. students on Plant Tissue Culture and Plant Molecular Biology.

Please refer to the website of the Centre at www.cpbhisar.org for details



Kalpna Chawla Memorial Planetarium (KCMP), Kurukshetra



- Setup in the memory of Dr Kalpana Chawla at Kurukshetra- Pehowa road in collaboration with Ministry of Culture, GOI at a cost of Rs.6.5 crores (50% share) in year 2007.
- To create awareness about astronomy among general public and students of the state.
- Imparting non-formal education by showing various films on astronomy/astrophysics.
- A new film 'Astronaut' is recently added.
- 8-inch telescope is also installed.
- An astro park comprising several exhibits in a lush green ambience.
- 3.29 lakhs visitors till date.

Popularization of Science

In order to popularize Science & Technology in the State, the following activities & programmes are organized every year:

a. Science Quiz Contest

- Organised at district, zonal and state level.
- Schools affiliated with CBSE/ICSE and Haryana School Education Board separately.
- Prizes at zonal level are: Rs.5000/- (First Prize), Rs.4000/- (Second Prize), Rs.3000/- (Third Prize) and Rs.2000/- (Consolation Prize).
- Prizes at state level are: Rs.20000/- & a trophy (First Prize), Rs.16000/- (Second Prize), Rs.12000/- (Third Prize) and Rs.8000/- (Consolation Prize).



b. Science Essay Writing Competition for School and College Students

- Class 9th to 12th under school category.
- Under college category, all under graduate students studying in Colleges, Universities and Professional Institutions of Haryana.
- Prizes for college students are: Rs. 8000/- (First Prize), Rs. 6000/- (Second Prize), Rs. 4000/- (Third Prize) and Rs. 3000/- each (Ten Consolation Prizes).
- Prizes for school students are: Rs. 5000/- (First Prize), Rs. 4000/- (Second Prize), Rs. 3000/- (Third Prize) and Rs. 1000/- each (Ten Consolation Prizes).

c. District Children Science Congress

- Organized in collaboration with District administration and Haryana Vigyan Manch, Rohtak.
- Rashtriya Vigyan Evam Prodyogiki Sanchar Parishad (RVSP), Govt. of India finalizes the theme for Children Science Congress.

d. National Science Day

- In collaboration with Rashtriya Vigyan Evam Prodyogiki Sanchar Parishad (RVSP), Govt. of India (GOI).
- Theme selected by RVSP, GOI
- Funds provided to schools, colleges and universities/institutions of Haryana.

e. Partial financial assistance to scientists/engineers/doctors for attending the international conference abroad

- Scientists/officers of S&T Department and its agencies are provided financial assistance for enabling them to attend various latest technical courses/seminars/conference/workshops abroad.

f. Grant in aid to Research & Development projects

- To enhance the general capability of scientists for pursuing innovative research ideas, which are having socio economic relevance / benefit of the State.



- Grant in aid is provided with a maximum budget of Rs.10 lakh over a period of three years.

g. Patent Information Centre

- Established at CPB, Hisar in 2004 and sponsored by Technology Information, Forecasting and Assessment Council (TIFAC), Department of Science and Technology, GOI, New Delhi.
- Providing patent related services particularly to the S&T community in Haryana.
- Patent awareness workshops have been organized in different universities/institutes of Haryana.
- Opened "IPR cells" in four universities of Haryana i.e. Chaudhary Devi Lal University, Sirsa, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, BPS Mahila University Khanpur Kalan and Guru Jambheshwar University of Science and Technology, Hisar.
- Nodal Officers appointed in above cells co-ordinate PIC activities in these Universities.

h. Conference/Workshop/Science communication programme

- Workshops/seminars/conferences on need-based topics of Science & Technology are being organized in the State.

2. New Initiatives:

The following new initiatives were taken during 2009-2010:

a. Setting up of Centre of Excellence/Common Research, Training & Education Facility in emerging areas of Science & Technology

- One Centre of Excellence on "DNA testing and diagnostics facility for research and application in Haryana" is being set up at Centre for Plant Biotechnology, Hisar.
 - Second Centre of Excellence on "Renewable Energy Development Centre (REDC)" is being set up at Deenbandhu Chhotu Ram University of Science & Technology, Murthal.

b. Setting up of Science City at Sampla

- Science City at Sampla, District Rohtak in collaboration with Ministry of Culture, Government of India is in pipeline.
- To develop scientific attitude and temper and to create, inculcate and sustain a general awareness amongst schools and college students as well as people of the state.

c. Promotion of Science Education

- To create enthusiasm and interest in Science.
- Number of students opting for science stream is on the decline in Haryana thus creating shortage of science graduates / post graduates for jobs in this sector particularly teaching.
- To reverse this declining trend, Department of Science & Technology, Haryana has taken many new initiatives to capture students at young stage and nurture them up to Ph.D. level by initiating following new schemes:

(i) Haryana Science Talent Search Scheme

- To capture brand name of National Talent Search Examination.
- To identify and nurture talented science students towards science subjects.

Class	Scholarship (monthly)
IX & X	Rs. 500
XI & XII	Rs. 1500

(ii) Promotion of Science Education (POSE) Scholarship Scheme

- Scholarships are being provided to the students during all three years of B.Sc. (Honours) and two years of M.Sc. in the basic science subjects i.e. Physics, Chemistry, Mathematics, Botany, Zoology and Geology.

Class	Scholarship (monthly)	Contingency (annual)
B.Sc. (Hon.)	Rs. 4000/-	Rs. 4000/-
M.Sc.	Rs. 6000/-	Rs. 5000/-



(iii) HSCST Fellowship Programme

- Awarded to students holding M.Sc. or equivalent degree with minimum 55% marks and on the basis of their performance in National Eligibility Test (NET) conducted by CSIR twice in a year.
- Research fellowships are in science subjects namely Life Sciences, Physical Sciences, Chemical Sciences, Mathematical Sciences, Earth Atmospheric Ocean & Planetary Sciences.
- Maximum period of fellowship is five years and the amount will be Rs.12,000/- per month for the first two years and Rs 14,000/- per month for the 3rd year onwards.
- Fellowship will carry an annual contingency grant of Rs. 20,000/-.

(iv) Counseling cum Awareness Camp

- At block level.
- To provide proper timely guidance to science students about the options of higher studies in natural/ pure sciences.
- To create awareness regarding future career opportunities after acquisition of higher qualification.

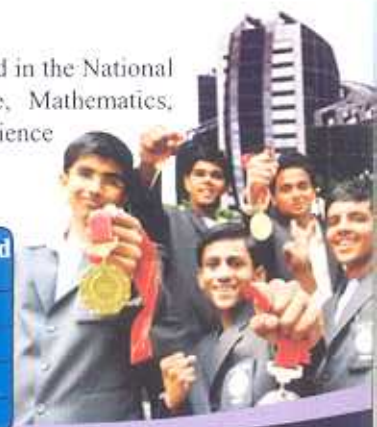
(v) Haryana Vigyan Ratna and Haryana Yuva Vigyan Ratna Awards

- To honor eminent scientists from Haryana, who have made outstanding contributions in the field of Science & Technology.
- Eligible scientist can be from any field like applied research, engineering, medical sciences, forensic sciences etc.
- Essential conditions are that either the person should have been born in Haryana or he must have spent a considerable part of their career/ studies in Haryana.
- Haryana Vigyan Ratna Award is meant for scientists above the age of 40 years and carries a cash award of Rs. 1.00 lakh, a citation and a trophy.
- Haryana Yuva Vigyan Ratna Award is meant for scientists below the age of 40 years and carries a cash award of Rs. 50,000/-, a citation and a trophy.

(vi) Honoring Meritorious Students of Haryana

- To encourage the students of Haryana, who are selected in the National team for participation in the International Science, Mathematics, Astronomy & Astrophysics Olympiads and Junior Science Olympiads.
- Prizes are as under:

Medal	International Science Olympiad (Rs. in Lakh)	Junior Science Olympiad (Rs. in Lakh)
Gold	5.00	2.50
Silver	3.00	1.50
Bronze	2.00	1.00
Selection	1.00	0.50



(vii) Collaborative Science and Technology Programme (CSTP)

- Financial support is provided to ensure integration of Science & Technology for overall socio-economic development of state.
- Special emphasis on Location Specific Research & Technology Development, Pilot Scale Demonstration, Adaptation and Transfer, S&T studies / surveys and information exchange & experience sharing on specific S&T programmes.
- Project proposals are invited from universities, national labs/ institutes/ S & T agencies, NGO's, State S & T Councils and KVK's.
- Projects are routed through HSCST and funding is provided by DST, GOI.

(viii) Exposure visit for meritorious students

- A new scheme for organizing exposure visits of meritorious school students to scientific institutions.
- To educate the students regarding the latest scientific developments and techniques.

(d) Science and Technology Reporter, a quarterly newsletter

- A quarterly newsletter, which is widely circulated among various government/non-government organizations as well as other, interested end users.
- Documents the objectives and various activities of the Department.
- Available on website www.dstharyana.org for free download.

(e) Science magazine in Hindi

- A quarterly Science magazine in Hindi "Haryana Vigyan Darpan" is being launched.
- To take science to school going students & nurturing them as science talents and also to motivate and generate interest in students towards science education.
- Articles have been invited from science teachers and students for publication in the magazine to make it a participatory activity.

(f) Setting up of Observatory

- An 11-inch diameter telescope is being installed in office building at Panchkula.
- For making astronomical observations and for popularization of astronomy amongst the students and people of the region.

CONTACT DETAILS

The Director
Science & Technology Department
Bays 35-38, Sector-2, Panchkula-134109
Tel: 0172-2563439, Fax: 0172-2560018
Website ; www.dstharyana.org

