

June 30, 2012

Short Report on SPSTI

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For promoting and popularizing science and technology among masses, thirty seven leading scientists, academicians and administrators decided to form a not-for-profit society by the name of Society for Promotion of Science & Technology in India and registered it on Oct. 14, 2009. Since then, 24 members have been added. Now there are 61 members - 38 Life Members, 22 Ordinary Members (with voting rights) and 1 Associate Member (without voting right). Several teachers and students have started working with Society and many of them are now its members. Applications of 10 experts for the membership of the Society are under process.

The guiding principle of the Society has been to work with complete transparency and concentrate on quality rather than quantity. According to its constitution, the SPSTI can take a number of activities to fulfill its objectives, but for the time being, it has decided to work in Haryana, Punjab and Chandigarh.

In a short span of two years, the SPSTI has undertaken several activities and plan to take up many more new initiatives in the near future. Some of them are:-

1. **Popular Lectures** – Two popular lectures by two distinguished scientists were organized during the year 2011.

The first lecture on ‘Brains, Computers and Intelligent Machines’ by Prof. Mriganka Sur, FRS, MIT, Cambridge, USA, took place on August 24, 2011 at the Tagore Theatre, Chandigarh. The lectures received an overwhelming response from the students and the teachers of the schools and colleges of Chandigarh, Panchkula and Mohali. More than 1,200 students and teachers attended the lecture.



The second lecture on ‘Innovations in Bio-science & Technology’ by Prof. D. Balasubramania took place in association with the Physics Colloquium on November 4, 2011 at the Physics Department Auditorium, Panjab University, Chandigarh. The lecture also evoked a lot of enthusiasm



Patrons

Prof. T. V. Ramakrishnan, FRS
Hindustan Lever Research
Professor & Emeritus Professor
BHU, Varanasi

Prof. Mriganka Sur, FRS
MIT, Cambridge, USA

Prof. Ashok Jhunjhunwala
IIT, Madras

Governing Council

President

Dharam Vir, IAS (Retd.)
Ex-Chief Secretary, Haryana

Vice President

Prof. Suman Beri
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Panjab University, Chandigarh

Advisor

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General Secretary

Prof. Keya Dharamvir
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Panjab University, Chandigarh

Treasurer

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Members

Prof. Ashok Sahni
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Panjab University, Chandigarh

Prof. H. S. Mani
Professor Emeritus
IISER, Mohali

Prof. I.B.S. Passi
Professor Emeritus
IISER, Mohali

Prof. Sagar Jain
Professor Emeritus
University of North Carolina

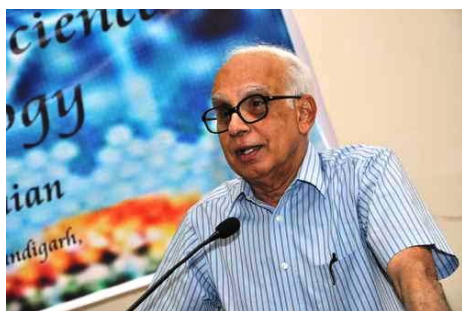
Sameer Pal Srow, IAS

Ajit Balaji Joshi, IAS

M. S. Brar, IAS

D. S. Bedi
Director-Principal
Shivalik Public School
Chandigarh

from the students and teachers of the PU, colleges and schools of Chandigarh.



It is proposed to organize such lectures every year.

2. **Lectures on Nobel Prizes-2011** – It was decided to organize lectures on the Nobel Prizes-2011 in Chemistry, Physics and Physiology or Medicine in schools and colleges. Accordingly, eleven lectures have already been organized in **six schools, one college and one Women University**.



3. **Awareness programme about the emerging areas of science and technology and better careers options** - Most of the students of Class XI and XII, even UG and PG, are not aware of the emerging / exciting opportunities in science and technology. In order to expose them to such opportunities and generate interest among Class XI and XII and UG students to consider research in science and technology as a serious career option, the society wishes to invite nationally and internationally known scientists to deliver lectures on selected topics. We have so far organized the following awareness sessions:-

9th Feb., 2011 - A talk on 'From Knowledge to Entrepreneurship' for the UG science students of Panchkula. The speaker was Prof. D. Sahdev, IIT, Kanpur. This was appreciated by the students and teachers. They wanted us to organize more such programmes.



16th Feb., 2011 - An awareness programme on ‘Emerging Areas in Science’ of 3+ hours duration for the science students of classes XI & XII of Panchkula district was organized. The speakers were Prof. N. Sathyamurthy, Director, IISER, Mohali on Chemistry; Prof. Keya Dharamvir, PU on ‘Nanotechnology’; Prof. Suman Beri, PU on ‘Large Hadron Collider Experiment’ and Prof. I. S. Dua, PU on ‘Biotechnology’. More than 400 students and teachers of government and private schools attended the programme.

Apr 21, 2011 - Debate ‘Human Cloning’ followed by a lecture on ‘Appreciating Life Through Science’ by Prof. I. S. Dua, a recipient of Kalinga Prize, at the Bhavan Vidyalaya, Panchkula. It also got huge response from the schools of the Tri-city.

Dec. 4, 2011 – Lectures on ‘Appreciating Life Through Science’ by Prof. I. S. Dua in two higher secondary schools (about 800 students attended the lectures).

Feb. 27, 2011 – Lecture on ‘Application of Technology in Life Sciences’ by Prof. D. Balasubramanian at the Echelon Institute of Technology, Faridabad (400+ students attended the lecture).

Feb. 27, 2011 – ‘Current Trends in Science & Technology – Popular Lectures’ at the YMCA University of Science & Technology, Faridabad for students and teachers.



Feb. 28 & 29, 2011 – ‘Emerging Areas in Science & Technology’ & Science Day at the Govt. PG College, Karnal – six lectures were organized. Prof. N. Sathyamurthy, Director, IISER, Mohali inaugurated the seminar.



4. **Seminar on Important Topics** - Realizing the growing concern about deterioration and depletion of natural resources and environment, the Society wishes to launch an educational campaign amongst school children for creating awareness on Water Conservation & Management, Genetically Modified Seeds, Pollution of Natural Resources and Climate & Global Warming. A few members of the society are noted earth scientists, who have shown keen interest to prepare easy to read and understand literature for school children. The Society would be willing to work with the interested schools. The Society had organized a seminar titled '**Climate, Carbon & Copenhagen**' on February 13, 2010, at the Panjab University, Chandigarh.



5. **Monthly Lecture Series** – The Society organizes lecture on first Saturday of every month on a topic of importance and public concern involving science and technology at Panchkula. The programme was launched on April 7, first Saturday of April. So far three lectures have been organized.

First Lecture: April 7, 2012, Genetically Modified Crops-Boon or Bane; Tuberculosis-How real is the threat? Speakers – Profs. I S Dua and Daisy Batis of PU, Chandigarh.

Second Lecture: May 5, 2012, Tuberculosis - How real is the threat?. Speaker - Prof. S. K. Jindal of PGIMER, Chandigarh

Third Lecture: June 2, 2012, How to save the self from self inflicted pollution?' Speaker - Prof. R. K. Kohli, Dean (Research), PU, Chandigarh.




Society for Promotion of Science & Technology in India

Monthly Lecture series
Debate on
Genetically Modified Crops
Boon or Bane
Speakers
Prof. I. S. Dua
Prof. Dalzy R. Battish


Society for Promotion of Science & Technology in India
Monthly Lecture series
Tuberculosis-How real is the threat?
Speaker
Prof. S. K. Jindal
PGIMER, Chandigarh




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Panjab University, Chandigarh

6. **Summer Schools in Science & Mathematics for Girl Students Prerana - 2012** – The Summer on the pattern of the one held in 2011 was successfully

organized from May 27 to June 24 at Kurukshetra. 34 meritorious girls belonging economically weaker sections attended the School. The emphasis was on science and mathematics and health.



7. **Summer Schools in Science & Mathematics for Girl Students Prerana - 2011-** The SPSTI in association with another NGO had identified more than 50 girl students of Class XI and XII, belonging to economically weaker sections. Several of them are keen to pursue careers in sciences. The SPSTI has been guiding them since November 2010 and organized a residential summer school of four weeks' duration (May 30 to June 26) for 50 girl students, who have moved into Class XII. The objective of the Summer School was to improve the conceptual framework of the students in sciences so that they can do better in Board level examinations and get admission in good colleges. The School was free for the students. The SPSTI mobilized resources from taking grant from the Governor of Haryana, the socially conscious organizations and the district administration.



The programme was successful as the participants learnt not only science subjects, but also soft skills. They also underwent detailed health check and

were suitable treatment wherever required. Encouraged by the response from the students, we have decided to work with students throughout the year by holding monthly sessions of 2-3 days so that we can help them to solve their difficulties and guide them for further education. We have also started identifying 40 students of class XI for similar programme.

8. **Weekend Classes** – The SPSTI has identified 40 science students in Panchkula district, who have obtained 65+% in class X and taken science subjects in class XI and whose family income is not more than Rs. 1 lac per year. The objective of this project is to help them in their studies and guide them in making choice for careers. This programme would be similar to that of Kurukshetra. This has already been started.



9. **Open House Discussion** – A unique meeting of a senior scientist Dr. Rakesh Mullick of GE Research Center, Bangalore with the UG engineering and science students was organized on medical technologies on Oct. 30, 2011. The meeting was extremely successful as it gave an opportunity to the students to have one to one interaction with the expert about industrial research, including career options in industrial labs. Encouraged by the feedback, the society has decided to have more such sessions in future.



10. **Science Week** – The SPSTI is exploring the possibility of hosting five days' long science week in the Tri-city comprising Chandigarh, Panchkula (Haryana) and Mohali (Punjab) and seven satellite towns (Baddi, Parwanoo, Kalka, Pinjore, Barwala, Dera Bassi & Kharar) around the Tri-city. There would be at least one programme in each of the three cities and seven satellite towns. In all there would be ten lectures, inter-school debate and inter-school science quiz. The programme would be organized during January, 2013.
11. **Camps under the INSPIRE Programme** - The Govt. of India extends grants for holding camps of meritorious science students to expose them to exciting and emerging opportunities in science and technology. Some of the students may be motivated to opt out for science courses at the UG and PG levels and career in scientific research. To start with, the SPSTI would organize camp(s) of three hundred students. Depending on the experience, the SPSTI would organize more such camps on a regular basis. Reputed scientists would be invited to give lectures and guide students on education and research in science.

12. **Mobile Laboratory** – It has also been decided to have a mobile laboratory. The details are being worked out. The name of the mobile would be ‘Circus of Science’.
13. **Compendium of Institutions & Science Courses** – Generally science students after +2 (class XII) opt out for engineering and medical courses. But a large number of them end with up the degrees, which do not get them any worthwhile jobs leading to frustration and economic loss. Perhaps some of them can look for brighter and exciting future in science disciplines. It has also been noticed that good science students of UG and PG levels have not decided about career and future education and are not clear about where to go for further education or employment. There is also a general tendency to stick to the places where they are studying or move towards nearby places. This results in shrinking of options and opportunities for the students. The SPSTI wishes to bring out a detailed compendium listing out institutions of India, offering various programmes in different branches of science and technology. Such information is not easily available to students at one place. The SPSTI wishes to prepare a compendium of all courses offered by universities and institutes for the benefit of students. Being a very laborious and strenuous work, the SPSTI wishes to approach funding agencies for financial support.
14. **Celebration of Important Days** - The UN, Government of India and several international and national organizations have started celebrating days such as World Earth Day, National Education Day, National Science Day etc.. The list is very long and the SPSTI has shortlisted the following days keeping in view the calendar of schools:-

Sr. No.	Date	Day
1.	28 th February	Science Day
2.	22 nd April	World Earth Day
3.	22 nd May	International Day for Biological Diversity
4.	8 th September	International Literacy Day
5.	4 th October	World Animal Day
6.	11 th November	National Education Day

15. **Earth Day**
 - **April 21, 2012** The Day was celebrated on April 21 as April 22 was Sunday. The venue was at the Vidya Jindal Girls School, Hisar. Two eminent earth scientists – Prof. Devesh Sinha, Professor of Oceanography and Marine Geology, University of Delhi and Prof. Arundeeep Ahluwalia, PU, Chandigarh, delivered lectures. Earlier, there was a quiz competition on environment.



- **April 22, 2011** - The SPSTI celebrated the Earth Day on 22nd April, 2011 at the Vidya Jindal Girls School, Hisar. Two eminent earth scientists – Prof. Devesh Sinha, Professor of Oceanography and Marine Geology, University of Delhi and Prof. V. Rajamani, Jawaharlal Nehru University, New Delhi, addressed the students of several schools of Hisar.
16. **International Day for Biological Bio Diversity – May 22, 2012** - The Day was celebrated in the Shivalik Public School, Sector-41, Chandigarh. There was a quiz competition and lectures by two eminent biologist – Prof. I. S. Dua and Prof. R. K. Kohli, of PU, Chandigarh.
17. **Activities under MOU with the Technology Alumni Association – North, IIT, Kharagpur (TAA) and the Society for Excellence in Education (SFEIE), Village Dadawas, Gurgaon district, Haryana** – The SPSTI has signed a tripartite MOU with TAA and the SFEIE for improvement in school education run by the SFEIE at village Dadawas, near Pataudi in Gurgaon and to launch development works using appropriate science and technology based solutions. A detailed report is being prepared.

NOTE – Please visit SPSTI at its websites www.spsti.org and [www.Facebook.com/SPSTI](https://www.facebook.com/SPSTI) for a glimpse of its activities.