

Society for Promotion of Science & Technology in India

Registered vide No.80 of 2009-10 under the Societies Registration Act, 1860 and Re-Registered vide No.00099 of 2013 under Haryana Registration and Regulation of Societies Act, 2012
Exemption U/S 80 G(5) of Income Tax Act, 1961 vide order No.457, dated June 4, 2013

Annual Report 2016-17

The Society for Promotion of Science and Technology in India came in to existence on Oct. 14, 2009. Since then, it has continued to grow steadily and to expand its activities mainly in Chandigarh and Haryana. The year 2016-17 was very special as much awaited Mobile Science Laboratory for taking science to schools in rural areas and small towns was launched by Hon'ble Chief Minister of Haryana. He had also sanctioned a grant of Rs. 11 lacs for its operations. Later during the year, the Department of Science and Technology, Government of India also sanctioned a sum of Rs. 23.68 lacs for operating the Lab for a period of one year in Karnal district. The Society became more visible and the public started recognizing and appreciating its contribution for popularization of science amongst the public and more specifically school students in rural areas and small towns. It has acquired expertise and confidence in organizing diverse activities for popularization of science and technology amongst various groups of people, including students of schools and colleges.

The salient features of the activities of the Society during the year 2016-17 are mentioned in subsequent paras.

1. **Meetings of the General Body and Governing Council:** Sixth Annual general Body Meeting took place on September 26, 2016 at Chandigarh. The General Body approved the Annual Accounts along with the Auditor's report. Two meetings of the Governing Council took place on September 11, 2016 and November 27, 2016.
2. **Income:** The total income of the Society during the year was Rs. 40.04 lacs, which is the highest so far. The grant of Rs. 11 lacs from the Chief Minister and Rs. 18.95 lacs from the Department of Science and Technology, Government of India, for operating the Mobile Laboratory were main contributors to the income of the Society.
3. **Expenditure:** The total expenditure was Rs.17.35 lacs. In addition, the current liabilities amounting to about Rs. 1 lac was pending on March 31, 2017. The year ended with a surplus of Rs. 22.69 lacs, most of which is committed for Mobile Science Lab and meeting other liabilities.
4. **Membership:** One Life Member, three Ordinary Members and two Associate members were added. At the end of the year 2016-17, there were 45 Life Members, 46 Ordinary Members and 4 Associate Members. A sum of Rs. 42,000 was received as membership fee.
5. **Launch of Circus of Science (Vigyan ka Jantar-Mantar), Mobile Science Laboratory:** This is a flagship project of the Society. A bus chassis was arranged by Shri D. S. Bedi, Life Member of the Society and Chairman, Shivalik Public School's Society. The School Society also met the expenditure on its fabrication, interior and exterior as well as the generating set. Earlier, the Intel Corporation, through its subsidiary, had donated a sum of Rs. 5 lacs for science equipment etc. The SPSTI had purchased ten laptops and a large number of scientific equipment during previous years. The Mobile Lab was launched by Hon'ble Chief Minister on April 6, 2016 from Karnal.





6. Later during the year, the Society submitted a proposal to the Department of Science and Technology, Government of India for a grant to operate the Mobile Lab. The project was approved with an outlay of Rs. 23.68 lac. A sum of Rs. 18.95 lac was also received during the year. The DST project commenced on January 1, 2017. The total expenditure on the Mobile Lab during the year 2016-17 was Rs. 10,58,121.88. Out of this, the expenditure against the DST Project was Rs. 2,28,837.
7. During this financial year, the Lab visited 116 schools and interacted with about 18,000 students. From April to December, 2016, the Lab visited 64 Government Schools, and 6 Summer Schools held during the month of June and interacted with about 12,000 students. Around 46 schools including Govt. Schools, Bal Bhawans and Asharams were covered from Jan 1 to March 31, 2017 and interacted with about 6,000 students against the DST sanctioned project. Eight community programs were organized in the month of January in different villages of Karnal district in which around 1,200 persons participated.



Students learning Propagation of Waves (left) and Obstacle Avoidance Robot (right)



Splitting of Colours in milk (left) and Center of Mass (right)



Demonstration of Magnetic Field Lines (left) and Outdoor Display of Equipments (right)



Community Program at Village Sagga, Karnal



Mobile Science Lab at Shradhanand Anathalaya



Mobile Science Lab at Mata Prakash Kaur Institute for Speech & Hearing Impairment Students

8. **Science Day, February 28, 2017:** A ‘Swachh Bharat Abhiyan and Awareness Workshop’ was organized by the District Child Welfare Society at the Haryana Rajya Bal Bhawan, Madhuban, where Mobile Science Laboratory visited and created a scientific environment among the students by displaying equipment and experiments. The students also participated and performed several experiments.



MSL on Science Day at Haryana Rajya Bal Bhawan, Madhuban, Karnal

9. **Teachers Training Programme:** The Mobile Science Lab has conducted training sessions for the teachers of the Government Schools and performed innovative experiments to encourage them to do similar exercise for the benefit of the students. The following training sessions were conducted during the year:

- (a) **September 27, 2016:** The Mobile Science Lab visited Government High School, Prem Nagar and conducted a Two-Day’s Training Session for the teachers of

Government Schools in which, 16 Science teachers participated and performed various experiments.



- (b) **October 5, 2016:** The Mobile Science Lab visited DIET, Village Shahpur, Karnal and imparted training to the JBT students for two days. The videos of several experiments of physics, chemistry and general science were also shown.



10. **Visit to Rotary Programme:** At the request of Shri Gurdip Singh Deep, the SPSTI's Treasurer, the Mobile Science Lab visited the installation ceremony of Rotary International of District 3080, organized at Chandigarh on August 21, 2016 for popularization of the project. The representatives of the Rotary International from Northern India visited the Mobile Science Lab and applauded SPSTI's efforts for the popularization of science.



11. **Visit to Lingaya's University, Faridabad:** At its (University) request, the Mobile Science Lab visited the Lingaya's University on November 11, 2016 and created an impact on the students and the faculty of the University. The possibility of launching such a Lab in Faridabad would be explored.



12. **Science Exhibition:** Mobile Science Lab participated in a Science Exhibition organized at District Level at Khalsa Senior Secondary School, Sheikhpura, Karnal by the Education Department on December 22, 2016. The Mobile Lab displayed all its equipment and apparatus and demonstrated several experiments for the benefit of the students and school teachers.



13. **Summer Schools:** This is another flagship initiative of the Society. Six summer schools of four week's duration were held during the summer vacations of 2016 in Haryana at Village Dadawas (Pataudi Tehsil), Gurgaon district, Kurukshetra, Palwal, Panchkula, and Rewari. In addition, an experiments-based summer school of two weeks duration was held at Vidya School, Gurgaon. All Summer Schools were open to the students of all government schools of the districts concerned, except for the two schools held in Gurgaon district. Six schools were day schools and open to both girls and boys. The School at Kurukshetra was residential and for girl students only. The salient features of the Summer Schools are as under: -

- (a) **Teaching:** The emphasis was on learning through principles and problem solving. The testing procedure comprised snap tests, weekly tests and final test.
- (b) **Mentors:** For teaching at Summer Schools in past, the trained teachers working in private and government schools used to be engaged on payment basis. During the Summer schools 2014, a radical departure was made by engaging the students of prestigious institutions and universities as interns to teach and mentor the participants. The main reasons for this decision were: (i) they are good students, who have already undergone rigorous training and testing system, (ii) their familiarity with the options in higher education and admission system including entrance examinations and how to prepare for them and (iii) they are source of inspiration and motivation as several of them come from backgrounds similar to the students

attending the Summer Schools. Thirty-two students of the IITs, Panjab University and Indian Institute of Science Education and Research Mohali were appointed as mentors to teach and guide the students of six Summer Schools. Every mentor was given a stipend of Rs. 15,000 for residential summer school and Rs. 10,000, for non-residential, plus a sum of Rs. 1,000 as out-of-pocket expenses and actual travel. The boarding and lodging arrangements were made by the Society. The total expenditure borne by the SPSTI was Rs. 5,80,581. The school-wise details are given below.

- (c) **Gurgaon:** The venue was Vidya School, Gurgaon. The School primarily caters to children of low income families. The Summer School was funded by the School's management. Two students of IISER Mohali were deployed as mentors to teach the students of Classes IX and X.
 - (d) **Village Dadawas, Tehsil Pataudi, Gurgaon:** The Summer School was held at the BMB Public School Village Dadawas (Pataudi Tehsil, Gurgaon) for its students. This School primarily caters to the students of village Dadawas and adjoining areas and is mentored by Prof. Sagar Jain, US based NRI. Five students- four of University of Delhi (including three of St. Stephen's' College) and one of IIT Ropar- were engaged as Interns to teach and mentor the students of the BMB School. The entire expenditure was borne by the School's management directly.
 - (e) **Kurukshetra:** The Summer School was residential for girl students of Classes XI to XII. The venue was Maharana Pratap Public School. In all, sixty-six girl students attended the School. Sixty-one stayed in the hostel and five were day scholars. Six girl students - five of Indian Institute of Science Education and Research, Mohali (IISER Mohali) and one of Panjab University - were appointed as Mentors. All of them stayed in the hostel along with the students. The emphasis was on fundamentals and concepts and their application through problem solving. The style and atmosphere were quite like that of a gurukul. The day started with a short yoga session. Adequate emphasis was laid on self-health management. Medical checkup of every student was carried out and suitable treatment prescribed, wherever required and medicines arranged free of cost.
 - (f) **Rewari:** The Summer School at Rewari was supported by Vikalp, a Rewari based organization set up by two IITians, engaged in preparing students of local areas for IITs, NITs etc.
 - (g) **Palwal:** The School at Palwal was meant for the students of Classes XI and XII and supported by the District Administration. Six students, four of IISER Mohali and two of IIT Kanpur, were appointed Mentors to teach at this School.
 - (h) **Panchkula:** Seven students, three of IISER Mohali and four of Panjab University, were appointed as mentors to teach the students of Classes XI and XII of Panchkula district. The expenditure was Rs. 1,17,819.00.
14. **Lectures under Monthly Lecture Series:** Started in the year 2012, this has become as a standing activity of the Society. During the year 2016-17, three lectures could be organized mainly due to preoccupation with Mobile Science Laboratory and Summer Schools. The details of the lectures organized are as under: -
- (a) 24.10.2016: Recent Advances in Artificial Intelligence, Robotics & Entrepreneurial Opportunities. Speaker: Siddharth Sood. Venue: Seminar Hall, Academic Block # 1, University Institute of Engineering and Technology, Panjab University, Sector-25 Campus, Chandigarh.
 - (b) 19.11.2016: Time to own Responsibility for Own Health. Speaker: Prof. R. P. Sapru, Eminent Cardiologist and formerly Professor of Cardiology, PGIMER, Chandigarh. Venue: Seminar Room, Department of Physics, Panjab University, Chandigarh
 - (c) 28.01.2017: Plastics: The Favourite Whipping Boys: Speaker: Gaurav Verma, Associate Professor, Dr SS Bhatnagar University Institute of Chemical Engineering & Technology, Panjab University, Chandigarh. Venue: Seminar Room, Department of Physics, Panjab University, Chandigarh

- (d) 25.02.2017 (Saturday): Technical Education-Problems and Solution Alternatives; Speaker: Prof. L. N. Mittal, Former Professor and Head, Curricula, Development Centre, NITTTR, Chandigarh
- (e) 19.03.2017: Gravitational Waves, a New Way of Seeing the Universe; Speaker: Prof. M. P. Khanna, Department of Physics, Panjab University, Chandigarh.
15. **Teachers Training:** May 10, 2016, four extension lectures on the emerging areas of science and mathematics were organized for the PG Teachers of the Indian Army at its Teachers' Training Faculty Development & Research Centre, Indian Army Public School, Shankar Vihar, New Delhi. Professors K. K. Bhasin (Chemistry), I. S. Dua (Biosciences), Keya Dharamvir (Physics) of Panjab University, Chandigarh and Dr. Amit Kulshrestha (Mathematics) of IISER Mohali delivered the lectures and interacted with the teachers.
16. **Foundation Day Lecture:** In its meeting held on November 27, 2016, the SPSTI's Governing Council decided to hold Foundation Day Lecture on October 14, the day on which the Society was registered. A noted scientist should be invited for this purpose.
17. **Celebration of International Water Day:** On the advice of Dr. O. N. Bhargava, Member of the Governing Council, it was decided to celebrate International Water Day.



President, SPSTI
October 7, 2017

Regd. Office & Correspondence Address

#229, Sector 4 Mansa Devi Complex, Panchkula - 134 114 Haryana

Phone : +91 172 255 8799

Mobile : +91 931 612 1799, +91 947 800 0088

Email : info@spsti.org, spsti.info@gmail.com

Website : www.spsti.org Facebook : www.facebook.com/spsti

