

PROFILE OF THE INDIAN SCIENCE CONGRESS ASSOCIATION

The Indian Science Congress Association (ISCA) is a premier scientific institution established in 1914 primarily for the purpose of providing a common platform to Indian scientists, engineers and technologists of all categories and belonging to different disciplines for sharing expertise and experience. The Association has been actively spreading the message of science among students and scholars all over the country and, in a way, helping the spread of a scientific temper among the people at large. The Annual Sessions of the Indian Science Congress provide opportunities to Indian scientists, and particularly those from younger generations, to come in contact with their seniors as well as their counterparts in developed countries, thus providing a very important input into the growth of Science in India. ISCA brings together scientists both from India and abroad for mutual interaction in the cause of national development. Ever since 1914, an annual Congress of the Association has been held every year with a very distinguished scientist as the General President. During the annual session of ISCA, representatives from similar associations throughout the world participate.

The objectives of the Association have not undergone any major change since 1914, though the scope of activities has increased. The objectives of the Association are as follows :

- (i) to advance and promote the cause of Science in India;
- (ii) to hold an Annual Congress at a suitable place in India;
- (iii) to publish proceedings, journals, transactions, etc.;
- (iv) to popularise Science.

The first meeting of the Congress was held from January 15-17, 1914 at the premises of the Asiatic Society, Calcutta, with the Honourable Justice Sir Asutosh Mookerjee, the then Vice-Chancellor of the Calcutta University, as General President. One hundred and five scientists from different parts of India and abroad attended and the papers numbering 35 were divided into six sections. Since then, many renowned scientists/ academicians from India and abroad have presided over Science Congress Sessions (Annexure - I).

From the modest beginning, with 105 members and 35 papers communicated for reading at the first session, ISCA has grown into a strong fraternity with more than fourteen thousand members. The number of papers communicated for reading often exceeds two thousand now. There are at present fourteen sections and one committee.

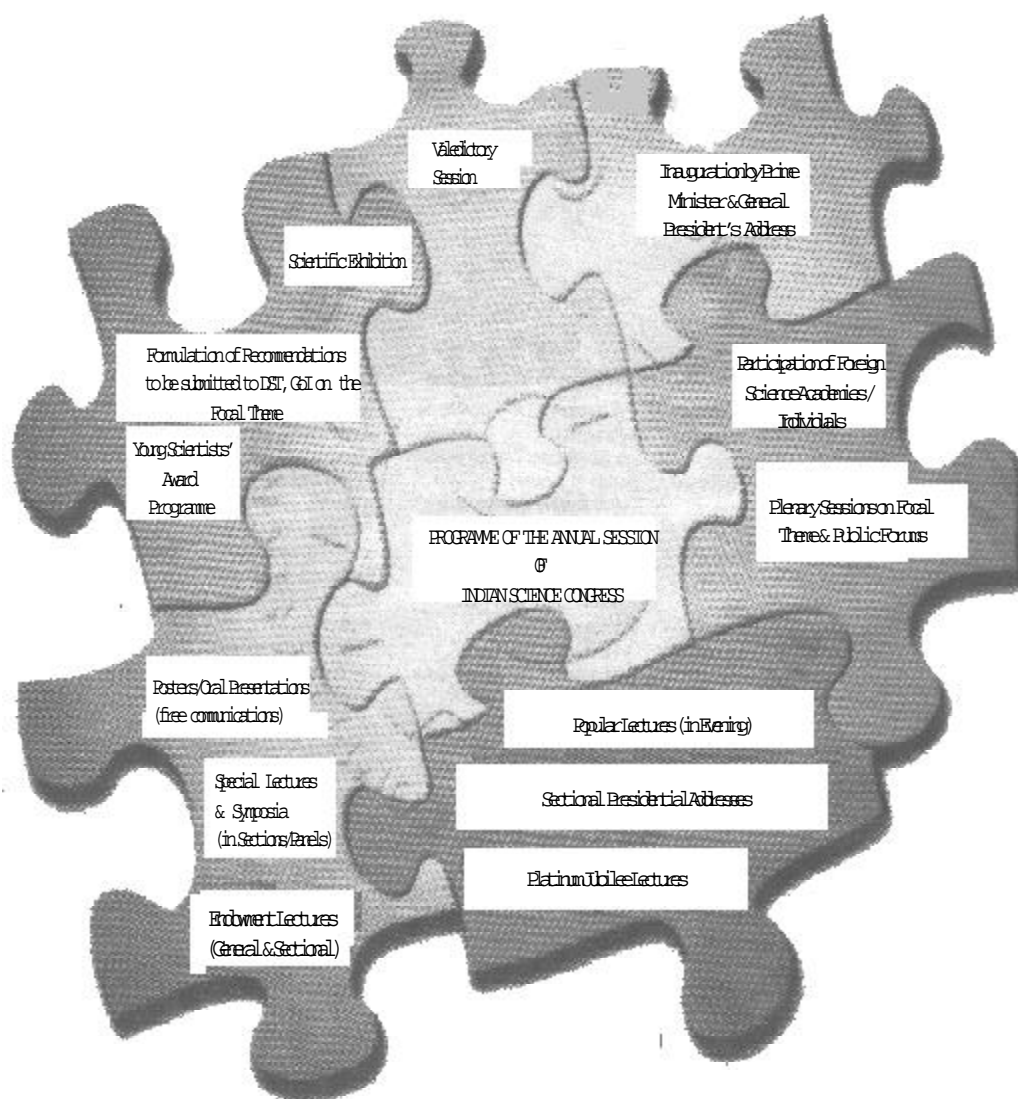
The year 1976 witnessed a significant breakthrough in the totality of deliberations in the Congress. It was being felt for sometime that such a gathering of scientists covering a wide spectrum, ought to be seized of national issues that have scientific and technological implications. Dr.M.S.Swaminathan, the then General President of ISCA, introduced the Focal Theme of national relevance which is now discussed during the annual session and several plenary sessions are organised around various facets of the Focal Theme in which scientists and technologists as well as policy makers and administrators interact with one another. ISCA has thus become a platform where members from different disciplines and from different walks of life can contribute to discussions on the Focal Theme.

In 1980-81, the Department of Science and Technology, Government of India, constituted a permanent Task Force involving representatives of ISCA and Chiefs of different agencies and voluntary organisations who are responsible for implementing various recommendations on the Focal Themes. Every year follow-up actions on recommendations made in the previous Science Congress are discussed at a general session during the annual Congress. Thus, ISCA to-day is involved not only in the development of Science and Technology in the country but also plays an important role in the formation of National Policy on Science and Technology of the country. On the basis of the recommendations emerging from the deliberations made during the Science Congress Sessions, the Government of India has created new Departments, made several changes in the rules of business in different existing Departments and taken several concrete measures to promote causes of Science in India.

ISCA introduced a programme for the benefit of young scientists from the 68th Session of the Indian Science Congress in 1981. The programme enables young scientists to present their proposed research work with opportunities to exchange ideas in the relevant scientific problems with their counterparts and specialists. For excellent presentations, upto 25 such scientists are given ISCA Young Scientist Awards.

Further, to encourage young scientists it was decided that some of the contributed papers on the basis of a careful screening to be done by the concerned Sectional Presidents with the help of some experts will be presented mostly by way of posters and at most two Prizes be awarded to the best Poster presentation in each Section from 1999 Session. Oral presentations of some selected contributed papers are also included in the programme of each section.

The programme of the annual session of the Indian Science Congress is generally planned as in the following chart :



THE NINETYFIRST INDIAN SCIENCE CONGRESS

Inauguration

The 91st Session of the Indian Science Congress was held at Chandigarh under the joint auspices of the Panjab University and Institute of Microbial Technology from January 3 to 7, 2004. Hon'ble Prime Minister of India Shri Atal Behari Vajpayee could not attend this Congress due to unavoidable circumstances. His message was read by Hon'ble Union Minister, Human Resource Development, Science & Technology and Ocean Development, Dr. Murli Manohar Joshi and he also inaugurated the 91st Session of the Indian Science Congress at 10 a.m. on January 3, 2004. Prof. Asis Datta, General President of the Indian Science Congress presided over the function. About 4000 delegates from Indian and abroad attended the Congress.

The inauguration was started with invocation and presentation of Bouquets.

Prof. K.N. Pathak, Vice-Chancellor, Panjab University and Chief Patron 91st Science Congress delivered the welcome address. Shri Amarinder Singh; Hon'ble Chief Minister of Punjab; Shri O.P. Chautala, Hon'ble Chief Minister of Haryana; Justice (Retd.) O.P. Verma, Governor of Punjab and Shri Babu Parmanand, Governor of Punjab also addressed on this occasion.

Dr. Murli Manohar Joshi, Hon'ble Minister for Human Resource Development, Science & Technology and Ocean Development, while inaugurating the 91st Indian Science Congress referred to the focal theme of this year's Science Congress - "Science and Society in the Twentyfirst Century : Quest for Excellence" and said "The pre- and post-independence era saw the setting up of a wide infrastructure for R&D with the establishment of national laboratories and institutions of higher learning which attracted some of the best minds of the day. But, by 1990's, some disturbing features in our manpower scenario started surfacing. Our national laboratories, universities and higher educational institutions had an ageing manpower profile requiring infusion of quality young manpower. But, there was a mismatch between the number of bright students opting for a career in science and scientific R&D and national requirements. The R&D infrastructure in these institutions also needed to be upgraded and modernized. We had this incongruent situation - while the emerging knowledge-economy demanded excellent and quality human resource churning out ever-competitive new technologies, the availability of such manpower and quality of their training was increasingly becoming a matter of concern. This had a deleterious effect on the quality of our R&D".

In this regard Dr. Joshi pointed out "My ministry has taken several steps and introduced a number of innovative schemes to take ever increasing numbers of children to schools. School syllabi

have been imaginatively revised to introduce newer concepts and emerging disciplines. The Prime Minister's slogan of "Jai Vijnan" has become the propeller for creating a widespread awareness for science. The year 2004 has been declared as the year of 'Science Awareness'. A Vijnan Rail Yatra was flagged off by the Hon'ble Prime Minister on December 15th, 2003 and is perambulating the four corners of India. This train will inform the country about the level of excellence achieved by India in the domain of Science and Technology. At the School level, the National Children's Science Congress is infusing the sense of scientific enquiry and training students in the methods of scientific experimentation. In order to encourage and stimulate school children to think creatively and reach the goals of excellence, CSIR, at my initiative, launched the CSIR Diamond Jubilee Awards in the year 2002 for inventions of school children. The students have been stimulated to innovate and Madhav Pathak, a socially responsive Class X student was awarded the first prize in 2002 for his invention of a frontface braille writer that enables the blind to read simultaneously with writing."

Regarding pursuing the goal of excellence Dr. Joshi said "To my mind, pursuit of excellence means a desire to improve, to innovate, to contribute, to scale higher and higher peaks to explore the new horizons of knowledge, to widen the frontiers - in essence it means competing against one's own self. The spirit of enquiring about the unknown and hidden dark areas is full of hazards and risks of failures. But the indomitable urge for creativity, this spirit to innovate, provides the light which enables one to reach the newer peaks. And, when one stands on a peak he or she becomes the leader. So, if you permit me, I may give a motto for the scientists, "India innovates, India leads and India Excels".

While discussing on the Drive towards Excellence, Dr. Joshi pointed out some of the New Initiatives taken during last 5 years and also the Glimpses of Achievements in this regard. Dr. Joshi said "The Government has set up a high-level committee to look at the wide-ranging policy guidelines in STP-2003 and prepare a blueprint for implementation of those policies. Brain-storming is currently on to draft Action Plans for various areas in order of priority. Human Resource Development has been judged to be the most important area. UGC, DST and AICTE have already decided to form a joint Task Force to look at the human resource aspects of STP-2003.

The Science Olympiad activities in the country have been considerably strengthened. It is now a well-orchestrated movement in the country with Department of Atomic Energy, MHRD and Department of Science and Technology providing invaluable assistance. Our teams have been doing extremely well in the International Olympiads, which only goes on to show that our children have all the ingredients to excel if provided the right environment and facilities for training. A very innovative, and by far the most attractive, scholarship scheme at the school and college level, the Kishore Vaigyanik

Pratsahan Yojana (KVPY) has been started which aims at selecting the brightest among the young school and college students and nurturing and training them continuously till the Master's stage. The International Olympiad participants are automatically offered this scholarship. The Department of Atomic Energy and CSIR have agreed to offer opportunities to the International Olympiad medalists subject to their maintaining satisfactory scholastic performance. The Department of Biotechnology is offering scholarships to bright students to pursue higher studies in biology or medicine. The CSIR Programme on Youth Leadership in Science (CPYLS) exposes school students to the world and challenges of scientific research by exposing them to the activities of CSIR laboratories. A number of non-governmental organizations are also contributing to this cause like the Intel Corporation, the Science Olympiad Foundation, the Jagadish Bose Science Talent Programme, etc.

Considering that scientific research ultimately hinges on human creativity and that scientific creativity blooms quite early in one's career, special attention has been paid to groom Young Scientists, who form an important target group for nurturing excellence. Fellowships of research fellows have been regularly increased to make their life comfortable and to attract young people to scientific research. Some special fellowships like the Shyama Prasad Mukherjee Fellowships of CSIR, the KS Krishnan Fellowships of the DAE motivate and reward the top performers with even higher fellowships. For post-doctoral work, the Research Associateships have also been made more paying on a regular basis. To enable young scientists to pursue their scientific ideas on their own and to establish them as independent individual researchers, the Department of Science and Technology has been granting Fast Track projects to such candidates. This gives them a respectable fellowship with the flexibility of mobility so that they do not lose out on their employment because of the project. The BOYSCAST Fellowships of DST provide opportunities to young scientists to receive post-doctoral training abroad. At the apex level of excellence, the Government instituted the Swarnajayanti Fellowships to attract, recognize and reward the brightest among young scientists to pursue world-class science with an attractive scholarship and a major research grant. As some of the bright young scientists, due to the vagaries of employment opportunities, lose out on their performance and are not able to effectively compete for the Swarnajayanti Fellowships, the Department of Science and Technology has drafted a new scheme to continuously nurture excellent young scientist project investigators till the Swarnajayanti stage by providing them successive projects."

Dr. Joshi also pointed out "Another path-breaking initiative has been taken recently and it is receiving worldwide acclaim. Women constitute half the population and a significant portion of the scientific workforce. They, however, have to go through an almost mandatory break in their career due to motherhood and family responsibilities. This problem has persisted for a long time, ever since women joined the scientific workforce. This led to our losing a significant number of gifted

women scientists due to a god-ordained social responsibility. The Government of India, last year, started a new Women Scientist Scheme to enable such women scientists to make a re-entry into mainstream research in basic and applied sciences and on society-related scientific problems and also to train some of them for pursuing science-based self-employment opportunities like patent searches, scientific editing, etc.”

Considerable effort has been put in to upgrade the infrastructure and R&D facilities in higher educational institutions. Roorkee University has become an IIT; the Regional Engineering Colleges have become Centrally-funded National Institutes of Technology. University of Allahabad is expected to become a Central University. Four National Institutes of Science are going to come up at Chennai, Pune, Bhubaneswar and Allahabad. The possibility of having a few more IITs is also being explored. We have been awarded an ‘Observer’ status for our contributions to accelerator and detector building activities at CERN, we are a leading nation in DNA finger printing, we are a acknowledged emerging vaccine power - and all this in addition to our strengths in IT and ITES. The medical devices laboratory of the Sree Chitra Tirunal Institute of Medical Sciences and Technology has recently earned international accreditation for testing of biomedical devices. This government funded institution of national importance has, for long, been serving the Nation by developing cost-effective biomedical technologies. Our scientists receive the most coveted prizes, are on the editorial boards of most prestigious journals and fellows of the most prestigious academies.

We have become one of the leading nations in developing and using space technology for national benefits. The launch of INSAT-3A, INSAT-3E and GSAT-2 last year has further boosted the capability of our satellite system to provide communication, television broadcasting, meteorology and disaster warning services. We have initiated new areas of space application like tele-medicine to provide super-specialty medical consultation to remote and rural areas. We have decided to launch an exclusive satellite for education, known as EDUSAT, which will be launched by our own launch vehicle, GSLV, this year. We also launched in October last, the most sophisticated remote sensing satellite, RESOURCESAT-1, which will help us to monitor our resources in a better manner. Our scientists have proved that they are second to none in mastering the technology of launch vehicles and we have successfully commissioned our Geo-Synchronous Satellite Launch Vehicle after its second successful test flight in May last year. We have ambitious plan to explore the universe and we have decided to undertake a scientific mission. Chandrayaan-1, to explore our nearest celestial neighbour, the Moon.”

Dr. Joshi also released the “Plant Genome Research— Road Map 2010” on this occasion.

While speaking on the Focal Theme “Science and Society in the Twenty First Century : Quest for Excellence” Prof. Asis Datta, General President, ISCA explained — “The population burst projects an additional 725 million mouths to feed in the next 10 years. By 2020, this figure would touch 1.2 billion, equivalent to the population of Africa and South America combined. This expansion comes in addition to the fact that today some 800 million people—nearly one in seven face chronic hunger. This is especially devastating to the world’s children, as every one out of three is under nourished and a child dies every five seconds due to hunger. Hunger affects those, who may appear to get enough to eat but lack nutritive quality. Altering the diet pattern of people and providing them nutritive food could prevent chronic diseases. Science, though provides a solution, cannot solve the problem of food availability and malnutrition alone. A combination of agricultural technology, political and economic reforms can increase crop productivity and improve the nutritional content of crops in developing countries”.

Prof. Datta also pointed out “Agricultural biotechnology achieves enhanced crop productivity in a more environmentally sustainable way. In the United States, the growing use of agricultural biotechnology is resulting in reduced use of pesticides and increased adoption of environmentally friendly farming practices such as ‘no-till’ farming, which reduces soil erosion and fertilizer run-off. Enhanced productivity means that more food can be raised on the same amount of land. As population pressure grows in the coming years, the ability to grow enough food for the world’s burgeoning population without encroaching on vital habitats such as tropical rainforests will be of enormous benefit to the environment. The challenge is to make tried and tested varieties of biotechnology-derived crops available to more developing countries and to help develop new varieties specifically adapted for their conditions. I believe that agricultural biotechnology can help both the developing and developed nations to enhance productivity while preserving the environment.”

Prof. Datta also added “Genomics is changing the face of biology. The genome sequences of several organisms have been deciphered by the coordinated efforts of several international laboratories. The focus now is on functional genomics, wherein the function of every gene needs to be established by high-throughput technologies covering the microarray and proteomics.”

“One of the cardinal principles of economic growth in Indian civilization has come with awareness of environmental responsibility. Environmental responsibility requires much better understanding of the complex inter-relationships among components of the biosphere and among human activities and the world around us. We must build upon our strengths and carry out fundamental research to develop appropriate technologies to detect and rectify environmental problems, to manage natural resources, and to sustain the environment. The projected growth of population, economy,

and industrial production revealed an urgent need to improve industrial processes and products, and to provide food and energy with least impact on the environment. The understanding of biological and physical processes is vital in maintaining biodiversity and healthy ecosystems.”

Prof.Datta said “The new century’s opportunities in research should be focussed on agricultural biotechnology, environmental biotechnology with a focus on bio-remediation, manufacturing/bio-processing, including energy research, and marine biotechnology and aquaculture. The plans were developed with input from the private sector. Such research is aimed at understanding the social, cultural, ethical, economic, and legal implications of biotechnology research and its applications. A coordinated effort is needed to pursue these priorities to provide, over the next decade, the leverage needed to fulfill the broad promise of biotechnology, which may well play as pivotal a role in social and industrial advancement over the next 10 to 20 years.”

“Science means the triumph of human mind over matter; there are therefore no limits to the excellence to which human mind can develop. Excellence of course can never be parameterized, bound down, or codified to measurable standards. Even so, the quest for excellence is the driving force of human societies and civilizations as much as it is for human individuals and institutions. It is in the attainment of excellence that the solutions to the societal problems lie.

Excellence needs to be achieved both at individual and institutional levels. Each one of us seeks excellence in our daily endeavour and in some cases, through exceptional ability of some individuals in selected spheres. At the institutional level, education and research are the best guarantee for success in the quest for excellence. India has witnessed phenomenal growth in educational and research infrastructure ever since independence and due to the foresight of the successive governments over the past five decades and more that high quality education was set as a high priority in India. The present government too is committed to increasing the allocation of funds for research and development up to 1 to 2% of the GDP in five years. The increased investment into research on biotechnology, information technology and traditional knowledge will fund more researchers and will provide opportunities to educate and train a new generation of researchers whose skills cross disciplinary boundaries.”

In this regard, Prof.Datta proposed several aspects that would encourage and strengthen scientific excellence in this country in the years to come. The first of all is **Excellence in our education** where the question of university education and basic research, is involved. Prof.Datta pointed out “The area that needs attention is the empowerment of young scientists working in the universities and in national institutes. If the corporate world can have young CEOs why should Science be far away? Give freedom to the young ones and they will do wonders.”

Moreover Prof. Datta suggested "Teachers should be trained to encourage a questioning mind. When would a teacher favour such an attitude? If the teacher himself or herself is confident about their knowledge base, then he/she does not feel at a loss. Thus, there should be a continuous up-gradation of the teacher's knowledge base.

The other proposal is to tap the knowledge base of successful professors, technocrats and technically qualified bureaucrats. Select about 100,000 such persons who have retired from their services, honour them as National Teachers. Let them choose or let the schools choose one or two such teachers. These teachers would visit the school three hours per week and transmit the excitement of their field of interest and discuss with the students. They may also be able to identify a bright spot in the class, as they are not taxed with the time bound coverage of syllabus or the examination burden. These teachers should play a role model to the students in various schools and inculcate their knowledge in these youngsters. They should talk to the 9th and 11th standard students. Two reasons for this choice of class, one that the students are not in the immediate race for high percentage scoring, secondly this would help them in selecting a stream of choice or course in the next year."

"Another important aspect in **Higher funding for education** is the state funding for education. Our honourable Prime Minister has assured in the last Science Congress for a higher outlay for Science and Technology accounting to upto 2% of the GDP. I would like to request you, Sir," Prof. Datta suggested "the education sector in fact needs increased outlay in our budget and in the next five-year plan. This would go a long way to strengthen the infrastructure and higher salary to recruit quality teachers in schools, colleges and universities that receive federal funds. However, the situation in state government-funded institutions is not healthy. Sir, may I with your permission, propose that legislation be introduced that guarantees minimum outlay for education in all our forthcoming state budgets as well. This is important to raise the minimum standards of education in the country."

Speaking on the **Role for women in scientific excellence** Prof. Datta said "In my understanding, we are now tapping only 50% of the female scientific strength of this country. There is an equal number waiting to be tapped. But it is also a time to ponder the numbers at this juncture. It is a common observation that starting from the CBSE examinations, the newspapers highlight the better performance of the girl students at each stage. At the university level, girls often outnumber boys, especially in biology, the number of girls coming for Master's programme or Ph.D. is large. But this does not translate into women occupying chairs of heads of research institution, or positions that requires decision-making? We should ask ourselves 'Why'? By far women are great managers, both of people and time and are vital in decision making in the family set up either directly or indirectly."

Prof. Datta also spoke on **Nutrition Security in the next millennium**. He remarked “We have achieved food security. The Green Revolution and Operation Flood are matters of great pride for all Indians. We now turn to nutrition security from food security. What has been achieved through iodised salt needs to be done for iron fortification and protein fortification. It may not be out of place to mention that one of our own efforts led to generation of transgenic potatoes fortified with *Amarnathus* protein. We ought to provide not only carbohydrate but also protein rich diet to the people, as potato is consumed by a large population in rural and urban India.”

On the aspects of **Science and Economic Development**, Prof. Datta said “The transition of products and processes from laboratory to the people requires a close co-operation of the academia and the industry. This is an essential component to reap the fruits of biotechnology and genomics. Our funding agencies like the DBT, CSIR, DST, ICMR, IARI and DRDO have been extensively funding research programmes but the partnerships between academia and industry needs to be strengthened as also a higher level of funding and more accountability.”

Lastly, Prof. Datta remarked on **The Health Sector** “Clean water, clean surroundings and clean environment remain highly desirable goals and of course deserve top most priority. But there is a need to increase health awareness among the people, awareness about infectious diseases and the importance of following the prescribed medication course, so as to reduce the problem of drug resistant strains. The media and the press have a great role to play. The future also will depend on biotechnology to play a major role in developing new drugs, vaccines and rapid diagnostics for many diseases.”

As Shri Atal Behari Vajpayee, Hon'ble Prime Minister of India could not attend the function, Dr. Joshi read out some relevant portions from the Prime Minister's speech. These are —

“India's success in achieving self-reliance in food production is only one of the numerous achievements made possible by our science and technology establishment. Indeed, today there is not a single area of India's socio-economic development that does not bear the signature of Indian S&T in some form or the other. In the years to come, this signature will look even more bold and pleasing as we script the story of making India a Developed Nation by 2020.

A latecomer in industrial R&D, India now ranks the highest among all countries in the rate of growth of patent filings, which is now around 300% per year. In this context, the Council of Scientific and Industrial Research (CSIR) has done India proud by securing, under the Patents Cooperation Treaty, No.1 position as the highest filer of patents from all developing countries, including South Korea, China and Brazil.

India's progress in biotechnology shows how quickly we are matching global standards of excellence in a frontier area of science. For this, I compliment the Department of Biotechnology and our many dynamic Indian biotech companies, which are poised to ride the bio-industrial revolution now on the anvil.

India is also actively helping other developing countries in this area. I have very recently inaugurated, with the President of Syria, a National Biotechnology Centre in Damascus. I am going to Islamabad today to take part in the SAARC summit. I shall discuss with my counterparts how we can expand regional cooperation in diverse areas of science and technology for mutual benefit.

The situation presents two distinctive features, which were previously absent. Firstly, a strong alliance - moving on the four wheels of science, technology, business and government - has been put in place. This has greatly toughened the competitive muscle of the Indian economy and also improved service delivery in the social sector. We will have to constantly strengthen this alliance to meet the challenges of the present and the future.

The second change is equally striking. Unlike in the past, top-notch Indian scientists and technology developers are no longer of the view that they can produce high-quality work only by going out of India. A significant number of Indian scientists and engineers, who had gone to western countries for study and work, are now returning to India. This is because attractive opportunities for challenging R&D activities are being created in India itself.

Similarly, we are keenly expecting biotechnology to provide affordable solutions to two of the biggest challenges in health care - namely, cure and prevention of numerous infectious and non-infectious diseases; and improving the nutritional status of the poor, especially the women and children.

I would like the Science Congress to annually review the progress made in implementing this Policy and suggest correctives. In doing so, the motto for every institution that is a part of India's S&T establishment - indeed, the motto for all the scientific and non-scientific personnel working in it — should be pursuit of excellence. I am happy to note that this is also the theme for this year's Science Congress.

In my address at the Lucknow Science Congress in 2001, I had called for an end to bureaucratism in our S&T institutions and overhauling of procedures for clearances and approvals. I would like this to be implemented effectively and without any further delay."

After this, Hon'ble Chief Minister of Haryana, Shri O.P.Chautala, Minister of State for Science and Technology, Government of India, Shri Bachi Singh Rawat, Minister for Higher Education, Punjab, Shri Harnam Dass Johar, Governor of Punjab, Justice(Retd.) O.P.Verma and Governor of Haryana Shri Babu Parmanand also gave their addresses on this occasion.

Then, Dr. Joshi presented the following awards to the respective recipients :

<i>Asutosh Mookerjee Memorial Award</i>	:	Dr. K. Kasturirangan
<i>C.V.Raman Birth Centenary Award</i>	:	Prof. G. Venkataraman*
<i>Srinivasa Ramanujan Birth Centenary Award</i>	:	Prof.V. C. Dumir
<i>Jawaharlal Nehru Birth Centenary Award</i>	:	Prof. M. Vijayan Prof. H. Y. Mohan Ram
<i>M. N. Saha Birth Centenary Award</i>	:	Prof. A.K. Sood
<i>P.C.Mahalanobis Birth Centenary Award</i>	:	Prof. Kalyan B. Sinha
<i>H.J.Bhabha Memorial Award</i>	:	Prof. A. K. Barua
<i>B.P.Pal Memorial Award</i>	:	Dr. H. K. Jain*
<i>B.C.Guha Memorial Lecture</i>	:	Prof. Samir Bhattacharya
<i>Rajkristo Dutt Memorial Award</i>	:	Dr. C. M. Gupta
<i>G.P.Chatterjee Memorial Award</i>	:	Dr. V. P. Sharma
<i>Jawaharlal Nehru Prize</i>	:	Kerala Sastra Sahitya Parisad, Thiruvananthapuram*
<i>The Science-in-Society Award</i>	:	Dr. Robin Mukhopadhyaya Prof.Anil K. Gupta

Prof.B.P.Chatterjee, General Secretary (Headquarters), ISCA gave the vote of thanks on behalf of Indian Science Congress Association. The ceremony ended with National Anthem.

After the inauguration, Dr.Murli Manohar Joshi, Hon'ble Minister for Human Resource Development and Ocean Development inaugurated the Science Exhibition - Pride of India.

*Unable to attend the inauguration.

Plenary Sessions on the Focal Theme

The Focal Theme '**Science and Society in the Twenty First Century : Quest for Excellence**' was introduced by the General President, Prof. Asis Datta at the inaugural function of the 91st Indian Science Congress on January 3, 2004.

The Plenary Sessions on the Focal Theme were held as follows :

PLENARY SESSION - I

January 3, 2004

13.45 to 16.00

Information Science in Future of India : Five Ideas that Can Transform India

Chair : Dr.R.A.Mashelkar, Director General, CSIR, New Delhi
Rapporteur : Dr.Anand K.Bachhawat, Institute of Microbial Technology,
 Chandigarh

Speaker	Topic
Shri F.C.Kohil, Tata Consultancy Services Mumbai	Computerisation of Societal Systems
Prof.Ashok Jhunjunwala, Indian Institute of Technology, Madras	Using Internet Towards Doubling Per Capita Rural GDP in Ten Years
Prof. Anil K. Gupta, President, SRISTI & Professor, Indian Institute of Management Ahmedabad	Making India Innovative : Can Grass Roots Genius of India Be Given Chance?

Speaker	Topic
Prof. Vijay Chandru, Indian Institute of Science, Bangalore	A Virtual Sense of Life
Dr. Vijay Bhatkar, Chairman, ETH Research Lab., Pune	Transformation Shifts in Computing

PLENARY SESSION - II

January 3, 2004

16.00 to 18.00

Ethics and Responsibility in Science

- Chair* : Prof. M. G. K. Menon, Dr. Vikram Sarabhai Distinguished
Professor, ISRO, New Delhi
- Rapporteur* : Dr. T. S. Rao, Director, Department of Biotechnology,
New Delhi

Speaker	Topic
Dr. P. N. Tandon, President, National Brain Research Centre, Guragaon.	Bioethics in Post-Genomic Era
Dr. H. K. Jain, Director General, ISNAR, The Hague	Responsibility and Values in Scientific Research

Speaker	Topic
Dr.Kirit Parikh, Chairman, Integrated Research and Action for Development (IRADE), New Delhi	The Ethical Scientist in Global Haat
Prof. Indira Nath, New Delhi	Ethics in Educational System
Dr. P. V. Indiresan, New Delhi	Even if Science is Neutral, Can Scientists Be Neutral?
Dr.M.A. Chitale, Vendanta Grihakul Savarkar, Aurangabad	Ethics of Water Management

PLENARY SESSION - III

January 4, 2004

09.00 - 11.45

New Frontiers in Biotechnology

- Chair* : Dr.Manju Sharma, Secretary, Department of Biotechnology,
Govt. of India, New Delhi
- Prof.A.M.Chakrabarti, The University of Illinois at Chicago,
Chicago, USA
- Rapporteur* : Dr.Alka Sharma, Department of Biotechnology, Govt. of India
New Delhi

Key note address :

Dr.Inder M.Verma,
Laboratory of Genetics,
The Salk Institute, USA

Molecular Medicine, The Next
Two Decades

Speaker	Topic
Dr.Sanjeev Munshi, Associate Director, Merck & Co. Inc., USA	Structure Based Lead Discovery : A High Throughput Approach
Prof. M. R. S. Rao, President, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	Genomics and Modern Biology
Dr.V.Mohan, Director, Madras Diabetes Research Foundation, Chennai	Genetics of Diabetes

Panel Discussion

Rapporteur : Dr. Meenakshi Munshi, Dept. of Biotechnology, New Delhi

Participants	Subject
Prof.S.K.Basu, NIL, New Delhi	Immunology
Prof.V.Ravindranath, NBRC, Gurgaon	Brain Research
Prof.Debi Sarkar, UDSC, New Delhi	Gene Delivery

Participants	Subject
Dr. S. E. Hasnain, CDFD, Hyderabad	Microbial Biotechnology
Dr. G. Sahni, IMTECH, Chandigarh	Protein Engineering
Dr. Murali Sastry, NCL, Pune	Nanotechnology

PLENARY - IV

January 4, 2004

16.35 - 18.15

Challenging Frontiers in Biomedical Research

- Chair* : Prof. N. K. Ganguly, Director General, ICMR, New Delhi
 Dr.Sandip K. Basu, Director, National Institute of Immunology,
 New Delhi
- Rapporteur* : Dr.Pradip K. Chakraborti, Institute of Microbial Technology,
 Chandigarh

Key note address:

Dr.Rita Colwell,
 Director,
 National Science Foundation,
 USA

Using Remote Sensing in the
 Bay of Bengal to Predict Cholera
 Epidemics

Speaker	Topic
Dr.G.Balakrish Nair, Associate Director, ICDDR, Bangladesh	The New Cholera Pandemic: The 0139 Case Study

Speaker	Topic
Dr.H.N.Saiyed, Director, NIOH, Ahmedabad	Status of Water Potability in Our Country
Dr.Amit Ghosh, Director, IMTECH, Chandigarh	Emergence of Drug Resistance in <i>Vibrio cholerae</i> : Presence of Integrans and Constins in Non-01, Non-0139 Strains Isolated in India
Prof.Yoshifumi Takeda, Professor, Jissen Women's University, Japan	<i>Esherichia coli</i> 0157:H7 :- A Pathogen's Climb to Notoriety

PLENARY SESSION - V

January 5, 2004

09.00 - 11.00

Science and Evergreen Revolution

Chair : Prof.M.S.Swaminathan, UNESCO Professor in Ecotechnology &
Chairman, M.S.Swaminathan Research Foundation, Chennai

Rapporteur : Dr.Sudip Chattopadhyay, NCPGR, New Delhi

Speaker	Topic
Prof.M.S.Swaminathan M.S.Swaminathan Research Foundation, Chennai	Biotechnology and Organic Farming

Speaker	Topic
Prof.Michael Gale, Director, John Innes Centre, UK	Synteny- A New Paradigm for Cereal Genetics
Dr.C.Ramasamy, Vice-Chancellor, Tamil Nadu Agricultural University Chennai	Evergreen Revolution : Indian Perspectives
Dr.Usha Barwale, MAHYCO, Hyderabad	Agricultural Technology Development and Adaption : Implications for Sustainable Agriculture and Food Security
Dr. G. S. Khush, International Rice Research Institute (IRRI), Manila, Philippines	Feeding the World in Twenty First Century – Role of Science

PLENARY SESSION - VI

January 5, 2004

16.30 - 18.00

Strengthening of Knowledge Base in Educational Institutions

Chair : Prof.Arun Nigavekar, Chairman, University Grants Commission,
New Delhi

Rapporteur : Dr. (Ms.) Raj Gupta, Dept. of Education,
Panjab University, Chandigarh

Speaker

Prof. H. P. Dikshit,
Vice Chacellor,
Indira Gandhi National Open
University, New Delhi

Prof.M.Anandkrishnan,
Chairman, Madras Institute of
Development Studies, Chennai

Dr. Y. Venkatarami Reddy,
Chairman, Jawaharlal Nehru
Technological University, Hyderabad

Dr.R.Natarajan,
Chairman, AICTE, New Delhi

Dr.S.Ramani,
Research Director,
HP Labs India, Bangalore

PLENARY SESSION - VII

January 7, 2004

9.00 - 11.00

**Role of Traditional Knowledge in the
Advancement of Modern Science**

Chair : Dr. P. Pushpangadan, Director, NBRI, Lucknow

Rapporteur : Dr. P. Guptasarma, IMTECH, Chandigarh

Speaker	Topic
Dr. P. Pushpangadan, NBRI, New Delhi	Role of Traditional Knowledge in 21st Century Herbal Technology
Dr. Gourdas Choudhuri, Sanjay Gandhi P. G. Instt. of Medical Sciences, Lucknow	Traditional Knowledge and Modern Medicine : Old Wine in New Bottle
Dr. Shakti N. Upadhyay, Reliance Industries Ltd., Mumbai	Ageing: Science and Philosophy
Dr. P. Guptasarma, IMTECH, Chandigarh	Molecular Perspective on Traditional Biomedical Knowledge
Dr. K. R. Koundal, IARI	Modern Approaches for Gene Isolation and Development of Transgenic Crops
Dr. Ashok Misra, Director, Indian Instt. of Technology, Bombay	Traditional Knowledge in Modern Society – Relevance, Intellectual Property Rights and Policy Issues

Panels

PANEL - I

January 4, 2004

11.45 - 13.00

Child Development and Nation Building

Chair : Prof. M.K. Bhan, All India Institute of Medical Sciences,
New Delhi

Speaker	Topic
Prof. Jacob John, Christian Medical College, Vellore	Childhood Infectious Diseases : The Unfinished Agenda
Prof. H. P. S. Sachdev, Maulana Azad Medical College, Delhi	Nutrition Transition in Indian Children and the Early Life Origins of Adult Diseases: A Challenge for the Future
Prof. M. K. Bhan, AIIMS, New Delhi	Burden of Micronutrient Deficiency in the Life Cycle and Impact on Development
Prof. I. C. Verma, Sir Ganga Ram Hospital, Delhi	Strategies for Prevention of Genetic and Other Disorders that Affect Development

PANEL - II

January 5, 2004

11.00 - 12.30

Global Warming and Environment

Chair : Dr. A. P. Mitra, Honorary Scientist of Eminence,
National Physical Laboratory, New Delhi

Rapporteur : Dr. Rajeev Puri, Dept of Physics, Panjab University, Chandigarh

Speaker	Topic
Dr. A. P. Mitra, National Physical Laboratory, New Delhi	Overview of Indian Efforts (Climate Change and Environment)

Speaker	Topic
Dr. S. R. Sikka, Chairman, Indian Climate Research Programme	Indian Climate Research Programme
Dr. Rupa Kumar Kolli, Indian Institute of Tropical Meteorology (IITM), Pune	Climate Change Over India : Past, Present and Future
Prof. A. Jayaraman, Physical Research Laboratory (PRL), Ahmedabad	Aerosols and Climate
Dr. Prodipto Ghosh, Ministry of Environment and Science, Govt. of India	Climate Change and India

PANEL - IIIA

January 6, 2004

9.00- 10.30

Women and Sustainable Development

Chair : Dr.G.Talukder, Ramakrishna Mission Seva Pratisthan, Kolkata

Rapporteur : Dr.Renu Swarup, Director, Dept. of Biotechnology, New Delhi

Speaker	Topic
Dr.S.Lakshmi Devi, Shaheed Rajguri College of Applied Sciences for Women, Delhi	Economic Empowerment of Women

Speaker	Topic
Dr. Asha Mathur, Saraswati Medical College, Lucknow	Messages for Safe Motherhood and Infant Care
Dr. Gurjeewan Grewal, Post Graduate Institute of Medical Education and Research, Chandigarh	Prevalence and Prevention of Iron Deficiency in Indian Women
Dr. Renu Swarup, Director, Dept. of Biotechnology, Govt. of India, New Delhi	Women and Sustainable Development : Biotechnological Intervention
Dr. Parul Chakrabarti, Bose Institute, Kolkata	Tuberculosis - A Global Emergency : Women's Role

PANEL - IIIB

January 6, 2004

10.30 - 12.30

**Representative Works of a Few Young
Women Bioscientists of Promise**

Chair : Prof. Kasturi Datta, Jawaharlal Nehru University, New Delhi

Rapporteur : Dr. Sangeeta Mukhopadhyay, CDFD, Hyderabad

Speaker	Topic
Dr. Mitali Mukherji, IGIB, Delhi	Repetitive Sequences and the Human Genome: Insight from Alu elements DNA Replication and Translation Within the Plastid of the Malarial Parasite

Speaker	Topic
Dr.Subhra Chakraborty, NCPGR, New Delhi	Nutritional and Stress Genomics : Gene Discovery and GM Crops
Dr.Sangita Mukhopadhyay CDFD, Hyderabad	Nitric Oxide Regulates IL -12 Induction in Macrophage : A Cross Talk Between the Innate and the Adaptive Immunity
Dr.Nibedita Lenka NCCS, Pune	Embryonic Stem Cells: The Elegant <i>in vitro</i> Paradigm in Understanding Prospective Embryonic Development
Dr.Taruna Madan Gupta IGIB, New Delhi	Multifaceted Role of Lung Surfactant Proteins in Aspergillosis

Special Lecture/Public Forum

January 3, 2004

18.00 - 19.00

Chair : Dr. R. Chidambaram,
Principal Scientific Adviser to Govt. of India

Speaker	Topic
Prof.C.N.R. Rao, Linus Pauling Research Professor, J.N. Centre for Advanced Scientific Research, Bangalore	New Dimensions of Chemical Science

January 4, 2004

18.15 - 19.00

Chair : Prof. Asis Datta,
Director, NCPGR, New Delhi

Speaker

Topic

Dr. Bruce Alberts,
President,
National Academy of Sciences, USA

Spreading a Scientific Temper
Throughout the World: Why and How?

January 5, 2004

17.15 - 18.00

Chair : Prof. Asis Datta,
Director, NCPGR, New Delhi

Speaker

Topic

Dr. Hartmut Michel,
University of Frankfurt,
Frankfurt, Germany

Membrane Proteins as Targets for
Drugs in Medicine and in Agriculture

18.30 - 19.15

Speaker

His Excellency Dr. A. P. J. Abdul Kalam,
The Hon'ble President of India

Chair : Prof. Asis Datta,
Director, NCPGR, New Delhi

January 6, 2004

16.45 - 18.15

Chair : Dr. G. S. Khush,
International Rice Research Institute (IRRI) Manila,
Philippines

Speaker**Topic**

Prof. Engene Nester,
Dept. of Microbiology,
University of Washington, USA

Agrobacterium : From Plant Pathology
to Biotechnology

Chair : Prof. K. A. Padmanabhan,
Vice-Chancellor, South Asia International Institute,
Hyderabad

Speaker**Topic**

Dr.H. Hahn,
Head, Thin Films Division,
Dept of Material Science,
Darmstadt University, Germany

Nanomaterials : Reality and Hype

Award Lectures**January 4, 2004**

16.15 - 16.35

G.P. Chatterjee Memorial Award Lecture

Chair : Prof. Asis Datta,
Director, NCPGR, New Delhi

Speaker	Topic
Dr.V.P.Sharma, Formerly Director, Malaria Research Institute and Additional DG, ICMR, New Delhi	Recent Developments in Malaria Control in India

January 6, 2004

18.15 - 19.00

B.C.Guha Memorial Lecture

Chair : Prof.Asis Datta,
Director, NCPGR, New Delhi

Speaker	Topic
Dr. Samir Bhattacharya, Director, IICB, Kolkata	Confronting Diabetic Type II : A Global Epidemic Disease

Raj Kristo Dutt Memorial Award Lecture

Chair : Prof.Asis Datta,
Director, NCPGR, New Delhi

Speaker	Topic
Dr.C.M.Gupta, Director, CDRI, Lucknow	Traditional Knowledge in Innovative New Drug Discovery

Activities in Sections

Deliberations in different sections commenced with the addresses of Sectional Presidents (Annexure - II) followed by Platinum Jubilee Lectures (Annexure - III) in each section. Symposia on specialised topics (Annexure - IV) and a large number of Invited/Special Lectures (Annexure - V) were organised by the Sections during the Session, which formed an integral part of the technical programme of the Indian Science Congress.

ISCA Young Scientists' Programme

Presentation of papers under ISCA Young Scientists' Programme in sections was arranged on January 5, 2004. This year twentyfour young scientists received award under this programme. Names of those young scientists and titles of their papers are given in Annexure - VI.

Presentation of Contributed Papers

Most of the contributed papers accepted on the basis of screening done by the Sectional Presidents were presented by way of Posters on January 6, 2004. The names judged for best poster presented during the 91st Indian Science Congress—2004 in different Sections are given in Annexure - VII. Oral presentations of some selected contributed papers were also made in different Sections on January 6 & 7, 2004.

ISCA Awards/Endowment Lectures

Following ISCA Awards/Endowment Lectures were delivered during the 91st Indian Science Congress in different Sections :

Name of the Award/Lecture	Speaker	Title
Prof. Hira Lal Chakravarty Award (Section of Plant Sciences)	Dr. R. Velazhahan Madurai	Biotechnological approaches for the management of rice sheath blight.

Name of the Award/Lecture	Speaker	Title
Pran Vohra Award (Section of Agriculture and Forestry Sciences)	Dr. A. Arunachalam Nirjuli	Ecological imperatives on the rehabilitation of jhum lands in Arunachal Pradesh.
Prof. Umakant Sinha Memorial Award (Section of New Biology including Biochemistry, Biophysics & Molecular Biology and Biotechnology)	Dr. Rajendra Kumar New Delhi	Crop improvement : Unlocking genetic potential through molecular markers.
Prof. K. P. Rode Memorial Lecture (Section of Earth System Sciences)	Prof. K. B. Powar Noida	Lineament Fabric and Tectonic Interpretation.
Prof. R. C. Shah Memorial Lecture (Section of Chemical Sciences)	Dr. Gopal Ch. Kundu Pune	Transcription Factor, NF-kB: mechanism of activation and its role in cancer.

Science for School Children Programme

A programme on “**Science for School Children**” was organised during the 91st Indian Science Congress by the host University/Institute. Prof.H.Y.Mohan Ram, Centre for Environmental Management of Degraded Ecosystems, Delhi University was the Convener of this programme. More than 500 children from schools in Punjab, Haryana and Chandigarh and other places in the country were exposed to the excitement of science.

Participation of Foreign Scientists

Representatives of some foreign scientific societies/academies and a few individual scientists from abroad participated in the deliberations of the plenary sessions as also in sections/panels. Besides, Nobel Laureates participated in the 91st Indian science Congress.

Exhibition

Dr.Murli Manohar Joshi, Hon'ble Minister for Human Resource Development, Science & Technology and Ocean Development inaugurated the "**Pride of India**" Exhibition organized on the occasion of the 91st Indian Science Congress. In this exhibition the major National achievements in the various areas of Science and Technology were focussed. Many research laboratories, various public and private sector institutions/organizations/firms participated in this exhibition. A "Hall of Pride" was the special feature of the Exhibition.

Valedictory Session

The Valedictory Session of the 91st Indian Science Congress was held on January 7, 2004 at 6.30 p.m. at the Main Pandal, Panjab University. Prof.K.N.Pathak, Vice-Chancellor of Panjab University welcomed the scientists and members of the ISCA.

Prof.Asis Datta, General President, 91st Science Congress chaired the session and also delivered an address.

The Chief Guest Prof.K.N.Pathak, Vice-Chancellor of Panjab University distributed twentyfour ISCA Young Scientists Awards (Certificate and Rs.5000/- in Cash) and twentyeight Best Poster Awards (Rs.1000/- in Cash along with a Certificate) to the selected young scientists in recognition of their contributions in their respective areas of research and to the participants judged as best poster presenters in sections respectively during the 91st Indian Science Congress.

On the absence of Prof.N.K.Ganguly, General President-Elect, 92nd Indian Science Congress, Prof.Asis Datta, General President, ISCA announced the venue and theme of 92nd Indian Science Congress "Health Technologies for the Nation Development" which is to be held at Ahmedabad under the auspices of the National Institute of Occupational Health (NIOH) during the period January 3 to 7, 2005.

Dr.Amit Ghosh, Local Secretary, 91st Indian Science Congress delivered an address on this occasion.

Prof. B. Satyanarayana, General Secretary (Outstation) offered a hearty vote of thanks on behalf of the Indian Science Congress Association.

OTHER ACTIVITIES

ISCA Chapters

One of the major objective of the ISCA is to inculcate the temper of science among the people and to encourage young scientist to grow up steadily in this direction involving them in the programmes relevant to fundamental, experimental and operational activities. With these objectives in view, ISCA started establishing Regional Chapters from 1986-87 in different places in India. During 2003-2004 one new ISCA Chapter has been opened at Bhopal. At present ISCA Chapters are in operation at eighteen places viz. Bangalore, Baroda, Bhubaneswar, Bhopal, Bodh-Gaya, Chandigarh, Chennai, Delhi, Guwahati, Hyderabad, Jaipur, Kanpur, Karnal, Kolkata, Mumbai, Nagpur, Patiala and Shillong.

Activities of some of the ISCA Chapters during the year under report are given below :

ISCA Baroda Chapter

Convener : **Dr. S.K. Tuteja,**
Address : Reader & Coordinator,
Foods & Nutrition Dept.,
Faculty of Home Science,
M.S.University,
Vadodara - 390002.

Activities during the year

Celebration : World Environment Day, National Science Day.
Programme : An Awareness Programme with regard to 'Importance of Breast Feeding' , 'Health of Baby' and 'Environment'.

- Seminar* : Seminars on 'Indian Sciences in the Era of Globalization', 'Use of Multimedia, 'Brainstorming', 'Leadership Development' 'Brain Storming : Media and Women Use and Misuse' where Prof.K.C.Upadhyay,Vice Chancellor, M.S.University, Prof.S.D.Sabnis, Prof.B.B.Chatto, Prof. V.S.Patel delivered lectures.
- Workshop* : Workshops on ' Women in Science', ' Medicinal Plants: Herb for Beauty and Health', A Comprehensive Entrepreneurship Training Workshop.

ISCA Bhubaneswar Chapter

- Convener* : **Dr. S. N. Patro,**
Address : ND-4 VIP Area, I.R.C.Village,
 Bhubaneswar- 751015.

Activities during the year

- Celebration* : National Science Day, World Environment Day.
- Lecture* : Popular Lectures on ' Water : Two Billion People are Dying for it', 'Encouraging Scientific Awareness in the Community', 'Water : The Elixir of Life'.
- Programme* : 7th Orissa Bigyan Congress where scientific papers were presented and young scientists as well as distinguished scientists were felicitated.The theme of the congress was 'Science for Society'. National Environment Awareness Programme, Colloquium on Science and Technology Policy.

ISCA Bhopal Chapter

- Convener* : **Dr. S. Kulshrestha,**
Address : 27/3 , Geetanjali Complex,
 Bhopal-462003.

Activities during the year

- Lecture* : Popular Lectures on 'Water Conservation and Plastic Pollution' by Dr.V.K.Parashar, 'Environmental Awareness' by Dr K. S Kulshrestha.
- Programme* : Scientific Popularization & Awareness Programmes for school level children and for advance level; Communication and Entertainment; Community Development Programme; and Elocution and Painting Competition Programme.
- Seminar* : On 'Role of Science in Environmental Awareness', Dr. K. K. Tiwari, Former Vice Chancellor of Jiwaji University, Dr.R.Prakash of Bhopal University, Dr.S.A. Iqbal of Sofia College, Dr. Mrs. S. Shrivastava, Dr .Mrs. C. Kaur delivered lectures.

ISCA Bodh-Gaya Chapter

- Convener* : **Dr. Arun Kumar Singh (Jr.)**,
Address : Reader in Physical Chemistry,
University Department of Chemistry,
Magadh University,
Bodh Gaya- 824234.

Activities during the year

- Celebration* : Teacher's Day.
- Programme* : Speech Competition, Essay Competition, Science Quiz in the School level, Health Awareness Programme where Dr.D.K.Verma, Dr. Mahajan took part.
- Seminar* : On 'Science and Society' where Prof.S.Sharma and Prof. K. S. Sharma delivered lectures.

ISCA Chennai Chapter

Convener : **Prof P. Ramasamy,**
Address : CSIR Emeritus Scientist,
Crystal Growth Centre,
Anna University,
Chennai-600025.

Activities during the year

Programme : The Science Meeting for the Children.
Seminar : Ninth National Seminar on 'Crystal Growth'.
Workshop : International Workshop on 'Crystal Growth and Characterization of Technologically Important Materials'.

ISCA Guwahati Chapter

Convener : **Prof. Umesh C. Goswami,**
Address : Department of Zoology,
Gauhati University,
Guwahati - 781014.

Activities during the year

Celebration : National Technology Day, World Environment Day, World Health Day, World Wetland Day, World Forest Day, National Children Day, National Science Day.
ISCA-NE-Network : ISCA NE-linking Network with Scientist and Organisations of North East region is continuing from last year.
Lecture : 12 popular lectures were arranged.
Programme : On 'Environmental Awareness', 'Tree Plantation', 'Health Awareness in Rural Sectors', 'Aids Awareness', 'Bird Watching' and 'Development of Rural Science Club'. Science exhibition among school students.

Seminar : On Focal Theme of 2003-2004, 'National Science Policy with reference to Agricultural Development and Tea Industry', 'Interlinking Major River Systems', 'Wetland Conservations', 'Utilisation of Refinery Waste'.

ISCA Hyderabad Chapter

Convener : **Dr. I. V. Subba Rao,**
Address : Former Vice-Chancellor,
Acharya N.G. Ranga Agricultural University, Hyderabad,
H.No.1-10-315, Hasmathpet Road, Manovikas Nagar (P.O.),
Secunderabad-500009 (A.P.).

Activities during the year

Celebration : National Science Day.

Lecture : G.P. Chatterjee Memorial Award Lecture for 2000-2001 was delivered by Dr.E.A. Sddiq on 'The Science of Genetics in Feeding the Billions'.

Seminar : On ' Science Policy and Higher Education' had been a collaborative programme with ISCA (HQ). It was presided by Padmashree Dr. I.V.Subba Rao, Vice Chancellor, ANGRAU. Prof. A.B.Banerjee was the Chief Guest and Prof. S. P. Mukherjee was the Guest of Honour. Mr. T. H. Choudhury, Advisor to the Govt. of A.P. on I.T., Mr. M.K. Uppaluri, C.E.O. and President, GE-IBC, Dr.P.K. Reddy, Associate Professor, I.I.T., Mr.C. Ramesh delivered lectures.

Orientation Programme for Science Teachers organised by Hyderabad Chapter for 3 days in collaboration with Collector & District Magistrate, Karimnagar at Mr. C. Ramaiah Education Institute, Hyderabad.

Programme : Quiz Competition, Residential Orientation Programme for Mathematics and Physical Science Teachers of Schools, Membership Drive Programme.

ISCA Jaipur Chapter

Convener : **Prof. P. C. Trivedi**,
Address : Head, Department of Botany and Co-ordinator,
P. G. Biotechnology, University of Rajasthan,
Jaipur - 302004.

Activities during the year

Celebration : National Technology Day, World Environment Day, National Science Day, Children Day, World Forestry Day.

Lecture : Popular Lectures on 'Renewable Energy Resources', 'Environment Education & Awareness Issues', and 'Pollution Management'.

Programme : Programmes on 'Tree Plantation Drive', 'Environment Quiz Competition', 'ISCA Objectives & Theme of 90th Science Congress', 'AIDS Awareness', and 'Bioinformatics'

Symposium : National Symposium on 'Biotechnology for Human Welfare'.

ISCA Kanpur Chapter

Convener : **Dr. P. K. Mathur**,
Address : Head, Department of Zoology,
D.A.V. College,
Kanpur - 208002.

Activities during the year

Celebration : World Environment Day, National Science Day.

- Lecture* : On 'Tobacco and Oral Cancer' by Dr.A.K.Dixit and 'Breast Cancer' by Dr. R. Wadke.
- Programme* : Debate, Slogan , Poster, Quiz and Model Competition; Competition on Flower Arrangement and Usefulness of Waste Materials.

ISCA Kolkata Chapter

- Convener* : **Prof. N. C. Datta,**
- Address* : Former Professor & Head,
Department of Zoology, University of Calcutta,
4, Gangadhar Babu Lane, Kolkata-700012
Residence: 110/20, B.T.Road, Kolkata-700108.

Activities during the year

- Seminar* : On
- (i) Emerging Crisis of Fresh Water : An Overview and Inner View. Venue-Surendranath College, Kolkata. Inaugurated by Sri Nanda Gopal Bhattacharya, Minister-in-Charge of minor irrigation and water. Speakers were Dr.C.S.Sarkar, Dr.T.S.Banerjee, Director, IW MED, Prof.N.C.Datta and Dr.N.C.Barua.
 - (ii) Health and Hygiene, Venue-Rammohan Mission School. Sri Sujay Biswa, Principal, Rammohan School was the President and other speakers were Dr. S. C. Chakraborty, M. D., Dr. K. Biswas, M.D., Sri S.K.Majumder, President of the School, Dr.Ranajit Sen, Dr.S.D.Chatterjee and Dr.N.C. Datta. The students of the school took part in the interactive session.
 - (iii) Panel discussion on 'National Science and Technology Policy-Its Achievements and Failures', jointly with American Society of Civil Engineers, Indian Section and Science for Society, Venue- Indian Institute of Chemical

Engineers, Jadavpur, Kolkata. Prof.S.P.Mukherjee, Dr.D.K.Rakshit, Dr.Rajat Chakraborty, Prof.N.C.Datta. Sri C.R.Datta and Sri Amar Ganguly were the speakers.

ISCA Nagpur Chapter

Convener : **Dr. R. P. Thakre,**
Address : Professor, Department of Botany,
Nagpur University Campus,
Amravati Road,
Nagpur 440033.

Activities during the year

Celebration : National Science day.
Lecture : Popular Lectures on 'Tissue and its Benefits' by Dr.A.Saoji and 'Gene Manipulation' by Dr. Balasubramanian.
Programme : New Science & Technology Policy 2003, Children Science Congress Programme and Scientific Quiz, Science and Environment Fair.
Seminar : A Seminar on ' Pollution Free Environment Need for 21st Century'.
Workshop : On'Scientific Utilization of Waste Materials' and 'Issues in Female Foeticide'.

ISCA Patiala Chapter

Convener : **Prof. I. J. S. Bansal,**
Address : Department of Human Biology
Punjabi University
Patiala - 147002.

Activities during the year

- Lecture* : On 'Genetic Counselling by Prof. H.K.Goswami , 'Human Anxology' by Dr.Ohio.G.Elben of Hungary.
- Programme* : Science Quiz for rural and urban sections and in the Inter Secondary Schools; District Inter School Science Exhibition and Inter Public/Convent School Declamation Contest Programme.
- Seminar* : On 'Status of Basic Sciences in Higher Education' Five Vice Chancellors presented plenary lectures. Panel discussion on Science and Technology Policy 2003.

Celebration of National Science Day at Headquarters

The National Science Day was celebrated by the Indian Science Congress Association, Kolkata on 27th February, 2004. The key theme was "Encouraging Scientific Awareness in the Community". The inaugural lecture was delivered by Prof. Deb Kumar Basu, Working President, State Council of Science & Technology and Key Note Lecture was delivered by Prof. Debasis Mukherjee, Director, Indian Association for the Cultivation of Science. On this occasion Prof.H.Y.Mohan Ram, Centre for Environmental Management of Degraded Ecosystems, Delhi University delivered the Jawaharlal Nehru Birth Centenary Award Lecture for the year 2003-2004. The award lecture was followed by a Symposium on "Science and Society in the Twenty First Century : Quest for Excellence" wherein some ISCA Young Scientists participated. Dr.S.C.Pakrashi, Former INSA Senior Scientist and CSIR Distinguished Fellow and Director, IICB and Past General President, ISCA presided over the programme. The whole day programme was attended by a large number of scientists and students and got wide coverage in media.

Collaborative Programme

National Symposium on Clinical Optometry

A two-day National Symposium on Clinical Optometry was organised by the Indian Optometrical Society in collaboration with Indian Science Congress Association, Kolkata during January 31, 2004 and February 1, 2004 at ISCA Auditorium and Gorky Sadan, Kolkata respectively.

Participation of ISCA in Kolkata Book Fair

The Indian Science Congress Association participated in the Kolkata Book Fair from 28th January to 8th February 2004. All the publications of the Association were displayed in the stall along with photographs of past General Presidents and charts on various activities of ISCA. Enrolment of new members were also done during the fair.

Publications

This is a very important and significant activity from the angles of both dissemination of scientific knowledge and projection of Association's image. The year under report witnessed a significant number of publications brought out by the Association. Proceedings of the Ninetyfirst Annual Session of the Indian Science Congress Association were published. The quarterly journal Everyman's Science (Vol.XXXVIII Nos.1-6) was brought out.

Other publications brought out were: ISCA Directory : 2003-2004, General Information - 91st Indian Science Congress, Annual Report : 2002-2003, List of Office-Bearers & Sectional Committees for 2003-2004, Honorary Member, Donor & Life Members for 2003-2004, Members (With Voting Right) for 2003-2004, Synopses of the Presentations of ISCA Young Scientist Awardees for 2003, etc.

Library Service

During the year under report, the Library of the Indian Science Congress Association subscribed to 9 Indian journals and 15 Foreign journals. List of these journals are given below :

Indian	Foreign
Current Science	Ambio
Down to Earth	American Scientist
Food & Nutrition World	Endeavour
Indian Journal of Experimental Biology	Interdisciplinary Science Reviews
Indian Journal of Biochemistry and Biophysics	International Studies in the Philosophy of Science
Indian Journal of Marine Sciences	Journal of Environmental Planning and Management
Pramana	Nature
PTI Science Service	Natural History
Science Reporter	New Scientist
	Policy Studies
	Science
	Science & Society
	Social Choice and Welfare
	Technology Analysis & Strategic Management
	Tropical Science

In addition to those subscribed above, the following journals/newsletters are also being received by the Library in exchange of the Association's journal "Everyman's Science" :

Chemecology	JIMA
CSIR News	Journal of Forensic Sciences
DRDO News	Medicinal and Aromatic Plant Abstracts
Environmental Awareness	Nutrition News
Environmental Health Perspectives	Natural History (Bombay)
Gana Darpan	S & T Post
Gyan Bigyan	Science & Culture
IASSI News	Spices India
INSA News	University News
ICSSR Newsletter	UNESCO News
Indian Journal of Physics	WMO Bulletin
Indian Spices	WISTA

The Library is open to all category of members of the Association as well as school, college and university teachers on all weekdays (except Saturday, Sunday and holidays) from 10.00 a.m. to 5.30 p.m.

MISCELLANY

Obituary

During the year under report the Executive Committee, the Council and the General Body recorded their deep sense of sorrow at the passing away of **Prof. Amar Nath Bhaduri**, President, Section of Biochemistry, Biophysics & Molecular Biology, 79th Session (1991-92) and Area Editor in the Biological Sciences of the Association's journal *Everyman's Science* from April 1, 1996 to March 31, 2001; **Dr. Surath Kumar Mukherjee**, President, Section of Physiology, 60th Session (1972-73); **Prof. Asok Ghosh**, Recorder (1961-62 & 1962-63), President, 60th Session (1972-73) of the Section of Zoology, Entomology & Fisheries and Treasurer for the year 1985-86; and **Prof. R.P. Singh**, Recorder (1970-71 & 1971-72) and President, 63rd Session (1975-76) of the Section of Chemistry.

ISCA Meetings

Following meetings of different bodies were held during the year 2003-2004 :

Name of the Body	Meetings held on
<i>General Body</i>	January 7, 2004
<i>Council</i>	October 18, 2003 and January 2, 2004 (adjourned to January 7, 2004)
<i>Executive Committee</i>	May 10, 2003; October 18, 2003 and January 2, 2004 (adjourned to January 7, 2004)
<i>Advisory Committee</i>	May 9, 2003
<i>Finance Committee</i>	May 9, 2003 and October 17, 2003
<i>Establishment Committee</i>	May 9, 2003 and October 17, 2003
<i>Publication Committee</i>	May 9, 2003
<i>Endowment Committee</i>	May 10, 2003 and October 17, 2003
<i>Standing Committee on Science and Society</i>	May 9, 2003

Besides, two meetings of the General President with Sectional Presidents of 91st Indian Science Congress were held on May 10, 2003 and October 17, 2003. Also, a meeting of Conveners of ISCA Chapters was held on January 2, 2004.

ISCA Representation in other Organizations

ISCA Members represented in the following organizations during 2003-2004 :

Indian National Science Academy, New Delhi : Prof.S.S.Katiyar, General President, ISCA & Vice-Chancellor, CSJM University, Kanpur (Upto December 31, 2003) and Dr.Sandip Kumar Basu, Director, National Institute of Immunology, New Delhi (from January 1, 2004) - *Member of the INSA Council;*

Post Graduate Institute of Medical Education and Research, Chandigarh : Prof. S. P. Mukherjee, Past General Secretary (Headquarters), ISCA and Centenary Professor of Statistics, Department of Statistics, University of Calcutta, Calcutta (Upto December 1, 2003) and Prof.B.P.Chatterjee, General Secretary (Headquarters), ISCA, Department of Biological Chemistry, Indian Association for the Cultivation of Science, Kolkata (from December 2, 2003) - *Member of Institute Body;*

All India Institute of Medical Sciences, New Delhi : Dr.(Mrs.) Manju Sharma, Past General President, ISCA and Secretary, Department of Biotechnology, Government of India, New Delhi - *Member of the Governing Body of AIIMS;*

Indian National Academy of Engineers, New Delhi : Dr. S. R. Singh, Vice-Chancellor, Rajendra Agricultural University, Bihar, Pusa (Samastipur) - *Member of the Governing Council of INAE.*

Representation in Foreign Scientific Meetings

Prof. B. P. Chatterjee, General Secretary (Headquarters), ISCA, Kolkata, represented the Indian Science Congress Association in the BA Festival of Science held in University of Salford, Greater Manchester from 8-12 September, 2003.

Membership

The trend in Membership of different categories during the last three years can be observed from the following table :

	89th Session (2001-2002)	90th Session (2002-2003)	91st Session (2003-2004)
Life Member	9,571	9,950	10,309
Member	2,717	2,050	2,920
Sessional Member	...	2,415	...
Student Member	885	304	970
Total	13,173	14,719	14,199

Administrative and Financial Set-up*

Reservations/Concessions for the SC/ST employees of the ISCA to safeguard their interest, as per policy of the Govt. of India.

The Association is following the policy of the Government of India in the matter of recruitment of its staff member. The roster showing the reservation of the post for SC/ST is maintained and given effect by the Executive Committee to this purpose.

A brief with regard to monitoring of Personnel Matters related to the employees of ISCA.

No personnel matters of employees of ISCA was monitored during the year.

Implementation of the Official Languages Policy/Act i/c instructions issued thereunder from time to time.

Steps to implement the provisions of Official Languages Policy as adopted by the Government of India from time to time, have been taken by the Association by way of printing of letterheads, title headings in different registers, name plates of different sections, membership forms, annual report, etc. in bi-lingual forms.

A report with regard to redressal of employees' grievances.

The General President holding the office in the consultation with the Executive Committee takes care of employee's grievances whenever such grievances are brought to his notice.

Welfare measures.

No staff welfare matters was taken during the year under report.

* In accordance with the suggestion given by DST in its letter No.AI/AR/004/2001 dated 10-10-2001 the above materials on administrative and financial set-up are also furnished.

Staff-strength (group-wise), Administrative/Technical preferably while giving strength of SC/ST i/c OBC employees.

Staff Sanctioned Strength as on 31.03.2004**

Category	Designation/Group	S.S.	F.S.	V.Ps
Administrative	Executive Secretary	1	-	1
	Asstt.Executive Secretary	1	1	-
	Group II(3) (Office & Supporting Technical Staff)	3	3	-
	Group II(2) (Office & Supporting Technical Staff)	5	4	1
	Group II(1) (Office & Supporting Technical Staff)	9	8	1
	Staff-Car-Driver	1	1	-
	Group I(2) (Helper)	1	1	-
	Group I(1) (Helper)	11	8	3
Total		32	26	6

S.S. : Staff Strength

F.S. : Filled Strength

V.Ps : Vacant Posts

*** Prepared on basis of the resolution taken by the Establishment Committee at its meeting held on September 17, 1994 and approved by the Executive Committee in its meeting held on October 7, 1994*

The Grants-in-Aid received from the Department of Science & Technology, Govt. of India under Plan & Non-Plan heads during the year.

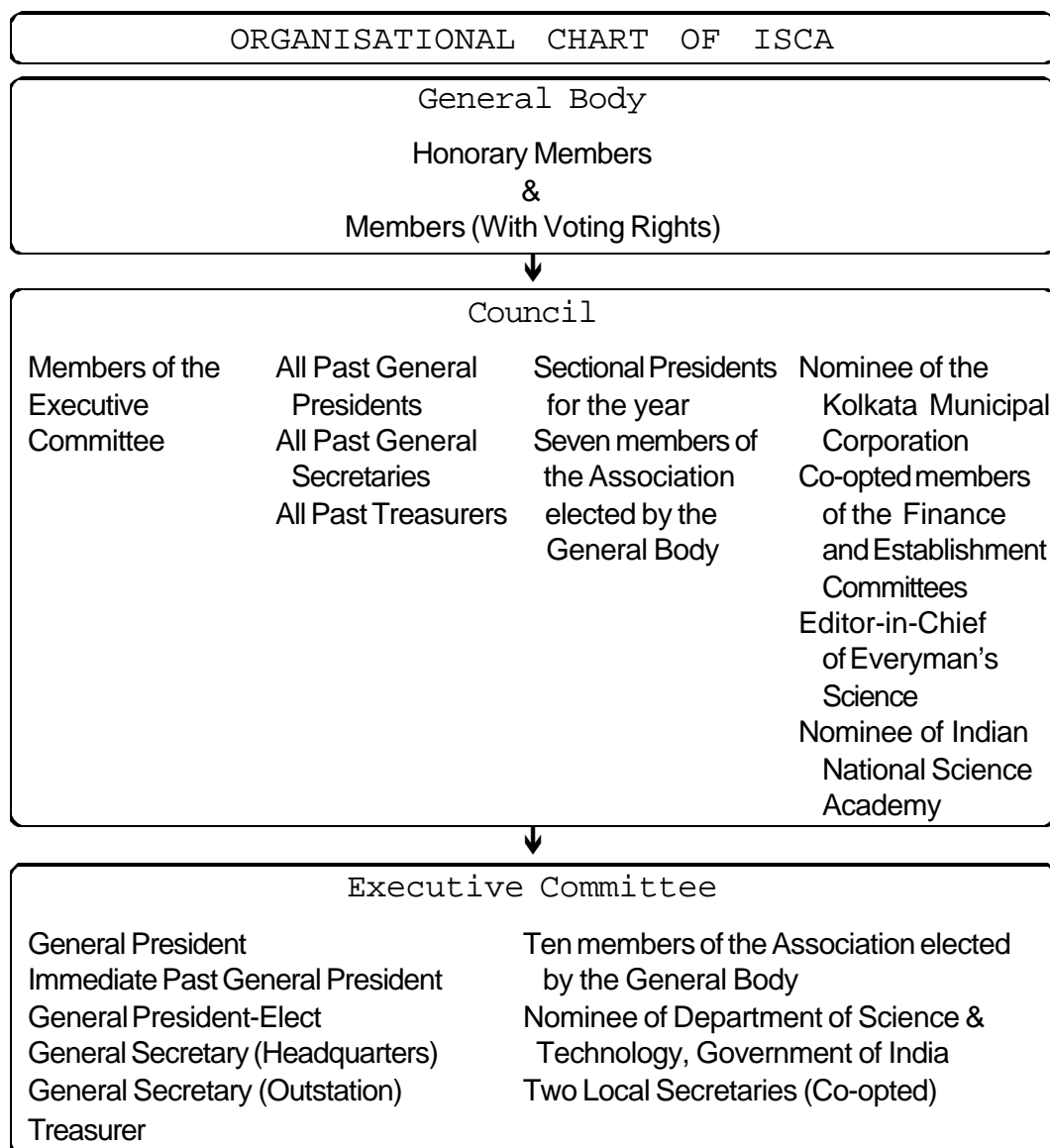
2003-2004

Plan – Rs.110.00 lacs.

Non-Plan – Rs. 33.25 lacs.

The composition of the GC, GB, FC, RAC, and any other important Committee constituted in the beginning of the annual reports.

The Organisational Chart of ISCA with composition and Statutory Committees and their composition are given below. These Committees were constituted in the beginning of the year under report.



STATUTORY COMMITTEES AND THEIR COMPOSITION

(1) Advisory Committee

(i)	General President	...	Chairman
(ii)	General Secretary (Outstation)	...	Member
(iii)	Treasurer	...	Member
(iv)	Six permanent Members of the ISCA Council nominated by the Executive Committee	...	Members
(v)	General Secretary (Headquarters)	...	Convener

(2) Finance Committee

(i)	General President	...	Chairman
(ii)	Immediate Past General President	...	Member
(iii)	General President-Elect	...	Member
(iv)	General Secretary (Headquarters)	...	Member
(v)	General Secretary (Outstation)	...	Member
(vi)	One Co-opted member resident in Kolkata to be nominated by the General President	...	Member
(vii)	Nominee of DST	...	Member
(viii)	Treasurer	...	Member-Convener
(ix)	Executive Secretary	...	Secretary (without voting right)

(3) Establishment Committee

(i)	General President	...	Chairman
(ii)	Immediate Past General President	...	Member
(iii)	General President-Elect	...	Member
(iv)	General Secretary (Outstation)	...	Member
(v)	Treasurer	...	Member
(vi)	Two Co-opted members resident in Kolkata to be nominated by the General President	...	Members
(vii)	General Secretary (Headquarters)	...	Member-Convener
(viii)	Executive Secretary	...	Secretary (without voting right)

(4) Publication Committee

- | | | | |
|-------|----------------------------------|-----|----------------------------------|
| (i) | General President | ... | Chairman |
| (ii) | General Secretary (Outstation) | ... | Member |
| (iii) | Treasurer | ... | Member |
| (iv) | Editor-in-Chief | ... | Member |
| (v) | One nominee of General President | ... | Member |
| (vi) | General Secretary (Headquarters) | ... | Member-Convener |
| (vii) | Executive Secretary | ... | Secretary (without voting right) |

(5) Endowment Committee

- | | | | |
|-------|---|-----|----------------------------------|
| (i) | General President | ... | Chairman |
| (ii) | General Secretary (Outstation) | ... | Member |
| (iii) | Treasurer | ... | Member |
| (iv) | Two members from the Council of ISCA nominated by the Executive Committee | ... | Members |
| (v) | One External Expert nominated by the General President | ... | Member |
| (vi) | General Secretary (Headquarters) | ... | Member-Convener |
| (vii) | Executive Secretary | ... | Secretary (without voting right) |

(6) Standing Committee on Science and Society

- | | | | |
|-------|--|-----|-----------------|
| (i) | General President | ... | Chairman |
| (ii) | Three permanent Members of the ISCA Council nominated by the Executive Committee | ... | Members |
| (iii) | General Secretary (Outstation) | ... | Member |
| (iv) | Treasurer | ... | Member |
| (v) | General Secretary (Headquarters) | ... | Member-Convener |

ACKNOWLEDGEMENTS

The Executive Committee of the Indian Science Congress Association (ISCA) is grateful to the Department of Science & Technology, Government of India, for the generous grant-in-aid to the Association. The Committee would also like to record its deep appreciation of the continued help and cooperation received from officers and staff of DST.

The Executive Committee records its appreciation of the personal interest taken by the Vice-Chancellor, Panjab University and the Director, Institute of Microbial Technology (IMTECH) for hosting the 91st Indian Science Congress in Chandigarh. Sincere thanks are also due to the Local Secretaries and their associates, Sectional Presidents, Sectional Recorders, Local Sectional Secretaries, and Members of the Sectional Committees for their untiring efforts to make the 91st Indian Science Congress a grand success.

The Executive Committee also expresses its indebtedness to the Council and the Members of the General Body as also Members of the different Committees and Sub-Committees for their guidance and advice. In referring to the success achieved at the Chandigarh Session, it is a pleasure for the Committee to record its gratefulness to the General President, Prof. Asis Datta for his continuous effort for the success of the 91st Indian Science Congress.

Lastly, no record of acknowledgement could be complete without expressing the Committee's deep appreciation of the work done by the staff of the Association throughout the year.

ANNEXURE - I

THE PAST GENERAL PRESIDENTS OF INDIAN SCIENCE CONGRESS

<i>Session</i>	<i>Year</i>	<i>Place</i>	<i>Name</i>	<i>Title of the Presidential Address</i>
1st	1914	Calcutta	Hon. Justice Sir Asutosh Mookerjee	About Science Congress
2nd	1915	Madras	Hon. Surgeon-General W.B. Bannermann	The Importance of Knowledge of Biology to Medical, Sanitary and Scientific Men Working in the Tropics
3rd	1916	Lucknow	Colonel Sir Sidney G. Burrard	The Plains of Northern India and their Relationship to the Himalayan Mountains
4th	1917	Bangalore	Sir Alfred Gibbs Bourne	On Scientific Research
5th	1918	Lahore	Gilbert T. Walker	On Teaching of Science
6th	1919	Bombay	Lt. Colonel Sir Leonard Rogers	Researches on Cholera
7th	1920	Nagpur	Acharya Prafulla Chandra Roy	Dawn of Science in Modern India
8th	1921	Calcutta	Sir Rajendra Nath Mukherjee	On Science and Industry
9th	1922	Madras	Mr. C. S. Middlemiss	Relativity
10th	1923	Lucknow	Sir M. Visvesvaraya	Scientific Institutions and Scientists
11th	1924	Bangalore	Dr. N. Annandale	Evolution Convergent and Divergent
12th	1925	Banaras	Dr. M. O. Forster	On Experimental Training
13th	1926	Bombay	Mr. Albert Howard	Agriculture and Science
14th	1927	Lahore	Sir J. C. Bose	The Unity of Life
15th	1928	Calcutta	Dr. J. L. Simonsen	On Chemistry of Natural Products
16th	1929	Madras	Professor C. V. Raman	On Raman Effect
17th	1930	Allahabad	Col. S. R. Christopher	The Science and Disease
18th	1931	Nagpur	Lt. Col. R. B. Seymour Sewell	The Problem of Evolution - Experimental Modification of Bodily Structure

Session	Year	Place	Name	Title of the Presidential Address
19th	1932	Bangalore	Rai Bahadur Lal Shiv Ram Kashyap	Some Aspects of the Alpine Vegetation of the Himalaya and Tibet
20th	1933	Patna	Sir Lewis L. Fermor	The Place of Geology in the Life of a Nation
21st	1934	Bombay	Professor M. N. Saha	Fundamental Cosmological Problems
22nd	1935	Calcutta	Dr. J. H. Hutton	Anthropology and India
23rd	1936	Indore	Sir U. N. Brahmachari	The Role of Science in the Recent Progress of Medicine
24th	1937	Hyderabad	Rao Bahadur T. S. Venkatraman	The Indian Village - Its Past, Present and Future
25th	1938	Calcutta	Sir James Jeans (Lord Rutherford of Nelson dies prematurely)	Researches in India and in Great Britain
26th	1939	Lahore	Professor J. C. Ghosh	On Research in Chemistry in India
27th	1940	Madras	Professor B. Sahni	The Deccan Traps : An Episode of the Tertiary Era
28th	1941	Banaras	Sir Ardeshir Dalal	Science and Industry
29th	1942	Baroda	Dr. D. N. Wadia	The Making of India
30th	1943	Calcutta	Dr. D. N. Wadia	Minerals' Share in the War
31st	1944	Delhi	Professor S. N. Bose	The Classical Determinism and the Quantum Theory
32nd	1945	Nagpur	Sir Shanti S. Bhatnagar	Give Science a Chance
33rd	1946	Bangalore	Professor M. Afzal Husain	The Food Problem of India
34th	1947	Delhi	Pandit Jawaharlal Nehru	Science in the Service of the Nation
35th	1948	Patna	Colonel Sir Ram Nath Chopra	Rationalisation of Medicine in India
36th	1949	Allahabad	Sir K. S. Krishnan	—————
37th	1950	Poona	Professor P. C. Mahalanobis	Why Statistics?
38th	1951	Bangalore	Dr. H. J. Bhabha	The Present Concept of the Physical World

<i>Session</i>	<i>Year</i>	<i>Place</i>	<i>Name</i>	<i>Title of the Presidential Address</i>
39th	1952	Calcutta	Dr. J. N. Mukherjee	Science and Our Problems
40th	1953	Lucknow	Dr. D. M. Bose	The Living and the Non-living
41st	1954	Hyderabad	Dr. S. L. Hora	Give Scientists a Chance
42nd	1955	Baroda	Professor S.K.Mitra	Science and Progress
43rd	1956	Agra	Dr. M. S. Krishnan	Mineral Resources and Their Problems
44th	1957	Calcutta	Dr. B. C. Roy	On Science for Human Welfare and Development of the Country
45th	1958	Madras	Prof. M. S. Thacker	Grammar of Scientific Development
46th	1959	Delhi	Dr. A. L. Mudaliar	Tribute to Basic Sciences
47th	1960	Bombay	Professor P. Parija	Impact of Society on Science
48th	1961	Roorkee	Professor N. R. Dhar	Nitrogen Problem
49th	1962	Cuttack	Dr. B. Mukherji	Impact of Life Sciences on Man
50th	1963	Delhi	Professor D.S.Kothari	Science and the Universities
51st/	1964/	Calcutta	Professor Humayun	Science and the State
52nd	1965		Kabir	
53rd	1966	Chandigarh	Professor B. N. Prasad	Science in India
54th	1967	Hyderabad	Professor T. R. Seshadri	Science and National Welfare
55th	1968	Varanasi	Dr. Atma Ram	Science in India - Some Aspects
56th	1969	Bombay	Dr. A. C. Joshi (Prof. A. C. Banerjee died prematurely)	A Breathing Spell : Plant Sciences in the Service of Man
57th	1970	Kharagpur	Dr. L. C. Verman	Standardization : A Triple Point Discipline
58th	1971	Bangalore	Dr. B. P. Pal	Agricultural Science and Human Welfare
59th	1972	Calcutta	Professor W. D. West	Geology in the Service of India
60th	1973	Chandigarh	Dr. S. Bhagavantam	Sixty Years of Science in India
61st	1974	Nagpur	Professor R. S. Mishra	Mathematics - Queen or Handmaiden
62nd	1975	Delhi	Professor (Mrs.) Asima Chatterjee	Science and Technology in India : Present and Future

<i>Session</i>	<i>Year</i>	<i>Place</i>	<i>Name</i>	<i>Title of the Presidential Address</i>
63rd	1976	Waltair	Dr. M. S. Swaminathan	Science and Integrated Rural Development
64th	1977	Bhubaneswar	Dr. H. N. Sethna	Survey, Conservation and Utilisation of Resources
65th	1978	Ahmedabad	Dr. S. M. Sircar	Science Education and Rural Development
66th	1979	Hyderabad	Professor R. C. Mehrotra	Science and Technology in India During the Coming Decade(s)
67th	1980	Jadavpur	Professor A. K. Saha	Energy Strategies for India
68th	1981	Varanasi	Professor A. K. Sharma	Impact of the Development of Science and Technology on Environment
69th	1982	Mysore	Professor M. G. K. Menon	Basic Research as an Integral Component of Self-reliant Base of Science and Technology
70th	1983	Tirupati	Professor B. Ramachandra Rao	Man and the Ocean - Resource and Development
71st	1984	Ranchi	Professor R. P. Bambah	Quality Science in India - Ends and Means
72nd	1985	Lucknow	Professor A. S. Paintal	High Altitude Studies
73rd	1986	Delhi	Dr. T. N. Khoshoo	Role of Science and Technology in Environmental Management
74th	1987	Bangalore	Professor (Mrs.) Archana Sharma	Resources and Human Well-being - Inputs from Science and Technology
75th	1988	Pune	Professor C. N. R. Rao	Frontiers in Science & Technology
76th	1989	Madurai	Dr. A. P. Mitra	Science & Technology in India : Technology Missions
77th	1990	Cochin	Professor Yash Pal	Science in Society
78th	1991	Indore	Professor D. K. Sinha	Coping with Natural Disaster : An Integrated Approach
79th	1992	Baroda	Dr. Vasant Gowariker	Science, Population and Development
80th	1993	Goa	Dr. S. Z. Qasim	Science and Quality of Life

<i>Session</i>	<i>Year</i>	<i>Place</i>	<i>Name</i>	<i>Title of the Presidential Address</i>
81st	1994	Jaipur	Professor P. N. Srivastava	Science in India : Excellence and Accountability
82nd	1995	Calcutta	Dr. S. C. Pakrashi	Science, Technology and Industrial Development in India
83rd	1996	Patiala	Professor U. R. Rao	Science and Technology for Achieving Food, Economic and Health Security
84th	1997	Delhi	Dr. S. K. Joshi	Frontiers in Science & Engineering and Their Relevance to National Development
85th	1998	Hyderabad	Professor P. Rama Rao	Science & Technology in Independent India : Retrospect and Prospect
86th	1999	Chennai	Dr. (Mrs.) Manju Sharma	New Bioscience : Opportunities and Challenges as we Move into the Next Millennium
87th	2000	Pune	Dr. R. A. Mashelkar	Indian S & T into the Next Millennium
88th	2001	New Delhi	Dr. R. S. Paroda	Food, Nutrition and Environmental Security
89th	2002	Lucknow	Professor S. S. Katiyar	Health Care, Education and Information Technology
90th	2003	Bangalore	Dr. K. Kasturirangan	Frontier Science and Cutting-Edge Technologies
91st	2004	Chandigarh	Professor Asis Datta	Science and Society in the Twenty First Century : Quest for Excellence