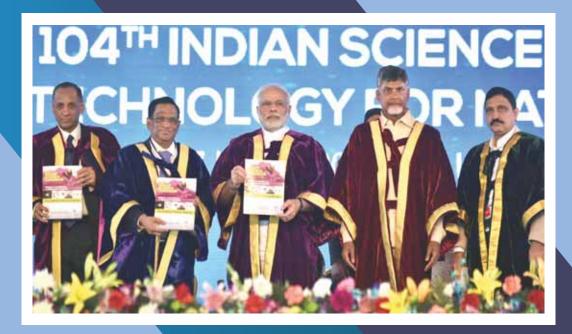
ANNUAL REPORT 2016-2017





THE INDIAN SCIENCE CONGRESS ASSOCIATION KOLKATA



ANNUAL REPORT 2016-2017



THE INDIAN SCIENCE CONGRESS ASSOCIATION 14, DR. BIRESH GUHA STREET, KOLKATA - 700 017

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PREFACE

March 31, 2017 marked the completion of the 104th year of The Indian Science Congress Association. The 104th Indian Science Congress was held at Tirupati under the auspices of the S.V. University, Tirupati from January 3-7, 2017. Shri Narendra Modi, Hon'ble Prime Minister of India, inaugurated the Congress on 3rd January in the presence of Shri. E.S.L. Narasimhan, Hon'ble Governor of Andhra Pradesh and Telangana, Dr. Harsh Vardhan, Union Minister of Science and Technology, Shri Y.S. Chowdhary, Union Minister of State (Science and Technology), Government of India, Shri. N. Chandrababu Naidu, Hon'ble Chief Minister of Andhra Pradesh, A. Damodaram, Hon'ble Vice Chancellor, Sri Venkateswara University. Prof. D. Narayana Rao, General President of ISCA delivered his address on the Focal Theme "*Science and Technology for National Development*". The inaugural function was attended by over 15,000 delegates including quite a few overseas scientists.

There were Plenary Sessions, Panel Discussions and Public Lectures devoted to different facets of the Focal Theme in which Nobel Laureates, many eminent scientists, technologists, policy-makers, industrial executives from industrial sector and social activists participated. Following the past tradition, Symposia on different interesting topics were organized in 14 sections besides the Platinum Jubilee Lectures which constituted a significant component of the entire programme. Invited Lectures and Paper Presentations (through Posters/Oral) organised in different sections were highly applauded.

Infosys ISCA Travel Awards were presented to the school children. Special emphasis was given on ISCA Young Scientists' Programme in sections and the awards were presented to Young Scientist Awardees. A large number of students from the neighbourhood schools and colleges visited and participated in the Children Science Congress.

Apart from this the 10th Rashtriya Vigyan Sancharak Sammelan (Science Communicators') was organised with Vigyan Prasar and support from NCSTC, DST, New Delhi, where Science Communicators selected from different Chapters of ISCA participated.

The 6th Women Science Congress was organised on the theme "*Empowering Women in Science and Technology*" with support from NCSTC, DST, New Delhi where women scientists from all over the country participated.

Children Science Congress was also organised with support from NCSTC, DST, New Delhi.

The Valedictory marking the end of the event of 104th Indian Science Congress was held at Srinivasa Auditorium, Sri Venkateswara University, Tirupati on 7th January, 2017. The dignitaries for the function were Dr. C.H. Vidyasagar Rao, Hon'ble Governor of Maharastra, Shri. Y.S. Chowdhary, Union Minister for State (Science and Technology), Government of India, Prof. A. Damodaram, Hon'ble Vice Chancellor of Sri Venkateswara University:, Prof. D. Narayana Rao, General President, ISCA, and Prof Achyuta Samanta, General President (Elect), ISCA. On this occasion, Young Scientist Awards and Best Poster Awards were also presented. Prof. Gangadhar, General Secretary (Membership Affiars), ISCA, and Prof. P.P. Mathur, General Secretary (Scientific Activities), were also present.

Twenty four ISCA Chapters continued their activities during the year under report by organising seminars, symposia, lectures, quiz contests, etc. Among various activities, the Chapters observed National Science Day, World Environment Day, World Wetland Day, Earth Day, National Technology Day, World Health Day, World AIDS Day, National Children Day, Teachers Day, etc.

The Chapters organised National Seminars on Focal Theme of 104th ISC.

The Association feels greatly honoured for receiving active financial support from Department of Science & Technology, Govt. of India, to carry out many of its intended activities and to execute improvements over its existing infrastructure. Attempts are being made to expand resource base and improve the fund position by effective fiscal management. The strength of Association lies in the strong support being received from its members.

21st September, 2017

(Prof. Gangadhar) General Secretary (Membership Affairs) The Indian Science Congress Association

PROFILE OF THE INDIAN SCIENCE CONGRESS ASSOCIATION

The Indian Science Congress Association (ISCA) is a premier scientific organization of the country established in 1914. ISCA has been promoting science and inculcating the spirit of science through its multifarious activities. ISCA meets in the first week of January in an Annual Congress of scientists, science administrators, policy makers and the general public to give a stronger impulse and a more systematic direction to the scientific inquiry, to promote the interaction of societies and individuals interested in science in different parts of the country and to obtain a more general attention to the objects of pure and applied sciences. ISCA brings together scientists both from India and abroad for mutual interaction in the cause of national development. Annual Congress of the Association has been held every year ever since 1914 with a very distinguished scientist as its General President.

The Association was formed with the following objectives:

- 1. To advance and promote the cause of Science in India;
- 2. To hold an annual Congress at a suitable place in India;
- 3. To publish such proceedings, journals, transactions and other publications as may be considered desirable;
- 4. To secure and manage funds and endowments for the promotion of Science including the rights of disposing of, or selling all or any portion of the properties of the Association;
- 5. To do and perform any or all other acts, matters and things as are conducive to, or incidental to, or necessary for, the above objectives.

Since its foundation, the Association has steadfastly worked to uphold its lofty objectives. The scope of its activities has expectedly increased many fold since 1914. The first Session of the Congress was held during January 15-17, 1914 at the premises of The Asiatic Society, Kolkata, with the Honourable Justice Sir Asutosh Mookerjee, the then Vice-Chancellor of the Calcutta University, a General President. One hundred and five Scientists from different parts of India and abroad attended and papers numbering 35 were divided into six sections; Botany, Chemistry, Ethnography, Geology, Physics and Zoology under six Sectional Presidents. From these relatively modest beginnings ISCA has grown into a strong fraternity with nearly forty thousand members – who participate in fourteen different sections of the Congress. The number of papers communicated for presentation has risen to more than one thousand five hundred. After independence ISCA has been actively interacting with various foreign Scientific Academies/Associations, namely, British Association for the Advancement of Science, French Academy of Sciences, Bangladesh Academy of Sciences, Sri Lanka Association for the Advancement of Science, Beijing Association for Science & Technology and others with a view to have a fruitful interactions on topics of mutual interest.

The year 1976 witnessed a significant departure in the trend of deliberations during the Congress. It was being felt for sometime that such a gathering of scientists, covering a wide spectrum and seized of national issues that have scientific and technological implications to adopt a cogent theme every year. In 1976, Dr. M.S.Swaminathan, the then General President of ISCA, introduced the concept of Focal Theme of national relevance which is now discussed at an Annual Session of the Indian Science Congress. Further, 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 an important platform where members from different disciplines and from different walks of life contribute to discussions on the Focal Theme.

Another significant breakthrough was made in 1980, when the Department of Science and Technology, Government of India, set up a permanent Task Force involving representatives of ISCA and chiefs of different agencies and voluntary organizations. Chaired by the Secretary, DST, as being responsible for follow-up action on various recommendations on the Focal Theme. Every year followup actions on recommendations made in the previous Science Congress are discussed at a General Session organized by DST during the Science Congress. Through this process, the Indian Science Congress Association has been contributing to the development of Science in general and National Science Policy, in particular.

ISCA introduced a programme for the benefit of young scientists from its 68th Session 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 the best presentations, such young scientists are given the ISCA Young Scientist Award. The Young Scientist Award has been enhanced from ` 5,000/- to ` 25,000/- from 2006 to encourage talented young scientists.

A substantial number of the contributed papers, which are accepted on the basis of a careful screening to be done by the concerned Sectional Presidents with the help of some experts, are presented by way of posters. Further, to encourage scientists it was decided that at most two Prizes of 1000/- in cash along with a certificate be awarded to the Best Poster presentation in each section from 1999 Session. The value of these prizes were enhanced to 5,000/- from 2007. From its 101st Session in 2014 it has been converted to a separate programme. Oral presentations of selected contributed papers are also included in the programme of each section.

The Indian Science Congress Association has instituted several Awards to honour and encourage scientists in India – mainly through special endowments received from individuals and groups and also from its own funds. The concept of instituting Awards started from 1965 onwards and presently there are about more than 40 Awards/Lectures that are given by ISCA. From 2013 Asutosh Mookerjee fellowship has been started for senior scientists. At present there are Ten regular fellows.



THE HUNDREDTH FOUR SESSION OF INDIAN SCIENCE CONGRESS

INAUGURAL SESSION

The 104th Indian Science Congress was inaugurated in the morning of January 3, 2017 at Tarakarama Stadium in Sri Venkateswara University, Tirupati by Shri. Narendra Modi, Hon'ble Prime Minister of India, in the presence of Shri. E.S.L.Narasimhan, Hon'ble Governor of Andhra Pradesh and Telangana, Dr. Harsh Vardhan, Union Minister of Science and Technology & Earth Sciences, Shri Y.S.Chowdhary, Union Minister of State (Science and Technology), Government of India, Shri. N.Chandrababu Naidu, Hon'ble Chief Minister of Andhra Pradesh, Prof. A.Damodaram, Hon'ble Vice Chancellor, Sri Venkateswara University and Dr. D. Narayana Rao, General President, The Indian Science Congress Association.

Dr. D. Narayana Rao, General President, The Indian Science Congress Association welcomed the dignitaries and delivered his Presidential Address, on the focal theme "Science and Technology for National Development". Dr. Harsha Vardhan, Union Minister of Science and Technology, Government of India gave his speech. Shri N.Chandrababu Naidu, Hon'ble Chief Minister of Andhra Pradesh delivered his address.

The Hon'ble Prime Minister of India Shri. Narendra Modi released the 104th ISC Plenary Proceedings and presented ISCA awards to Scientists. He also felicitated and gave mementoes to six Nobel Laureates across the globe. He also presented Gold Medals to eminent persons working in various fields of Science and Technology. In his inaugural address, he referred to the constraints involved in securing and completing research projects and stressed the need to ensure 'ease of doing science' as an empowering factor for scientific delivery.

The inaugural session was attended by a large number of foreign scientists, distinguished scientists from various agencies of Government of India, academicians, Vice Chancellors of various Universities, Members of Parliament, Senior functionaries from the Government of Andhra Pradesh, representatives from Industry, students and scholars from different parts of India and abroad.

CHILDREN SCIENCE CONGRESS

Hon'ble Chief Minister of Andhra Pradesh, Shri Chandrababu Naidu inaugurated Children Science Congress in Padmavathi Mahila Vishva Vidyalaya, Tirupati on 4 January 2017 in presence of Shri Y.S. Chowdary, Hon'ble Minister of State for Science & Technology and Earth Sciences and Dr. Takaki Kajita, Nobel Laureate from Japan, Prof. A. Damodaram, Vice Chancellor, Prof. P.P. Mathur, General Secretary (Scientific Activities), Prof. Gangadhar, General Secretary (Membership Affairs), and Prof. D. Narayana Rao, General President ISCA.

Infosys Travel Awards were presented to school students. Prof. P.P. Mathur General Secretary (Scientific Activities), Prof Gangadhar, General Secretary (Membership Affairs) and Prof. A.K. Saxena, Immediate Past General President were also present.

In his inaugural speech, Shri Chandrababu Naidu delivered an inspirational message for young children who want to take up Research & Development and addressed them as the "Future of India". He also mentioned that education for girl child is a must for the development of India on all fronts. He encouraged the children to have Scientists as their role model and strive for achieving their set goals. To encourage the young minds, Shri Chandrababu Naidu announced an award of Rs. 100 crore to the Scientist who wins a Nobel Prize from Andhra Pradesh.

He then invited Dr. Takaki Kajita, the Nobel Laureate, to give some tips to the students so that they can also dream of being scientists. Dr. Kajita told the students that hard work with aim is the only way to become successful in life.

The Children Science Congress, an important event of the Indian Science Congress, is organized to provide a unique opportunity to children of the age group of 10-17 years to use their scientific temperament and knowledge and to quench their thirst for creativity by conducting scientific experiments. The three days' event encouraged children to stimulate their scientific temperament by giving the school children a unique platform to showcase their innovation and creativity in scientific projects.

About 7-8 lakhs school children in the age group of 10-17 yrs participated at various levels from the districts, states & union territories. Around 2 to 3 best projects from each state participated in Indian Science Congress is then identified for the award based on the originality.

WOMEN'S SCIENCE CONGRESS

The 6th Women Science Congress was inaugurated by Hon'ble Chief Minister Chandrababu Naidu in presence of Shri Y. S. Chowdary, Union Minister of State for Science & Technology & Earth Sciences & Prof. D. Narayana Rao, General President, ISCA, on 4th January 2017 in Srinivasa Auditorium at SV University, Tirupati.

This programme is intended to showcase the contribution of women in Science and Technology. Renowned women scientists participated and delivered lectures in this session with aim to empower the women and to inculcate scientific interest and temper among them.

Prof. Neeta Singh, Professor, Department of Biochemistry, NDMC Medical College & Hindu Rao Hospital, started the session and spoke about her cancer research. She explained sbout Human Papillona virus and cervical cancer to the audience in layman's language. Her speech includes the treatment and diagnosis of cervical cancer. The treatment of cervical cancer includes LEEP, Laser, Cryotherapy, cone biopsy and she explained in brief about these. She also spoke about the importance of education in girls.

Prof. H.S. Savithri, Department of Biochemistry, IISC, Bangalore, advised the young students for the development of women in the society.

Other eminent women scientists like Dr. B. Vengamma, Director, Sri Venkateswara Institute of Medical Sciences (SVIMS) & Prof. D Usha Rani were also encouraged the young women and advised to step out of their home and achieve something.

SCIENCE COMMUNICATORS' MEET

The 10th Science communicators' meet was inaugurated on 5th Jan2017 at 10.30 AM in the Botany Seminar Hall of Sri Venkateswara University, Tirupati. Inaugural address was given by Prof.Hemanth Joshi, Indian Institute of Mass Communication, New Delhi. Prof.P.P.Mathur, General Secretary, Scientific Activities, ISCA welcomed the guests. The key note address was given by Prof.A.Damodaram, Vice-Chancellor, Sri Venkateswara University, Tirupati. He also released the Souvenir. Prof D Narayana Rao, General President, ISCA presided over the function. The vote of thanks was given by Prof.Gangadhar, General Secretary, Membership Affairs, ISCA.

The technical session started with panel discussion on "Challenges in Science communication. A State of Art Perspective." The session was chaired by Dr.R.Gopi Ramachandran, Director, Vigyan Prasar, New Delhi. The other speakers were Dr.Dineesh.C.Sharma, News and Media specialist, Dr.Gita Bamzai, IIMC, New Delhi, Dr.T.V.Venkateswaran, Vigyan Prasar and Dr.Sarita Ahlwat, IIT, New Delhi.

Oral Presentations followed this technical session. The first presentation was by Abhay SD Rajput on "The other side of Science: Towards Better Science Communication Skills", Present and Future Prospect of Ultrafast Laser by Susanta Kumar Das, and "Sustainable Development for India's Pursuit of Happiness" by Bharathi Ravikrishnan. This session was chaired by Prof.S.Ramakrishna, Dept of Zoology, Bangalore University, Bangalore.

The next technical session of oral presentations was started by Abheek Chaudhuri on Emergence of Bioinformatics and its Applications. This session was chaired by Prof.C.Muthamizhchelvan,Director, Faculty of Engineering and Technology, SRM Univ, Kattankulathur, Chennai. Other oral presentations followed.

The technical session on 6th Jan2017 started with poster session followed by panel discussion represented by the Heads of the National Council for Science Museums of the Ministry of Culture, CSIR NISCAIR and DST's Vigyan Prasar (Dr Anil Manekar, Dr Manoj Patairiya and Dr R Gopichandran respectively). They presented an overview of the activities carried out as part of the governmental framework and proposed pathways for value added outputs as part of the way ahead. This was followed by oral presentation and the session was chaired by Dr.T.V.Venkateswaran, Vigyan Prasar, New Delhi and later by Prof.P.Neeraja, Prof of Zoology, S.V.University, Tirupati and Convener of Science comunicators' meet. The last technical session was chaired by Prof.S.Krupanidhi, Vignan University, Guntur.

Valedictory function was conducted at 4.30 PM on 6th Jan' 17. The guests were welcomed by the Convener Science Comunicators' Meet, Prof.P.Neeraja. Prof.P.P.Mathur General Secretary, Scientific Activities, ISCA presided and valedictory address was given by Prof.Gangadhar, General Secretary, Membership Affairs, ISCA. Finally Vote of Thanks was given by Dr. Amit Krishna De, Executive Secretary, ISCA.

Recommendations

One of the immediate objectives of the above stated academic event is to acknowledge the fact we as a community of communicators is poised to take science communication ahead through strategically important adaptations of institutional and capacity enhancement interventions on the basis of a well-defined road map.

They are:

- 1. Stimulate curiosity and confidence in stakeholders to ask questions to tackle pre-conceived notions
- 2. Deliver appropriate information in a timely manner based on a clear understanding of the
 - a. ability of stakeholders to comprehend &
 - b. Architecture of circumstances that can transform learning into real life benefits.

This also calls for focused capacity building of communicators to articulate suitably and use multiple tools of communication for improved / enhanced delivery

- 3. Present facts in an unbiased manner and highlight the open-endedness / continually evolving nature of knowledge systems
- 4. Acknowledge eagerness to learn and foster interest with the help of locally adapted teach and learn modules
- 5. Optimize on forms and functions of science communication as public policy tools for real engagement gains and in this process overcome the predicament of trivialization faced by science communication and communicators in general.

SCIENCE EXHIBITION: PRIDE OF INDIA EXPO-104TH ISC

Chief Minister N. Chandrababu Naidu inaugurated the Pride of India (Pol) Expo, hosted as part of the 104^{1h} Indian Science Congress (ISC), at Sri Venkateswara University (SVU) campus here on Tuesday, the 3rd January, 2017. Mr. Naidu, flanked by Union Minister of State for Science and Technology Y.S. Chowdary, State Ministers Ganta Srinivasa Rao (HRD), Bojjala Gopalakrishna Reddy (Environment and Forests) and others, initiated the proceedings by lighting the 'Vigyan Jyot'. He later visited the stalls set up by various departments and institutions of Andhra Pradesh, followed by those set up by R&D organizations, academic institutions and many more, evincing keen interest in the exhibits.

The mega science expo was organized to describe and display the latest innovations and applications of Science and Technology to the general masses including students who visited the Expo. Department of Science & Technology (DST) participated in Pride of India - Science Expo - 2017 held from 3-7 January, 2017. This stall of DST received the 'Most interactive pavilion award".

DRDO pavilion has been a major attraction at the Pride of India Expo amongst visitors and student, 40 DRDO laboratories are participating at the expo to showcase state-of-art military systems and technologies at the DRDO Pavilion which narrate the sage of Self-reliance & National Pride with the "Make in India" spirit. Star attractions of the outdoor exhibits include the Long Range Surface-to-Surface Ballistic Missile Agni-5, Akash Weapon System, Shaurya Missile, the model of the Brahmos missile, Remotely Operated Vehicle Daksh Robot etc.

The other organizations like DAE, CSIR, Ministry of Earth Sciences and other S&T Department and Agencies also had their exhibits along with some stalls from the state governments and other private industry. All of them were based on the themes implied by the Government of India like Swachh Bharat, Make in India, Digital India etc, which inspired people to innovate and further improve science and technology for the betterment of mankind.

VALEDICTORY SESSION

The valedictory marking the end of the event of Indian Science Congress was held at Srinivasa Auditorium, Sri Venkateswara University, Tirupati on 7th January, 2017 at 4:30 P.M. The dignitaries for the valedictory function were Dr. Ch. Vidyasagar Rao, Hon'ble Governor of Maharastra:, Shri. Y.S. Chowdhary, Union Minister of State for Science & Technology and Earth Sciences, Government of India, Prof. A. Damodaram, Hon'ble Vice Chancellor of Sri Venkateswara University, Prof .D. Narayana Rao, General President, ISCA, three Ministers from Government of Andhra Pradesh, Dr A K Saxena, immediate Past General President, ISCA. The Vigyan Jyoth was handed over by Prof D Narayan Rao, General President to Dr Achyuta Samanta , General President Elect. On this occasion Young Scientist Awards and Best Poster Awards were also presented. Prof. S. Vijaya Bhaskara Rao, proposed the vote of thanks.

TECHNICAL PROGRAMMES

PUBLIC AND PLENARY PROGRAMME SCHEDULE

January 3, 2017

Speaker	Prof. Ada E Yonath, Nobel Laureate Weizmann Institute of Science, Rehovot, Israel	
Chairman	Prof. D. Narayana Rao General President, ISCA	
	Special Lecture:	
Speaker	Prof. Kip S. Thorne California Institute of Technology, USA	
Chairman	Prof. B.P. Chatterjee Maulana Abdul Kalam University of Technology Kolkata	
Panel Discussion: Ministry of Science and Technology Perspectives:		
Speaker	Prof. William E Moerner, Nobel Laureate Stanford University, USA	
Chairman	Prof. Ashok Kumar Saxena Immediate Past General President, ISCA	
Speaker	Prof. Takaaki Kajita, Nobel Laureate Institute for Cosmic Ray Research, University of Tokyo, Japan	
Chairman	Prof. P. Rama Rao International Advanced Research Centre for Powder Metallurgy, Hyderabad	

January 4, 2017

Speaker	Prof. Jean Tirole, Nobel Laureate Toulouse School of Economics (TSE), University Toulouse Capitole, France
Chairman	Prof. A. Damodaram Vice-Chancellor Sri Venkateswara University, Tirupati
Plenary Session	Industry Academia Interaction
Convenor	Dr. V.K. Saraswat Member, NITI Aayog, Govt. of India, New Delhi
Co-Convenor	Prof. P.P. Mathur Vice-Chancellor, KIIT University, Bhubaneshwar
Speakers	Mr. Baba Kalyani Chairman & Managing Director, Bharat Forge Limited
	Dr. G. Satheesh Reddy Scientific Advisor to Defence Minister, Govt. of India
	Dr. Baldev Raj Director, NIAS, Indian Institute of Science, Bangalore
	Prof. V. Ramgopal Rao Indian Institute of Technology, Delhi
	Dr. Girish Sahni Director General, CSIR and Secretary, DSIR Anusandhan Bhavan
	Mr. Santosh Srinivas Head, CIET, Jewelary Division, Titan Company Ltd., Hosur
Plenary Session	Space Technology
Convenor	Dr. K. Sivan Director, Vikram Sarabhai Space Centre Thiruvananthapuram
Co-Convenor	Prof. Pramod Kumar Verma Madhya Pradesh Council of Science & Technology Bhopal

Speakers	Dr. M. Annadurai Director, ISRO Satellite Centre, Bengaluru
	Dr. Y.V.N. Krishna Murthy Director, National Remote Sensing Centre, Hyderabad
	Mr. S. Somanath Director, Liquid Propulsion System Centre (LPSC), ISRO Trivandrum
	Mr. Tapan Misra Director, Space Applications Centre, SAC, Ahmedabad
Plenary Session	Nanotechnology
Convenor	Prof. Ajay Kumar Sood, FRS Indian Institute of Science, Bangalore
Co-Convenor	Prof. S.P. Singh Kurukshetra University, Kurukshetra
Speakers	Prof. S. Sampath Indian Institute of Science, Bangalore
	Prof. Satishchandra B. Ogale Indian Institute of Science Education and Research, Pune
	Prof. Tata Narasing Rao International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad
Plenary Session	Frontiers of Defence Research
Convenor	Dr. G. Satheesh Reddy Scientific Advisor to Defence Minister, Govt. of India
Co-Convenor	Prof. Ranjit Kumar Verma Magadh University, Bodh Gaya
Speakers	Dr. (Mrs.) Shashi Bala Singh Director, Defence Institute of Physiology & Allied Sciences, Delhi
	Dr. S. Christopher Secretary & DG DRDO, Department of Defence Research & Development DRDO Bhawan, New Delhi

Dr. M.H. Rahaman Outstanding Scientist & Chief Controller (TM) Department of Defence Research & Development DRDO Bhawan, New Delhi

Dr. G. Athithan DG (MED, CoS & CS), DRDO, New Delhi

Plenary Session	S & T in the Neighbourhood, Extended Neighbourhood &African Countries
Convenor	Dr. Harsh Vardhan Hon'ble Union Minister for Science and Technology & Earth Science, Govt. of India
Co-Convenor	Prof. D. Narayana Rao General President, ISCA
Plenary Session	Next Generation Network & Disaster Management
Convenor	Prof. Navrati Saxena School of Information and Communication Engineering, South Korea
Co- Convenor	Prof. S. Ramakrishna Bangalore University, Bangalore
Speakers	Prof. Sajal K. Das Chair, Missouri University of Science & Technology, Rolla, M.O, USA
	Dr. Abhishek Roy Network Systems Division, Samsung Electronics, Seoul, South Korea
	Prof. Dharma P. Agrawal University of Cincinnati, Cincinnati, OH, USA
	Prof. M.S. Prasad Babu College of Engineering, Andhra University, Visakhapatnam
	Prof. Snehanshu Saha Dept. of Computer Science and Engineering, PESIT, Bangalore
Plenary Session	Methanol Economy
Convenor	Dr. V. K. Saraswat Member, NITI Aayog, Govt. of India, New Delhi
Co-Convenor	Prof. R. Ramamurthy

Speakers	Former Vice Chancellor, S.V. University Prof. G.K. Surya Prakash George A. and Judith A. Olah Nobel Laureate Chair Donald P. and Katherine B. Loker Hydrocarbon Research Institute, Department of Chemistry, University of Southern California, Los Angeles, USA
	Mr. Dom La Vigne Director of Government & Public Affairs – Asia Pacific/ Middle East, Singapore, Methanol Institute, Singapore
Plenary Session	Science Policy for Technology Led Innovation for Societal Applications
Convenor	Dr. Baldev Raj Director, National Institute of Advanced Sciences, Bangalore
Co-Convenor	Prof. Geetha Bali KSWU, Karnataka
Panel Discussion	
Members	Dr. S. Ayyappan Former Secretary (DARE) & DG (ICAR) Ministry of Agriculture, Krishi Bhavan, New Delhi
	Prof. D. Balasubramanian Director Research, L V Prasad Eye Institute L V Prasad Marg, Banjara Hills, Hyderabad
	Prof. Ambuj Sagar Indian Institute of Technology Delhi, New Delhi
	Prof. N.S. Vyas Department of Mechanical Engineering Indian Institute of Technology Kanpur, Kanpur
	Dr. Sunil Shukla Director, Entrepreneurship Development Institute of India, Gandhinagar
	Dr. Venktesh Dutta Department of Environmental Science BBAU, Vidya Vihar, Lucknow
	Dr. Neeraj Sharma Head, Technology Development Transfer Department of Science & Technology Technology Bhavan, New Mehrauli Road, New Delhi

Speaker	Prof. M. Younus, Nobel Laureate Founder, Grameen Bank, Bangladesh
Chairman	Prof. D. Narayana Rao General President, ISCA
	January 5, 2017
Speaker	Prof. Serge Haroche, Nobel Laureate College De France, Paris
Chairman	Prof. Naresh Padha University of Jammu, Jammu
	Public Lecture
Speaker	Dr. R. Chidambaram Principal Scientific Adviser to the Government of India & Chairman, SAC-C
Plenary Session	Cloud Computing and Virtualization
Plenary Session Convenor	Cloud Computing and Virtualization Prof. Biswanath Mukherjee Distinguished Professor, University of California, Davis, USA
·	Prof. Biswanath Mukherjee
Convenor	Prof. Biswanath Mukherjee Distinguished Professor, University of California, Davis, USA Prof. S.V. Kasmir Raja
Convenor Co-Convenor	 Prof. Biswanath Mukherjee Distinguished Professor, University of California, Davis, USA Prof. S.V. Kasmir Raja SRM University, Chennai Dr. Goutam Das G S Sanyal School of Telecommunications,
Convenor Co-Convenor	 Prof. Biswanath Mukherjee Distinguished Professor, University of California, Davis, USA Prof. S.V. Kasmir Raja SRM University, Chennai Dr. Goutam Das G S Sanyal School of Telecommunications, Indian Institute of Technology, Kharagpur Shri. E. Iniya Nehru Senior Technical Director

Plenary Session	5G & Internet of Things (IOT)
Convenor	Prof. Biswanath Mukherjee Distinguished Professor, University of California, Davis, CA, USA
Co-Convenor	Prof. C. Muthamizhchelvan SRM University, Chennai
Speakers	Dr. Rishi Bhatnagar President, Aeris Communications, New Delhi
	Prof. Bhabani Sinha Professor, IEEE Fellow Advanced Computing & Microelectronics Unit Indian Statistical Institute, Kolkata
	Dr. Vijay Mishra Centre for Nano Science & Engineering (Ce NSE) Indian Institute of Science, Bangaluru
Plenary Session	Mentorship and Networking in Science
Convenor	Prof. Chellu S. Chetty Associate VP for Research, Savannah State University GA, USA
Co-Convenors	Dr. A. Mukhopadhyay Head, INSPIRE Program, Department of Science and Technology, New Delhi
	Dr. G. James Pitchai PGP Educational and Welfare Society, Chennai
Speakers	Dr. Christine Pfund UW Research Mentoring Initiatives, Department of Medicine, University of Wisconsin, Wisconsin, USA
	Prof. Jamboor K. Vishwanatha Regents Professor and Vice President, Health Science Center University of north Texas, Texas, USA
	Prof. Prasad Dhulipala Scientist Advisor, Molecular Biology Baker Hughes Upstream Chemicals- Chemical and Industrial Services, Sugar land TX, Texas, USA

	Prof. Pudur Jagadeeswaran Division of Biochemistry and Molecular Biology, University of North Texas, Texas, USA
	Prof. Srinivas Pentyala Director of Translational Research, Associate Professor of Anesthesiology, SARAS Coordinator, Stony Brook Medical Center, NY, USA
Plenary Session	Swachh Bharat
Convenor	Dr. Vinod Tare Professor, Environmental Engineering and Management Programme, Department of Civil Engineering IIT Kanpur, KANPUR
Co-Convenor	Prof. Bhupati Naidu SV University, Tirupati
Speakers	Dr. V. V. Rao National Remote Sensing Centre, Indian Space Research Organization, Department of Space, Government of India, Hyderabad Dr. B. Chandra Sekhar
	Director, Central Leather Research Institute Adyar, Chennai
Plenary Session	S & T Achievers Meet
Convenor	Prof. D. Narayana Rao General President, Indian Science Congress Association
Speakers	Dr. Suman Kumar Dhar Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi
	Dr. Rajeev Kumar Varshney Centre of Excellence in Genomics, International Crops Research Institute for the Semi-Arid Tropics, Hyderabad
	Dr. Suvendra Nath Bhattacharyya Molecular and Human Genetics Division, CSIR- Indian Institute of Chemical Biology, Kolkata
	Dr. Sunil Kumar Singh Geosciences Division, Physical Research Laboratory Ahmedabad

	Dr. Suman Chakraborty Department of Mechanical Engineering, Indian Institute of Technology Kharagpur
	Dr. Venkata Narayana Padmanbhan Research Manager, Microsoft Research India, Bangalore
	Dr. Eknath Prabhakar Ghate School of Mathematics, Tata Institute of Fundamental Research, Mumbai
	Dr. Amol Dighe Department of Theoretical Physics, Tata Institute of Fundamental Research
	Dr. Subramanian Anantha Ramakrishna Department of Physics, Indian Institute of Technology, Kanpur
	Dr. Sudhir Kumar Vempati Centre for High Energy Physics, Indian Institute of Science, Bangalore
Plenary Session	Smart Cities
Convenor	Dr. Sameer Sharma Additional Secretary and Mission Director (Smart Cities) Ministry of Urban Development, Govt. of India Room: 138-C, Nirman Bhawan, New Delhi
Co-Convenor	Prof. Dhyanendra Kumar V.K.S. University, Arrah
Speakers	Prof. Jagan Shah Director, National Institute of Urban Affairs India Habital Centre, Lodhi Road, New Delhi Sri V. Vinay Chand, IAS
	Commissioner, Tirupati Municipal Corporation, Tirupati
Plenary Session	Indian Nuclear Programme
Convenor	Dr. Sekhar Basu Chairman, Atomic Energy Commission and Secretary, DAE, Mumbai
Co-Convenor	Prof. R.K. Verma Patna University, Patna

Speakers	Dr. Sarbani Ghosh Radiation Oncologist Tata Memorial Hospital Dr. E Borges Road, Parel, Mumbai
	Prof. R. Balasubramanian Institute of Mathematical Sciences, CIT Campus Taramani, Chennai
	Dr. S. Gautam SO/G, Food Technology Division Bhabha Atomic Research Centre, Trombay, Mumbai
Plenary Session	Scientific Applications of HPCC
Convenor	Prof. Prasant Goswami Director, CSIR- National Institute of Science Technology and Development Studies (NISTADS), New Delhi
Co-Convenor	Prof. B. Satyanarayana Osmania University, Hyderabad
Speakers	Prof. G.P. Das Senior Professor Indian Association for the Cultivation of Science Jadavpur, Kolkata
	Mr. Joevin Fernando Vice President, Metrics, Analytics and Bench Marking Group, Operations Wells Fargo, San Francisco, California, USA
	Dr. VCV. Rao Associate Director/ Head of Division High Perf. Comp. – Frontier Technologies Exploration Group (HPC- FTE Group) C- DAC, Pune University Campus, Pune
G.]	P. Chatterjee Memorial Award Lecture
Co-Convenor	Prof. Vijay Laxmi Saxena Past General Secretary, ISCA
Plenary Session	Sports Science and Sports Medicine
Convenor	Dr. Jaspal Sandhu, Secretary, UGC

Co-Convenor	Prof. P.P. Mathur, KIIT, Bhubaneswar	
Speakers	Dr. Sanjeev Sahni, Sports Psychologist, JSW	
	Dr. Rajdeep Kaur, Dean, FOSS, Sports Authority of India	
	Shri. Injeti Srinivas, Secretary, MYAS & DG, SAI	
	Shri Vijay Goel, Minister of Youth Affairs & Sports, Govt. of India	
Plenary Session	Food and Nutrition Security	
Convenor	Prof. M.S. Swaminathan Emeritus Convenor and Chief Mentor M S Swaminathan Research Foundation (MSSRF), Chennai	
Co-Convenor	Prof. Vijay Laxmi Saxena Bioinformatics Infrastructure Facility Centre, Kanpur	
Speakers	Prof. K. Ramasamy Vice- Chancellor, Tamil Nadu Agricultural University Coiambatore	
	Dr. R. Rukmini Director – Food Security MSSRF, Chennai	
	R.V. Bhavani Project Manager, LANSA MSSRF, Chennai	
Plenary Session	Bioresources – Impact of Climate Change	
Convenor	Prof. R. Ramamurthi Chairman, Regional Central of Expertise, Tirupati	
Co-Covenor	Prof. H.P. Tewari Allahabad University, Allahabad	
Speakers	Dr. B. Meenakumari Chairperson, National Biodiversity Authority, Chennai	
	Dr. S. Subramaniyan Member, National Biodiversity Authority, Chennai	
	Dr. V.B. Mathur Director, Wild Life Institute of India, Dehradun	

ConvenorProf. Bala Iyer International Centre for Theoretical Sciences Tata Institute for Fundamental Research, IISc Campus, BangaloreSpeakersDr. P. Ajith International Centre for Theoretical Sciences Tata institute of Fundamental Research, Bengaluru Dr. Sanjit Mitra IUCAA, Savitribai Phule Pune University Campus, PuneProf. C.S. Unnikrishnan THFR, Homi Bhabha Road, MumbaiPlenary SessionEnhancing of Quality Education and Research: Role of AccreditationConvenorProf. D. Singh Director, National Assessment and Accreditation Council, BangaloreCo-ConvenorProf. D. Narayana Rao General President, ISCASpeakersDr. Virander S. Chauhan Chairman-EC, NAAC and Member, UGC, New Delhi Prof. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), Varanasi Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons	Plenary Session	Gravitational Waves (Including LIGO & VIRGO)
International Centre for Theoretical Sciences Tata institute of Fundamental Research, BengaluruDr. Sanjit Mitra IUCAA, Savitribai Phule Pune University Campus, PuneProf. C.S. Unnikrishnan TIFR, Homi Bhabha Road, MumbaiPlenary SessionEnhancing of Quality Education and Research: Role of AccreditationConvenorProf. D.P. Singh Director, National Assessment and Accreditation Council, BangaloreCo-ConvenorProf. D. Narayana Rao General President, ISCASpeakersDr. Virander S. Chauhan Chairman-EC, NAAC and Member, UGC, New Delhi Prof. S.P. Thyagarajan Frof. S.P. Thyagarajan Ervire Charcellor, University of Madras, Chennai Prof. S.P. Thyagarajan Ervire Charcellor, University (BHU), VaranasiProf. I.K. Bhat Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons	Convenor	International Centre for Theoretical Sciences Tata Institute for Fundamental Research, IISc Campus,
IUCAA, Savitribai Phule Pune University Campus, PuneProf. C.S. Unnikrishnan TIFR, Homi Bhabha Road, MumbaiPlenary SessionEnhancing of Quality Education and Research: Role of AccreditationConvenorProf. D.P. Singh Director, National Assessment and Accreditation Council, 	Speakers	International Centre for Theoretical Sciences
TIFR, Homi Bhabha Road, MumbaiPlenary SessionEnhancing of Quality Education and Research: Role of AccreditationConvenorProf. D.P. Singh Director, National Assessment and Accreditation Council, BangaloreCo-ConvenorProf. D. Narayana Rao General President, ISCASpeakersDr. Virander S. Chauhan Chairman-EC, NAAC and Member, UGC, New DelhiProf. Rajpal S. Sirohi Chair Professor, Department of Physics, Tezpur University, Tejpur Prof. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), VaranasiPlenary SessionClimate Change/Monsoons		•
Role of AccreditationConvenorProf. D.P. Singh Director, National Assessment and Accreditation Council, BangaloreCo-ConvenorProf. D. Narayana Rao General President, ISCASpeakersDr. Virander S. Chauhan Chairman-EC, NAAC and Member, UGC, New Delhi Chair Professor, Department of Physics, Tezpur University, TejpurProf. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), VaranasiProf. I.K. Bhat Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons		
Director, National Assessment and Accreditation Council, BangaloreCo-ConvenorProf. D. Narayana Rao General President, ISCASpeakersDr. Virander S. Chauhan Chairman-EC, NAAC and Member, UGC, New DelhiProf. Rajpal S. Sirohi Chair Professor, Department of Physics, Tezpur University, TejpurProf. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), VaranasiProf. I.K. Bhat Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons	Plenary Session	
General President, ISCASpeakersDr. Virander S. Chauhan Chairman-EC, NAAC and Member, UGC, New DelhiProf. Rajpal S. Sirohi Chair Professor, Department of Physics, Tezpur University, TejpurProf. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), VaranasiProf. I.K. Bhat Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons	Convenor	Director, National Assessment and Accreditation Council,
Chairman-EC, NAAC and Member, UGC, New DelhiProf. Rajpal S. Sirohi Chair Professor, Department of Physics, Tezpur University, TejpurProf. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), VaranasiProf. I.K. Bhat Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons	Co-Convenor	•
Chair Professor, Department of Physics, Tezpur University, TejpurProf. S.P. Thyagarajan Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development Banaras Hindu University (BHU), VaranasiProf. I.K. Bhat Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons	Speakers	
Former Vice Chancellor, University of Madras, ChennaiProf. A.S. RaghubanshiInstitute of Environment and Sustainable DevelopmentBanaras Hindu University (BHU), VaranasiProf. I.K. BhatDepartment of Applied MechanicsMotilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons		
Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT), AllahabadPlenary SessionClimate Change/Monsoons		Former Vice Chancellor, University of Madras, Chennai Prof. A.S. Raghubanshi Institute of Environment and Sustainable Development
		Department of Applied Mechanics Motilal Nehru National Institute of Technology (MNNIT),
Convenor Dr. R. Krishnan	Plenary Session	Climate Change/Monsoons
	Convenor	Dr. R. Krishnan

	Indian Institute of Tropical metrology Dr. Homi Bhabha Road, Pashan, Pune
Co-Convenor	Dr. Basu Kolkata Municipal Corporation, Kolkata
Speakers	Prof. R. Ramesh Physical Research Laboratory Ahmedabad
Plenary Session	Blue Economy – India's Efforts
Convenor	Dr. M. Rajeevan Secretary to the Govt. of India, Ministry of Earth Sciences, New Delhi
Speakers	Dr. M.A. Atmanand Ex-Director, National Institute of Ocean Technology, Chennai
	Dr. B. Meena Kumari Deputy Director General (Fisheries), Division of Fisheries, New Delhi
	Dr. S. Rajan Director, National Centre for Antarctic and capcean Research, Ministry of Earth Science, Government of India
	Dr. Satheesh C. Shenoi Director, Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, India
	Dr. Viswapati Trivdei Chairman, National Shipping Board, New Delhi, India
Plenary Session	CRISPR – CAS9/Gene Editing
Convenor	Dr. S.R. Rao Adviser, Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India
Co-Convenor	Prof. Gangadhar Bangalore University, Bangalore
Speakers	Dr. Amitabh Mohanty Senior Research Manager, DuPont Knowledge Center, ICICI, Knowledge Park, Hyderabad
	Prof. K. Veluthambi School of Biotechnology, Madurai Kamaraj University, Madurai

	Dr. Abhinav Sinha National Institute of Malaria Research, ICMR, New Delhi
Panel Discussion Members	Dr. P. Chandra Sekhar CCMB, Hyderabad
	Dr. Sreenivasulu Kurukuti University of Hyderabad, Hyderabad
	Dr. Binay Panda Bio-IT Centre, Ganit Labs, IBAB, Bangalore
	Dr. Dhananjay Tiwary Department of Biotechnology, New Delhi
Plenary Session	Human Microbiome
Convenor	Dr. Yogesh Shouche National Centre for Cell Science, NCCS Complex, Pune
Co-Convenor	Prof. Ashok Kumar Saxena Immediate Past General President, ISCA
Speakers	Dr. Vineet Ahuja Department of Gastroenterology, All India Institute of Medical Sciences, New Delhi
	Dr. B.S. Ramakrishna Director & Senior Consultant – medical Gastroenterology SRM Institute for Medical Science, Chennai
	Dr. Sharmila Mande Innovation Labs, Tata Consultancy Services, Hadpsar, Pune
	B.C. Guha Memorial Lecture
Chairman	Dr. Manoj Kumar Chakraborty NICED, Kolkata
Plenary Session	Robotics
Convenor	Dr. Subir Kumar Saha Naren Gupta Chair Professor Department of Mechanical Engineering Indian Institute of Technology Delhi, India
Co-Convenor	Prof. Umakanth University of Rajasthan, Jaipur

Speakers	Prof. (Ms.) R. Bhavani Rao Director, AMMACHI Labs, Amrita University, Amritapuri, Vallikavu, Keral
Plenary Session	Cyber Security
Convenor	Prof. N. Balakrishnan Honorary Professor Department of Aerospace Engineering and Supercomputer Education and Research Centre Indian Institute of Science, Bangalore
Co-Convenor	Prof. S.V. Kasmir Raja SRM University, Chennai
Speakers	Mr. G.Narendranath DDG (Security) Department of Telecommunications (Dot), New Delhi
	Dr. V. Sridhar SRM Research Institute, Bangalore
	Prof. S.V. Raghavan Chief Architect, NKN of India, Chennai
Plenary Session	Advanced Materials
Convenor	Prof. B V R Chowdari Executive Director, NUS – India Research Initiatives, Office of Deputy President (Research & Technology), Physics Department, National University of Singapore
Co-Convenor	Prof. Byrappa Mangalore University, Mangalore
Speakers	Prof. Noriyoshi Matsumi School of Materials Science, Japan Advanced Institute of Science and Technology, Japan
	Dr. Raman Vedarajan School of Materials Science, Area of Materials Science, Advanced Institute of Science and Technology, Japan
	Prof. Ashutosh Tiwari Department of Materials Engineering, University of Uttah, USA

Plenary Session	India-based Neutrino Observatory
Convenor	Prof. Amol Dighe Department of Theoretical Physics, Tata Institute of Fundamental Research, Mumbai
Co-Convenor	Prof. Dinesh Rangappa Visweswaraya Technological University, Chikbalapur
Speakers	Prof. S. Uma Sankar Department of Physics, IIT Bombay
	Prof. Prafulla Kumar Behera Department of Physics, IIT Madras, Chennai
	Dr. B. Satyanarayana Scientific Officer (H) Department of High Energy Physics, Tata institute of Fundamental Research, Mumbai
	Prof. D. Indumathi The Institute of Mathematical Sciences, Chennai
Plenary Session	Solar Energy: Photovoltaic and Thermal
Convenor	Dr. O.S. Sastry Scientist G/Adviser & Director General National Institute of Solar Energy Faridabad, Faridabad
Co-Convenor	Prof. Dinesh Kumar Kurukshetra University, Kurukshetra
Speakers	Prof. S.B. Kedare Department of Energy Science and Engineering Indian Institute of Technology Bombay, Mumbai
	Prof. Ayodyanath Tiwari Head, Laboratory for Thin Films and Photovoltaics Empa-Swiss Federal Laboratories for Material Science and Technology, Switzerland
	Dr. Ashvini Kumar Director Solar Energy Corporation of India Limited (A Govt. of India Enterprise) New Delhi

Plenary Session	Off Shore Wind Farms
Convenor	Dr. S. Gomathinayagam Director General National Institute of Wind Energy (NIWE) Chennai
Co-Convenor	Dr. Vidya Patni University of Rajasthan, Jaipur
Speakers	Dr. M.V. Ramana Murty Group Head/ Scientist- G, National Institute of Ocean Technology (NIOT), Chennai
Plenary Session	Frontiers in Hemostatis and thrombosis
Convenor	Prof. Satya P. Kunapuli Director Thrombosis Research Centre Temple University School of Medicine Philadelphia PA 19140, USA
Co-Convenor	Prof. Gangadhar General Secretary, ISCA
Speakers	Prof. Pudur Jagadeeswaran Director Division of Biochemistry and Molecular Biology LIFE B120 University of North Texas, U.S.A.
	Prof. Debabrata Dash Institute of Medical Sciences Banaras Hindu University, Varanasi
	Prof. Ulhas P. Naik Director, Cardeza Centre for Vascular Biology Sidney Kimmel Medical College, Thomas Jefferson University, USA
	Prof. L. Vijaya Mohan Rao Professor of Biochemistry
	Department of Cellular and Molecular Biology, TX, USA
Plenary Session	Photonics and Meta Materials
Convenor	Prof. Subal Kar Institute of Radio Physics and Electronics University of Calcutta, Kolkata
Co-Convenor	Prof. Kanhaiya Lal Srivastava Jai Narain Vyas University, Rajasthan
Speakers	Prof. S. Anantha Ramakrishna Dept. of Physics, IIT Kanpur

Prof. Sushil Mujumdar

Department of Nuclear and Atomic Physics, Tata Institute of Fundamental Research, Mumbai

Plenary Session	S & T in Northeast Region
Convenor	Prof. Gautam Biswas
	Director,
	Indian Institute of Technology (IIT) Guwahati
Co-Convenor	Prof. Arun Kumar
	Manipur University, Imphal
Speakers	Dr. N.C. Talukdar
	Director,
	Institute of Advanced Study in Science & Technology, Guwahati
	Prof. B.K. Tiwari
	Professor & Head, Dept. of Environmental Studies
	North-Eastern Hill University, Shillong, Meghalaya



ACTIVITIES IN SECTIONS

Deliberations in the 14 sections commenced with the addresses of Sectional Presidents (Annexure-I) followed by Platinum Jubilee Lectures (Annexure-II) in each section. Symposia on special topics (Annexure-III) and a large number of Invited/Special Lectures were organised by the Sectional Presidents which formed an integral part of the technical programme of the 104th Science Congress.

ISCA Young Scientists'Programme

Presentation of papers under ISCA Young Scientists' Programme in the sections were arranged on 4th January, 2017. This year thirteen young scientists received awards under this programme in recognition of their contributions in respective areas of research. ISCA Young Scientist Awards (Certificate and Cash Award of ` 25,000/-) were presented on 7th January 2017 during valedictory programme of 104th Science Congress. Names of those young scientists and titles of their papers are given in Annexure-IV.

ISCA Best Poster Award Programme

To encourage Scientists, the ISCA has instituted Best Poster Awards in each Sections. These Awards carry a sum of ` 5,000/- besides a Certificate of Merit. This year 16 numbers of Best Poster Awards were presented on 7th January 2017 during the valedictory function of 104th Science Congress. Names of those Awardees and titles of their papers are given in Annexure-V.

Name of the Award	Awardee
utosh Mookerjee Memorial Award	Dr. Ashok Kumar Saxena Kanpur
Raman Birth Centenary Award	Prof. K. Byrappa Mangalagangotri
Mitra Birth Centenary Award.	Dr. N. R. Jagannathan New Delhi
bal Sahani Birth Centenary Award	Prof. Arun Kumar Imphal
S.Kothari Memorial Award	Dr. I Sathyamurthy Chennai
f. R.C.Mehrotra Memorial Life ne Achievement Award	Prof. B. P. Chatterjee Kolkata
aharlal Nehru Birth Centenary Awards	Dr Baldev Raj Bangalore
	Prof Om Prakash Kurukshetra

ISCA ENDOWMENT AWARDS / LECTURES

Name of the Award

Millennium Plaques of Honour

G.P.Chatterjee Memorial Award

B C Guha Memorial Lecture

Professor Hira Lal Chakravarty Memorial Award

Prof. Archana Sharma Memorial Award

Dr. V. Puri Memorial Award

Dr. B.C. Deb Memorial Award for Soil/ Physical Chemistry

Prof. G.K. Manna Memorial Award

Prof. S.S. Katiyar Endowment Lecture

Professor Umakant Sinha Memorial Award

Prof. R.C. Shah Memorial Lecture

Prof. (Mrs.) Anima Sen Memorial Lecture

Prof. William Dixon West Memorial Award

Awardee

Prof. Appa Rao Podile Hyderabad

Dr M Ramchandra Mohan Bangalore

Prof B B Kaliwal Davangere

Dr. Supriya Tiwari Varanasi

Dr. Jitendra Kumar Thakur New Delhi

Prof. K.R. Shivanna Bangalore

Dr. Biswajit Pal Kolkata

Prof. Mohammed Hafeez Tirupati

Dr. P. Venkatesu New Delhi

Dr. Sanjeev Das New Delhi

Dr. Vinod Kumar Haryana

Prof. Sibnath Deb Puducherry

Prof. J.P. Shrivastava Delhi



PROF. D. NARAYANA RAO GENERAL PRESIDENT OF ISCA 104TH INDIAN SCIENCE CONGRESS TIRUPATI

Prof. D. Narayana Rao, a scientist of repute is known for his scientific contributions in the field of Atmospheric Sciences. He has worked as Lecturer, Reader and Professor in S.V. University, Tirupati during the period 1975-2002. He has carried out several major research projects sponsored by Science Department and Agencies of Govt. of India like DST, CSIR, MoES (Formerly DOD), MIT (Formerly DOE), ISRO, and UGC. He was later on appointed by the Government of India as Director, National Atmospheric Research Laboratory (NARL), Department of Space, Prof. Narayana Rao has greatly contributed in making NARL a world-class Centre of Excellence for research in frontier areas of Atmospheric Science and Radar Technology. He had the unique privilege of sensitizing and motivating the young students of SRM University, Chennai in designing, developing and fabricating a Nano Satellite being launched by ISRO in October 2011.

Prof. Rao has published more than 100 research papers in highly reputed international journals. 27 students were awarded their Ph.D degrees under his research supervision. In recognition of his scientific contributions, he has received several awards including Sir. C.V. Raman award for outstanding contribution to Physical Sciences awarded by UGC, K.R. Ramanathan award for outstanding contributions to Atmospheric Sciences, Andhra Pradesh Scientist Award for outstanding contributions to Physical Sciences, Astronautical Society of India (ASI) award for excellence in the field of Space Science and Applications, presented by the Hon'ble Prime Minister of India in the year 1996. He had the privilege of receiving the S.S. Bhatnagar Memorial Award (ISCA) from the Hon'ble Prime Minister of India in the year 2011.

Prof. Rao is a Fellow of National Academy of Sciences, India and a Fellow and Member of the Governing Council of IETE and member of several Scientific and Technical Committees at national and international levels. He was the President of Andhra Pradesh Akademi of Sciences during 2007-2010. He has visited a number of countries including USA, Canada, Peru, U.K. France, Italy, Singapore, Hong Kong, Sri Lanka, China, Taiwan, Australia and Japan on various academic and scientific assignments and for international scientific collaboration. He has made significant contributions through international collaboration in the field of Atmospheric Sciences to monitor regional and global Climate Variability.

Prof. Rao was the Project Director of SRMSAT, a Nano Satellite designed and developed by the students of SRM University. He took the complet responsibility for the design and development of SRMSAT. The satellite was launched from SHAR Centre, Sriharikota in October 2011. He had the opportunity of serving the Indian Science Congress Association (ISCA) as Local Secretary for the 98th Indian Science Congress held at SRM University, Chennai in January 2011.



Shri Narendra Modi, Hon'ble Prime Minister of India delivering inaugural speech



Dr. Ashok Kumar Saxena receiving highest award of ISCA - Ashutosh Mookerjee Memorial Award by Shri Narendra Modi, Hon'ble Prime Minister of India

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Shri Narendra Modi, Hon'ble Prime Minister of India felicitating Nobel Laureate.



Shri Narendra Modi, Hon'ble Prime Minister of India and Shri Chandrababu Naidu, Chief Minister of Andhra Pradesh at Science Exhibition.



Shri Y. S. Chowdary, Hon'ble Union Minister of State for Science & Technology and Earth Sciences delivering speech at Valedictory Session.



Dignitaries on the Dias during inauguration of Women's Science Congress.



Inauguration of Children Science Congress by Dr. Takaki Kajita, Nobel Laureate.



Dignitaries on the Dias during Valedictory Session.

104TH INDIAN SCIENCE CONGRESS S V UNIVERSITY, TIRUPATI 3-7 JANUARY, 2017

RECOMMENDATIONS OF SECTIONAL COMMITTEES (AS RECEIVED FROM SECTIONAL PRESIDENTS)

AGRICULTURE AND FORESTRY SCIENCES

- Research on climate change in relation to adaptation and mitigation for a climate smart agriculture should be strengthened in an interdisciplinary manner.
- Assessment of natural resources with modern tools and techniques (e.g., geoinformatics, remotesensing, drone, simulation medelling, etc.) at farm level and their integration with socio-economic scenario for sustainable land use planning and management.
- Promotion of diversified agriculture and popularization of non-timber forest products (NFTP) through adoption of agro-forestry and short duration energy plantations to ensure livelihood security and women empowerment in tribal areas need to be encouraged.
- Enhancing nutrient and water use efficiency in agro-ecosystems through the use of existing traditional and modern techniques like nano-formulation, fertigation, etc. in irrigated and rain-fed farming systems.
- Research on conservation agriculture in relation to soil processes involving nutrient fluxes and flows, organic recycling in relation to organic matter formation and its stability, nutrient availability and soil quality for enhanced productivity and environmental security should be emphasized.
- Newer formulations of mixed bio-fertilizers exploiting soil metagenomics and devising effective delivery systems to farmers' fields is needed.
- Research on rapid waste recycling and use of organic manures such as FYM, compost, vermicompost, etc. needs to be promoted. Standardization of organic manures, their preparation methods and quality criteria needs to be established.
- National networking arrangement to coordinate the studies of fertilizer use and soil health in different agro-ecological regions for efficient inputs use, soil health and environment needs to be developed.
- Strengthening public-private partnershipand farmers' linkages with research institutes should be expedited for enhancing agro-technology delivery.

ANIMAL, VETERINARY AND FISHERY SCIENCES

- Keeping in view the focal theme of Indian Science Congress (S &T for National Development) and the topic of symposia for the Section of Animal, Veterinary and Fishery Sciences, following recommendations have been made.
- Basic Biology should be made integral part of undergraduate and Post-graduate studies in Biotechnology, Microbiology, Bioinformatics and modern disciplines.
- The assemblage of species with we share the planet represents a vast untapped genetics library, with undiscovered pharmaceutical and beneficial substances. So programme needed to be initiated for the exploration of other less known potential varieties of life forms with a view to ensure rural livelihood, food health and financial security.
- Documentation of traditional technical knowledge (TTK) and indigenous technology, its revival and strengthening for sustainable development in the area of bioresources and adaptation to climate change should be made.
- Bioresources are the wonderful gift of nature to the mankind whose sustainability can be effectively linked to rural livelihood and economic development, so science education should aim at attracting students for proper management and sustainable utilization of bioresources.
- Programme needs to be initiated for exploration of other less known varieties of life forms with the view to ensure livelihood and food security.
- Application of molecular tools for wildlife conservation, especially of endangered species may be given greater importance.
- Multivoltine race of silkworm (*Bombyx mori*) should be tested under different agro-climatic zones of India for proper evaluation of improvement efficiency.
- Bio-economic modeling of different ponds and reservoir management with view to increase fish production should be carried out.
- Promotion of public awareness on biodiversity conservation role of individuals for minimizing ecological footprint and maintaining health and hygiene in the vicinity should be made.
- Public-private partnership (PPP) should be encouraged to solve the environmental problems and conservation and proper exploitation of all such life forms, which ensure food, health and livelihood.
- Public participation in decision-making should be ensured and integration of environmental, economic and social sustainability with food, health and livelihood security of the people.
- Various disease problems (in aquaculture and animal's husbandry etc.) and their management can be worked out in details.

- Launching of massive training programme to link economically important bioresources such as silkworm, honey bee, aquaculture, vermiculture, pearl culture livestock, etc. with a view to promote/ accelerate more rural livelihood should be intensively initiated.
- Since biotechnology is now playing an important tool for food, health and livelihood security, short term training should be initiated in rural area for better production of eatables which will contribute in increasing National GDP from this sector.
- Students with M.Sc. Degree in Zoology (with specialization in Fish & Fisheries) are neglected and denied appointment in fisheries and other related departments which is a great injustice to them. UGC should take strong step to protect the interest of such students.

ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES (INCLUDING ARCHAEOLOGY. PSYCHOLOGY, EDUCATION AND MILITARY SCIENCES)

- More research works should be carried out in the field of reproductive health of women living in rural and tribal areas of India. Because reproductive health is an important component of general health and is a prerequisite for social, economic and human development. The highest attainable level of health is not only a fundamental human right for all, it is also a social and economic imperative because human energy and creativity are the driving forces of development.
- Population Aging' indeed has become a great challenge for the humanity in the 21st century. It is a demographic imperative which has socioeconomic and political consequences across the globe. There should be a collective approach in dealing with this phenomenon to secure our lives and also of our future generation in last years.
- Scientists from behavioral sciences discussed about the authentication of the MNREGA implementation through rapid field survey.
- There should be more research in the field of Development Psychology since this will enhance the skill of people in problem solving, moral understanding, conceptual understanding, language acquisition, social, personality emotional development, self concept and identity formation. It can be considered as an alternative approach to a single focus on economic growth, and focused more on social justice, as a way of understanding progress.
- Scholars also found it imperative to research in studying ethnic variability (both biological and cultural) and its reasons. This is will help in bringing national harmony, social justice and peace.

EARTH SYSTEM SCIENCES

- > Oceanic resource need to strength and Smart cities employs.
- > Natural hazards need to be concentrated.
- Earth System academics.
- Geo ethics need to be taken care.
- More & more power need to established (Nuclear Power) nuclear waste should be taken care.
- Space technology need to be taken care in geo spatial maps.
- Linkage with societal needs.
- Mineral resource need to be studies –Topping the benefits.
- > Natural hazards need to be investigated: sustainable development.
- > Dedicated section on Remote Sensing Application.

ENGINEERING SCIENCES

- Fresh graduate engineers/ scientists should be motivated for R & D work as well as for teaching faculty.
- There should be good interactive mechanism between the academia and the industry to minimize unemployment for the passing out students.
- Good number of faculties along with infrastructural facilities should be provided to the engineering colleges and universities in order to upgrade the standard of education.
- > Discipline-wise engineering curriculum should be updated periodically to meet the future challenges.
- Training courses for the engineers should be improved/upgraded, so that they can adapt themselves to emerging technologies.
- Faculty members should have good industrial exposure in order to improve the quality of education as well as to create job opportunities for the fresh engineers/ scientists.
- Engineers and scientists should work in a harmony, so that innovation by the scientists can be fruitfully assimilated and utilized by the engineers to make it useful to the society at large.
- Microzoning of Metropolitan cities should be taken up with priority. Engineers and scientists should come forward to sort out critical issues in mitigating the disaster due to earthquake.

Govt. of India stressed on infrastructure development. We must take up the critical issues, safety and security.

ENVIRONMENTAL SCIENCES

- National Survey on Biodiversity of Himalayan Region and Western Ghats (including- microphysics. BGA) with special emphasis on indigenous knowledge based natural resources should be undertaken to decipher the unknown and un-recorded natural resources.
- An all India co-ordinated program should be undertaken to assess and monitor environmental pollution (inorganic and organic) to mitigate the pollution and also to provide a better livelihood.

INFORMATION AND COMMUNICATION SCIENCE & TECHNOLOGY (INCLUDING COMPUTER SCIENCES)

- Proliferation of different technologies, combined with ever-increasing complexity of software and more advanced business, economic, financial models has led to a wider complex and networked issues. Scientific discoveries and innovations produce new knowledge bases for development of new products, solutions and services for transforming lives of masses and new ways of living using new technologies. These should continue unabated.
- In order to have true digital society, suitable for the country like ours, creation, integration and adoption of new culture base is to be formed.
- Computer and IT education including its history and ramifications, must form a part of course curricula in universities, colleges and other courses offered from time to time. Exhaustive databases including events, personalia etc. must be prepared. Professional Societies like ISCA, Computer Society of India (CSI), NassCOM, IETE etc. along with major institutions, universities etc. also NIELIT, at all levels must be involved in this process to be supported by governments as part of nationwide project.
- The need for further data acquisition in some specified areas like medicine- both diagnosis, disease control and cure, also healthcare, should be well funded, and subsequently disseminated and analysed for the betterment of the society, Rigorous analysis and critical attention need to be given to medical electronics taking into account its affordability to a large segment of consumers.
- Cognitive Computing, Artificial intelligence, archival, searching, Predictive Analytics and Prescriptive Analytics in ever-involving Big data and Internet to Things need to be studied and exercised with well funded projects on a continuing basis.
- Smart villages, like smart cities, are the order of the day. Special and appropriate infrastructural design and application long with skilled manpower must be identified throughout the country at different levels, particularly among the next generations.

- IT should act as a facilitator and a catalyst, as well to provided 'Education for ALL' in the coming decade. Future Citizen driven education need to be introduced for the transformation from the present Academy driven education.
- Decision-making with the use of computers, mobiles, televisions considering all networks with popular social networking sites should be encouraged and acted upon. Legislation and security mechanisms to this effect, particularly in connectivity, must be strengthened.

MATERIALS SCIENCE

- Development of advanced polymeric/elastomeric/polymer matrix composite materials for Defence/ Aeronautical applications.
- > Nano materials and devices for green and clean energy applications.
- > Polymeric Hydrgel materials for Biomedical applications.
- > Sensor materials for detection of toxic chemicals.
- > Chalcogenide and chalcopyrites for optoelectronic applications.

MATHEMATICAL SCIENCES (INCLUDING STATISTICS)

A Special Symposium entitled "Role of Mathematics in the National Development" was organized on 04th January, 2017 to address the theme of ISCA Conference 2017. It was addressed by three Eminent Indian Mathematicians, who has contributed immensely initiating mathematics education of various levels. The meeting was attended by more than 100 mathematicians from all over the country. It also had a very live discussion session. It is strongly recommended that mathematics curriculum should be reengineered at all levels including School and College level, keeping in mind the unfolding Science and Technology revolution across the globe. It was also recommended that a very well defined methodology, be in place to impart basic mathematics education to every citizen of the country. Also, sufficient researches in mathematics and related areas in Indian Universities and Research Institutes. This should be in addition to promotional research avenues addressing applications of Mathematics in various disciplines such as Defense Studies, Biological Studies, Environmental Studies and Social Sciences Studies.

MEDICAL SCIENCES (INCLUDING PHYSIOLOGY)

- > Physiological Survey of India needs to be set up to promote the subject of Physiology.
- More work needs to be done to fast different natural pro.

NEW BIOLOGY (INCLUDING BIOCHEMISTRY, BIOPHYSICS & MOLECULAR BIOLOGY AND BIOTECHNOLOGY)

- The new Biology domain knowledge is rapidly increasing. The students for both Undergraduate and Post Graduate courses in the related area must be exposed to a dynamic curriculum .More stress should be given to Practical exposure and training for the students. The DST/DBT/CSIR supported funds must reach to the remote area colleges and Universities which will help to build up the Human resources in this area.
- > The research focus should be given to both basic and applied research.
- > New approaches to be implemented for border less education and collaborative research.
- > The basic training should nurture more inquisitive minds and Innovation should be encouraged more.
- Research in the area of Chemical Biology, Chemical genetics to be encouraged to facilitate Drug discovery.
- Research related to health and food production should be emphasized to help the nation come out of malnutrition, poverty and challenges to keep the biodiversity undisturbed

PHYSICAL SCIENCES

- Immediate and serious emphasis should be given to Physics Education/Teaching at Undergraduate and Postgraduate levels in Universities particularly State Universities situated in remote areas.
- > Intensive research is required for developing materials for electro-optic applications.
- > Development of nanomaterials suitable for display, imaging and lightening applications.
- Scaphene quantum dot conducting polymer for opto-electronic and photovoltaic applications.
- Applications of electrochemical and photo-catalytic technology should be expanded for mineralisation of various environmental organic polymers.
- The need of hour is the quality and speedy research in various disciplines of Physics. Proper attention must be given to multidisciplinary research.
- In view of the importance of liquid crystals both in technological developments and also in chemical/ biological/medical sciences; proper attention be paid to this gray area.

PLANT SCIENCES

- New alternative sources of phytomedicines from preferable so far untouched plants, especially the weeds and lower plants (Algae, Bryophytes and Pteridophytes) should be explored and multiplied.
- Bioprospecting of the medicinal compounds or compounds of commercial importance (pharmaceutical, nutraceutical, industrial enzymes, dyes, etc.) should be carefully carried out from screened potential sources or through use of synthetic biology.
- > Development of biofertilizers and biocontrol agents for improvement of crops.
- Screening of plants and phytoplanktons for C-sequestration, biofuel development and reducing carbon credits.
- Phytoremediation of heavy metal pollution through phytomining/ phytoextraction/ phytostabilization/ volatalization and their suitable disposal or bacterial degradation.
- > Development and popularization of bioplastics.
- All the new compounds, plants and technology should be entered in the digital database of CSIR to protect our traditional, cultivated or bioprospected herbal wealth.

OTHER ACTIVITIES ISCA CHAPTERS

The Association started organizing popular science lectures in different centers in India from 1962-63. The scheme envisages constructive work for the popularization and advancement of science throughout the year. Till 1985-86 these lectures were delivered at seventeen centres spread over the country. How-ever, this was restructured with the formation of Regional Chapters from 1986-1987.

One of the major objectives of the ISCA is to inculcate the Scientific temper among the people and to encourage young scientists 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 Chapters from 1986-87 in different places in India. At present twenty four ISCA Chapters are at Allahabad, Amravati, Bangalore, Baroda, Bhopal, Bhubaneswar, Cochin, Chennai, Coimbatore, Delhi, Haridwar, Hyderabad, Imphal, Jaipur, Jammu, Kanpur, Kolkata, Kurukshetra, Patiala, Patna, Pondicherry, Sagar, Sri Nagar, Tirupati.

Highlights of ISCA Chapter Activities (2016-2017) Focal theme 'Science & Technology for National Development''

ALLAHABAD CHAPTER Convener: Dr. I.R. Siddiqui

Organized a three day National Seminar on Focal theme between 11th-13th February, 2017. On the Science Day i.e. 28th February 2017 was celebrated on the theme "Science and Technology for especially abled person" in the form of debate by UG and PG students and invited talks. On the 26th March 2017, a science exhibition including poster presentation, scientific model presentation and talks by local scientists to popularize science and technology was organized at MRS school and college, Patel Nagar, Jhunsi, Allahabad.

BANGALORE CHAPTER Convener : Dr. S. Ramakrishna

Organized three day "National Conference on Science and Technology for National Development – Health, environment and agriculture" in association with Department of Biotechnology, Jain University. One keynote address, six plenary lectures, 34 research papers were presented and 63 posters, Chaired by eminent personalities of life sciences. Organized two day "International conference on Science and Technology for National Development-Social, mobile, analytics and cloud" in association with Adarsh institute of Management and Information Technology.Received 144 pull papers and contributed more than 200 authors 60 research papers were presented 64 posters. Organized one day Lecture work shop on "Science and Society", includes ignatian scientific lectures.Organized one day symposium to commemorate National science Day on 28th February 2017, includes invited lectures.

BARODA CHAPTER Convener : Prof. (Mrs.) G. Sandhya Kiran

Conducted two workshops, one seminar, two competitions and a lecture in academic year 2016-2017. Workshop on Hands on training on "GC and HPLC" was organized for training the research students in these important analytical techniques. Chapter successfully celebrated "World Space Week – 2016" and organized national Seminar on "Remote Sensing: Enabling our Future" as a part of the space week. ISCA-(BC) also organized Rangoli Competition in which students of B.Sc. and M.Sc. Programs of Botany Department participated and prepared beautiful rangolis. Science Conclave-2017 was organized by the chapter to inspire young researchers for doing interdisciplinary research. Invited lecture On "Orientation of Naturopathy and Yoga for complete health improvement by promoting women health" and elocution Competition for students was organized by the chapter on 8th March, i.e. international women's day. Workshop on "Exposure to Scientific Vocational Technology & A tour to Botanical Garden for Differently Abled Persons" was organized on National Science day-2017 for encouraging differently abled students.

BHUBANESWAR CHAPTER Convener : Dr. Kajal Parashar

Organized a national seminar on Focal Theme on 12th & 13th December 2016 in collaboration with KIIT University. Director Space Application center, former Vice Chancellor of Jadavpur University and present vice-chancellor of KIIT University and Utkal University. More than three hundred participants were presented their scientific works in the two days seminar. In collaboration with KIIT University celebrated "National Science Day" on 28th February 2017 on the theme "Science & Technology for Specially Abled Persons". The event was graced by Prof. Achyuta Samanta, Founder KIIT & KISS and General President ISCA, Padma Shree Dr. Subrata Acharya Pro Chancellor KIIT University, Prof. Christopher. W. Bielawski, Professor, Department of Chemistry, Ulsan National Institute of Science and Technology, South Korea, Prof. Kumar Devadutta Associate Professor, School of Computer Sciences and Engineering, KIIT University. On this occasion seven budding innovative students belonging to different schools of Odisha who have been awarded with Dr APJ Kalam Ignite Award, were felicitated by the dignitaries.

CHENNAI CHAPTER Convener : Prof. C. Muthamizhchelvan

Conducted 9 one-day workshops/seminars and 1 three-days national conference on Science & Development. Conventional roadblocks of Human fundamental rights (HFR) such as gender equity issues, stereotypes, lack of mentoring, socio-cultural differences (immoral tints), health/sanitation issues, inherent barriers along with ethical/moral responsibilities of woma(e)n at workplaces were significantly addressed through one-day Women Empowerment Program. As a part of the focal theme, the Chennai chapter has been devoted to conduct special programs such as Hindi essay competition for the school children and nominated two science communicators through its revival of indigenous development and the latest developments of sustainable aquaculture and circular economy. With a special focus on rural education to the school children (named as rural education achievement program – REAP); the three day conference



attracted the large number of practitioners and witnessed various thematic lectures, invited lectures, airrocketry (space) workshop, science mobile express activities with hands-on-learning demonstration, digitizing Google maps, and so on. The Science-of Rocketry was the special attention. The flavour of collaborated events with NGO based environment camp known as (Art-on-Green) for the impacts of conventional and advanced medical diagnoses, the raising awareness of iron-deficiency especially to the rural girls, the prevalence of Geoinformatics (Geo-positional Informational Systems) for the cleaner environments. The popularization of scientific benefits to the Specially Abled persons was significantly emphasized through the inspired bionic systems.

COCHIN CHAPTER Convener : Prof. Dr. K.V. Jayachandran

International Conferences on Focal theme, held at KUFOS on 25th and 27th October, 2016; "Science and Technology for National Development – Advances in Crustacean Research" at University of Kerala on 20/09/ 2016; "Taxonomy of Crustacea" during 21st to 23rd/09/2016 at University of Kerala, Workshop on "Quality, food safety and productivity", National Programmes: Interactive seminar on "Promotion of rural aquaculture for improving the protein security and livelihood in India with special reference to Kerala" on 4/07/2016 at KUFOS; Panel discussion and interactive seminar on "Linking Rivers, Barrages and Fish Migration" on Fish Migration Day on 21/05/2016 at KUFOS; Awareness programme on Kandal (Mangrove) along with Mangrove Mahotsavon 16/11/2016 at KUFOS; One day workshop on "Capacity building on crustacean taxonomist" on 18/01/2017 at FMN College; Science awareness programme at University College on 20/01/2017; at Govt. Higher Secondary School, Trichur District, Kerala State on 30/01/2017; at MSM College, Kayamkulam, on 02/02/2017; at SEED, Cherthala for school children, on 26/02/2017; Awareness programme for School children at Govt. Higher secondary school, Kadamakkudy, Ernakulam District, on 03/03/2017; at Govt. Higher Secondary School, Njarakkal, Ernakulam District, 29/03/2017; at SEED office, Cherthala for farmers on 19/03/2017. Awareness class on differently abled people as part of National Science Day celebrations at UC College, at Alappuzha on 12/03/2017 Science popularization programme at Sree Narayana College, Cherthala on "Climate change and Environment" on 20/03/2017; Selected two candidates for Science Communicator's meet ISC at Tirupati during 3-7/01/2017.

COIMBATORE CHAPTER Convener : Smt. C.A. Vasuki

'International Yoga Day' was celebrated on 21.06.2017 in Kongunadu Arts and Science College campus with the participation of 452 members, Free medical camp was organized jointly with Kovi Medical Centre Hospitals for tribal people on 31.07.2016 at Chadivayal tribal hamlet. National level Symposium on 'Green Ecology for Environmental Security' on 6.10.2016, Conference on 'Current scenario in pure and applied mathematics' on 22nd & 23rd December, 2016, workshop on 'Research in Basic Science' on 15.02.2017 and special lecture on 'Managing anaemia and malnutrition through home remedies' on 21.12.2016 were organized, Hindi essay writing competition was conducted on 15.10.2016 on the focal theme, National Science Day was celebrated by conducting 'Drawing competition' on 14.02.2017, 'Quiz competition' on 16.02.2017 and seminar on 'Scientific Advancement in Modern Medicine' and exhibition on 28th Feb, 1st and 2nd March, 2017 in Kongunadu Arts and Science College, Four, one day seminars *viz.*, on 'Career Guidance in Training on Youth Leadership and Community Development, 'Green chemistry'



for sustainable development in India, Opportunities and Challenges in Biological Sciences', and 'Advanced developments in spectroscopic techniques and its applications' were conducted, Eminent experts/scientists in the respective field served as resource persons in various above mentioned programme.

DELHI CHAPTER Convener : Dr. Salil Gupta

Engineers Day was celebrated with Prof. PB Sharma, VC Amity University, Gurgaon, the chief guest read the keynote address on Engineers' Day organized for ISCA members. On National Science Day Poster competition and a series lectures by scientists on Persons with Disability was organized together with Hansraj College and NCWEB. ISCA gave away prizes to winning entries. Awareness campaigns include Cancer screening awareness camp with Race to rein in Cancer and ROKO NGOs. 50+ ladies registered; Health and Hygiene and also anti-tobacco awareness campaign among underprivileged school children in form of lectures and poster competitions. ISCA gave away prizes to winning entries; Pollution Control and Air Quality Measurement awareness campaign that culminated in an inter-school poster, AV clips, skits etc. competition. ISCA gave prizes to winning schools.

HARIDWAR CHAPTER Convener : Prof. (Dr.) Rajneesh Dutt Kaushik

The International Yaga day was celebrated by ISCA: Haridwar Chapter in collaboration with the Department of Yoga, Gurukul Kangri University, Haridwar, on 21st June, 2016 from 6.45 a.m. onwards. About 300 persons participated. Hindi Essay writing competition was held in the Department of Chemistry, Gurukula Kangri Vishwavidyalaya Haridwar on 25.09.2016 at 11:00 am. Two candidates from both category I and II were selected. Science communicators' selection was made on 14 October, 2017, 2 pm onwards at Department of Chemistry, Gurukul kangri University, Haridwar. Two candidates were selected and their names were forwarded to ISCA headquarters. The Chapter took care of the toilet, bathroom and other works done in the village adopted last year. National conference was organized on November 20-22, 2016. Poster exhibition on the theme "Science & Technology for Specially Abled Persons" on the occasion of National Science Day was organized at Faculty of Engineering & Technology, Gurkul Kangri University, Haridwar(Uttarakhand) on February 28, 2017 from 11:00 am onwards. A total of 11 invited scientific talks were organized for propagation of the cause of science during this year.

JAIPUR CHAPTER Convener : Dr. Payal Lodha

Celebrated Earth Day, National Education Day, World Environment Day, International Literacy Day, World Health Day, Student Day, Women's Day, National Science Day. Organised National Conference on "Environment Challenges, Human Health and Society "29th-30th August, 2016 at University of Rajasthan, Jaipur, National Seminar on Focal Theme 16th – 17th September, 2016 at University of Rajasthan, Jaipur. International Conference on "Environment Awareness Protection & New Challenges" 3rd – 4th Feb, 2017 at St. Wilfred's P.G. College, Jaipur, Rajasthan. Science Awareness programme on Interactive Session on General health issues, current affairs related to School science in India and World, and Quiz competition in Poddar Senior Secondary School, Bapu Nagar, Jaipur, Lecture related to pollution, environment and health held at Government schools in various parts of Jaipur.

KANPUR CHAPTER Convener : Dr.(Mrs.) Vijay Laxmi Saxena

Organised Intercollegiate Hindi essay Competition in the Dept. of Zoology on the focal theme, where Seven schools and six post graduate colleges participated in the Event, Quiz competition was held on 22. 09. 2016 at Sri KailashNath Balika Vidyalaya Inter College, where eight inter colleges participated in the quiz competition, The Poster Comp. on the theme was held on 30.09.2016 in which large number of students from various degree and post graduate colleges participated. Science Day was celebrated on 28th February, 2017 at Kumari Udyan Girls/ Inter College, Ashok Nagar, Kanpur. Where Eight colleges participated Inter Collegiate competitions., organized two day Seminar from 29 to 30.09.2016 in Dayanand Brajendra Swarup College, (DBS) Kanpur. Former Vice Chancellor S.V. University and Former General President ISCA Prof. Ramamurthi, presided the session. Chief Guest Mrs.Kumkum Swarup inaugurated the programme and Guest of Honor Mr.Gauravendra Swarup released the Souvenir Mr. Manvendra Swarup, Guest of Honor, addressed. Immediate past General President of ISCA Dr. Ashok K.Saxena, Dr. Manoj K Chakravorti & Dr. Nibedita Chakravorti EC Member ISCA & Prof. Santosh Kumar, Former Vice Chancellor Barkatullah University, .Mr.Mahendra Pati, GM Telephones, Kanpur. Prof. Gangadhar, General Secretary Membership Affairs Prof Ranjit Verma, Treasurer ISCA, Prof. H.P. Tiwari. Former General Secretary, Prof. Arun Kumar Former General Secretary (Scientific Activities) Prof. Ramakrishna, (Banglore University and EC member of ISCA) Dr. Arun K. Pandey AES ISCA were present. Prizes were given to winners of different competitions held.

KOLKATA CHAPTER Convener : Prof. Ananga Mohan Chandra

World environment Day was observed on June 7, 2016 where Prof Goutam Paul, Dean Faculty of Science, Kalyani University delivered a lecture on the recent aspects of the environmental problems. The World Yoga day was observed on 22nd June 2016 at the Auditorium of ISCA (Hqrs). The speaker was Dr Udaysankar Ray, Scientist (Retired), Defense Institute of Physiology and Allied Science, DRDO, Delhi. Doctor's Day was observed on July 1, 2016 at the Auditorium of the ISCA (Hqrs). Organised one day seminar in a rural Schools on Aug 26, 2016 at Paniparul Mukteswar High School (H.S.), Purba Medinipur on the focal theme and in another rural college on March 11, 2017 at Ramananda College, Bishnupur, Bankura. National Scientific seminar on Nov 10-12, 2016 at the Conference Hall of RJ Resort at Darjeeling and at the Netaji Institute For Asian Studies, Kurseong, on the focal theme. The seminar was attended by many dignitaries of ISCA, such as Dr M K Chakraborty, Former General Secretary, ISCA, Dr Nibedita Chakraborty, Member, Executive Committee, and others. Prof AM Chandra, welcomed. Prof R. Ramamurthy, Past General president of ISCA presided over the seminar. Prof H P Tiwari, Former General Secretary, ISCA, Dr. AK Saxena, Immediate Past General President, ISCA and Prof Gangadathar, General Secretary (membership Affairs), ISCA, Dr Arun Kumar, Former General Secretary, ISCA delivered speech on the focal theme. Besides, Science Communicator's meet was organised on 21st Nov, 2016 at Dept. of Physiology, University of Calcutta., Felicitation to Dr Monilal Bhaumik, an eminent Physicist of USA on 23rd Dec, 2016 and National Science Day on 28th February, 2017 jointly with Lady Brabourne College.

KURUKSHETRA CHAPTER

Convener: Prof. Ashok Aggarwal

\Under the aegis of Prime Minister Swaachh Bharat Abhhiyan, two toilets one for ladies and one for Gents got constructed by ISCA, were inaugurated by Vice Chancellor, Kurukshetra University, and Vice Chancellor YMCA, Faridabad. Organized various Science exhibitions, Quiz completions and popular

lectures on Science awareness among school students of rural area of Haryana. Organized one day National Conference on , "Chemical and Environmental Science: Emerging Dimensions and Challenges Ahead", On National Science Day, Jawaharlal Nehru Centenary lecture was delivered by Dr. O.P.Arora and plaque was presented by Prof P. P. Mathur, General Secretary, Scientific Activities(ISCA). On Line Quiz completion, declamation contest for Masters students and Science awareness programme for differently abled children were organized.

PATIALA CHAPTER Convener : Prof. (Dr.) Tarlok Singh

Under the stewardship of the Convenor (Patiala-Chapter), a team of experts surveyed the cancer and fluoresces prone belt of Punjab comprising districts – Bhatinda, Mansa and Sangrur and found that the uranium laidden underground water and irrational use of pesticides are playing havoc with the human life. Though NGO's and the Govt. agencies are doing their best but due to the size of the population, all efforts fall short of the target. Of the Scientific Organized National Yoga Day at University Campus and Expo-Science Exhibition at DAV Public school, Patiala as well as Gobindgarh Public School, Mandi Gobindgarh. For rural school children, competitions were arranged to sharpen their skill and love for the science and environment. Large number of school students enthusiastically participated and won merit certificates and prizes. Celebrated the National Science Day with the special children at a school for handicapped, located at village Saifdipur. Deaf and dumb students demonstrated their skill in performing a scientific skit. Blind students came forward to make speeches on top Indian Scientists and some students showed their expertise in painting as well.

PATNA CHAPTER Convener : Dr. Sheo Satya Prakash

The Hindi Essay competition on the focal theme "Science and Technology for National Development" was organized on 28th September 2016 and 3rd October 2016 at R.P.S. Girls School Patna and Ganga Devi Mahila college Patna respectively. Altogether 65 candidates participated. National Seminar was held on 16 to 18th December 2016 at I.G.S.C., Planetarium and Indian Institute of Business Management, Patna. The chief guest was Immediate General President Dr. Ashok Kumar Saxena. Prof. R.Ramamurti, Former General President presided the function. The other dignitaries addressed the seminar were Dr.VL Saxena, Dr. M K.Chakrabarti, Prof. M.K.Jyoti, Prof. Dhyanendra Kumar, Prof. J.S.Tara and Dr. Kuldeep Sharma. 20 research papers were presented. All the essay's participants were awarded certificates and medals. National Seminar on the topic "Environmental Pollution: Causes and Remedies" was held at Ramesh Jha Mahila College, Saharsa on 10th & 11th February. The National Science Day was celebrated on 28th February 2017 at P.G.Department of Chemistry, A.N.College, Patna. On 30th March 2017, one day National Seminar on the topic "Role of Women Scientist in National Development" was organized by the chapter at P.G. Department of Chemistry, T.M.Bhagalpur University, Bhagalpur. The chief guest highlighted the importance of Women Scientists in National Development. The President elect (ISCA 2019 Session). Dr. Manoj K. Chakravorti, Dr V LSaxena, Dr. Nivedita Chakrabarti, Prof. Gangadhar, Prof. R K. Verma also addressed the seminar. Dr.S S Prakash, proposed the vote of thanks. 10 Research papers was also presented on the occasion.

PONDICHERRY CHAPTER Convener: Dr. V. Amouda

Orgainsed with Pondicherry University (PU) one day National symposium on "Science and Technology for National Development" on Feb 27, 2017 for UG and PG students (200 students) from in and around Pondicherry. The National Symposium comprises of 7 lectures by eminent professors ondifferent topics of science discipline to educate and empower young minds of the Nation. Posters were invited from different parts of the country. Around 37 posters, best posters were selected for presentation and prize. Observed National Science day on "Science and Technology for Specially Abled Persons", on Feb 28, 2017 where around 220 students from 27 schools and 87 Differently Abled Children participated. One lecture on popularizing Science along with various competitions like quiz, skit and elocution for the school students were conducted and distributed the prize to encourage the students for their hard work and contributions.

SAGAR CHAPTER Convener : Dr. Subodh Kumar Jain

Observed June 21, 2016, World Yoga Day; September 23 – 24, 2016 National seminar on "Science and Technology for National Development" where Prof. Ashok Kumar Saxena (Former GP, ISCA), Prof. Vijay Laxmi Saxena, Prof Santosh Kumar, and Prof. R.P.Tiwari (VC, DHSGU, Sagar) delivered speech. As resource persons Prof. Ishan Patro (Gwalior), Prof. Anjana Sharma (Jabalpur), Prof. Satyawati Mishra (IIT, Delhi), delivered lectures. Organised on February 18, 2017 a lecture workshop on "Stress: Concept and Real Life". February 22, 2017 in a lecture workshop on "Stress and Behaviour" organised February 28, 2017, National Science day on "Science and Technology for Specially Abled Persons" organised. March 02, 2017 a lecture on "Advancements in Biotechnology" by Prof. Krishna Mishra (Allahabad) organized.

TIRUPATI CHAPTER Convener : Prof. R. Ramamurthi

Special lectures were conducted by experts for the benefit of college students.Dr.N.Chandrayudu of Geography department of S.V.Univerity spoke on Remote sensing technology for Resource Management in Rajampet degree college on 26 August 2016.On March 8th 2017 Dr.Poola Kesavulu spoke on Statistics for National Development in Emerald Degree college Tirupati. The following important days were observed and performed befittingly: World Earth Day, World Environment Day, World Forest Day, World Water Day, World Health Day, International Yoga Day and programmes relating to Youth for Agriculture.

CELEBRATION OF HINDI WEEK CEREMONY IN THE INDIAN SCIENCE CONGRESS ASSOCIATION

OBSERVATION OF HINDI WEEK CELEBRATION

The inauguration of the Hindi Week of The Indian Science Congress Association started on 12th September, 2016 with Dictation competition. This programme was presided by Dr. Amit Krishna De, Executive Secretary. On this programme Dr. Arun Kumar Pandey, Assistant Executive Secretary was also present. In Hindi Week Ceremony various competitions were organised and everyone participated in this. On 16th September, 2016 Hindi Week Ceremony has it's valedictory session with Quiz Competition. Shri Priyankar Paliwal, Secretary, TOLIC (Offices - 2) conducted Hindi Workshop and judged Dictation Competition. On the prize distribution ceremony of this programme Dr. Vijay Laxmi Saxena, Past General Secretary (Scientific Activities) presented prizes to the participants.

PUBLICATIONS

The bi-monthly journal Everyman's Science (Vol.LI Nos.1-6) was brought out. Other publications brought out were : ISCA Directory : 2016-2017, Annual Report : 2015-2016, Synopsis of the Presentations of ISCA Young Scientist Awardees for 104th ISC, Abstracts of Best Poster Award Programme for 104th ISC and proceedings (containing Presidential Address, abstracts of Platinum Jubilee Lecture, Award Lectures, papers presented and invited lectures of different sections).

OTHER ITEMS ISCA MEETINGS

Following meetings of different bodies were held during the year 2016-2017.

Name of the Body	Meetings held on
Executive Committee	May 13, 2016, October 03, 2016, October 22, 2016, January 02, 2017 (adjourned to January 7, 2017),
Council	May 14, 2016, October 22, 2016 and January 02, 2017 (adjourned to January 07, 2017)
Finance & Establishment Committee	May 13, 2016 and October 03, 2016 January 02, 2017
Advisory Committee	May 13, 2016, October 22, 2016, January 02, 2017

Besides above, two meetings of the General President with Sectional Presidents of 104th Indian Science Congress were held on May 14, 2016 and October 22, 2016. Also, meeting of Permanent members of Conveners of ISCA Chapters were held on October 22, 2016 and Chapter Conveners on January 02, 2017.

ISCA REPRESENTATION IN OTHER ORGANIZATIONS DURING 2016-2017

Indian National Science Academy, New Delhi :

Prof. S. S. Katiyar, General President (2001-02), ISCA, Chairman, U.P. State Council for Higher Education, Lucknow, Formerly Vice-Chancellor, Chhatrapati Shahu Ji Maharaj University, Kanpur & Vice Chancellor, C.A.University of Agriculture and Technology, Kanpur & Founder Director, Dr. Ram Manohar Lohia National Law University, Lucknow & President, Association of Indian Universities, New Delhi.

Post Graduate Institute of Medical Education and Research, Chandigarh :

Prof. B.P.Chatterjee, former General Secretary, ISCA, Emeritus Professor, West Bengal University of Technology, Sector-I, BF-142, Salt Lake, Kolkata.

JIPMER, Puducherry, (Jawaharlal Institute of Post Graduate Medical Education and Research):

Dr. Ashok Kumar Saxena, General President (2015-2016) and Former General Secretary, ISCA, Former Dean, Faculty of Science, C.S.J.M. University, Kanpur; 7/182, Swarup Nagar, Kanpur - 208 002, U.P.

National Academy of Engineering, Gurgaon:

Dr. N.B. Basu, General Secretary (Membership Affairs) ISCA, Principal Chief Engineer (C) & C.M.E. (P & D), The Kolkata Municipal Corporation, Kolkata.

All India Institute of Medical Sciences (AIIMS), New Delhi:

Dr.(Mrs.) Vijay Laxmi Saxena, Former General Secretary, ISCA, Coordinator- Bioinformatics Infrastructure Facility Centre of DBT (Government of India), Former Head of the Department of Zoology, Dayanand Girls (P.G.) College, Kanpur; Member: Academic Council, KIIT University, Bhubaneswar; Member: Academic Council, Mysore University, Mysore; Managing Editor, Trends in Life Sciences (An International Journal); Editor, Everyman's Science, ISCA, Kolkata

All India Institute of Medical Sciences, Bhopal:

Dr. (**Mrs.**) **Vijay Laxmi Saxena,** Former General Secretary, ISCA, Head of the Department of Zoology, Dayanand Girls (P.G.) College, Kanpur.

All India Institute of Medical Sciences, Bhubaneswar:

Dr. Ashok Kumar Saxena, General President (2015-2016) and Former General Secretary, ISCA, Former Dean, Faculty of Science, S.S.J.M. University, Kanpur.

All India Institute of Medical Sciences, Jodhpur:

Prof. Dr. Ranbir Chander Sobti, General President, (2013-14), ISCA, Vice-Chancellor, Babasaheb Bhimrao Ambedkar University, Lucknow - 226 025

All India Institute of Medical Sciences, Patna:

Prof. S.S. Katiyar, Former General President, ISCA and Former Vice-Chancellor, Chhatrapati Shahu Ji Maharaj University, Kanpur & Vice-Chancellor, C.A. University of Agriculture and Technology, Kanpur & Former Chairman, U.P. State Council for Higher Education, Lucknow.

All India Institute of Medical Sciences, Raipur:

Prof. H.P. Tiwari, Former General Secretary, ISCA, Allahabad.

All India Institute of Medical Sciences, Rishikesh:

Dr. Manoj Kumar Chakrabarti, General President (2018-2019), ISCA, Scientist G (Director Grade) & Head, Division of Pathophysiology, National Institute of Cholera and Enteric Diseases (ICMR), Kolkata.

MEMBERSHIP

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

	102 nd Session (2014-2015)	103 rd Session (2015-2016)	104 th Session (2016-2017)
Life Member	26,782	29,059	32,137
Annual Member	6,642	4,920	7,793
Sessional Member	2,127	4,195	3,176
Student Member	2,227	3,702	3,140
Individual Donor	20	23	26
Institutional Donor	31	33	34
Institutional Member	12	8	8
 Total	37,841	41,940	46,314

ORGANIZATIONAL SET-UP*

The composition of GB/GC/FC :

The composition of **General Body** of ISCA consists of all the Members (with voting right) and Honorary Members of the Association.

The **Council** consists of (i) Members of Executive Committee, (ii) all such Members or HonoraryMembers of the Association who have held office as General President, General Secretary or Treasurer,(iii) Sectional Presidents, (iv) seven members of the Association elected by the General Body, (v) one member to be nominated by The Kolkata Municipal Corporation, (vi) Editor-in-Chief of Everyman's Science, and (vii) a nominee of Indian National Science Academy (INSA) Council who is a member of ISCA.

The **Executive Committee** consists of the General President, the Immediate Past General President, the General President-Elect, the two General Secretaries, the Treasurer, ten members elected by the General Body, and Secretary or his nominee, Department of Science and Technology, Government of India and two local Secretaries of the ensuing session.

ISCA has five **Statutory Committees** *viz*: (i) Advisory Committee (ii) Finance & Establishment Committee (iii) Publication Committee (iv) Endowment Committee and (v) Standing Committee on Science and Society.

Staff Welfare measures :

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

Implementation of reservation policy :

The Association is following the policy of the Government of India in the matter of recruitment of its staff members.

^{*} In accordance with the suggestion given by DST in its letter No.AI/AR/004/2007 dated 31-03-2007 the above materials on organizational set-up are also furnished.

Implementation of the Official Languages Policy :

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 Junior Hindi Translator is looking after the above work.

Right to Information Act :

As per Right to Information Act a Public Information Officer has been identified from the existing Officers and her name has been displayed in the ISCA Website. Any enquiry received regarding R.T.I.is taken care of by the concerned Officer.

Public Grievances Redress Mechanism :

Executive Secretary has been nominated as Public Grievance Officer to take necessary action on complaints received from the members of the Association. There is also a Vigilance Officer whose name has been displayed in the ISCA Website.

Citizen's Charter :

Reservation Policy under the Corporate Social Responsibility :

The Association is following the Reservation Policy of the Government of India in respectof SC/ST/OBC in the matter of recruitment of its staff members and a roster is maintained in this regard.



ACKNOWLEDGEMENTS

The Executive Committee of the Indian Science Congress Association 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 great appreciation of the personal interest for hosting and organizing the 104th Indian Science Congress by S V University, Tirupati. Sincere thanks are also due to the Prof. A. Damodaram, Vice-Chancellor and their associates, for their untiring efforts to make the 104th 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 different Committees and Sub-Committees, Sectional Presidents, Sectional Recorders, Local Sectional Secretaries, Chapter Conveners and members of the Sectional Committees for their guidance and advice. In referring to the success achieved at the 104th Session, it is a pleasure for the Committee to record its gratefulness to the General President, Prof. D. Narayana Rao for all his efforts to make the 104th Indian Science Congress a great success and memorable one.

Last but not least, no record of acknowledgement could be complete without expressing the deep appreciation of the work done by the staff of the Association throughout the year.



Nationwide Activities through ISCA Chapters (2016-2017)



ISCA Allahabad Chapter



ISCA Bangalore Chapter



ISCA Amravati Chapter



ISCA Bhubaneswar Chapter

Nationwide Activities through ISCA Chapters (2016-2017)



ISCA Chennai Chapter



ISCA Coimbatore Chapter



ISCA Haridwar Chapter



ISCA Jaipur Chapter

Nationwide Activities through ISCA Chapters (2016-2017)



ISCA Jammu Chapter



ISCA Kanpur Chapter



ISCA Kolkata Chapter



ISCA Kurukshetra Chapter



ANNEXURE - I TITLE OF ADDRESSES OF SECTIONAL PRESIDENTS OF 104th ISC SESSION

Sl	No. Section	President	Title
1.	Agriculture and Forestry Sciences	Dr. Ashok K. Patra Bhopal	Impacts of Climate Change on Fertilizer use, soil health and crop productivity in India.
2.	Animal, Veterinary and Fishery Sciences	Prof. B.B. Kaliwal Davangere	Biotechnology is a tool for Human Welfare.
3.	Anthropological and Behavia Sciences (including Archaeo Psychology, Education and Military Sciences)	•	Aging and Human Development - A Challenge for the 21 st Century.
4.	Chemical Sciences	Prof. Raj Nath Yadava Sagar	Studies on Potential allelochemicals from some Indigenous Medicinal Plants.
5.	Earth System Sciences	Dr. Onkar Singh Chauhan Goa	Application of remote sensing and a new sedimentary proxy to decipher sources, dis- persal and sequestration pathways of the continental fluxes in the ocean.
6.	Engineering Sciences	Mr. Sisir Kr. Banerjee Kolkata	Engineering education and its relevance in the present context.
7.	Environmental Sciences	Prof. Swati Gupta-Bhattacharya Kolkata	Identification and characterization of aero- allergens for better livelihood.
8.	Information and Communica Science & Technology (inclu Computer Sciences)	-	Revisiting Leading Vistas of Information and Communication Technology and its Contemporaneity.
9.	Materials Science	Dr. Durgesh Nath Tripathi Kanpur	Development of Polymeric/ Elastomeric Materials for Defence and Aeronautical Applications.
10.	Mathematical Sciences (including Statistics)	Prof. Tarun Kumar Das Delhi	Recent Advances in Differentiable and Measure Theoretic Dynamical Systems.
11.	Medical Sciences (including Physiology)	Prof. Somnath Roy Midnapore	Genetic polymorphism and drug resistance: A problem in malaria control.
12.	New Biology (including Biochemistry, Biophysics & Molecular Biology and Biotechnology)	Prof. Dhrubajyoti Chattopadhyay Kolkata	Drug Discovery: Past, Present and Future
13.	Physical Sciences	Prof. Sugriva Nath Tiwari Gorakhpur	Liquid Crystal Interactions: An Overview.
14.	Plant Sciences	Prof. Vijai Pal Singh Bareilly	Heavy Metals, Nitrophenols and Chloroaminophenols: Toxicity and their Phytoremediation/Bacterial Degradation.

ANNEXURE - II

Section	Speaker	Title
Agriculture and Forestry Sciences	Prof. O.P. Yadav Jodhpur	Marching towards Second Green Revo- lution: Issues and Opportunities.
Anthropological and Behavioural Sciences (includ- ing Archaeology, Psychology, Education and Military Sci- ences)	Dr. Sarit Kumar Chaudhuri Bhopal	Tribe, State and Development: Under- standing Transformative Discourse in India's North East.
Chemical Sciences	Dr. Pawan K. Sharma Kurukshetra	Impending Paradigm Shift in Drug Design and Discovery
Earth System Sciences	Dr. Devesh Walia Shillong	Active Tectonics in Shillong Plateau
Environmental Sciences	Dr. Sudip Chattopadhyay Durgapur	Calmodulin 7 (CAM7) and Elongated Hypocotyl5 (HY5) work in concert to regulate <i>Arabidopsis</i> seedling Development.
Information and Commu- nication Science & Technology (including Computer Sciences)	Dr. Sanghamitra Bandyopadhyay Kolkata	Computational Biology: Challenges and Advances
Mathematical Sciences (including Statistics)	Dr. Indranil Biswas Kolkata	Homogeneous Bundles on Hermitian Sym- metric Spaces.
Medical Sciences (including Physiology)	Prof. Uday Bandyopadhyay Kolkata	Non-steroidal anti-inflammatory drugs (NS AIDs) - induced gastric injury/ gastropathy: cause and correction.
New Biology (including Bio- chemistry, Biophysics & Molecular Biology and Biotechnology)	Prof. Hari S. Misra Mumbai	Bacterial response to DNA damage: be- yond LexA/RecA type SOS response.

PLATINUM JUBILEE LECTURES OF 104TH ISC SESSION

ANNEXURE - III

TITLES OF SYMPOSIA ON SPECIALIZED TOPICS ORGANISED BY THE SECTIONS OF 104TH ISC SESSION

SI No. Section Topic(s)		
-	iculture and estry Sciences	 Enhancing Soil Health for Sustainable Agriculture and Environment. Climate-Smart Agriculture.
	mal, Veterinary and hery Sciences	 Animal Sciences a boon for the Development. Biotechnology as a tool for food, health and livelihood security.
Beh (inc Psyc	hropological and pavioural Sciences luding Archaeology, chology, Education l Military Sciences)	 Engaging Anthropology for National Development. Role of Behavioural Sciences for National Development.
4. Che	emical Sciences	 Advances in Natural Products Research: Perspectives and Prospects Recent Advances in Medicinal Chemistry.
5. Ear	th System Sciences	 Causes, response and mitigation strategies for climatic change. Global Climate Changes and extreme events.
6. Eng	nineering Sciences	 Role of Renewable Energy in the rural & urban sectors. Institutionalisation of Water Resources Development to meet the growing challenges.
7. Env	ironmental Sciences	 Documentation and conservation of Indian biodiversity with special emphasis on indigenous knowledge-based natural resources. Assessment and mitigation of environmental pollution in terms of bioaerosols for better livelihood.
Con Teci	ormation and nmunication Science & hnology (including nputer Sciences)	 Role of Societies and Organisations in Computer Science and Technology for National Development. Impact of Information Technology and Communication Sciences and Technology for National Development.
9. <i>Ma</i>	terials Science	 Material Science and Technology for Defence Applications Material Science and Technology for Aeronautical Applications.
	hematical Sciences (includ- Statistics)	 Strategies for the improvement of Mathematics Education in relation to National Development. Algebra and Coding Theory. Space Dynamics.
	dical Sciences (including siology)	 Current Trends of Physiological Research in Community Development. Nano and Conventional Technology in Cancer Research.
Bio Mol	v Biology (including chemistry, Biophysics & lecular Biology and technology)	 Cell Signaling and Cellular Regulation: Promise to Practice. Chemical Biology and Drug Research.
	sical Sciences	 Physics in National Development. Physical Sciences in Nation Building.
14. Plan	nt Sciences	 Phytoremediation Plant Science Research for Human Welfare.

2. Plant Science Research for Human Welfare.

SL	No. Section	Name of the Awardee(s)	Title of the Paper(s)
1.	Agriculture and Forestry Sciences	Bappa Das Old Goa	Evaluation of Different Unit- and Multi- Variate Techniques for Water- Deficit Stress Phenotyping of Rice Through Spec- troscopy.
2.	Animal, Veterinary and Fishery Sciences	Sreekanth G. B. Old Goa	Fish Communities Refuge Shipwrecks than Natural Reefs along South West Coast of India
3.	Anthropological and Behavioural Sciences (including Archaeology, Psychology, Education and Military Sciences)	Nivedita Som Kolkata	Body Image Perception of Adolescent Girls: A Study in the City of Kolkata, West Bengal.
4.	Chemical Sciences	Satyabadi Martha Bhubaneswar	Onestep Ssynthesis of g-C3N4 Powder Photocatalyst and Thin Film as Photoanode for Photocatalytic and Photoelectrochemical Applications.
5.	Earth System Sciences	Shital P. Godad Goa	Variability of Winter Cooling in the Arabian Sea: Implications for the NE Monsoon.
6.	Engineering Sciences	Nandini Bhandaru Kharagpur	Capillary Force Assisted Nano Patterning of De-mixed Polymer Blend Thin Films.
7.	Environmental Sciences	Praveen Dhyani Almora	Source Dependent Variation in Bioactive Compounds of Selected Apple Cultivars in Western Himalaya.
8.	Information and Communication Science & Technology (including Computer Sciences)	Abhirup Banerjee Kolkata	Rough-Probabilistic Clustering for Brain Tumor Segmentation in Multispectral MR Images.
9.	Materials Science	Anjilina Kerketta Kanpur	Preparation of Flame Retardant Fibers of Polyphosphazene and it's Blends with Polyolefins.
10.	Mathematical Sciences (including Statistics)	No Award	
11.	Medical Sciences (including Physiology)	Sabyasachi Das Paschim Medinipur	Artemisinin Combination Therapy failure in <i>Plasmodium falciparum</i> Associates with Novel Genetic Polymorphisms: An Emerging Problem in Eastern India.
12.	New Biology (including Biochemistry, Biophysics & Mo- lecular Biology and Biotechnology)	Bodhisattwa Saha Kolkata	Proteomics Assisted Identification, Cloning and Epitope Mapping of Coc n 1, the First Major Cross Reactive Allergen of Coconut and Date Palm Pollen.

LIST OF YOUNG SCIENTIST AWARDEES FOR THE YEAR 2016-2017

LIST OF YOUNG SCIENTIST AWARDEES FOR THE YEAR 2016-2017

SI No.	Section	Name of the Awardee(s)	Title of the Paper(s)
13.	Physical Sciences	Dharmendra Pratap Singh Lucknow	Gradual Growth of Ferroelectric Mesophase under Geometrical Confinement in Core/ Shell Quantum Dot-Ferroelectric Liquid Crystal Composite and their Ultra- fast Electro-optical Response for Display Application.
14.	Plant Sciences	Neha Pandey Lucknow	UV-B radiation as epigenetic modulator of artemisinin biosynthesis in <i>Artemisia annua</i> L., an antimalarial plant.

S	l No. Sections	Name of the Awardee(s	s) Title of Paper (s)
1.	Agriculture and Forestry Sciences	1. Ganajaxi Math Karnataka	Use of Sunflower (<i>Helianthus annuus</i> L.) residue compost to urdbean (<i>Vigna mungo</i> L. Hepper) for improving soil health
2.	Animal, Veterinary and Fishery Sciences	1. Yashika Awasthi Lucknow	Cr ⁶⁺ induced oxidative stress and altered expression of p53 and bax genes in fish <i>Channa punctatus</i> (Bloch).
		2. Yogita Y. Falak Jalgaon	Antibacterial potential of some extracts of <i>Eisenia spp</i> .
3.	Anthropological and Behavioural Sciences (including Archaeology, Psychology, Education and Military Sciences)	Delhi	Supernumerary Volar Digital Flexion Crease: A New Feature for Forensic Identification in In- dia Association of disordered eating behaviours with dietary pattern of the urban adolescent
4.	Chemical Sciences	1. Aarti Dalal	girls of West Bengal, India: An exploratory study Photoreorganization of Chromenones: A
		Kurukshetra	Green and Convenient Synthesis of fused Xanthenones
		2. Pradeep Kumar Brahman Guntur	Design and development of a composite film based on CuNPs/Fullerene- 60/MWCNTs for the trace recognition of paracetamol
5.	Earth System Sciences	NoAward	
6.	Engineering Sciences	NoAward	
7.	Environmental Sciences	1. Partha Karak Santiniketan	Fungal aerosols, pollutants and meteorological factors leading to increasing allergic diseases in Durgapur- an industrial township of West Bengal, India
		2. Priyanka Priyadarshani Ranchi	Measuring Carbon Footprint Impacts of Microfinance: An Empirical Study of Deoghar district, Jharkhand
8.	Information and Communication Science & Technology (including	• 8	Four-Element Highly Isolated MIMO Antenna System for 5 GHz WLAN Applications
	Computer Sciences)	2. Ajish K. Abraham Mysore	Effect of microphone type on some temporal and spectral parameters of speech sounds recorded through PC
9.	Materials Science	No Award	

LIST OF BEST POSTER PRESENTATION AWARDEES FOR 2016-2017

LIST OF BEST POSTER PRESENTATION AWARDEES FOR 2016-2017

SL	No. Sections	Name of the Awardee((s) Title of Paper (s)
10.	Mathematical Sciences (including Statistics)	1. Rishikesh Dutta Tiwary Dhanbad	Effects of radiation pressure and oblateness on the regularized restricted three body problem
11.	Medical Sciences (including Physiology)	No Award	
12.	New Biology (including Biochemistry, Biophysics & Molecular Biology and Biotechnology)	1. Nandini, B Mysuru	Novel membrane lipid nanoemulsion of <i>Trichoderma</i> spp. for the induction of systemic resistance in pearl millet against downy mildew disease
13.	Physical Sciences	1. Swarniv Chandra Kolkata	Investigation of ion-acoustic solitary structures in multi-componentplasma containing q-exponential distributed electron beam
		2. Ajaz Hussain Lucknow	Volumetric, Acoustical and Optical Properties of Poly Ethylene Glycol Methyl Ether Methacrylate (PEGMA) 475 with 2- Methoxyethanol and 2-Ethoxyethanol : An Experimental and ¹ H NMR Spectroscopy Study.
14.	Plant Sciences	1. Debleena Roy Kolkata	An easy approach to augment the antioxidative potentials of peppermint through micropropagation.

ANNEXURE - VI

LIST OF INFOSYS FOUNDATION - ISCA TRAVELAWARDEES FOR 2016-2017

Sl. No.	Name of the Awardee
1.	TusharAgarwal
	Seth Anandram Jaipuria School, Kanpur
2.	Sheen Parimoo
	Seth Anandram Jaipuria School, Kanpur
3.	Shourya Singh
	Seth Anandram Jaipuria School, Kanpur
4.	Subhanjali Saraswati
	Mahadevi Birla World Academy, Kolkata
5.	V. Manaswini
	Montessori English Medium High School, Mahabubabad
6.	Sanjay
	Bhartiya Vidyabhavan, Tirupati
7.	S. Vidhayini
	Sree Vidyanikethan International School, Tirupati
8.	Jithendra
	Bhartiya Vidyabhavan, Tirupati
9.	Praneeth Kumar G
	Sree Vidyanikethan International School, Tirupati
10.	P. Kapileshwar
	Marg Chinmaya Vidyalaya, Tiruchnoor Byepass Road, Tirupati

MEMBERS OF THE COUNCIL FOR 2016-2017

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General President	
Prof. D.Narayana Rao	Kattankulathur
Immediate Past General President	
Dr.Ashok Kumar Saxena	Kanpur
General President Elect	
Dr.Achyuta Samanta	Bhubaneswar
General Secretary (Membership Aff	
Prof. Gangadhar	Bengaluru
General Secretary (Scientific Activit	Ų
Prof. Premendu P.Mathur	Bhubaneswar
Treasurer	
Prof. Ranjit Kumar Verma	Patna
Elected Members of the Executive (Committee
Prof.(Dr.) Kanhaiya Lal Shrivastava	Jodhpur
Prof. Pramod K. Verma	Bhopal
Mrs. Kumkum Swarup	Kanpur
Dr. Nibedita Chakrabarti	Kolkata
Prof.K.S.Rangappa	Mysuru
Dr.S.Ramakrishna	Bengaluru
Prof.B.Satyanarayana	Hyderabad
Prof.Naresh Padha	Jammu
Prof. C. Muthamizhchelvan	Kattankulathur
Prof.R.Ramamurthi	Tirupati
Representative of DST, Governmen	•
Dr. Praveer Asthana	New Delhi
Local Secretaries	
Prof.N.Sethuraman	Kattankulathur
Prof.C.Muthamizhchelvan	Kattankulathur
Past General Presidents	
Prof. M.S. Swaminathan	Chennai
Prof. A.K.Sharma	Kolkata
Prof. M.G.K. Menon	New Delhi
Prof. R.P.Bambah	Chandigarh
Prof. C.N.R. Rao	Bengaluru
Prof. Yash Pal	Noida
Prof. D.K. Sinha	Kolkata
Prof. P.N. Srivastava	Gurgaon
Dr. S.C. Pakrashi	Kolkata
Prof. U.R. Rao	Bengaluru
Prof. S.K. Joshi	New Delhi
Dr. P. Rama Rao	Hyderabad
Dr. (Mrs.) Manju Sharma	New Delhi
Dr. R.A. Mashelkar	Pune
Dr. R.S. Paroda	New Delhi
Prof. S.S. Katiyar	Kanpur
Dr. K. Kasturirangan	Bengaluru
Prof. Asis Datta	New Delhi
Prof. N.K. Ganguly	New Delhi
Prof. Harsh Gupta	Hyderabad
Dr. T. Ramasami	Chennai
Dr. G. Madhavan Nair	Trivandrum
Prof. K.C. Pandey	Lucknow
Prof. Geetha Bali	Bengaluru

Dr. Manmohan Singh New Delhi Prof. Dr. Ranbir Chander Sobti Lucknow **Past General Secretaries** New Delhi Dr. (Miss) Shashi Prabha Arya Prof. H.P. Tiwari Allahabad Prof. S.P. Mukherjee Kolkata Dr. (Mrs.) Yogini Pathak Vadodara Prof. Uma Kant Jaipur Prof. B. Satyanarayana Hyderabad Prof. B.P. Chatterjee Kolkata Prof. S.P. Singh Kurukshetra Prof. Avijit Banerji Kolkata Dr. Manoj Kumar Chakrabarti Kolkata Dr. (Mrs.) Vijay Laxmi Saxena Kanpur Dr. Nilangshu Bhusan Basu Kolkata Prof.Arun Kumar Imphal Past Treasurer Dr. S.B. Mahato Kolkata Prof. Dhyanendra Kumar Arrah **Sectional Presidents** Dr. Ashok K.Patra Bhopal Prof.B.B.Kaliwal Davangere Prof.Subho Roy Kolkata Prof.Raj Nath Yadava Sagar Dr.Onkar Singh Chauhan Goa Mr.Sisir Kr.Banerjee Kolkata Prof.Swati Gupta-Bhattacharya Kolkata Mr.Devaprasanna Sinha Kolkata Dr.Durgesh Nath Tripathi Kanpur Prof.Tarun Kumar Das Delhi Prof.Somnath Rov Kolkata Prof.Dhrubajyoti Chattopadhyay Kolkata Prof.Sugriva Nath Tiwari Gorakhpur Prof.Vijai Pal Singh Bareilly **Elected Members of the Council** Mr.Gauravendra Swarup Kanpur Dr. Vidya Patni Jaipur Prof.(Dr.) K.Muthuchelian Madurai Prof.(Dr.) S.Rajarajan Sonepat Prof.M.Bhupathi Naidu Tirupati Dr.G.James Pitchai Chennai Prof.S.V.Kasmir Raja Chennai **Representative of The Kolkata Municipal** Corporation Sri Anindya Karforma Kolkata Editor-in-Chief of Everyman's Science Dr. Ashok Kumar Saxena Kanpur **Representative of Indian National Science** Academy (INSA) Council Prof.Kankan Bhattacharyya Kolkata

MEMBERS OF THE COUNCIL FOR 2017-2018

General President	
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Immediate Past General President	
Prof. D. Narayana Rao	Vijayawada
General President Elect	J. J
Dr.Manoj Kumar Chakrabarti	Kolkata
General Secretary (Membership Aff	fairs)
Prof. Gangadhar	Bengaluru
General Secretary (Scientific Activity	-
Prof. Premendu P.Mathur	Bhubanaeswar
Treasurer	Diffeoundeswar
Prof. Ranjit Kumar Verma	Bodh Gaya
Elected Members of the Executive (•
Dr. Ashok Kumar Saxena	
	Kanpur
Mrs. Kumkum Swarup	Kanpur Mumbai
Dr. Anoop Kr. Jain Dr.S.Ramakrishna	
	Bengaluru Tirupati
Prof. M. Bhupathi Naidu Dr. Nibedita Chakrabarti	Kolkata
Prof. Subodh Kumar Jain	
	Sagar
Prof. M.K. Jyoti Prof.Kanhaiya Lal Shrivastava	Jammu Jodhpur
Prof. C. Muthamizhchelvan	Kattankulathur
Representative of DST, Governmer Dr. Praveer Asthana	New Delhi
	New Delli
Local Secretaries	TT 1 1 1
Prof. B. Reddya Naik	Hyderabad
Prof. T. Parthasarathy	Hyderabad
Past General Presidents	
Prof. M.S. Swaminathan	Chennai
Prof. R.P.Bambah	Chandigarh
Prof. C.N.R. Rao	Bangaluru
Prof. D.K. Sinha	Kolkata
Prof. P.N. Srivastava	Gurgaon
Dr. S.C. Pakrashi	Kolkata
Prof. S.K. Joshi	New Delhi
Dr. P. Rama Rao	Hyderabad
Dr. (Mrs.) Manju Sharma	New Delhi
Dr. R.A. Mashelkar	Pune
Dr. R.S. Paroda	New Delhi
Prof. S.S. Katiyar	Kanpur
Dr. K. Kasturirangan	Bengaluru
Prof. Asis Datta	New Delhi
Prof. N.K. Ganguly	New Delhi
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Dr. G. Madhavan Nair Prof. K.C. Panday	Lucknow
Prof. K.C. Pandey Prof. Geetha Bali	
Dr. Manmohan Singh	Bengaluru New Delhi
Prof. Dr. Ranbir Chander Sobti	Lucknow

Past General Secretaries

Past General Secretaries	
Dr. (Miss) Shashi Prabha Arya	New Delhi
Prof. H.P. Tiwari	Allahabad
Prof. S.P. Mukherjee	Kolkata
Dr. (Mrs.) Yogini Pathak	Vadodara
Prof. Uma Kant	Jaipur
Prof. B. Satyanarayana	Hyderabad
Prof. B.P. Chatterjee	Kolkata
Prof. S.P. Singh	Kurukshetra
Prof. Avijit Banerji	Kolkata
Dr. (Mrs.) Vijay Laxmi Saxena	Kanpur
Dr. Nilangshu Bhusan Basu	Kolkata
Prof.Arun Kumar	Imphal
Past Treasurer	
Dr. S.B. Mahato	Kolkata
Dr. S.B. Mahato Prof. Dhyanendra Kumar	Kolkata Arrah
Prof. Dhyanendra Kumar	
Prof. Dhyanendra Kumar Sectional Presidents	Arrah
Prof. Dhyanendra Kumar Sectional Presidents Dr. Surendra Kumar Singh	Arrah Nagpur
Prof. Dhyanendra Kumar Sectional Presidents Dr. Surendra Kumar Singh Prof. Poduri Nagaraja Rao	Arrah Nagpur Hyderabad
Prof. Dhyanendra Kumar Sectional Presidents Dr. Surendra Kumar Singh Prof. Poduri Nagaraja Rao Dr. Rakesh Kumar Srivastava	Arrah Nagpur Hyderabad Navi Mumbai
Prof. Dhyanendra Kumar Sectional Presidents Dr. Surendra Kumar Singh Prof. Poduri Nagaraja Rao Dr. Rakesh Kumar Srivastava Prof. K.S.Rangappa	Arrah Nagpur Hyderabad Navi Mumbai Mysore
Prof. Dhyanendra Kumar Sectional Presidents Dr. Surendra Kumar Singh Prof. Poduri Nagaraja Rao Dr. Rakesh Kumar Srivastava Prof. K.S.Rangappa Dr. Devesh Walia	Arrah Nagpur Hyderabad Navi Mumbai Mysore Shillong

Dr. M.Sundaresan Coimbatore Prof. Dinesh Kumar Faridabad Dr. M.Xavier James Raj Thiruvananthapuram Prof.Anup Kumar Bhattacharya Kishanganj Prof. V.Ravishankar Rai Mysore Prof. Manisha Gupta Lucknow Dr. Akhilesh Kumar Pandey Bhopal

Elected Members of the Council

Elected Members of the Council	
Mr.Gauravendra Swarup	Kanpur
Dr. Atul N. Nerkar	Nagpur
Prof. K. Byrappa	Mangalagangotri
Prof. Sunil Prakash Trivedi	Lucknow
Dr. M.G. Ragunathan	Chennai
Prof.(Dr.) S.Rajarajan	Sonipat
Prof.S.V.Kasmir Raja	Kattankulathur

Representative of The Kolkata Municipal Corporation Mr. Samiran Ghosh Kolkata Editor-in-Chief of Everyman's Science Dr. Ashok Kumar Saxena Kanpur **Representative of Indian National Science** Academy (INSA) Council New Delhi

PERSONNEL

STAFF AS ON MARCH 31, 2017

Executive Secretary Dr. Amit Krishna De

Assistant Executive Secretary Dr. Arun Kumar Pandey

Section Officer III Mrs. Indrani Das

Office Assistant I Mr. Santu Kumar Ghosh Mrs. Swasti Roy

Junior Hindi Translator Mrs. Debasree Dutta (Saha)

Office Assistant I Mr. Pijus Ghosh

Office Assistant II

Mr. Kaushik Kumar Nandy Mr. Sudip Kumar Bala Mr. Dipankar Dey Mr. Sambhu Nath Chatterjee

Office Assistant III

Mr. Akshya Kumar Patra Mr. Owen Mechabeus Lakra Mr. Anit Pal Mr. Krishna Bhujel Mr. Sudhansu Chowdhury Mr. Prabhu Dayal Singh Mr. Subhas Das Mr. Swarup Kumar Mondal Mr. Gopal Nath Mr. Dipesh Chandra Ghosh

Multitasking Staff Mr. Saikat Mandal Mr. Anupam Sarkar

Staff Car Driver Mr. Manojit Sankar Dasgupta

Sessic	on Year	Place	Name	Title of the Presidential Address
1 st	1914		Calcutta	Hon.Justice Sir About Science Congress
2 nd	1915	Madras	Asutosh Mookerjee Hon.Surgeon-General Dr.W.B.Bannermann	The Importance of Knowledge of Biology to Medical, Sanitary and Scientific Men Working in the Tropics
3 rd	1916	Lucknow	Colonel Sir Syndey Burrard	The Plains of Northern India and their Burrar Relationship to the Himalayan Moutains
4^{th}	1917	Bangalore	Sir Alfred Gibbs Bourne	On Scientific Research
5^{th}	1918	Lahore	Dr.Gilbert T.Walker	On Teaching of Science
6 th	1919	Bombay	Lt.Colonel Sir Leonard Rogers	Researches on Cholera
$7^{\rm th}$	1920	Nagpur	Acharya Prafulla Chandra Ray	Dawn of Science in Modern India
8^{th}	1921	Calcutta	Sir Rajendra Nath Mookerjee	On Science and Industry
9^{th}	1922	Madras	Mr.C.S.Middlemiss	Relativity
10^{th}	1923	Lucknow	Sir M.Visvesvaraya	Scientific Institutions and Scientists
11^{th}	1924	Bangalore	Dr.T.N.Annandale	Evolution Convergent and Divergent
12^{th}	1925	Banaras	Dr.M.O.Forster	On Experimental Training
13^{th}	1926	Bombay	Mr.Albert Howard	Agriculture and Science
14^{th}	1927	Lahore	Sir J.C.Bose	The Unity of Life
15^{th}	1928	Calcutta	Dr.J.L.Simonsen	On Chemistry of Natural Products
16^{th}	1929	Madras	Professor C.V.Raman	On Raman Effect
17^{th}	1930	Allahabad	Col.S.R.Christophers	The Science and Disease
18^{th}	1931	Nagpur	Lt.Col.R.B.Seymour- Sewell	The Problem of Evolution - Experimental Modification of Bodily Structure
19 th	1932	Bangalore	Rai Bahadur Lal Shiv Ram Kashyap	Some Aspects of the Alpine Vegetation of the Himalaya and Tibet
20^{th}	1933	Patna	Sir Lewis L.Fermor	The Place of Geology in the Life of a Nation
21^{st}	1934	Bombay	Professor M.N.Saha	Fundamental Cosmological Problems
22^{nd}	1935	Calcutta	Dr.J.H.Hutton	Anthropology and India
23 rd	1936	Indore	Sir U.N.Brahmachari	The Role of Science in the Recent Progress of Medicine
24^{th}	1937	Hyderabad	Rao Bahadur T.S. Venkatraman	The Indian Village – its Past, Present and Future
25 th	1938	Calcutta	Sir James H.Jeans (Lord Rutherford of Nelson died prematurely)	Researches in India and in Great Britain
26^{th}	1939	Lahore	Professor J.C.Ghosh	On Research in Chemistry in India
27^{th}	1940	Madras	Professor B.Sahni	The Deccan Traps : An Episode of the Tertiary Era
28^{th}	1941	Banaras	Sir Ardeshir Dalal	Science and Industry
29^{th}	1942	Baroda	Dr.D.N.Wadia	The Making of India

Sessio	on Year	Place	Name	Title of the Presidential Address
30 th	1943	Calcutta	Dr.D.N.Wadia	Minerals' Share in the War
31 st	1944	Delhi	Professor S.N.Bose	The Classical Determinism and the
				Quantum Theory
32 nd	1945	Nagpur	Sir Shanti S.Bhatnagar	Give Science a Chance
33 rd	1946	Bangalore	Prof. M.Afzal Husain	The Food Problem of India
34 th	1947	Delhi	Pandit Jawaharlal Nehru	Science in the Service of the Nation
35 th	1948	Patna	Colonel Sir Ram Nath Chopra	Rationalisation of Medicine in India
36^{th}	1949	Allahabad	Sir K.S.Krishnan	
37^{th}	1950	Poona	Prof. P.C.	Why Statistics
			Mahalanobis	
38^{th}	1951	Bangalore	Dr.H.J.Bhabha	The Present Concept of the Physical World
39 th	1952	Calcutta	Dr.J.N.Mukherjee	Science and Our Problems
40^{th}	1953	Lucknow	Dr.D.M.Bose	The Living and the Non-living
41^{st}	1954	Hyderabad	Dr.S.L.Hora	Give Scientists a Chance
42 nd	1955	Baroda	Professor S.K.Mitra	Science and Progress
43 rd	1956	Agra	Dr.M.S.Krishnan	Mineral Resources and Their Problems
44^{th}	1957	Calcutta	Dr.B.C.Roy	On Science for Human Welfare and
				Development of the Country
45^{th}	1958	Madras	Prof.M.S.Thacker	Grammar of Scientific Development
46 th	1959	Delhi	Dr.A.L.Mudaliar	Tribute to Basic Sciences
47 th	1960	Bombay	Prof. P.Parija	Impact of Society on Science
48^{th}	1961	Roorkee	Prof. N.R.Dhar	Nitrogen Problem
49 th	1962	Cuttack	Dr.B.Mukerji	Impact of Life Sciences on Man
50 th	1963	Delhi	Prof. D.S.Kothari	Science and the Universities
51 st	1964	Calcutta	Prof. Humayun Kabir	Science and the State
52 nd	1965	Calcutta	Prof. Humayun Kabir	
53 rd	1966	Chandigarh	Prof. B.N.Prasad	Science in India
54 th	1967	Hyderabad	Prof.T.R.Seshadri	Science and National Welfare
55^{th}	1968	Varanasi	Dr.Atma Ram	Science in India – Some Aspects
56 th	1969	Bombay	Dr.A.C.Joshi	A Breathing Spell : Plant Sciences in the
			(Prof.A.C.Banerjee	Service of Men
			died prematurely)	
57 th	1970	Kharagpur	Dr.L.C.Verman	Standardization : A Triple Point Discipline
58 th	1971	Bangalore	Dr.B.P.Pal	Agricultural Science and Human Welfare
59 th	1972	Calcutta	Prof. W.D.West	Geology in the Service of India
60 th	1973	Chandigarh	Dr.S.Bhagavantam	Sixty Years of Science in India
61 st	1974	Nagpur	Prof. R.S.Mishra	Mathematics – Queen or Handmaiden
62 nd	1975	Delhi	Prof. (Mrs.) Asima Chatterjee	Science and Technology in India : Present and Future
63 rd	1976	Waltair	Dr.M.S.Swaminathan	Science and Integrated Rural Development
64^{th}	1977	Bhubaneswar	Dr.H.N.Sethna	Survey, Conservation and Utilisation of Resources
65^{th}	1978	Ahmedabad	Dr.S.M.Sircar	Science Education and Rural Development
66 th	1979	Hyderabad	Prof. R.C.Mehrotra	Science and Technology in India During the Coming Decade(s)

Sessio	n Year	Place	Name	Title of the Presidential Address
57 th	1980	Jadavpur	Prof. A.K.Saha	Energy Strategies for India
58 th	1981	Varanasi	Prof. A.K.Sharma	Impact of the Development of Science and
COth	1092	Maria	Duef MCV	Technology on Environment
59 th	1982	Mysore	Prof. M.G.K.	Basic Research as an Integral Component of
7 O th	1092	Timmoti	Menon Drof P	Self-reliant Base of Science and Technology
⁷ 0 th	1983	Tirupati	Prof. B.	Man and the Ocean – Resource and
7 1 of	1004	D 1	Ramachandra Rao	Development
71 st	1984	Ranchi	Prof. R.P.Bambah	Quality Science in India – Ends and Means
2^{nd}	1985	Lucknow	Prof. A.S.Paintal	High Altitude Studies
^{73rd}	1986	Delhi	Dr.T.N.Khoshoo	Role of Science and Technology in
-				Environmental Management
4 th	1987	Bangalore	Prof. (Mrs.)	Resources and Human Well-being –
-	-/0/		Archana Sharma	Inputs from Science and Technology
5 th	1988	Pune	Prof. C.N.R.Rao	Frontiers in Science & Technology
76 th	1989	Madurai	Dr.A.P.Mitra	Science & Technology in India :
5	1707		21,1 1,1 1,1 11111 u	Technology Missions
'7 th	1990	Cochin	Prof. Yash Pal	Science in Society
78 th	1991	Indore	Prof. D.K.Sinha	Coping with Natural Disaster :
0	1771	Indole	1101. D.R.Shina	An Integrated Approach
9 th	1992	Baroda	Dr. Vasant Gowariker	Science, Population and Development
0 th	1993	Goa	Dr.S.Z.Qasim	Science and Quality of Life
50 51 st	1993	Jaipur	Prof.P.N.Srivastava	Science in India : Excellence and
1	1774	Jaipui	1 101.F.IN.SIIVastava	Accountability
32 nd	1995	Calcutta	Dr.S.C.Pakrashi	Science, Technology and Industrial
02	1995	Calculta	DI.S.C.F aktashi	
3 rd	1996	Patiala	Prof. U.R.Rao	Development in India
.5	1990	Pallala	P101. U.K.Ka0	Science and Technology for Achieving
4 th	1007	Dalhi	Dr C V Jack	Food, Economic and Healthy Security
94 ^m	1997	Delhi	Dr.S.K.Joshi	Frontiers in Science & Engineering and
				Their Relevance to National
c th	1000	TT-d-1		Development
85 th	1998	Hyderabad	Prof. P.Rama Rao	Science & Technology in Independent
Octh	1000	Charter		India : Retrospect and Prospect
36 th	1999	Chennai	Dr.(Mrs.) Manju Sharma	New Bioscience : Opportunities and
				Challenges as we Move into the Next
7 th	2000	D		Millennium
37 th	2000	Pune	Dr.R.A.Mashelkar	Indian S & T into the Next Millennium
8 th	2001	New Delhi	Dr.R.S.Paroda	Food, Nutrition and Environmental Security
9 th	2002	Lucknow	Prof. S.S.Katiyar	Health Care, Education and Information Technology
Oth	2003	Bangalore	Dr.K.Kasturirangan	Frontier Science and Cutting-Edge Technologies
)1 st	2003	Chandigarh	Prof. Asis Datta	Science and Society in the Twenty First
. 1	2004	Chanoizain	1 101, 1 1010 Dalla	Century : Quest for Excellence
92 nd	2005	Ahmedabad	Prof.N.K.Ganguly	Health Technology as Fulcrum of
-	2005	Anneuabau	i ioi.iv.ix.Oaliguiy	Development for the Nation
3 rd	2006	Undershed	Dr I V Subbo Doo	-
'S ~	2000	Hyderabad	Dr.I.V.Subba Rao	Integrated Rural Development : Science and

Sessio	on Year	Place	Name	Title of the Presidential Address
94 th	2007	Annamalainagar	Prof.Harsh Gupta	Planet Earth
95 th	2008	Visakhapatnam	Prof.R.Ramamurthi	Knowledge based Society using Environmentally Sustainable Science and Technology
96 th	2009	Shillong	Dr. T. Ramasami	Science Education and Attraction of talent for Excellence in Research
97 th	2010	Thiruvanthapuram	Dr. G. Madhavan Nair	Science and Technology challenges of 21 st Century – National perspective
98 th	2011	Chennai	Prof. K.C.Pandey	Quality Education and excellence in Scientific Research in Indian University.
99 th	2012	Bhubaneswar	Prof.Geetha Bali	Science and Technology for Inclusive Innovation - Role of Women
100 th	2013	Kolkata	Dr. Manmohan Singh	Science for Shaping The Future of India
101 st	2014	Jammu	Prof. Dr. Ranbir Chander Sobti	Innovations in Science & Technology for Inclusive Development
102 nd	2015	Mumbai		Science and Technology for Human Development
103 rd	2016	Mysuru	Dr. Ashok Kumar Saxena	Science and Technology for Indigenous Development in India
104 th	2017	Tirupati	Prof. D. Narayana Rao	Science and Technology for National Development

lear	Name	Year	Name
913-14	Mr. D. Hooper	1973-76	Dr. S.M. Sircar
914-26	Dr. J.L. Simonsen	1974-77	Prof. R.D. Tiwari
914-20	Mr. P.S. Macmahon	1976-79	Prof. A.K. Sharma
920-25	Dr. C.V. Raman	1977-80	Dr. B. Ramachandra Rao
924-35	Dr. S.P. Agharkar	1979-82	Dr. D. Basu
926-30	Dr. Roland V. Norris	1980-83	Prof. Arun K. Dey
930-32	Dr. H.B. Dunnicliff	1982-85	Prof. (Mrs.) Archana Sharma
932-39	Mr. W.D. West	1983-86	Prof. M.K. Singal
935-40	Prof. J.N. Mukherjee	1985-88	Prof. D.K. Sinha
938-44	Prof. P. Parija	1986-89	Dr. (Miss) S.P. Arya
939-45	Prof. S.K. Mitra	1988-91	Dr. S.C. Pakrashi
944-45	Prof. P.C. Mitter	1989-92	Dr. (Mrs.) Gouri Ganguly
944-49	Prof. M. Qureshi	1991-94	Prof. D.P. Chakraborty
945-48	Prof. P.C. Mahalanobis	1992-95	Prof. H.P. Tiwari
948-52	Dr. B. Mukerji	1994-97	Prof. S.P. Mukherjee
948-52	Dr. B. Sanjiva Rao	1995-98	Dr. (Mrs.) Yogini Pathak
952-53	Dr. S.R. Sen Gupta	1997-2000	Prof. A.S. Mukherjee
952-55	Dr. B.N. Prasad	1998-2001	Prof. Uma Kant
953-57	Dr. U.P. Basu	2000-2003	Prof. A.B. Banerjee
955-58	Dr. B.B. Joshi	2001-2004	Prof. B. Satyanarayana
957-60	Dr. A.K. Dey	2003-2006	Prof. B.P. Chatterjee
958-61	Dr. B.N. Prasad	2004-2007	Prof. S.P. Singh
960-62	Prof. B.C. Guha	2006-2009	Prof. Avijit Banerji
961-65	Prof. P. S. Gill	2007-2010	Dr. Ashok K. Saxena
962-66	Dr. Atma Ram	2010-2013	Dr. Manoj Kumar Chakrabarti
965-68	Prof. Chandra Sekhar Ghosh	2010-2013	Dr. (Mrs.) Vijay Laxmi Saxena
966-70	Prof. A. K. Saha	2013-2016	Dr. Nilangshu Bhusan Basu
968-71	Prof. R.S. Mishra	2013-2016	Prof. Arun Kumar
970-73	Prof. (Mrs.) Asima Chatterjee	2016-2019	Prof. Gangadhar
971-74	Prof. Ram Chand Paul	2016-2019	Prof. Premendu P. Mathur

APPENDIX -VI

TREASURERS OF THE INDIAN SCIENCE CONGRESS ASSOCIATION

Year	Name	Year	Name
1913-14	Dr. R. D. Hooper	1965-68	Prof. (Mrs.) Asima Chatterjee
1914-16	Dr. J. L. Simonsen	1968-71	Dr. S. M. Sircar
1916-19	Mr. R. D. Mehta	1971-74	Prof. A.K. Saha
1919-20	Mr. D. R. Bhandarkar	1974-76	Prof. A. K. Sharma
1920-21	Mr. W. W. K. Page	1976-77	Prof. A. K. Saha
1920-21	Mr. Oswald Martin	1977-80	Prof. D. N. Kundu
1921-22	Mr. A. H. Harley	1980-82	Prof. (Mrs.) A. Sharma
1922-23	Mr. W. R. C. Brierley	1982-85	Prof. D. K. Sinha
1923-24	Dr. C. V. Raman	1985-86	Prof. Asok Ghosh
1924-25	Dr. Baini Prashad	1986-88	Dr. S. C. Pakrashi
1925-26	Dr. S. L. Hora	1988-89	Prof. D. K. Sinha
	Dr. Baini Prashad	1989-91	Prof. D. P. Chakraborty
1930-31	Mr. K. C. Mahindra	1991-92	Dr. D. Basu
1931-32	Mr. Jas Insch	1992-94	Prof. S. P. Mukherjee
1932-34	Mr. K.C. Mahindra	1994-95	Dr. D. Basu
1934-37	Dr. S. L. Hora	1995-98	Dr. S. B.Mahato
1937-38	Rai Bahadur	1998-2000	Prof. A.B. Banerjee
	Dr. S. L. Hora	2000-2001	Prof. S. P. Mukherjee
1938-39	Mr. Percy Brown	2001-2003	Prof. B. P. Chatterjee
1939-44	Prof. J. N. Mukherjee	2003-2004	Prof. A. B. Banerjee
1944-49	Prof. P. Ray	2004-2006	Prof. Avijit Banerji
1949-52	Prof. K. N. Bagchi	2006-2007	Prof. A. B. Banerjee
1952-55	Prof. P. C. Mahalanabis	2009-2010	Prof. B. P. Chatterjee
1955-58	Shri B. K. Sarkar	2010-2013	Er. N.B. Basu
1958-60	Prof. B. C. Guha	2013-2016	Prof. Dhyanendra Kumar
1960-65	Prof. P. K. Bose	2016-2019	Prof. Ranjit Kumar Verma

AUDIT REPORT & ACCOUNTS

31st March, 2017

S. K. Bhattachariya& Co. CHARTERED ACCOUNTANTS 4. KIRAN SANKAR ROY ROAD. " R A J A C H A M B E R S" KOLKATA - 700 001. PHONE: 2248-2560 FAX: 2248-7589

Independent Auditors Report

To the members of

Indian Science Congress Association

Report on the Financial Statements:

We have audited the accompanying stand alone financial statements of Indian Science Congress Association which comprises of the Balance Sheet and the Endowment Fund thereof as on 31st March, 2017 and the Income & Expenditure Account of Grants (Plan & Non-Plan) and Endowment Fund and also the Receipts and Payments Account for the year ended on that date annexed thereto and a summary of the significant accounting policies and other explanatory information.

Management's Responsibility for the financial statements:

The Association's management is responsible for the preparation of these stand alone financial statements that give a true and fair view of the financial position, financial performance and closing cash/bank balances of the Association in accordance with the Accounting Standards and in accordance with the accounting principles generally accepted in India. This responsibility also includes the maintenance of adequate accounting records in accordance with the law for safeguarding the assets of the Association and for preventing and detecting frauds and other irregularities, selection and application of appropriate accounting policies, making judgments and estimates that are reasonable and prudent, and design, implementation and maintenance of internal financial controls that were operating effectively, for ensuring the accuracy and completeness of the accounting records relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditors Responsibility:

Our responsibility is to express an opinion on these stand alone financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. These standards require that we comply with the ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the stand alone financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the stand alone financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risks assessment, the auditor considers internal control relevant to the Association's preparations and fair presentation of the financial statements in order to design audit procedures that are appropriate to the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonable of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Basis of Qualification:

1) a) Grants received from Government including grants for capital expenditure have been treated as income violating AS-12. Further, no reconciliation for difference between the total asset account and non recurring fund grant account could be made available.

b) Grant of Rs 1,23,79,000 which was received on 11.04.2017 has been accounted for as grant receivable in FY 2016-17. We have not been provided with any direct confirmation from DST.

2) Liabilities as per actuarial valuation have not been provided for in respect of Pension, Gratuity and Leave Encashment (Refer Note no 1,2 and 3 to the Notes to Accounts) thereby violating AS-15.

3) Interest on Term Deposit credited by bank are net of tax deducted at source. Interest on various funds have been taken at net of tax which should have been at gross value. The total income tax deducted at source from interest on different funds is Rs 10,11,501 which has not been accounted for resulting in understatement of fund and investment value by Rs 10,11,501. (refer to note no 9 to the Notes to Accounts)

Further non accounting of Income Tax deducted at source Rs 10,11,501 will amount to loss to the Association, since this is not shown as advance income tax in the books of accounts.

4) Income Tax Department has completed assessment for the A.Y. 2014-15 and has passed order dated 20/12/2016 demanding payment of Rs 1,35,75,590 towards income tax for that assessment year. Further, vide letter dated 20/12/2016 income tax department has initiated penalty proceedings u/s 271 of the Income Tax Act. The association has preferred appeal against this order. Contingent liability for Rs. 1,35,75,590 have been disclosed vide note no 10 to the Notes to accounts.

5) Contingent liability of Rs 1,81,46,810 for income tax demand under dispute/appeal for AY 2012-13 and AY 2013-14 have been disclosed refer note no 10 to the Notes to Accounts. However, current status of the same could not be made available to us.

6) Amount sent to various chapters during 2016-17 total Rs 1,01,19,812 for various purposes were charged off without any relation to the nature and actual expenses incurred. It was noticed that closing balance in cash/ bank to the extent of 8,90,939 (for 14 chapters whose accounts have been received) have not been accounted for during the year under audit. Further, income earned by the chapters to the extent of Rs. 4,82,781 (for 14 chapters) have not been accounted for in the books of ISCA. Moreover out of 23 chapters only 14 chapters have sent utilization report, balance not yet received. As such, we are unable to comment upon the same.

7) The association maintains various fund for different purposes. It is observed that in cases of reserve fund, building fund and life membership fund the fund balance does not match with the investment value for which no reconciliation is found to have been done.

8) Physical verification of the Fixed assets as on 31/03/2017 has not been done.

Building Fund which was created long back is being carried forward without any action or transaction.



Endowment Fund

 Interest on Term Deposits of Endowment Fund has been accounted for on receipt basis and not on accrual basis.

2) Huge loss of Interest incurred from Endowment Fund as substantial part of it is kept in the savings account instead of Term Deposit with the bank. Out of total balance of Rs. 2,76,72,145 in Endowment Fund as on 31/03/2017, Rs. 1,77,54,955 is kept in Term Deposit and balance Rs. 99,17,190 is in savings account. The expenditure (award) in the financial year 2016-17 is 3,12,820 and in 2015-16 is 9,50,394.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, financial statements, except for the possible effects stated on the basis of qualification give the information required by the law in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India;

- a) In the case of Balance Sheet of the state of affairs of the association as at 31st March, 2017;
- b) In the case of Income and Expenditure Account, of the surplus for the year ended on 31st March, 2017;
- c) In the case of Receipts and Payments Account, of the actual receipts and payments for the year ended on 31st March, 2017 and of the closing cash/Bank balances as on 31st March, 2017.

Report on Other Legal and Regulatory Requirements:

We report that:

- We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
- In our opinion, proper books of accounts as required by law have been kept by the Association so far as appears from the examination of those books;
- iii) The Balance Sheet, Income and Expenditure Account and the Receipts and Payments Account dealt with by this report are in agreement with the books of accounts;
- iv) In our opinion the aforesaid financial statement comply with the Accounting Standards issued by ICAI, wherever applicable, except for accounting of Government Grant (AS-12), Liabilities on Pension, Gratuity and Leave Encashment (AS-15);
- with respect to the matters to be included in the Auditor's Report, in our opinion and to the best of our information and according to the explanations given to us;
 - Association has disclosed the impact of pending litigation on its financial position in Note10 under Notes to account.
 - Association did not have any long term contracts including derivative contracts.
 - There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Association.



iv. The association has provided requisite disclosure in its stand alone financial statements as to holdings as well as dealings in specified Bank Notes during the period from 08.11.2016 to 31.12.2016 and these are in accordance with the books of accounts maintained by the Association refer to note no 11 to the Notes to Accounts.

> For S.K. Bhattachariya & Co. Chartered Accountants FRN-301081E

Janaunhagen SK Mukherjee ZULKATA Mem.No- 017067

Place - Kolkata Date- 30.06.2017

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- a) Grants received from Government including grants for capital expenditure have been treated as income violation AS-12. Further, no reconciliation for difference between the total asset account and non recuring fund grant account could be made available.
 - b) Grant of Rs.1,23,79,000 which was received on 11.04.2017 has been accounted for as grant receivable in FY 2016-17. We have not been provided with any direct confirmation from DST.
- Liabilities as per acturial valuation have not been provided for in respect of Pension, Gratuity and Leave Encashment (Refer Note 1,2 and 2 to the Notes to Accounts) thereby violating AS-15.
- 3. Interest on Term Deposit credited by bank are net of tax deducted at source. Interest on various funds have been taken at net of tax which should have been at gross value. The total income tax deducted at source from interest on different funds is Rs.10,11,501 which has not been accounted for resulting in understatement of fund and investment value by Rs.10,11,501 (refer to note no 9 to the Notes to Accounts).
- 4. Income Tax Department has completed assessment for the A.Y.2014-15 and has passed order dated 20/12/2016 demanding payment of Rs.1,35,75,590 towards income tax for that assesment year.Further, vide letter dated 20.12.2016 income tax department has initiated penalty proceedings u/s 271 of the Income Tax Act. The association has preferred appeal against this order. Contigent liability for Rs.1,35,75,590 have been disclosed vide note no 10 to the Notes to Accounts.
- Contingent Liability of Rs.1,81,46,810 for income tax demand under dispute/appeal for A.Y. 2012-13 and A.Y.2013-14 have been disclosed refer note no 10 to the Notes to Accounts. However, current status of the same could not be made available to us.

Transferring the amount equal to Fixed Assets has been practised since long and no objection was raised in the past. From next financial year the total Capital Grant will be Shown in the Balance Sheet.

As for the reconciliation of Non Recurring Fund Grant with that of Fixed Assets, necessary guidelines to be provided by the Audit in this regard as this practice was not followed in the past.

The Last installment of Grant for 2016-2017 was received on 11.04.2017, and hence it was treated as receivable in 2017-2018, as per sanction order from PFMS portal.

Excess Provision has already been made in case of Gratuity and Leave Encashment as per decision of Executive Committee. As for Pension Liability there is a total uncovered liability of Rs.302.39 lacs, for which the funding will be done phase wise every year in the budget. Moreover appropriate adjustments as per liability will be made as per decision of Competent Authority.

Form 16 issued by bank towards TDS on interest does not clearly reflect from which interest the TDS has been deducted. Moreover few TDS details were missing from the Certificate in all 4 quarters therefore proper accounting of Term Deposit interest could not be made.

The matter will be taken up with the Bank so that TDS accounting can be made as far as possible from the next accounting year.

As per legal advice 15% of the assessed tax has been deposited with Bank on 4/7/2017 for 2014-2015 and the Association is appealing for Stay Order in Hon'ble High Court against the Assessed Demand.

The Association has moved to Hon'ble High Court for stay order of the Assessed demand for A.Y.2012-13 and 2013-14.

- 6. Amount sent to various chapters during 2016-2017 total Rs.1,01,19,812 for various purpose were charged off without any relation to the nature and actual expenses incurred.It was noticed that closing balance in cash/bank to the extent of Rs.8,90,939 (for 14 chapters whose accounts have been received) have not been accounted for during the year under audit. Further, income earned by the chapters to the extent of Rs. 4,82,781 (for 14 chapters) have not been accounted for in the books of ISCA. Moreover out of 23 chapters only 14 chapters have sent utilization report, balance not yet received. As such, we are unable to comment upon the same.
- 7. The Association maintains various fund for different purpose. It is observed that in case of reserve fund, building fund and life membership subscription fund the fund balance does not match with the investment value for which no reconciliation is found to have been done.
- 8. Physical Verification of Fixed Assets as on 31.03.2017 has not been done.
- 9. Building Fund which was created long back is being carried forward without any action or transaction.
- 10. Interst on Term Deposits of Endowment Fund has been accounted for on receipt basis and not on accrual basis.
- 11. Huge Loss of interest incurred from Endowment Fund as substantial part of it is kept in the savings account instead of Term Deposit with the Bank. Out of total balance of Rs.2,76,72,145 in Endowment Fund as on 31.03.2017 Rs.1,77,54,955 is kept in Term Deposit and balance Rs.99,77,190 is in savings account. The expenditure (award) in the financial year 2016-2017 is Rs.3,12,820 and in 2015-2016 is Rs.9,50,394.

ISCA instituted chapters to propagate science temper among the mass. There are no permanent staff in the chapters. One member is nominated in each chapter to carry out the activities. No honorarium is provided to him/her for this work and no salary is paid to any staff. The amount provided by ISCA office to each chapter is to carry out the activities through out the year. Hence the question of earnings doesnot arise. Based on the amount provided by ISCA, necessary UC and Audited Statement are provided by the chapter.The Grant for next financial year is provided to chapters which has submitted the above.

For year 2016-17, 23 nos of chapters have submitted all documents till July, 2017 and grant for 2017-18 is being released to them accordingly.

As per discussion of Executive Committee the Accounting principal followed by ISCA is to transfer, Rs.50,000 from Membership Fund to Reserve Fund and 80% of the Life Membership collected during the year to Life Membership Fund after the audit is complete. Hence there was the difference in the above two funds at the time of Audit.

As for Building Fund, the difference in the Fund balance was from long past for reason unknown.

The Physical Verification Committee was formed in the Finance Committee Meeting held on 7th May,2017, and the matter is under process.

Will be placed in the next Finance and Establishment Committee Meeting for advice.

As per accounting principal follwed by ISCA the interest on Term Deposit of Endowment Fund is accounted for in cash basis.

Will take the matter with the Banks to convert the unutilized balance lying in the savings bank account to convert in to flexi deposit wherever possible, or to make one endowment fund savings bank account and convert the unutilized balance in to One Term Deposit.

THE INDIAN SCIENCE CONGRESS ASSOCIATION 14, DR. BIRESH GUHA STREET,KOLKATA 700 017 Receipts and Payments Account as on 31st March,2017

RECEIPTS				PAYMENTS			
Particulars	<u>Non - Plan</u>	Plan	Total	Particulars	<u>Non - Plan</u>	Plan	Total
	Rs	Rs	Rs		Rs	Rs	Rs
Opening Cash & Bank Balances :				Establishment	13,254,029.00	679,772.00	13,933,801.00
Cash- in- hand			2,000.00	Ad-hoc Bonus	209,543.00		209,543.00
Cash at Bank : State Bank of India			30,858,495.46	Contribution to New Pension Scheme Fund	384,523.00		384,523.00
: Central Bank of India			5,413,591.86	Contribution to Staff Pension Fund	4,179,314.00		4,179,314.00
				Electricity Charges		611,803.00	611,803.00
Membership Subscription (All categories)	3,110,616.00		3,110,616.00	Telephone Charges	86,160.84		86,160.84
				Transport Expenses	119,662.00		119,662.00
Admission Fees	303,950.00		303,950.00	Municipal Taxes	926.00		926.00
Life Membership Subscription	6,203,651.00		6,203,651.00	Security Guard Expenses	1,459,894.00		1,459,894.00
Government Grant	1,000,000.00	32,621,000.00	33,621,000.00	Cleaning & Building Maintenance	407,787.00		407,787.00
Sale of Publications	10,210.00		10,210.00	Leave Travel Concession	412,706.00		412,706.00
Sale of Tender Paper	1			Insurance	14,465.00		14,465.00
Journal Subscription (Non Members)		35,820.00	35,820.00	Guest House Expenses	17,837.00		17,837.00
Misc Income	20,038.00		20,038.00	Advertisement		7,000.00	7,000.00
Advance Realised :			T	Post. & Stn. For Sec. Pres. & Convenors		161,527.00	161,527.00
General	3,309,422.00		3,309,422.00	Upgrd. & Imvro. Of Existing Facilities		587,851.00	587,851.00
Festival				General Printing		1,482,768.00	1,482,768.00
				Sessional Publications		540,972.00	540,972.00
Guest House Lodging Charges	31,100.00		31,100.00	Publication of Proceedings		545,802.00	545,802.00
				Publication of Journal		1,678,840.00	1,678,840.00
Deposit Account	421,269.00		421,269.00	Re-imbursement of Children Edu Allow	155,218.00		155,218.00
Reimb of Service Chgs for ISCA Lecture Hall	131,350.00		131,350.00	Retention Money		126,288.00	126,288.00
			I	Stationery Expenses		234,817.00	234,817.00
Establishment	22,902.00		22,902.00	Postage		1,826,597.00	1,826,597.00
Postage		78,100.00	78,100.00	Contingency		221,269.00	221,269.00
Retention Money	252,576.00	1	252,576.00	Travelling Expenses		5,146,992.07	5,146,992.07
				ISCA Chapters		4,719,812.00	4,719,812.00
				Expenses for Organising Seminars, Symposia		5,400,000.00	5,400,000.00
				Expenses for Official Languages		24,250.00	24,250.00
				Prepaid expenses	221,775.00		221,775.00
				Advance :			1
				General	4,931,307.00		4,931,307.00
				Festival		76,500.00	76,500.00
				Deposit	167,751.00		167,751.00
				Honorarium to ISCA Platinum Jubilee Lecturers		80,000.00	80,000.00
				Repair & Renovation of Building		7,200.00	7,200.00
				Poster Presentation Awards		80,000.00	80,000.00

Receipts and Payments Account as on 31st March, 2017

RECEIPTS				PAYMENTS			
Particulars	Non - Plan	Plan	Total		Non - Plan	Plan	Total
	Rs	Rs	Rs		Rs	Rs	Rs
				Modernization of ISCA Exhibition Board		90,540.00	90,540.00
				Prepaid Upgradation of Improv of Existing Facility	12,918.00	1	12,918.00
					τ		τ
				Screening and Evaluation of Paper		55,000.00	55,000.00
				Legal Expenses		188,992.00	188,992.00
				Young Scientists Awards		325,000.00	325,000.00
				Young Scientists Travelling Expenses		6,671.00	6,671.00
				Young Scientists Contingency		11,500.00	11,500.00
				Sitting Fee		1,230,000.00	1,230,000.00
				Leviries to Staff Car Driver	1	2,000.00	2,000.00
				Sessional Expenses		28,274.00	28,274.00
				Operation & Maintenance of A.C Plant	102,125.00		102,125.00
				Transfer to Life Membership Subscription Fund	2,500,000.00		2,500,000.00
				Outstanding Liabilities	139,241.00	1,070,627.00	1,209,868.00
				Main Building		173,718.00	173,718.00
				Annex Building		2,762,995.00	2,762,995.00
				AirConditioner of Lecure Hall		514,477.00	514,477.00
				Asutosh Mookerjee Award Fund	4,600,000.00		4,600,000.00
				Furniture & Fittings		17,100.00	17,100.00
				Equipment		98,424.00	98,424.00
				Prepaid Insurance	21,798.00		21,798.00
				Xerox Machine	1	31,576.00	31,576.00
				Cost of Gold Medals and Plaque		323,080.00	323,080.00
				Bank Charges	17,900.91	1	17,900.91
				General Fund	100,000.00	3	100,000.00
				Closing Cash & Bank Balances :			
				Cash- in- hand			2,000.00
				Cash at Bank : State Bank of India			14,678,813.84
				: Central Bank of India			4,458,362.66
	14,817,084.00	32,734,920.00	83,826,091.32		33,516,880.75	31,170,034.07	83,826,091.32
	Acres		Rullin	S. K. Bhattachariya & Co Chartered Accountants FRN 301081E			
	Gangadhar		Ranjit Kumar Verma	Shyanel Rena Nerschegar.			

(CA.S.K.Mukharjee) Partner Membership No 017607

Ranjit Kumar Verma Treasurer

Gangadhar General Secretary (Membership Affairs)

> Place: Kolkata Date : 30/06/2017

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THE INDIAN SCIENCE CONGRESS ASSOCIATION 14, Dr Biresh Guha Street, Kolkata 700 017

		heet as at March 31st		ınt in Rs.)
	Particulars	Note	As at	As at
			March 31, 2017	March 31, 2016
I	LIABILITIES			
1	FUND			
(a)	Reserves and surplus- Fund	1	128,847,259.86	125,901,948.20
• /	- Grant	1a	22,479,136.67	21,544,801.67
2	Non - current liabilities:			
(a)	Long - term provisions	2	45,130,908.40	42,143,571.57
3	Current liabilities			
(a)	Other current liabilities	3	3,122,169.00	1,798,932.00
	Total		199,579,473.93	191,389,253.44
	4.00770			
II	ASSETS			
1	Non - current assets:			
(a)		4	21,554,763.09	21,890,802.54
	(i) Tangible assets(ia) Capital work-in-progress - Tangible	4	3,627,919.00	61,493.00
	(ii) Intangible assets	4		01,495.00
	(iia) Capital work-in-progress - Intangible			
	(Inf) cupina norm in progress innangione			
(b)	Non - current investments	5	141,463,960.95	130,110,453.30
(c)		6	13,024,071.00	2,269,425.00
(d)		7	392,414.51	392,414.51
()				
2	Current assets:			
(a)	Inventories	8	74,414.88	269,614.77
(b)		9	19,143,116.50	36,277,565.32
(c)	Short-term loans and advances	10	30,600.00	34,200.00
(d)	Other current assets	11	268,214.00	83,285.00
	Total		199,579,473.93	191,389,253.44
	Significant accounting policies	17		
	Notes to accounts	18		
	The notes are an integral part of these final	ncial statements.		
	As per our attached report of even date			
S	.K.Bhattachariya & Co	has		Rullim
	Chartered Accountants	- Harden		· —
	122	Gangadhar		Ranjiy Kumar Verma
2	Shyanel Kon Mushej. Ger	neral Secretary (Membership	o Affairs)	Treasurer
	(CA S.K.Mukherjee)			
	Partner			

ISCA Annual Report 2016-2017

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Membership No 017607

Place: Kolkata Date : 30.06.2017

14, Dr Biresh Guha Street, Kolkata 700017

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

Sr. No	Particulars	NOTE	2016-17	2015-16	
5r. INO	rarticulars	NOTE	Rs	Rs	
A.	INCOME				
1	Grant From Government	12	46,000,000.00	60,000,000.00	
	Less: Trf to Asutosh Mookerjee Fund		(4,600,000.00)	(4,600,000.00)	
	Less: Trf to Non Recurring Fund:		(934,335.00)	(780,702.00)	
			40,465,665.00	54,619,298.00	
2	Income From Other Activities	13	4,816,985.00	3,548,148.00	
			45,282,650.00	58,167,446.00	
B.	EXPENDITURE				
3	Expenses on Scientific Activities & Awards	14	17,573,086.07	16,073,047.00	
4	Other Expenses	15	15,023,035.67	14,452,290.71	
5	Employees' Benefit Expenses	16	19,352,458.00	18,864,911.00	
6	Depreciation		1,232,195.42	1,369,911.17	
				-	
			53,180,775.16	50,760,159.88	
	Excess of Income Over Expenditure		(7,898,125.16)	7,407,286.12	
	Add : Surplus/(Deficit)Carried over from Last Year		24,832,954.53	17,425,668.41	
			16,934,829.37	24,832,954.53	
	Significant Accounting Policies Notes on Account	17 18	I	1	
	In terms of our report of even date annexed hereto.				
	A sur		Ruerenne		
	Gangadhar	1	Ranjit Kumar Verma		
	General Secretary (Membership Affairs)		Treasurer		
			K.Bhattachariya & Co artered Accountants)	
		FRN 301081E			
		0	omel Kumer Nurskej-		
Place: Kol		(C	A S.K.Mukherjee)		
Date : 30.0	06.2017	Mei	Partner mbership No 017607		

Notes to Financial Statement

For the year ended 31st March 2017

NOTE 1		Year Ended 31.03.2017 Amount	Year Ended 31.03.2015 Amount
Fund		Rs	Rs
	Other Fund		
	General Fund		
	Opening Balance	1,304,471.15	1,800,669.81
	Addition during the Year	3,048.10	3,801.34
	Payement made during the year		500,000.00
	Net Balance at the end of the year	1,307,519.25	1,304,471.15
	Reserve Fund		
	Opening Balance	5,841,704.41	5,249,998.82
	Addition during the Year	608,578.83	591,705.59
	Net Balance at the end of the year	6,450,283.24	5,841,704.41
	Public Information Officer Fund		
	Opening Balance	3,478.00	3,093.00
	Addition during the Year	462.00	385.00
	Net Balance at the end of the year	3,940.00	3,478.00
	Sir Asutosh Mookerjee Fellowship Award Fund		
	Opening Balance	4,949,261.00	1,120,888.00
	Addition during the Year	4,762,722.00	4,748,373.00
	Less Payments during the year	5,060,230.00	920,000.00
	Net Balance at the end of the year	4,651,753.00	4,949,261.00
	Total	12,413,495.49	12,098,914.56
	Asset Fund		
	Building Fund		
	Opening Balance	977,161.06	928,026.46
	Addition during the Year	54,588.96	49,134.60
	Net Balance at the end of the year	1,031,750.02	977,161.06
	House Building Advance Fund		
	Opening Balance	936,929.53	877,383.83
	Addition during the Year	60,276.46	59,545.70
	Net Balance at the end of the year	997,205.99	936,929.53
	ISCA Development Fund		
	Opening Balance	10,932,876.59	10,217,045.16
	Addition during the Year	680,061.44	715,831.43
	Net Balance at the end of the year	11,612,938.03	10,932,876.59
	Plan Construction of Building Fund		
	Opening Balance	11,347,499.32	11,347,499.32
	Addition during the Year		-
	Net Balance at the end of the year	11,347,499.32	11,347,499.32
	Total	24,989,393.36	24,194,466.50

	Life Membership Subscription Fund		
	Opening Balance	64,775,612.61	56,151,811.08
	Addition during the Year	11,239,974.75	9,549,221.53
	0	76,015,587.36	65,701,032.61
	less - paymentduring the year	1,506,045.72	925,420.00
	Net Balance at the end of the year	74,509,541.64	64,775,612.61
	, ,	74,509,541.64	64,775,612.61
	Credit Balance in Income Expenditure Account	Rs	Rs
	Opening Balance	24,832,954.53	17,425,668.41
	Addition during the Year	(7,898,125.16)	7,407,286.12
	Net Balance at the end of the year	16,934,829.37	24,832,954.53
	2	16,934,829.37	24,832,954.53
	Total	128,847,259.86	125,901,948.20
NOTE 1a			i
Grant	(Non Recurring fund grant)		
	Opening Balance	21,544,801.67	20,764,099.67
	Addition during the Year	934,335.00	780,702.00
	Net Balance at the end of the year	22,479,136.67	21,544,801.67
	·		
NOTE 2			
Non - Cu	urrent Liabilities		
	Long Term Provision		
	Gratuity Fund		
	Opening Balance	15,648,802.49	16,530,856.21
	Addition during the Year	1,067,999.82	965,667.28
		16,716,802.31	17,496,523.49
	Less Payments during the year	23,232.00	1,847,721.00
	AddTransfer to Fund		-
	Net Balance at the end of the year	16,693,570.31	15,648,802.49
	Pension Fund		
	Opening Balance	15,026,600.96	14,998,283.43
	Addition during the Year	5,348,092.15	4,886,268.53
	Auditon during the Tear	20,374,693.11	19,884,551.96
	Less Payments during the year	4,181,722.00	4,857,951.00
	AddTransfer to Fund		4,007,701.00
	Net Balance at the end of the year	16,192,971.11	15,026,600.96
	5		, ,
	Leave Encashment Fund		
	Opening Balance	11,468,168.12	11,940,535.26
	Addition during the Year	790,278.86	711,072.86
	-	12,258,446.98	12,651,608.12
	Less Payments during the year	14,080.00	1,183,440.00
	AddTransfer to Fund		-
	Net Balance at the end of the year	12,244,366.98	11,468,168.12
	Total	45,130,908.40	42,143,571.57

NOTE 3

Current liabilities

ladinnes		
Outstanding Liabilities		
Non Plan	178,733.00	139,245.00
Plan	2,360,820.00	1,338,086.00
	2,539,553.00	1,477,331.00
Deposits		
As per Last Account	270,501.00	194,814.00
Add: Addition	421,269.52	75,687.00
Less: payment	237,142.52	
	454,628.00	270,501.00
Plan Retention Money		
Opening	1,000.00	164,253.00
Addition during the year	126,288.00	-
Less payement during the year		163,253.00
Net Balance at the end of the year	127,288.00	1,000.00
Advance		-
Membership Subscription	700.00	50,100.00
- •	700.00	50,100.00
Total	3,122,169.00	1,798,932.00

Particulars	Rate	Origin	Addition			Depreciation	Depleciation	Adjustifielit	10101		+	
		as on 01-04-16		Adjustment	as on 31-03-17	upto 31-03-16	for the year	of Depr.	Depreciation as on 31-03-17	as on 31-03-17		as on 31-03-16 to 31-03-10 not considered
AGAINST BUILDING FUND												
Main Building	10	258,964.25	173,718.00		432,682.25	43,515.78	17,416.85	•	60,932.63	371,749.62		192,152.83
Annexe Building TOTAL	01	323.155.86	173.718.00		496.873.86	10,808.08 54.323.86	17.995.49		72.319.35	52,804.89 424.554.52	268.832.00	239.749.97
AGAINST PLAN GRANT FOR												
IJOORSILACION OF AURITORIAL Building with Refurbishing	10	2 775 466 82			2 775 466 82	1 076 202 43	57 613 41		1 133 815 84	1 641 650 96	1 699 264 37	1 123 130 28
ii)Tubewell	10	467,573.12			467,573.12	29,315.30	1,569.33	•	30,884.63			422,564.50
iii)AirConditioning of Lecture Hall	10	3,230,090.74	514,477.00		3,744,567.74	243,607.52	60,108.05		303,715.57		2,986,483.23	2,832,222.50
TOTAL		6,473,130.68	514,477.00	•	6,987,607.68	1,349,125.26	119,290.79		1,468,416.04	5,519,191.64	5,124,005.42	4,377,917.28
AGAINST NON-PLAN GRANT NON-												
RECURRING FUND GRANT	4	00 000 71			00 010 11		01 00		- 000 T	ro 000 00		
I) Fax Machine INEDARY Machine	0 0	172 020 00			02.878,16	2014/12/12	90.09 2 07 14	Ĩ	1,280.59		3U, / 03.00 133 005 51	50, 113.08 03.734.15
	2	224,899.20			224,899.20				45,122.22	179,776.97		143,847.23
AGAINST GARAGE BUILDING FUND GRANT												
Garage Building	10	10,701.95			10,701.95	2,147.68	114.96	•	2,262.64	8,439.31	8,554.27	7,404.66
TOTAL		10,701.95	ı	•	10,701.95		114.96		2,262.64			
AGAINST NON-PLAN GRANT												
) Typewriter	10	9.088.79			9 088 79	15 78	0.88		16.66	9 072 13	9 073 01	9 064 26
TOTAL		9,088.79		•	9,088.79	15.78			16.66			9,064.26
AGAINST PLAN NON-RECURRING FUND GRANT												
) Typewriter	10	48,417.49	•		48,417.49	3,503.11	187.49		3,690.60	44,726.89	44,914.38	43,039.44
ii) Furniture General	10	1108 040 81	17 100 00		1 145 142 81	302 204 33	45 465 01		347 667 34	797 475 57	875 841 48	377 366 51
Lecture Hall	10	90.726.00	-		90.726.00	42.117.17	3.730.24		45.847.41		48.608.83	11.306.40
Guest House	10	140,334.04		•	140,334.04	61,853.04	3,311.22		65,164.26	75,169.78	78,481.00	45,368.79
AirConditioning of Main Building	10	1,181,906.49			1,181,906.49	400,779.65	34,756.75		435,536.40	746,370.09	781,126.84	433,559.37
iii) AirConditioning of Annex Building	10	193,300.00			193,300.00	53,511.03	6,992.27	•	60,503.30	132,796.70		69,866.25
N/Jupilcating Machine	5 5	06 766 76			76 76 76 76 76	033.45 CA 604 C	PC-144		9/8/04	10,0/0.00 22,127,55		90'695'9I.
vintaure viitflactronic Typawritar	0 6	31.642.97			31 642 97		79.22		1 559 47	30.083.50	30.162.72	
vii)Xerox Machine	10	74,880.00	36,576.00	30,926.39	80,529.61	7	4,747.85		45,603.72	34,925.89		
viii)Computer	60	908,048.99	35,200.00		943,248.99	441,050.71	21,499.79		462,550.50	480,698.49	4	442,547.90
ix)Projectors	9	52,600.00			52,600.00	12,642.53	3,995.75		16,638.28	35,961.71	39,957.46	101,335.90
XJConstruction of Boundry Wall	2 8	01,050,101			101,050,95	0/10/20/0	96,506		01.090.25	90,000,00	100 000 00	85,494,63 400,000,40
xijuigiiization of ISCA Exhib Board	10	226,885.00	90.540.00		317.425.00	97,848.47	8.233.69		106.082.16	211.342.84		67.363.86
Xiii) PA Systems	10	84,725.00			84,725.00	29,826.85	1,596.81		31,423.66	53,301.34		38,930.03
xiv) Email	60	13,500.00			13,500.00	13,499.00	•		13,499.00		1.00	
xv)Office Car	15	711,986.00			711,986.00	11,969.33	65,350.86	•	77,320.19	G	700,016.67	264,344.30
xvi)Web Site xviiil anton	60 80	357 RED OD			357 860 00	42,809.69 275 971 26	49 133 24		42,935.72 325 104 50	32,964.28	23,090.31 81 888 74	22,880.2(
xviii)Software	09	598.247.00			598,247.00	598.246.00			598.246.00	1.00	1.00	.
14TOT		01010000	00 011 011	0000000	01 001 100 0	10 001 101 0	10 010 010					

(cont.)

FROM NATIONAL ACABEMY OF AGRICULTURAL SCIENCE												
Computer with Printer	60	286,825.00	•		286,825.00	13,261.44	0.83		13,262.27	273,562.73	273,563.56	273,562.17
Installation of Lan	60	50,500.00		•	50,500.00	2,355.88	0.15	•	2,356.03	48,143.97	48,144.12	48,143.87
Furniture	10	52,190.00			52,190.00	17,904.19	958.44		18,862.63	33,327.37	34,285.81	24,701.39
TOTAL		389,515.00			389,515.00	33,521.50	959.44		34,480.93	355,034.07	355,993.50	346,407.43
DI AN SUBSCRIPTION OF ICURNAL	Ug	A 770 304 AG			A 770 304 46	BED BAD EA	1 CO 1 OU C		857 025 AG	3 076 360 00	2 078 /62 07	2 07/ 077 20
TOTAL	3	4,779,304.46		•	4,779,304.46	850,840.54	2,094.92		852,935.46	3,926,369.00	3,928,463.92	3,924,972.39
8) AGAINST PLAN AD-HOC FUND GRANT												
	100	17,348.60	•		17,348.60	17,348.60			17,348.60	•	•	
Airconditioning for Guest House	10	52,750.90			52,750.90	34,357.85	1,839.31		36,197.15	16,553.75	18,393.05	
Electro Copier Machine	10	22,080.00			22,080.00	14,380.95	769.91		15,150.85	6,929.15	7,699.05	
TOTAL		92,179.50	•		92,179.50	66,087.39	2,609.21		68,696.60	23,482.90	26,092.10	•
9) NON FARMARKED FIYED ASSETS												
General	10	8,407.84			8,407.84	466.38	24.94		491.32	7,916.52	7,941.46	7,692.11
Library	10	8,153.95			8,153.95	5,310.93	284.30	•	5,595.23	2,558.72	2,843.02	•
Lecture Hall	10	41,454.45			41,454.45	27,000.08	1,445.44	•	28,445.52	13,008.93	14,454.37	
Office & Record Room	10	23,228.54			23,228.54	15,129.12	809.94		15,939.06	7,289.48	8,099.42	•
Guest House	10	7,847.20	•	•	7,847.20	5,111.35	273.59	•	5,384.94	2,462.26	2,735.85	•
Equipment	10	238,533.00	66,724.00	7,252.64	298,004.36	72,336.71	19,414.52	•	91,751.23	206,253.13	166,196.29	
TOTAL		327,624.98	66,724.00	7,252.64	387,096.34	125,354.58	22,252.72		147,607.29	239,489.04	202,270.41	7,692.11
10) BUST OF ASHUTOSH MOOKERJEE	10	100,000.00	•	•	100,000.00	52,757.05	2,824.30	•	55,581.35	44,418.65	47,242.95	19,000.00
		100,000.00			100,000.00	52,757.05	2,824.30		55,581.35	44,418.65	47,242.95	19,000.00
11) PLAN EXPENDITURE FROM GRANT OF				-	-							
UPGRADATION OF OFFICE AUTOMATION												
i)Computer with Printer	10	340,162.00	•		340,162.00	150,910.13	667.91		151,578.04	188,583.96	189,251.87	182,572.80
ii)Furniture	10	37,110.00			37,110.00	20,041.30	1,072.93		21,114.22	15,995.78	17,068.70	6,339.45
iii)Generator	10	163,844.00	•	•	163,844.00	74,464.81	3,986.36	•	78,451.17	85,392.83	89,379.19	49,515.60
iv)Xerox Machine	10	105,000.00		,	105,000.00	10,603.28	9,439.67		20,042.95	84,957.05	94,396.72	132,829.52
V)FaX Machine	2	16,500.00			00.000,01	0,851.13	300./0		68.712,7	9,282.11	9,648.87	GZ-L96'G
vi)Software package for Accounts	US.	74 070.00	,		74 970 00	74 DK2 14	4.72		7/ 066 25	2.15	7.86	
TOTAL	8	737 586 00			737 586 00	337 832 78	15 538 35		353.371.13	384 214 87	399 753 21	377 238 62
12) BUILDING UNDER CONSTRUCTION		222				0	00000		0.000		400	
Building Third Floor	10	7.921,163.13			7,921,163.13	3.345,141.78	457,602.14		3,802,743.92	4,118,419.21	4,576.021.35	
Building/Lift	10	3,364,311.00			3,364,311.00	337,352.83	336,431.10		673,783.93	2,690,527.07	3,026,958.17	
Building Marble Plaque	10	10,000.00			10,000.00	4,637.06	536.29		5,173.35	4,826.65	5,362.94	
TOTAL		11,295,474.13		•	11,295,474.13	3,687,131.67	794,569.53	•	4,481,701.20	6,813,772.92	7,608,342.46	•
CPAND TOTAL		20 001 040 04	00100100									

NOTE -4 Fixed Assets Schedule for 2016-2017 (cont.)

NOTE 5

Non - Current Investments

	Rs	Rs
General Fund In Term Deposit In Bonk	49,086.50	- 46,038.40
In Bank	49,086.50	46,038.40
Reserve Fund		
In Term Deposit	6,220,709.77	5,668,465.94
In Bank	179,573.47	73,238.47
	6,400,283.24	5,741,704.41
Pension Fund		
In Term Deposit	12,360,882.11	11,379,431.96
In Bank	3,832,089.00	3,644,723.00
	16,192,971.11	15,024,154.96
Building Fund		
In Term Deposit	667,002.23	614,427.27
In Bank	41,591.93	39,577.93
	708,594.16	654,005.20
Life Membership Subscription Fund		
In Term Deposit	65,975,212.51	61,099,226.76
In Bank	5,937,979.13	3,609,285.85
	71,913,191.64	64,708,512.61
Gratuity Fund		
In Term Deposit	8,648,629.61	7,973,804.79
In Bank	8,044,940.70	7,674,997.70
	16,693,570.31	15,648,802.49
House Building Advance Fund		
In Term Deposit	685,930.90	640,724.44
In Bank	311,275.08	296,205.08
	997,205.98	936,929.52
ISCA Development Fund		
In Term Deposit	8,857,099.17	8,765,318.73
In Bank	2,755,838.86	2,167,557.86
	11,612,938.03	10,932,876.59
ISCA Leave Encashment Fund		
In Term Deposit	6,486,031.98	5,976,773.12
In Bank	5,758,335.00	5,491,395.00
	12,244,366.98	11,468,168.12
ISCA Asutosh Mookherjee Fund		
In Term Deposit		-
In Bank	4,651,753.00	4,949,261.00
Tatal	4,651,753.00	4,949,261.00
Total	141,463,960.95	130,110,453.30

NOTE 6

Long-Term loans and advances		
Advance - General	637,891.00	2,254,421.00
Advance to Staff	7,180.00	15,004.00
Grant. Recrivable from Govt.	12,379,000.00	-
	13,024,071.00	2,269,425.00
NOTE 7		
Other non-current assets		
Security Deposit for High Tension Line	376,914.51	376,914.51
Security Deposit with CESC Ltd	1,000.00	1,000.00
Security Deposit for Telex	10,000.00	10,000.00
Membership Receivable	4,500.00	4,500.00
*	392,414.51	392,414.51
NOTE 8	Rs	Rs
Inventories		
Stock of Printing Paper	144,054.75	269,614.77
Less: Provision for Damaged Stock of Paper	(69,639.87)	-
	74,414.88	269,614.77
NOTE 9 Cosh and Cosh Equivalents		
Cash and Cash Equivalents Cash	2,000.00	2,000.00
Savings Bank	19,137,176.50	36,272,087.32
Public Information Officer with Bank	3,940.00	3,478.00
i ubic information Officer with balk	19,143,116.50	36,277,565.32
		,
NOTE 10		
Short-term loans and advances		
Festival Advance	30,600.00	34,200.00
NOTE 11		
Other current assets		
Prepaid Expense	233,225.00	11,450.00
Prepaid Upgradation of Improv of Exis.Facilities	13,191.00	60,150.00
Prepaid Insurance	21,798.00	11,685.00
-	268,214.00	83,285.00

INCOMES		2016-2017			2015-2016	
NOTE-12	Plan	Non Plan	Total	Plan	Non Plan	Total
	R_S	R_{S}	R_{S}	Rs	R_{S}	Rs
Grant from Government	45,000,000.00	1,000,000.00	46,000,000.00	55,000,000.00	5,000,000.00	60,000,000.00
	45,000,000.00	1,000,000.00	46,000,000.00	55,000,000.00	5,000,000.00	60,000,000.00
NOTE-13						
Income From Other Activities		2016-2017	017		2015-2016	2016
	Plan	Non Plan	Total	Plan	Non Plan	Total
	R_{S}	R_{S}	R_{S}	Rs	Rs	Rs
Membership Subscription Received		3,160,116.00			2,337,682.00	
Less: Transfer to Reserve Fund		50,000.00			50,000.00	
		3,110,116.00			2,287,682.00	
Add: Admission Fee		303,950.00			177,400.00	
Add:Transfer from Life Membership Subscription						
Fund		1,174,401.00			923,220.00	
		4,588,467.00	4,588,467.00		3,388,302.00	3,388,302.00
Guest House Lodging Charges		31,100.00	31,100.00		32,200.00	32,200.00
Reimbursement of Service Charges of ISCA Lecture			-			
Hall (Net)		131,350.00	131,350.00		80,600.00	80,600.00
Misc Income		20,038.00	20,038.00		3,025.00	3,025.00
SESSIONAL MEMBERSHIP SUBSCRIPTION		ı	ı			
Interest earned from computer loan	I	ı	ı	I	ı	I
Sale of Publications	I	10,210.00	10,210.00		I	I
Plan Sale of Tender Papers	1	1	1	16,000.00	1	16,000.00
Journal Subscription (Non Members)	35,820.00	I	35,820.00	28,021.00	I	28,021.00
Interest Income (Accrued)						
General Fund	I	3,048.10	3,048.10	1	3,801.34	3,801.34
Building Fund	I	54,588.96	54,588.96	I	49,134.60	49,134.60
Gratuity Fund	I	1,067,999.82	1,067,999.82	ı	965,667.28	965,667.28
House Building Advance Fund	I	60,276.46	60,276.46	I	59,545.70	59,545.70
ISCA Development Fund	1	680,061.44	680,061.44	1	715,831.43	715,831.43
Life Membership Subscription	I	5,036,323.75	5,036,323.75	I	5,075,124.53	5,075,124.53
Pension Fund	ı	1,168,797.15	1,168,797.15	ı	1,108,100.53	1,108,100.53
Reserve Fund	t	558,578.83	558,578.83	I	541,705.59	541,705.59
Public Information Officer Fund	ı	180.00	180.00	ı	125.00	125.00
Leave Encashment Fund	I	790,278.86	790,278.86	I	711,072.86	711,072.86
	35,820.00	14,201,298.37	14,237,118.37	44,021.00	12,734,235.86	12,778,256.86
Less: Transfer to Fund (Interest Accured but not due)	ı	9,420,133.37	9,420,133.37	I	9,230,108.86	9,230,108.86
	35,820.00	4,781,165.00	4,816,985.00	44,021.00	3,504,127.00	3,548,148.00

EXPENDITURES						
NOTE-14						
		2016-2017			2015-2016	
EXPENSES ON SCIENTIFIC ACTIVITIES & AWARD	Plan	Non Plan	Total	Plan	Non Plan	Total
	Rs	Rs	Rs	Rs	Rs	Rs
Sessional Expenses	28,274.00	1	28,274.00	18,634.00	1	18,634.00
Travelling Expenses	5,109,837.07	ı	5,109,837.07	4,594,935.00	1	4,594,935.00
Sitting fee	1,230,000.00	1	1,230,000.00	1,135,000.00		1,135,000.00
ISCA Chapters	4,719,812.00	τ	4,719,812.00	4,400,000.00	τ	4,400,000.00
Seminars, Symposia, Discussion & Lectures	5,400,000.00	1	5,400,000.00	4,462,170.00	1	4,462,170.00
Honorarium to ISCA Platinum Jubilee Lectures	80,000.00	1	80,000.00	120,000.00	1	120,000.00
Pt. Jawarharlal Nehru Birth Centenary Awards	I	I	I	1	I	1
Pt. Jawarharlal Nehru Prize	1	3	1	3	1	1
Poster Presentation Award	80,000.00	1	80,000.00	125,000.00		125,000.00
Cost of Gold Medals & Plaques	323,080.00	1	323,080.00	582,113.00	1	582,113.00
Membership Subscription	t	t	t	t	t	I
Binding Charges for Periodicals	t	τ	t	t	τ	τ
101st Science Congress	I	I	I	I	1	1
Young Scientists:			1			1
Awards	325,000.00	ı	325,000.00	275,000.00		275,000.00
Travelling Expenses	117,283.00	1	117,283.00	185,872.00	I	185,872.00
Publication	t	t	t	t	r	t
Stationery	ı	1	1	1	1	1
Advertisement	ı	1	T	45,000.00	1	45,000.00
Contingency	11,500.00	1	11,500.00	10,500.00	1	10,500.00
Expenses for Delegation to Meetings Abroad	93,300.00	1	93,300.00	38,823.00	3	38,823.00
Screening / evaluation of paper	55,000.00	1	55,000.00	80,000.00	1	80,000.00
Exhibition	ı	1	ı	1	1	1
	17,573,086.07	1	17,573,086.07	16,073,047.00		16,073,047.00
		2016-2017	017		2015-2016	016
NOTE-15	Plan	Non Plan	Total	Plan	Non Plan	Total
Other Expenses	Rs	Rs	Rs	Rs	Rs	Rs
Telephone Expenses	1	98,239.84	98,239.84	I	86,129.00	86,129.00
Transport Expenses	t	119,662.00	119,662.00	τ	46,802.00	46,802.00
Municipal Tax	1	926.00	926.00	I	181.00	181.00

		2016-2017			2015-2016	
Security Guard Expenses	1	1,592,624.00	1,592,624.00		1,248,018.00	1,248,018.00
Audit Fees	1	34,500.00	34,500.00		34,500.00	34,500.00
Cleaning & Building Maintenance	1	341,896.00	341,896.00		334,031.00	334,031.00
Postage & Stationery for President	161,527.00	t	161,527.00	210,000.00	t	210,000.00
Advertisement	7,000.00	1	7,000.00	92,460.00	1	92,460.00
Electricity Charges	671,991.00	1	671,991.00	616,985.00	1	616,985.00
Upgradation & Improvement of Existing Facilities	568,613.00	I	568,613.00	377,634.00	1	377,634.00
General Printing	1,482,768.00	ı	1,482,768.00	1,285,111.00	1	1,285,111.00
Guest House Expenses	1	17,837.00	17,837.00	-	19,752.00	19,752.00
Insurance	1	26,150.00	26,150.00		43,294.00	43,294.00
Bank Charges		17,900.91	17,900.91	1	14,023.25	14,023.25
Operation and Maintenance of A.C.Plant	1	111,900.00	111,900.00		106,561.00	106,561.00
Profit and loss on sale of fixed assets	1	29,679.03	29,679.03	1	202,704.48	202,704.48
Damaged Stock of Paper	69,639.87	1	69,639.87			1
OTHER OPERATION EXPENSES						
Stationery Expenses	237,017.00	1	237,017.00	149,535.00	1	149,535.00
Postage	4,229,314.00	1	4,229,314.00	3,995,621.00	1	3,995,621.00
Contingencies	232,842.00	I	232,842.00	124,810.50	1	124,810.50
Repair & Renovation of Building	4,700.00	I	4,700.00	24,000.00	1	24,000.00
Legal Expenses	188,992.00	1	188,992.00	85,497.00	1	85,497.00
Contingency Expenses for Meeting with Official						
Laliguage Di IDI ICA TIONI EVDENICES	00.002/#2	1	74,420.000	00.071/70	3	00.021,20
Contraction Ext Ended	E40.070.00	1	E40.070.00	00 610 022	1	00.010.022
Sessional Fublication	00.776/0HC		00.276,040	00770/6/9	'	00770/6/9
Publication of Proceedings	645,671.00	1	645,671.00	679,012.00	1	679,012.00
Publication of Journals	3,440,864.00	ı	3,440,864.00	2,875,311.00	1	2,875,311.00
Cost of Printing Paper	125,560.02	t	125,560.02	1,089,181.48	t	1,089,181.48
Focal Theme Publication		1	1		3	1
	12,631,720.89	2,391,314.78	15,023,035.67	12,316,294.98	2,135,995.73	14,452,290.71
		2016-2017	017		2015-2016	2016
NOTE-16	Plan	Non Plan	Total	Plan	Non Plan	Total
Employees' Benefit Expenses	Rs	Rs	Rs	Rs	Rs	Rs
Establishment	690,122.00	13,319,051.00	14,009,173.00	474,242.00	13,775,991.00	14,250,233.00
Ad-hoc Bonus	1	209,543.00	209,543.00	1	69,080.00	69,080.00
Contribution to Staff New Pension Scheme	τ	384,523.00	384,523.00	ι	372,444.00	372,444.00
Contribution to Staff Gratuity Fund	1	1	1	1	1	1
Contribution to Staff Pension Fund	1	4,179,295.00	4,179,295.00	ı	3,778,108.00	3,778,108.00
Contribution to Leave Encashment	I	1	1	1	I	1
Leave Travel Concession	1	412,706.00	412,706.00	1	218,115.00	218,115.00
Staff Liveries	1	2,000.00	2,000.00	1	2,000.00	2,000.00
Re-imbursement of Children Educational Allowance	t	155 218 00	155 218 00	t	174 931 00	174 931 00
		10 200 330 00	10.050 /50 00	00 000 121	10 000 660 00	10 0/1 041 00

Schedule 1A

Reconciliation of Life Membership Subscription Fund with Investment and Bank

Life Membership Subscription Fund				<u>Rs</u>
Opening Balance as on 01-04-2016 Add: Subcription received during the year 2016-2017 Add: Interest Accured during the year as detailed below			<u>Rs</u> 6,203,651.00	64,775,612.61
	TDR NO	Rs		
	33251159345	270,687.80		
	33171568280	92,035.74		
	10959318633	451,129.52		
	10959318622	517,046.96		
	33062685839	500,902.82		
	34803843458	171,025.30		
	30275144311	175,526.29		
	32225475315	299,429.35		
	32399434877	257,301.79		
	32654087378	854,220.28		
	32529725604	462,628.39		
	34069506239	824,051.51	4,875,985.75	
Savings Bank Interest			,,	
31/03/2017		160,338.00		
, ,		,	160,338.00	11,239,974.75
			,	76,015,587.36
Less : 20% Transferred to ISCA as Men	nbership Income			1,174,401.00
				74,841,186.36
Less: Expenditure incurred by ISCA on	behalf of the Fund		331,644.72	
				331,644.72
Bala	nce of Life Members	hip Fund (A	r)	74,509,541.64
Life Membership Investment			Rs	
Balance as per Last Account			61,099,226.76	
Add: Interest Accured during the yea	r			
	TDR No	Rs		
	33251159345	270,687.80		
	33171568280	92,035.74		
	10959318633	451,129.52		
	10959318622	517,046.96		
	33062685839	500,902.82		
	33529725604	171.025.30		

87

33529725604 171,025.30

175,526.29 299,429.35

257,301.79

854,220.28

462,628.39

824,051.51

4,875,985.75 (B) 65,975,212.51

34803843458

30275144311

32225475315 32399434877

32654087378

Life Membership Bank A/c State	e Bank of India		
Opening Balance 01-04-2016 Add: Transfer during the year	<u>Rs</u>	<u>Rs</u> 3,609,285.85	
10-03-16	2,500,000.		
	2,500,000.	00	
Savings Bank Interest			
31/03/2017	160,338.0	00	
		2,660,338.00)
		6,269,623.85	
Less: Payments made during the y	vear	331,644.72	
, G ,		,	
		5,937,979.13	(C)
	A =	B +	С
	Rs	Rs	Rs
	74,509,541.64	65,975,212.51	5,937,979.13
Difference to be transferred in			
current year		2,596,350.00	

Note - 17

Significant Accounting Policies:

- 1. The accounts are prepared on Historical cost basis under going concern concept.
- 2. Income from Subscription, Government Grant and Interest on Investments are accounted for on accrual basis.
- 3. Subscriptions received for the month of February and March are taken as Pre-receipted subscription for the following year.
- 4. 20% of Life Membership subscription is treated as income in the year of receipt and balance 80% is kept in Life Membership Subscription Fund Account as per decision of the Finance Committee at its meeting held on 21.09.2013 followed by the approval of the Executive Committee meeting dated 04.10.2013
- 5. Transfer of ₹.50,000 instead of ₹.25,000 to Reserve Fund Account from General Fund Account as per decision of Finance Committee at its meeting held on 21.09.2013 followed by the approval of the Executive Committee meeting held on 04.10.2013.
- 6. Fixed Assets in the Balance Sheet are taken at cost less depreciation provided w.e.f. 2006-07 except "Plan Subscription of Journal" which is shown in the Balance Sheet at cost less depreciation as effective from 2010-11. Thus, arrears of depreciation on Fixed Assets (other than "Plan Subscription of Journal") up to 31.03.2006 are reduced from the cost of Fixed Assets to arrive at w.d.v. for computation of depreciation on fixed asset for the current year at the rate prescribed by The Income Tax Act. 1961. In case of "Plan Subscription of Journal", arrears of depreciation up to 31.03.2010 are reduced from the cost to arrive at w.d.v. for computation.
- 7. In absence of any guidelines from the funding authorities, the bifurcation of expenses between Plan and Non-Plan Account is done on the basis of perception of the management.
- 8. Investment in Term Deposit other than Endowment are stated at carrying cost and accured interest on term deposits are taken into the Fund Account. However, at the time of maturity of Term Deposits invested out of General Fund, the total interest accured thereon is credited to Income and Expenditure Account by transferring from General Fund Account.

The Investments are mostly made for the period of 39 months since the interest for this period yields maximum rate of interest.

- 9. Interest on Investment in Term Deposit in Endowment Fund is accounted for in cash basis.
- 10. Guest House lodging charges and service charges for ISCA Lecture Hall has been accounted for in cash basis during the year.6

Note - 18

Notes on Accounts:

- 1. Gratuity Provision has not been made for the year ended 31.03.2017. Actuarial valuation is carried out to determine the liability on account of Gratuity as at 31.03.2017 and Liability as on per Valuation is Rs.67.06 lacs. (Excess Provision already made in the earlier years to the extent of Rs. 99.88 lacs)
- 2. Leave Encashment Provision has not been made for the year ended 31.03.2017. Actuarial valuation is carried out to determine the liability on account of Leave Encashment as at 31.03.2017 and the Liability as per Valuation is Rs.55.92 lacs. (Excess Provision already made in the earlier years to the extent of Rs.66.52 lacs)
- 3. Pension Provision has not been made for the year ended 31.03.2017. Actuarial valuation is carried out to determine the liability on account of Pension as at 31.03.2017 and the Liability as per Valuation as at 31.03.2017 is Rs.464.32 lacs leaving an uncovered liability to the extent of Rs. 302.39 lacs
- 4. "Plan subscription of Journal" although capitalized in 2008-09, no depreciation has been charged till 31.03.2010. However, during the current year ₹ 2,094.92 has been charged as depreciation in Income & Expenditure Account.
- 5. As practiced since 1991-92, with reference to Accounting Policy of ISCA (Para 2.3) ₹ 46,97,604/- being 80% of Life Membership subscription received during the current year has been retained in Life Membership Subscription Fund. A statement of Reconciliation of Life Membership Subscription Fund and Investment thereof till 31.03.2017 given in sub-schedule no. IA.
- 6. The basis of allocation of Non Recurring Fund Grant transferred as per the actual expenditure incurred on account of Capital Assets to Grant Fund Account.
- 7. The Plan and Non Plan Grant is received from DST under i) General, ii)Salary and iii) Capital without specifying sub heads. However, the reconciliation of the 3 major heads is mentioned above is made. The Association also submits the Utilization Certificate to DST on Quarterly basis.
- 8. Capital-Work in Progress for Rs.36,27,919/- consists of the following:-

a) Centenary Building	Rs. 52,943/-
b) Guest House	Rs.27,71,545/-
c) Fire Safety Work	Rs. 8,03,431/-
	Rs.36,27,919/-

- 9. Income Tax Deducted at Source from Interest on Term Deposits with the Banks has not been accounted for due to non availability of required details from the Bank. The matter has been taken up with the Bank and necessary action will be taken on availability of proper documents.
- 10. Contingent Liability for the Income Tax Demand of Rs. 3,17,22,400/- (Assessment Year 2012-2013.Rs.32,40,200/-,Assessment Year 2013-2014..Rs.1,49,06,610/- and Assessment Year 2014-2015 ..Rs. 1,35,75,590/-) which are under appeal.
- 11. The Association did not hold or made any dealings in specified Bank Notes during the period 8th November,2016 to 30th December,2016.
- 12. Figures of the previous year have been re-grouped and re-arranged where necessary to make them comparable with the figures of the current year.

For S.K. Bhattachariya & Co. Chartered Accountants FRN - 301081E

Shyamel Kome Nursheij-

CA. S.K Mukherjee (Partner) Membership. No. 017607

Gangadhar General Secretary (Membership Affairs)

Riceron

Ranjit Kumar Verma Treasurer

The Indian Science Congress Association

Place:Kolkata Date :30.06.2017

BALANCE SHEET OF ENDOWMENT FUNDS AS AT 31ST MARCH,2017

Particulars	Note	Current Year Rs	Previous Year Rs
LIABILITIES Endowment Fund Balance	19	27,721,886.09	26,218,237.70
Total:		27,721,886.09	26,218,237.70
PROPERTIES & ASSETS Endowment Investments	20	27,721,886.09	26,218,237.70
Total:		27,721,886.09	26,218,237.70

In terms of our report of even date annexed hereto.

Gangadhar General Secretary (Membership Affairs)

Place: Kolkata Date : 30.06.2017

Radiema

Ranjit Kumar Verma Treasurer

Shyamel Kuma Nursheija.

For S.K.Bhattachariya & Co Chartered Accountants FRN 301081E

(C.A. S.K.Mukherjee) Partner

Membership No 017607

Particulars		Note	Current Year Rs	Previous Year Rs
Income	21		1,816,469	2,293,574
			1,816,469	2,293,574
Expenditure	21		312,821	950,394
			312,821	950,394
Excess of Income Ove	r Expenditure		1,503,648	1,343,180
Less: Transferred to Re	espective Fund		1,503,648	1,343,180
			-	-

INCOME & EXPENDITURE ACCOUNT OF ENDOWMENT FUND FOR THE YEAR ENDED 31ST MARCH,2017

In terms of our report of even date annexed hereto.

Gangadhar General Secretary (Membership Affairs)

Place: Kolkata Date : 30.06.2017

Ruereme

Ranjit Kumar Verma Treasurer

For S.K.Bhattachariya & Co Chartered Accountants FRN 301081E

Shyamel Kimer Muscherja.

(C.A. S.K.Mukherjee) Partner

Membership No 017607

Note 19

ENDOWMENT FUND BALANCES

Particulars	Balance as on 1-04-2016	Surplus(+)/ Deficit(-) of Respective Fund	Donation Received	Balance as on 31-03-2017
	Rs	Rs	Rs	Rs
B.C.Guha Memorial Fund	170,661.39	8,324.00		178,985.39
G.P.Chatterjee & Smt Suniti Chatterjee Fund	777,267.25	32,226.13	,	809,493.38
Prof Hiralal Chakraborty & Smt Toru Chakraborty	351,284.60	20,956.00	I	372,240.60
Prof K.P. Rode Memorial Lecture Fund	168,202.66	11,382.00	I	179,584.66
Pran Vohra Award Fund	667,406.13	45,645.00	I	713,051.13
Raj Kristo Dutta Memorial Award Fund	171,049.00	17,811.00	,	188,860.00
Prof Uma Kant Sinha Memorial Award Fund	338,434.81	16,852.00	,	355,286.81
Dr B.C.Deb Memorial Award Fund	635,161.39	35,532.00	,	670,693.39
Prof R.C. Saha Memorial Award Fund	185,839.42	(331.87)	ı	185,507.55
Prof R.C. Mehrotra Commemoration Award Fund	295,123.74	21,253.00	,	316,376.74
Prof S.K.Mukherjee Commemoration Award Fund	295,642.45	16,193.00	I	311,835.45
Prof (Mrs) Anima Sen Memorial Award Fund	197,646.00	4,381.00	I	202,027.00
Dr (Mrs) Gouri Ganguly Award Fund	340,375.15	19,995.00	I	360,370.15
Prof S.S.Katiyar Commemoration Lecture Fund	671,662.00	2,543.00	I	674,205.00
ISCA Ward Fund	8,784,737.66	564,543.00	ı	9,349,280.66
ICSA Vikram Sarabhai Memorial Award Fund	1,331,920.29	92,634.00	ı	1,424,554.29
ISCA Excellence in Science & TechnologyI Award Fund	3,206,341.00	215,260.00	ı	3,421,601.00
ISCA Royalty Fund	676,493.50	41,409.00	ı	717,902.50
ISCA Infosis Foundation Travel Award Fund	773,470.26	14,507.13	·	787,977.39
Prof R.C.Mehrotra Memorial Life Time Achivement Award Fund	2,564,913.00	118,650.00	I	2,683,563.00
Prof M.K.Singal Memorial Award Fund	1,166,585.00	73,219.00	I	1,239,804.00
Prof Archana Sharma Memorial Award Fund	619,312.00	35,452.00	I	654,764.00
Prof G.K.Manna Memorial Award Fund	683,848.00	35,566.00	ı	719,414.00
Prof V.K.Puri Memorial Award Fund	641,621.00	58,820.00	·	700,441.00
Prof W.D.West Memorial Award	503,240.00	827.00		504,067.00
	26,218,237.70	1,503,648.39		27,721,886.09

THE INDIAN SCIENCE CONGRESS ASSOCIATION

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ENDOWMENT FUND INVESTMENTS

Particulars	In Term Deposit	2016-2017 In Bank	Total	2015-2016
	Rs	Rs	Rs	Rs
B.C.Guha Memorial Fund	125,000.00	53,985.39	178,985.39	170,661.39
G.P.Chatterjee & Smt Suniti Chatterjee Fund	420,000.00	389,493.38	809,493.38	777,267.25
Prof Hiralal Chakraborty & Smt Toru Chakraborty	225,000.00	147,240.60	372,240.60	351,284.60
Prof K.P. Rode Memorial Lecture Fund	95,000.00	84,584.66	179,584.66	168,202.66
Pran Vohra Award Fund	425,000.00	288,051.13	713,051.13	667,406.13
Raj Kristo Dutta Memorial Award Fund	100,000.00	88,860.00	188,860.00	171,049.00
Prof Uma Kant Sinha Memorial Award Fund	185,000.00	170,286.81	355,286.81	338,434.81
Dr B.C.Deb Memorial Award Fund	379,955.00	290,738.39	670,693.39	635,161.39
Prof R.C. Saha Memorial Award Fund	120,000.00	65,507.55	185,507.55	185,839.42
Prof R.C. Mehrotra Commemoration Award Fund	230,000.00	86,376.74	316,376.74	295,123.74
Prof S.K.Mukherjee Commemoration Award Fund	150,000.00	161,835.45	311,835.45	295,642.45
Prof (Mrs) Anima Sen Memorial Award Fund	100,000.00	102,027.00	202,027.00	197,646.00
Dr (Mrs) Gouri Ganguly Award Fund	200,000.00	160,370.15	360,370.15	340,375.15
Prof S.S.Katiyar Commemoration Lecture Fund	500,000.00	174,205.00	674,205.00	671,662.00
ISCA Award Fund	6,400,000.00	2,949,280.66	9,349,280.66	8,784,737.66
ISCA Vikram Sarabhai Memorial Award Fund	800,000.00	624,554.29	1,424,554.29	1,331,920.29
ISCA Excellence in Science & Technologyl Award Fund	2,000,000.00	1,421,601.00	3,421,601.00	3,206,341.00
ISCA Royalty Fund	300,000.00	417,902.50	717,902.50	676,493.50
ISCA Infosis Foundation Travel Award Fund	500,000.00	287,977.39	787,977.39	773,470.26
Prof R.C.Mehrotra Memorial Life Time Achivement Award Fund	1,500,000.00	1,183,563.00	2,683,563.00	2,564,913.00
Prof M.K.Singal Memorial Award Fund	1,000,000.00	239,804.00	1,239,804.00	1,166,585.00
Prof Archana Sharma Memorial Award Fund	500,000.00	154,764.00	654,764.00	619,312.00
Prof G.K.Manna Memorial Award Fund	500,000.00	219,414.00	719,414.00	683,848.00
Prof V.K.Puri Memorial Award Fund	500,000.00	200,441.00	700,441.00	641,621.00
Prof W.D.West Memorial Award	500,000.00	4,067.00	504,067.00	503,240.00
	17,754,955.00	9,966,931.09	27,721,886.09	26,218,237.70

THE INDIAN SCIENCE CONGRESS ASSOCIATION

Note 21

			2016-2017			2015-2016	
	Particulars	Income	Expenditure	Surplus (+)/ Deficit(-) Transferred to Respective Fund	Income	Expenditure	Surplus (+)/ Deficit(-) Transferred to Respective Fund
~	B.C.Guha Memorial Fund	13,344.00	5,020.00	8,324.00	13,476.00	27,464.00	(13,988.00)
2	G.P.Chatterjee & Smt Suniti Chatterjee Fund	52,649.00	20,422.87	32,226.13	47,252.00	1,815.00	45,437.00
e	Prof Hiralal Chakraborty & Smt Toru Chakraborty	24,956.00	4,000.00	20,956.00	22,898.00	4,000.00	18,898.00
4	Prof K.P. Rode Memorial Lecture Fund	11,382.00	ı	11,382.00	11,209.00	10,085.00	1,124.00
ŝ	Pran Vohra Award Fund	45,645.00	ı	45,645.00	43,532.00	26,890.00	16,642.00
9	Raj Kristo Dutta Memorial Award Fund	17,811.00	ı	17,811.00	11,414.00	11,900.00	(486.00)
2	Prof Uma Kant Sinha Memorial Award Fund	22,872.00	6,020.00	16,852.00	20,654.00	5,690.00	14,964.00
00	Dr B.C.deb Memorial Award Fund	45,158.00	9,626.00	35,532.00	42,424.00	13,630.00	28,794.00
<u>б</u>	Prof R.C. Saha Memorial Award Fund	13,641.00	13,972.87	(331.87)	13,101.00	6,815.00	6,286.00
10	Prof R.C. Mehrotra Commemoration Award Fund	21,253.00	ı	21,253.00	20,130.00	I	20,130.00
÷	Prof S.K.Mukherjee Commemoration Award Fund	16,193.00	ı	16,193.00	17,436.00	10,370.00	7,066.00
12	Prof (Mrs) Anima Sen Memorial Award Fund	11,401.00	7,020.00	4,381.00	12,032.00	85.00	11,947.00
13	Dr (Mrs) Gouri Ganguly Award Fund	19,995.00	ı	19,995.00	20,788.00	5,000.00	15,788.00
14	Prof S.S.Katiyar Commemoration Lecture Fund	44,438.00	41,895.00	2,543.00	49,257.00	36,563.00	12,694.00
15		605,452.00	40,909.00	564,543.00	624,650.00	63,630.00	561,020.00
16	ISCA Vikram Sarabhai Memorial Award Fund	92,634.00	I	92,634.00	87,254.00	9,608.00	77,646.00
17	ISCA Excellence in Science & Technologyl Award Fund	215,260.00	I	215,260.00	217,064.00	I	217,064.00
18	ISCA Royalty Fund	41,409.00	I	41,409.00	39,833.00	85.00	39,748.00
19	ISCA Infosis Foundation Travel Award Fund	55,100.00	40,592.87	14,507.13	58,499.00	57,121.00	1,378.00
20	Prof R.C.Mehrotra Memorial Life Time Achivement Award Fund	170,670.00	52,020.00	118,650.00	157,999.00	85.00	157,914.00
21	Prof M.K.Singal Memorial Award Fund	73,219.00	I	73,219.00	84,717.00	83,159.00	1,558.00
22	Prof Archana Sharma Memorial Award Fund	47,472.00	12,020.00	35,452.00	45,496.00	11,815.00	33,681.00
23	Prof G.K.Manna Memorial Award Fund	47,586.00	12,020.00	35,566.00	50,070.00	11,815.00	38,255.00
24	Prof V.K.Puri Memorial Award Fund	70,840.00	12,020.00	58,820.00	50,318.00	23,938.00	26,380.00
25	Prof W.D.West Memorial Award Fund	36,089.00	35,262.00	827.00	532,071.00	528,831.00	3,240.00
		1,816,469.00	312,820.61	1,503,648.39	2,293,574.00	950,394.00	1,343,180.00

THE INDIAN SCIENCE CONGRESS ASSOCIATION

ISCA Annual Report 2016-2017







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