



THE NATIONAL ACADEMY OF SCIENCES, INDIA

(NASI)

(The Oldest Science Academy of India)



87th Annual Session and Symposium

on

"Basic Research - its role in national development"

Dates: 8-10 December 2017

Venue

**Savitribai Phule Pune University,
Ganeshkhind Road, Pune**

NASI: A Brief Profile - The idea of establishing a forum for Indian scientists, which would help them in publishing their researches and bringing them on one platform to discuss and find scientific solutions to the problems of the country, was mooted by Prof. Meghnad Saha, a great scientist, visionary and the then Professor of Physics at the University of Allahabad. His views were published in an article titled 'A Plea for an Academy of Sciences' in December 1929 issue of the University of Allahabad magazine; in the very next year, The National Academy of Sciences, India was established as the first Science Academy of this country. Speaking in the inaugural session, Prof. Saha said:

"An Academy of Science can do a great deal by educating public opinion, undertaking particular problems, and bringing out scientific workers in various fields for discussion and cooperative research. But the main function of the Academy should be towards cultural improvement by contributions to human knowledge."

Therefore, NASI strongly feels that Science-Society programmes are a must to generate scientific temper as well as to solve many societal problems through scientific education and research. Presently, the programmes are being steered by Prof. Anil Kakodkar, President of the Academy, and former Chairman, Atomic Energy Commission. The Past Presidents, namely Prof. M S Swaminathan, Prof. (Mrs.) Manju Sharma, Prof. S K Joshi, Prof. Ashok Misra, Prof. Asis Datta, Dr. V. P. Kamboj, Dr. K. Kasturirangan and Prof. Akhilesh K. Tyagi have been taking keen interest in the development of Science in general and the Academy, in particular. The Academy was also nurtured by Late Prof. M G K Menon, Prof. A K Sharma and Dr. V. P. Sharma- Past Presidents, NASI (who, unfortunately, passed away in the recent past).

NASI envisions the cultivation and promotion of Science & Technology in all its branches. The Academy is striving hard to promote Science & Technology by regularly organizing several activities, such as: (1) publishing two quarterly journals (Proceedings of the National Academy of Sciences, India- Section A (Physical Sciences) and Section B (Biological Sciences) and one bi-monthly journal (National Academy Science Letters); (2) holding an Annual Session in a scientific and academic institution every year; (3) organizing symposia, seminars and workshops on subjects of current national and scientific interest; (4) planning and executing science communication programmes like Science Extension Lectures, State level Science Contests (Quiz, Debate, Oration, Exhibition, Essay, etc), Talent Search, Teachers' Workshops, Summer/Winter Schools, Vocational Training Programmes, National Level Scientific Creative Writing Contest, Celebration of National Technology Day, National Science Day and World Environment Day, etc.; (5) recognizing the significant contributions of scientists at every level by honoring them with Fellowship/Membership/Awards such as Lecture Awards, NASI-Reliance Awards, NASI-SCOPUS Awards, NASI-Young Scientist Awards etc.; (6) instituting prestigious Research Fellowships/Chairs/Senior-Scientist Fellowships etc. to honor distinguished scientists; (7) organizing sensitization programmes for women researchers/scientists all across the country; (8) conducting the 'Safe water' project; (9) organizing/ conducting other projects and schemes, such as Nutrition Programme for eradicating malnutrition, Science Awareness Programme for Army Personnel, Entrepreneurship Development Programmes and a joint programme of NASI & ICAR on Farm Mechanization/ Implementation, etc.; and (10) establishing river galleries.

Besides the fore-mentioned activities, the Academy also organizes several other activities jointly with other two National Science Academies- INSA and IASC- all through the year. Since the year 2000, the annual sessions have been held at places such as Allahabad, Pune, Shillong, Ahmedabad, Jaipur, Pondicherry, Mumbai, Mysore, Chandigarh, Kolkata, Jaipur, Trivandrum, Varanasi, Goa, Jodhpur, Bhubaneswar and Dehradun. These annual sessions provide a platform for the scientists across the country to interact, present their papers and exchange expertise with each other.

The Academy holds a well-organized library known as 'Dr. Sir Dadampat Singhania Library' in which there are two sections, one for research students and teachers and the other for school students. In the year 2011 the library was connected to National Knowledge Network (NKN). The Academy is also maintaining 18 Chapters all across the country to organize scientific activities in and around their respective regions.

Symposium on "Basic Research - its role in national development"

Basic Research in science and its translation to potential applications that are relevant to society's needs is essential for a country's strength in all spheres of activities. In this context, India's position in the global ranking of knowledge creation, judged by the number of research publications in high impact journals has to improve consistently. Several measures, policy interventions and program initiatives for promotion of research and development have been launched by the Government of India, such as: Establishment of Indian Institutes of Science Education and Research (IISER) and new Indian Institutes of Technology (IITs) and Central Universities; establishment of the Science and Engineering Research Board (SERB); launch of the program "Innovation in Science Pursuit for Inspired Research" (INSPIRE); launch of the Promotion of University Research and Scientific Excellence (PURSE) program; expansion of the "Fund for Infrastructure Strengthening of SET" (FIST) to include autonomous colleges etc. The pursuit of such evidence-based public policies and aggressive measures to strengthen basic research has to continue.

Recent times have seen a surge in research related to innovation, invention and translational product orientation. The 'Make in India' and 'Start-up' programmes launched by the government are now gaining momentum; but its coherence with basic research and competitiveness in the global playing field is an issue, which demands greater attention. Basic research should remain the cornerstone/foundation of the transformational technology's edifice. There are several dimensions to this, such as accelerating excellence in research, capability to translate a new scientific idea into a new technology, sustaining a conducive innovation eco-system, nurturing entrepreneurship etc., which are at the top of the priority list. Nevertheless, basic research has to remain our nation's highest priority.

To keep the primary target towards efficient need-driven research, it is crucial to redefine our priorities, policies and prerogatives. The Academy (NASI), thus decided to organize the meeting of leading scientists, technocrats, professionals, as well as key sector leaders and policy makers to undertake an in-depth introspection and analysis of the problems and prospects of basic research in India, and its role in national development. The Academy, in its attempt to address such prospects, would deliberate at length on the technical, scientific, as well as institutional and policy related issues and potential science and technology interventions, in the context of the new programmes and initiatives being launched by the Government of India. It is expected that at the end of the symposium, there would be concrete recommendations which would require the attention of the funding agencies and policy making bodies to support basic research with highest national priority.

THE NATIONAL ACADEMY OF SCIENCES, INDIA (NASI)

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General Secretaries

5, Lajpatrai Road,
Allahabad – 211 002,
India

07.08.2017

Dear Sir/Madam,

We are happy to inform you that the 87th Annual Session of the National Academy of Sciences, India and Symposium on "Basic Research - its role in national development" will be held during December 8-10, 2017 at Savitribai Phule Pune University, Ganeshkhind Road, Pune.

On behalf of The National Academy of Sciences, India, we have great pleasure in inviting you to attend these events and participate in the deliberations.

Scientific Sessions

The Scientific Sessions will be held in two sections: Section of Physical Sciences- Sectional President Dr. Dinakar Kanjilal, Director, Inter University Accelerator Centre, New Delhi; and Section of Biological Sciences- Sectional President Dr. Chandrima Shaha, Professor of Eminence and Former Director, National Institute of Immunology, New Delhi.

The scientific papers are presented by selected researchers/scientists in scientific sessions, for which prior submission of the Abstract(s)/Paper(s) is necessary (for details please see the sub-heading "Abstracts", given overleaf).

The National Academy of Sciences, India- Swarna Jayanti Puruskars, each comprising Rs. 5000/- and a citation, will be awarded to young scientists (below the age of 35 years as on 1.1.2018) presenting the best research paper(s) in the Sections of Physical and Biological Sciences. Another prestigious award, 'NASI-Springer Young Scientist Award' has also been started from the year 2015, for the young bright researchers and is given as per the norms of NASI and Springer.

Symposium

A Symposium on "Basic Research - its role in national development" will be held during the Annual Session. Presentation of papers in the Symposium would only be through invitation. The Convener of the Symposium is Prof. (Mrs.) Manju Sharma, NASI Distinguished Woman Scientist Chair & former Secretary to the Govt. of India, DBT, New Delhi; Prof. K.V.R. Chary, Senior Professor (I), JC Bose Fellow (DST, GOI), Department of Chemical Sciences, Tata Institute of Fundamental Research, Mumbai, is the Co-convener.

All interested persons are invited to attend the Symposium and Scientific Sessions of Physical and Biological Sciences; however, the facilities will be available only to those who get themselves registered with the host institution and enroll themselves as Sessional Members. *Fellows and Members of NASI are exempted from paying the registration fee as well as the sessional membership fee*; for all others, the sessional membership fee is Rs. 50/- (for scientists and stipendiary researchers) or Rs. 30/- (for non-stipendiary researchers).

The sessional membership fee should be sent to the Executive Secretary, The National Academy of Sciences, India by a Bank Draft or Account Payee Local/Multicity Cheque drawn in favour of The National Academy of Sciences, India.

(Payment in Cash / I.P.O./Money Order/Outstation Cheque will not be accepted).

Through the next Circular, the host institution (Savitribai Phule Pune University, Ganeshkhind Road, Pune) would inform about the amount and the last date of receipt of Registration/Accommodation fee.

Privileges

Fellows and Members of the Academy and Sessional Members are entitled to attend the Session and other activities, submit papers for presentation in scientific sessions, receive copies of the Presidential Addresses, Abstracts of papers and other related material circulated during the Session. They will be entitled to rail travel at concessional rates as per rules. Those desiring to obtain Railway concession should write to the Executive Secretary referring the nature of their membership.

Abstracts

The abstract(s) of paper(s) (not exceeding 200 words), along with one copy of the full-length paper for presentation in the scientific session should reach the Office of the Academy at 5, Lajpatrai Road, Allahabad - 211 002, India, latest by October 15, 2017. An author can submit up to a maximum of three papers, including papers having more than one author.

The advance copy of the abstract may also be sent by email to - nasi.annuals87@gmail.com

Bona fide research scholars are required to get their abstract(s)/research paper(s) forwarded by the Supervisor and/or the Head of the Department/Institution. All abstracts/papers submitted for presentation will be screened. Authors whose papers are accepted will be informed about the mode of presentation (Oral or Poster) at the earliest. The decision of the Academy for the acceptance/rejection and also for the mode of presentation would be final.

The Academy would pay, on production of the xerox copy of railway tickets, 2nd class rail fare, by shortest route (both ways) only, to the author who would present the paper provided his/her travel has not been subsidized by any other agency.

Publication of full length Papers

In case it is desired that a paper presented at the Annual Session be considered for publication in the journals of the Academy, viz. Proceedings of the National Academy of Sciences, India- Part A (Physical Sciences) or Part B (Biological Sciences)/National Academy Science Letters, it must be submitted on line as per the prescribed procedure of submission. (For details please see the website of the Academy). These manuscripts will undergo the usual processing and refereeing as per rules of the Academy. Papers sent for the Session will not be automatically considered for publication in the journals of NASI.

Signing of the Fellows' Register

The Fellows who have not signed the Fellows' register so far, can sign the register in the Fellows' meeting, to be held during the 87th Annual Session.

We once again extend a very cordial invitation to you to participate in the 87th Annual Session of the National Academy of Sciences, India and Symposium on "Basic Research - Its Role in National Development" to be held during December 8-10, 2017 at Savitribai Phule Pune University, Ganeshkhind Road, Pune.

Yours truly

Sd/ U.C. Srivastava
Sd/ Veena Tandon
General Secretaries,
NASI, Allahabad

The host city & institutions:

Considered to be the cultural capital of Maharashtra, Pune is known as "Oxford of the East" due to the presence of several well-known educational institutions in the city. The city has emerged as a major educational hub in recent decades, with nearly half of the total international students in the country studying in Pune. Since the 1950s and 1960s, Pune has had a traditional economic base as most of the old industries continue to grow here. The city is known for its manufacturing and automobile industries, as well as for research institutes of information technology (IT), education, management and training, which attract students and professionals from India, South-East Asia, the Middle East and Africa. Several colleges in Pune have student-exchange programs with colleges in Europe.

Pune was an important centre in the social and religious reform movements of the late 19th century. Prominent social reformers and freedom fighters lived here, including Bal Gangadhar Tilak, Vitthal Ramji Shinde, Dhondo Keshav Karve, Mahatma Jyotirao Phule and Dr. Raghunath Karve.

The metropolitan Pune area has two of the most important pilgrimage centers for Marathi Hindu people. These are the towns of Alandi where the Samadhi of the 13th century sant Dnyaneshwar is located and Dehu where the 17th century Sant Tukaram lived. The annual Vari (foot procession) of the paduka (symbolic sandals) for both these saints in the month of Ashadh (June/July) make a stopover in the city on their way to Pandharpur and attracts hundreds of thousands of devotees.

Contact Persons from the Local Organising Committee for the 87th Annual Session of NASI at Pune - Prof. D. D. Dhavale, (Chairman- NASI Pune Chapter) and Prof. Dipalee D. Malkhede (Coordinator- NASI Pune Chapter), Department of Chemistry, Savitribai Phule Pune University, Ganeshkhind Road, Pune.



Savitribai Phule Pune University

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