

# The National Academy of Sciences, India

5, Lajpatrai Road, Prayagraj-211002, India

## Summary of the Activities, held in the month of July 2024

### 1. NASI-Fellowship/Membership Scrutiny Committees and Council Meeting(2024-III):

The National Academy of Sciences, India (NASI), successfully organized the Fellowship/Membership Scrutiny Committees meeting for the selection of NASI Fellows (FNASc) and Members (MNASc) for the year 2024. The meetings were held on July 9-10, 2024. More than 1500 nominations of the eminent scientist from all across the country and abroad (for Foreign Fellowship) were received. The nominations were meticulously reviewed and scrutinized by the Learned Members of various Sub-Committees. A total of 80 Scientists (40-40 from Physical & Biological Sciences each) were recommended for the award of NASI Fellowship (FNASc) and 60 scientists (30-30 from Physical & Biological Sciences each) for NASI-Membership (MNASc) including 3 Foreign Fellowship. A snapshot of the Committee Meeting is enclosed herewith as **Annexure-1**.

3<sup>rd</sup> meeting of the NASI Council Members (2024-III) and Standing Finance Committee (SFC) Members was held on July 10,2024.

2. A two-day lecture workshop on ‘**A Wholistic Approach towards National Development with S&T Interventions - Focus on Ayodhya**’ was successfully organized at K.S. Saket P.G. College, Ayodhya on July 19-20, 2024. The programme was developed and mentored by Prof. Manju Sharma, Chairperson of NASI New Initiatives, and coordinated by Prof. Ashutosh Singh, Department of Chemistry at K.S. Saket P.G. College, Ayodhya. The programme aimed to address the current status and future projections in various frontier areas of Science and Technology (S&T) – focused on Ayodhya. The programme provided valuable insights into the current and future trends in Science and Technology but also fostered a spirit of collaboration and learning among the students, researchers, and eminent scientists.

The copy of programme and relevant photographs of the programme are enclosed herewith as **Annexure-2a, 2b,2c and 2d**.

3. The 94<sup>th</sup> Annual Session of the NASI and Symposium on and Symposium on “**Accelerated R & D towards a Developed India**” Dedicated to the Past President of the Academy Bharat Ratna Dr. M.S.Swaminathan scheduled to be held on **December 01-03, 2024** to be hosted by Indian Institute of Science Education and Research (IISER) Bhopal. The 1<sup>st</sup> Circular for the proposed event is enclosed herewith as (**Annex. 3**). It will be sent to the universities/institutes and various departments, including the esteemed DST, GoI.
4. The Local Chapters of the NASI also organized several programmes in the different parts of the Country. The detailed report is to be received and would be incorporated in the Annual Report.
5. The publication of the NASI-Journals also achieved their time-lines.



Annexure – 2A



Annexure- 2B





# रसायन शास्त्रियों का सेमिनार शुरू

अयोध्या (एसएनबी)। कासु साकेत स्नातकोत्तर महाविद्यालय में रसायन विज्ञान विभाग में अयोध्या पर केंद्रित विज्ञान एवं तकनीक के माध्यम से संपूर्ण राष्ट्रीय विकास 'ए हॉलिस्टिक अप्रोच टुवर्ड्स नेशनल डेवलपमेंट साइंस एंड टेक्नोलॉजी इंटरवेंशन फोकस ऑन अयोध्या' विषयक राष्ट्रीय विज्ञान अकादमी के संयुक्त तत्वावधान में आयोजित दो दिवसीय राष्ट्रीय कार्यशाला शुरू हुई। शुभारंभ विज्ञान एवं प्रौद्योगिकी मंत्रालय के जैव प्रौद्योगिकी विभाग की पूर्व सचिव पद्मभूषण प्रो. मंजू शर्मा ने किया। उन्होंने कहा कि विज्ञान और धर्म का रास्ता भले अलग है लेकिन मंजिल मानव कल्याण की है। अयोध्या मोक्षदायिनी नगरी है यहां से वैज्ञानिक निकलेंगे तो वह अवश्य बहुत दूर तक जाएंगे।

मुख्य अतिथि पद्मभूषण प्रो. शर्मा ने कहा कि हमारे देश के प्रत्येक वैज्ञानिकों का सतत विकास का सपना है। सेमिनार में आईआईटी दिल्ली के प्रो. अनुराग शर्मा ने शिक्षक के योगदान को चर्चा करते हुए कहा कि शिक्षक अपने योगदान से देश को उन्नति और सामाजिक विकास को आगे बढ़ा सकते हैं। डॉ. संतोष शर्मा ने कहा कि राष्ट्रीय

विज्ञान व धर्म की मंजिल मानव कल्याण : प्रो. मंजू

साकेत कालेज में रसायन शास्त्रियों का लगा जमावड़ा दो दिवसीय नेशनल सेमिनार शुरू

'ए हॉलिस्टिक अप्रोच टुवर्ड्स नेशनल डेवलपमेंट साइंस एंड टेक्नोलॉजी इंटरवेंशन फोकस ऑन अयोध्या' विषयक सेमिनार में जुटे रसायन शास्त्री

विकास के लिए विज्ञान और तकनीकी का समुचित सदुपयोग कर के ही हम आगे बढ़ सकते हैं।

महाविद्यालय के प्राचार्य प्रो. अभय कुमार सिंह ने अतिथियों का स्वागत किया। कहा कि गर्व है कि अंतरराष्ट्रीय ख्याति प्राप्त दिग्गज वैज्ञानिक महाविद्यालय में आए हैं।

कार्यक्रम में निदेशक श्रीराम इंस्टीट्यूट ऑफ इंस्टीट्यूटल रिसर्च नई दिल्ली डॉ. मुकूल



सेमिनार में प्रस्तुतिका का विमोचन करतीं मुख्य अतिथि, साथ में प्राचार्य प्रो. अभय सिंह व अन्य (फोटो : एसएनबी)

दास, प्रो. अरुण कुमार पांडेय मानसरोवर ग्लोबल विश्वविद्यालय भोपाल, डॉ. देवशोष मोहंती निदेशक नेशनल इंस्टीट्यूट ऑफ इन्फ्यूनीरिंग नई दिल्ली, प्रो. प्रतिभा जोशी पूर्व प्राचार्य मिरांडा हाउस नई दिल्ली, प्रो. अखिलेश त्यागी दिल्ली विश्वविद्यालय, डॉ. अलका शर्मा वरिष्ठ सलाहकार

बायोटेक्नोलॉजी, प्रो. नीलम पाठक, प्रो. राजीव गौड़, प्रो. अभिषेक सिंह यूपी कॉलेज वाराणसी सहित मुख्य नियंत्रण प्रो. अशोक कुमार मिश्र, छात्र कल्याण अधिकारी प्रो. अमूल्य कुमार सिंह, डॉ. आशुतोष त्रिपाठी, प्रो. एफडी यादव, प्रो. शिवकुमार तिवारी, प्रो. अशोक कुमार राय, प्रो. औषी यादव, प्रो.

एसपी गुप्त, प्रो. प्रीति सिंह, प्रो. प्रतिभा सिंह, प्रो. वंदना जायसवाल, प्रो. कविता सिंह, प्रो. उपमा वर्मा, डॉ. पूनम जोशी, डॉ. अविनाश तिवारी, डॉ. विनय कुमार सिंह सहित प्राध्यापक व छात्र मौजूद रहे। संचालन सेमिनार के समन्वयक प्रो. आशुतोष सिंह ने किया।



# THE NATIONAL ACADEMY OF SCIENCES, INDIA

*(The Oldest Science Academy of India)*



## ***94<sup>th</sup> Annual Session and Symposium on*** ***“Accelerated R & D towards a*** ***Developed India”***

***Dedicated to the Past President of the Academy***  
***Bharat Ratna Dr. M.S.Swaminathan***

***December 01-03, 2024***

**Hosted by**

**Indian Institute of Science Education and Research (IISER)**  
**Bhopal - 462 066**

NASI: A Brief Profile - The idea of establishing a forum for Indian scientists, which would help 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.”*

NASI got the mandate of Science and Society by its Founder. Presently, the programmes are being steered by **Prof. Balram Bhargava** (former Secretary to the GoI; and presently at AIIMS, New Delhi), **President of the Academy**. The Past Presidents, namely, Prof. P. N. Tandon, Prof (Mrs.) Manju Sharma, Prof Ashok Misra, Prof Asis Datta, Prof. J. P. Mittal, Dr. K. Kasturirangan, Prof. Akhilesh K. Tyagi, Prof. Anil Kakodkar, Prof. G. Padmanaban and Prof. Ajoy K. Ghatak have been taking keen interest in the progress of Science and the Academy, in particular. The Academy was also nurtured especially by Late Prof M. G. K. Menon, Prof M. S. Swaminathan, Prof A. K. Sharma, Dr V. P. Kamboj, Prof S. K. Joshi, Prof. U. S. Srivastava and Dr V. P. Sharma - Past Presidents, and others.

NASI envisions the cultivation and promotion of Science & Technology in all its areas, including: (1) publishing two quarterly journals (Proceedings of the National Academy of Sciences, India- Section A (Physical Sciences) and Section B (Biological Sciences) and one bimonthly 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, National Mathematics 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.(continued till 2022); (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 adopting COVID Appropriate Behaviour, Entrepreneurship Development Programmes and a joint programmes of NASI, ICAR and ICMR; (10) Establishing River Galleries; and (11) Organizing Rural/Tribal Welfare Programmes.

Besides the above mentioned activities, the Academy also organizes several other activities jointly with other two National Science Academies- INSA and IASc all through the year. The Academy is also maintaining a well-organized library; and has 22 Chapters all across the country to organize scientific activities in and around their respective regions.

The Annual Session of (NASI) has always been a platform for the convergence of brilliant minds and the exchange of groundbreaking ideas. Each year, alongside the core events, a Symposium is organized on a contemporary topic that bridges the gap between **science and society**. In the recent past such sessions were held at Allahabad, Pune, Shillong, Ahmedabad, Jaipur, Pondicherry, Mumbai, Mysore, Chandigarh, Kolkata, Jaipur, Trivandrum, Varanasi, Goa, Jodhpur, Bhubaneswar, Dehradun, Chitrakoot, Hyderabad, Mumbai etc.

### **94<sup>th</sup> Annual Session of NASI and Symposium on “Accelerated R & D towards a Developed India”-**

This year, the Academy is organizing a Symposium on “**Accelerated R & D towards a Developed India**”.

The realm of Research and Development (R&D) is crucial for fostering innovation, propelling economic growth, and tackling societal challenges. R&D and Innovations are considered essential for national development and prosperity. “**Accelerated R & D towards a Developed India**” is one of the major drivers of socio-economic development and it will play a major role in achieving India’s aspirations and goals.

The country, like India having vast human resources, diverse intellectual capital, and an emerging technological landscape, the ‘**Accelerated R&D towards a Developed India**’ is not just a necessity but a strategic imperative for us.

The symposium will not only provide the information on our achievements in this field but also be helpful in pinpointing the areas of future scope & exploration. During the session, following key points would be discussed:

- Quantum Research & Futuristic Applications
- Climate Resilience & Sustainability
- Cyber-security & Data Sovereignty
- Health & Disease Prevention
- Artificial Intelligence and Machine Learning

### ***The Host – Indian Institute of Science Education and Research Bhopal (IISERB)***

IISER Bhopal is a prestigious autonomous research institute in Bhaury, Bhopal district, Madhya Pradesh, India. It was established by the Ministry of Education (India), Government of India in 2008 (Founder Director, Padma Shree Professor Vinod K. Singh) under the category of institutes of national importance to promote quality education and research in basic sciences.

The institute incorporates research in fundamental science at undergraduate and graduate level, with equal emphasis on higher education for research and education in science. It is an autonomous institution awarding its own degrees.

More details will be available in the second Circular, to be issued by the host institute (IISERB) by the end of September, 2024.

# THE NATIONAL ACADEMY OF SCIENCES, INDIA (NASI)

**Prof. Daya Shankar Pandey**

PhD, FNASc, FNA, FASc

**Prof. Jayesh R. Bellare**

PhD, FNASc, FNAE, FEMSI, FMAS

**General Secretaries**



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18.07.2024

Dear Sir/Madam,

We are happy to inform you that the 94<sup>th</sup> Annual Session of The National Academy of Sciences, India (NASI) and Symposium on “**Accelerated R & D towards a Developed India**” will be held during December 1-3,2024 at **Indian Institute of Science Education and Research Bhopal (IISERB)- 462 066**.

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

## Scientific Sessions

The Scientific Sessions will be held in two sections: **Section of Physical Sciences** – Sectional President: **Prof. S Natrajan**, Professor Solid State & Structural Chemistry, IISc, Bengaluru and **Section of Biological Sciences**- Sectional President: **Prof. Ch. Srinivasa Rao**, Director, NAARM, Hyderabad.

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

All abstracts/papers submitted for presentation through the email (nasiannualsession94@gmail.com) and will be screened. Authors whose papers are accepted will be informed at the earliest. The decision of the Academy for the acceptance/rejection and also for the mode of presentation (Oral/Poster) would be final. The travel/ticket charges (AC-III, shortest route) will be reimbursed to the presenting authors, only.

## Symposium

A Symposium on “**Accelerated R & D towards a Developed India**” 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. Vinod Kumar Singh**, Padma Shri, FNA, FASc, FTWAS, Chair Professor, Dept. of Chemistry, IIT Kanpur, who is being supported by a group of NASI Fellows, Council Members and Past Presidents of the Academy.

**All interested persons are invited to attend the Symposium and Scientific Sessions of Physical and Biological Sciences; however, other facilities will be available only to those who get themselves registered with the host institution as well as enroll themselves as Sessional Members. Fellows and Members of the NASI are exempted from the registration formalities.**

**Through the next Circular, the host institution (IISER, Bhopal) would inform about the amount and 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 the Scientific Sessions, receive copies of the Presidential Addresses, Abstracts of papers and other related material circulated during the Session.

Newly elected Fellows and Members (elected in 2024) are encouraged to attend and present their work; their local stay will be taken care of by the conference organizers.



### **Abstracts**

The copy of abstracts of papers (not exceeding 250 words), along with copies of full length papers for presentation in the Scientific Sessions should reach the office of the Academy at 5, Lajpatrai Road, Prayagraj – 211 002, India or mail to nasiannualsession94@gmail.com; **latest by September 15, 2024. An author can submit up to a maximum of three papers including papers having more than one author.**

**Bonafide research scholars are required to get their research papers forwarded by the Supervisor and the Head of the Department/Institution.** All 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 would be final for the mode of presentation.

**The Academy would pay, on production of original copy of railway tickets, AC-3 rail fare, by shortest route (both ways) only, to the author who would present the paper** provided his/her travel has not been borne by any other agency.

### **Publication of 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/National Academy Science Letters, it must be submitted online (for details please see the website of the Academy), as per prescribed procedure of submission. These papers 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 Fellow's Register**

The Fellows who have not signed the Fellow's register so far can sign the register in the Fellow's meeting, to be held during the 94<sup>th</sup> Annual Session.

**We once again extend a very cordial invitation to you to participate in the 94<sup>th</sup> Annual Session and Symposium on "Accelerated R & D towards a Developed India" at IISER Bhopal.**

Yours truly

**Prof. D S Pandey  
Prof. Jayesh R Bellare**  
General Secretaries,  
NASI, Prayagraj

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Website : <http://www.nasi.org.in>; <http://www.nasi.nic.in>**

**N.B.- In the 2<sup>nd</sup> Circular the host institution (IISER Bhopal) will inform in detail about the programme, stay arrangements & other logistics, by the end of September 2024.**