

# The National Academy of Sciences, India

5, Lajpatrai Road, Prayagraj-211002, India



## Summary of the Activities, held in the month of November 2022

1. The NASI-Varanasi Chapter organized a Science-Society Program – ‘An effort to nurture the budding female scientists’, under the leadership of Prof. Madhoolika Agrawal, Chairperson of the NASI-Chapter & Dean, Faculty of Science, BHU, Varanasi. The programme was started on 2nd November 2022 and continued till 4th November 2022. Topic of lecture on Nov. 2, was “Career options after 12th science (biology group students) delivered by Dr Gautam Geeta J, MMV, BHU. Students were briefed with all the possible options related to PCB group that can be chosen after passing 12th class with Physics, Chemistry and Biology subjects. Besides they were also given information regarding the pattern of some entrance exams like NEET, CUET etc. There was an overwhelming response and the lecture was attended by several other students of the schools also along with the ones selected in this project.
2. A joint programme in collaboration with the Deptt. of Zoology, BHU and the NASI-Varanasi Chapter was also organized on Nov. 5-7 on “Science communications, data analysis, validation and application of Bioinformatics” for the budding scientists.
3. Another interesting & informative programme in joint collaboration with the INSA, NASI & IT BHU was organized at Varanasi on 7<sup>th</sup> Nov. 2022 focusing on the details of the Nobel laureates of 2022 in the areas of Physics, Chemistry and Physiology (please see the brochure enclosed herewith – **Annex. 1**).
4. A Popular Science Lecture was delivered by Dr R. R. Rao, INSA Hon. Scientist, Bengaluru at BHU, Varanasi under the aegis of NASI Chapter (**Annex. 2**) on 18<sup>th</sup> November.
5. A three day Conference was organized at Jabalpur in joint collaboration with NASI Bhopal Chapter and others (**Annex. 3 ‘a’ & ‘b’**), attended by more than 200 students and researchers.
6. An interesting, informative and enriching programme on several ‘Science-Society’ issues, was organized by the NASI-Varanasi Chapter at BHU, Varanasi under the guidance of Prof. Madhoolika Agrawal, Chairperson on 23<sup>rd</sup> Nov. 2022; a report is enclosed herewith – **Annex. 4**). The students were encourage for participation in such programmes regularly.
7. NASI has chalked out a detailed plan for celebrating ‘Azadi ka Amrit Mahotsav (AKAM)’, which will continue for another year and will culminate on August 15, 2023, as per direction of the DST, GoI. NASI-HQ and its different Chapters will participate in this activity. Accordingly, the 92<sup>nd</sup> Annual Session of the NASI, has been dedicated to AKAM (please see the programme-**Annex. 5**). About more than 225 participants have already confirmed their participation in the Session to be held on Dec. 4-6, 2022.
8. Several Chapters of the Academy also organised Science-Society Programmes of the NASI; the publication of the NASI-Journals also achieved their time-lines.

काशी हिन्दू  
विश्वविद्यालय



BANARAS HINDU  
UNIVERSITY



Sir C V Raman Memorial Lectures  
on

**NOBEL PRIZE - 2022 WINNING WORKS IN  
PHYSICS, CHEMISTRY and PHYSIOLOGY/MEDICINE**

Date & Time

7<sup>th</sup> November 2022 : 10:30 AM

Venue: Mahamana Hall, Institute of Science, BHU

**Nobel Prize Winners**

**Topic**

**Speaker**



Svante Pääbo

Ancient DNA: a genetic  
thread that connects our  
past and present

**Dr. K. Thangaraj**  
Director  
Centre for DNA Fingerprinting  
and Diagnostics (CDFD),  
Hyderabad



Alain Aspect



John F. Clauser



Anton Zeilinger

From EPR Paradox to  
Quantum Information

**Prof. Arvind**  
Professor of Physics, IISER,  
Mohali, and Vice Chancellor of  
Punjabi University, Patiala



Carolyn Bertozzi



Morten Meldal



Barry Sharpless

Discovery of Catalytic  
Click Reactions:  
Past, Present and Future

**Prof. D.B. Ramachary**  
Professor  
School of Chemistry,  
University of Hyderabad



Institute of Science, BHU



INSA, New Delhi



NASI, Prayagraj





The Department of Botany, Institute of Science  
&  
The National Academy of Sciences, India-Varanasi Chapter  
cordially invites you to the lecture  
on

**Annex. 2**



**Floristic diversity in India – conservation and bioprospection, a priority agenda for 21<sup>st</sup> century**



**Dr. R. Raghvendra Rao, FNA, FNASc, FASc**  
INSA Honorary Scientist, Bengaluru

*On*

***November 18, 2022 (Friday) at 2:30 PM***

***Venue:***

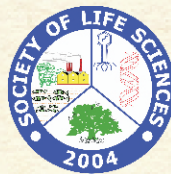
***Birbal Sahni Hall, Department of Botany, Institute of Science  
Banaras Hindu University***

**Prof. Madhoolika Agrawal**

Chairperson, NASI-Varanasi Chapter &  
Dean, Faculty of Science,  
Banaras Hindu University,  
Varanasi

**Prof. R K Asthana**

Head, Department of Botany,  
Institute of Science,  
Banaras Hindu University  
Varanasi



**International Conference on**  
**“Recent Advances in Research and**  
**Innovations in Life Sciences”**  
**(Hybrid Mode)**

**17-19 November, 2022**

*Organised by*

**MATA GUJRI MAHILA MAHAVIDYALAYA**  
**(AUTONOMOUS), JABALPUR**

Reaccredited 'A+' Grade by NAAC

*In collaboration with*

**Bhopal Chapter, The National Academy of Sciences, India (NASI)**  
**& The Society of Life Sciences (SLS)**

*In Association with*

**IQAC, Rani Durgavati Vishwavidyalaya, Jabalpur**



**Address : Mata Gujri Mahila Mahavidyalaya (Auto), Civic Centre, Marhatal, Jabalpur (M.P.) 482002**



## CONFERENCE DETAILS

### About the Conference

It gives us immense pleasure to invite you to join international conference on Recent Advances in Research and Innovations in Life Sciences, to be held at one of the most historical and culturally rich city of Madhya Pradesh 'Jabalpur', also known as 'Sanksaardhani' from November 17-19, 2022. The conference will be held in hybrid mode. The conference is being organized by Mata Gujri Mahila Mahavidyalaya (Autonomous), Jabalpur, Madhya Pradesh, India in collaboration with Bhopal Chapter The National Academy of Sciences, India (NASI) and Society of Life Sciences, Satna, with an aim to promote excellence in scientific knowledge and innovation in Life Sciences and related disciplines to motivate young researchers. The conference also envisages providing a forum to researchers around the country and globe to explore and discuss various aspects on recent advances in the field of Life Sciences that has dynamically opened up new avenues of research. It will provide deep insights into innovations, challenges and growth opportunities in diversified domains of Life Sciences. The conference consists of various sessions including keynotes, plenary talks and parallel sessions. Each session will be addressed by outstanding experts who will highlight recent advances in various facets of Life Sciences. It will also offer budding scientist an opportunity to present their work in front of eminent experts of their field and compete for various awards.

### Scope of the Conference

The event will draw assemblage of people of illustrious personalities from diverse fields. It will also act as a single platform for knowing and exchanging latest updates related to various aspects of Life sciences. The scope of this conference is multidisciplinary and invites original work to be presented in various categories.

### Themes of the Conference

- Molecular Biology and Bioinformatics
- Plant sciences, Plant Biotechnology, Crop Sciences
- Environmental Sciences
- Basic and Applied Sciences
- Microbial Biotechnology and Nanotechnology
- Climate, Environment and Human Health
- Medical and Pharmaceutical Biotechnology
- Multidisciplinary Aspects.

## ORGANIZING BODIES

### About the Host Institute

Mata Gujri Mahila Mahavidyalaya (Autonomous) was established by Guru Gobind Singh Educational Society in the year 1994, affiliated to Rani Durgawati Vishwavidyalaya, Jabalpur and recognized by UGC under clauses 2f & 12B since 1998. The college was first assessed by National Assessment and Accreditation Council, Bangalore in 2004 and subsequently in 2011, earning the grade 'A' in both the cycles. College has undergone 3rd cycle of assessment by NAAC and has been graded A+ with CGPA 3.51/4. Over the years, the college has incorporated the quality assurance practices as per NAAC quality indicators and perseveringly evolved into an institution known for 'Women Empowerment' in letter and spirit. Based on the NAAC recommendations, during the previous assessment and its own core strengths, the college has earned the Autonomous Status from UGC w.e.f. 1st April, 2012.



## About NASI

National Academy of Sciences, India (NASI) was founded in the year 1930, with the objectives to provide a national forum for the publication of research work carried out by Indian scientists and to provide opportunities for exchange of views among them. It is the oldest Science Academy of India. The Academy works in promoting scientific and technological research related to the problems of societal welfare. The Academy is Professional Autonomous body of Department of Science & Technology, Ministry of Science & Technology, Govt. of India. The Academy also maintain 21 Chapters all across the country to Organize Scientific activities in and around their respective regions throughout the year.

## Society of Life Sciences

The Society of Life Sciences (SLS) was established in 2004. It is the registered society open to everyone, who has an interest in the field of Life Sciences. The Society provides a forum for the publication of basic and applied researches in Life Sciences in the field of animal science, plant science, microbiology, biotechnology, environment and medical. Society is regularly publishing two peer reviewed biannual journals i.e National Journal of Life Sciences and Life Science Bulletin from 2004 and also occasionally supplement issues and commemoration volumes. The Society awarded Citation, Medals, encouragement awards to research students, senior and young scientists to encourage their best presentation throughout the country in more than thirty institutions.

## VENUE OF THE CONFERENCE

### Place

Mata Gujri Mahila Mahavidyalaya (Autonomous) Jabalpur (Madhya Pradesh).

### About the City

Jabalpur is a city situated on the banks of Narmada River in the state of Madhya Pradesh, India. Jabalpur is an important administrative, industrial and business center of Madhya Pradesh. It is the judicial capital of Madhya Pradesh. Historically, a center of the Kalachuri and Gond dynasties, the city developed a syncretic culture influenced by intermittent Mughal and Maratha rule. Jabalpur has been selected as one of the hundred Indian cities to be developed as a smart city under Smart Cities Mission. Major tourist destinations include Dhuadhar Falls, Marble rocks, Bargi Dam on Narmada river, Kachnar City, Madan Mahal Fort etc. The host institution MGMM is situated at the commercial centre of the city called Civic Centre. The weather in November remains pleasant.

### Transport Facilities

**By Air-** Nearest Airport is in Jabalpur called as Dumna Airport which is just 20 KMs away. Jabalpur is well connected from Mumbai, Delhi, Pune, Nagpur, Bhopal and Indore through air route.

**By Rail-** Nearest Railway station is Jabalpur Railway Station. It is an important station of West Central Railway. Jabalpur is well connected from various major cities of the country through Rail route.

**Road-** Jabalpur is connected by road to Varanasi, Damoh, Sagar, Nagpur, Bhopal, Jaipur, Kota, Raipur, Allahabad, Hyderabad, Bilaspur and Bangalore. National Highway 30 connects it to Allahabad, Lucknow. National Highway 34 connects it to Kanpur.



## COMMITTEE

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- Mr. Rakesh Tiwari
- Mrs. Sheetal Yadav



## NASI Bhopal Chapter

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- Prof. Shivesh Pratap Singh, (Satna) Secretary

## The Society of Life Sciences, Satna

- Dr. A. K. Pandey, (Lucknow) Working President
- Prof. K. K. Dube (Jabalpur), Managing Editor NJLS

### ABSTRACT SUBMISSION/PAPER PRESENTATION

Researchers, Scholars, Faculties, UG&PG Students, Professionals from educational institutes, R&D centres, Government and Professional Organizations are invited to contribute Abstract/Full papers and participate for the Conference.

**Abstract:** Times New Roman, Size: 12, Word Limit: not exceeding 250 words

**Full paper:** Times New Roman, Size 12, Word Limit: not exceeding 3500 words

All Abstracts/Papers will be reviewed by panel of experts and will be selected either for oral or poster presentation. Atleast one author should register by paying the required registration fees.

**E-mail for the Submission of Abstract / Paper :**

[conferenceinternationalmgmm@gmail.com](mailto:conferenceinternationalmgmm@gmail.com)

### REGISTRATION FEE

Registration category	Early Bird Registration (30/10/2022)	Late Registration (15/11/2022)
Industries / Foreign Delegates	3000	3500
Scientist & Faculty	2000	2500
Ph.D Students / Guest Faculties	1000	1500
PG / UG Students	500	800

Registration fee includes conference material and local Hospitality. Registration fee should be made online through NEFT / RTGS / IMPS to the Bank Account as per the details below.

### BANK ACCOUNT DETAILS

Name of Beneficiary: PRINCIPAL MATA GUJRI MAHILA MAHAVIDYALAYA U.G.C.  
Account No.: 520101220689853  
IFSC Code: UBIN0903671  
Bank Name & Branch: Union Bank of India Ground Floor, Guru Singh Sabha Bldg. Civic Centre, Marhatal, Jabalpur (M.P.)

## TRAVEL ASSISTANCE

Due to paucity of fund, all the delegates are requested to kindly make arrangement for TA DA from their Organization

## ACCOMMODATION

Limited number of accommodations is available in the RDVV University guest houses and Accommodation can also be arranged in private hotels. Preferably, the hotel booking may be made directly by the delegates. However, on prior request the accommodation may be booked on making advance payment, after the registration. Kindly inform well in advance for better and comfortable accommodation.

## IMPORTANT DATES

Registration opens	Date
Abstract/Full length Paper Submission Deadline	31 <sup>st</sup> October
Early Bird Registration closes	10 <sup>th</sup> November
Late Registration closes	15 <sup>th</sup> November

## CONTACT PERSONS

### *Convenor*

Dr. Mahima Tripathi (9827014444)

### *Organising Secretaries*

Dr. Sangeeta Sarkhel (8827931811)

Dr. Ayesha Siddhiqua (8319104034)

Dr. Shyamji Shukla (7999695167)

### *Contact E-Mail*

[conferenceinternationalmgmm@gmail.com](mailto:conferenceinternationalmgmm@gmail.com)



**International Conference on  
“Recent Advances in Research and  
Innovations in Life Sciences”**

*17 - 19 November 2022*

**Registration Form**

1. Name (Mr./Ms./Dr./Prof.) : .....

2. Designation : .....

3. Department : .....

4. Institution/Organization : .....

5. Communication Address : .....

6. Mobile No. : (1)..... (2).....

7. Email : .....

8. Mode of Presentation (Invited/Oral/Poster) : .....

9. Title of Abstract/Full paper : .....

10. Authors (Underline Presenting Author) : .....

11. Accompanying person (if any) : .....

12. Accommodation required (Yes / No) : .....

13. Details of Registration Fees : .....

14. Arrival Details - Date : ..... Time: .....

15. Departure Details - Mode of Travel..... Date : ..... Time : .....

Date : .....

Place : ..... Signature of Delegate : .....

**ONLINE REGISTRATION**

<https://forms.gle/Uc3yzRGN8v4iCQ148>

You can also visit our website for online registration- [matagujricollege.edu.in](http://matagujricollege.edu.in)

## Annex. 3 'b'

# स्टूडेंट्स के लिए हितकारी हैं नवाचार और अनुसंधान

## लाइफ साइंस विषय पर अंतर्राष्ट्रीय संगोष्ठी का हुआ शुभारंभ



सिटी रिपोर्टर, जबलपुर। लाइफ साइंस ने कोरोना काल में बहुत महत्वपूर्ण कार्य किए हैं। इसमें नवाचार एवं अनुसंधान निरंतर होने चाहिये, जो छात्र-छात्राओं के लिए हितकारी है। साथ ही नई शिक्षा नीति में भी इन्हें महत्वपूर्ण स्थान दिया गया है। उक्त विचार विषय विशेषज्ञों ने व्यक्त किए। अवसर रहा माता गुजरी महिला महाविद्यालय में आयोजित तीन दिवसीय अंतर्राष्ट्रीय संगोष्ठी के शुभारंभ का। जूलाजी विभाग, आईक्यूएसी एवं नासी के कोलेबोरेशन में 'रीसेन्ट एडवॉन्स इन रिसेर्च एवं इनोवेशन इन लाइफ साइंस (हाइब्रिड मोड)' विषय पर आयोजित संगोष्ठी में विशेषज्ञों ने विचार रखे।

अतिथि के रूप में प्रो.अखिलेश कुमार पाण्डेय, कुलपति विक्रम वि.वि.उज्जैन, विशिष्ट अतिथि डॉ. संजय नागरकर सीईओ ग्लोबेक्स बायोटेक लिमिटेड हांगकांग रहे। इस दौरान प्रो.ए.के. पाण्डेय, प्रो. शिवेश प्रताप सिंह सचिव नासी भोपाल चैप्टर, प्रो.सेलिक्स बस्ट पंजाब वि.वि, प्रो. चिश्ती कश्मीर, प्रो. एस.एस.संधु, डॉ. राजेश्वरी राणा, प्रो. आलोक चंसोरिया मंचासीन रहे। डायरेक्टर डॉ. कमलेश तिवारी एवं प्राचार्य प्रो.डॉ.संगीता झाम्ब ने अतिथियों का स्वागत किया। कन्वीनर डॉ.महिमा त्रिपाठी एवं को-कन्वीनर डॉ.मंजूषा पौराणिक ने संगोष्ठी के उद्देश्यों पर प्रकाश डाला। अध्यक्ष स.कुलदीप सिंह बंसल, उपाध्यक्ष सरदार करतार सिंह भटीजा एवं सचिव स.जतिन्दर सिंह मैनी, डायरेक्टर डॉ.कमलेश तिवारी आदि का सहयोग रहा। संचालन डॉ.आवशा सिद्धिकी, यशमीत रोहल और शुभी त्रिवेदी ने किया। आभार डॉ.श्यामजी शुक्ला ने किया।



## 23 नवंबर 2022 कार्यक्रम के लिए प्रेस विज्ञप्ति/रिपोर्ट

23 नवंबर 2022, बुधवार को राष्ट्रीय विज्ञान अकादमी, भारत (NASI) के तत्वावधान में अंतर्विषयक जैविक विज्ञान स्कूल विज्ञान संस्थान काशी हिन्दू विश्वविद्यालय में आयोजित एक विज्ञान सामाजिक कार्यक्रम 'नवोदित महिला वैज्ञानिकों को पोषण करने का प्रयास' के अंतर्गत में विज्ञान प्रदर्शनी और वनस्पति उद्यान, संग्रहालय और प्रयोगशालाओं के दौरे सहित वैज्ञानिक कार्यक्रमों की एक श्रृंखला का आयोजन किया। NASI वाराणसी चैप्टर हाल के दिनों में स्कूली छात्राओं के लिए विभिन्न विज्ञान जागरूकता और प्रेरक कार्यक्रम आयोजित करता रहा है। NASI वाराणसी चैप्टर कार्यक्रम की अध्यक्ष प्रोफेसर मधुलिका अग्रवाल, ने अतिथियों और स्कूल प्रतिभागियों का स्वागत किया।



प्रो. अग्रवाल ने नवोदित बाल वैज्ञानिकों के बीच विज्ञान को करियर के रूप में लेने के उत्साह को विकसित करने में अकादमी की भूमिका के बारे में बताया, जो भविष्य में NASI के इस तरह के समर्थन और प्रयासों से बेहतर कर सकती हैं। एमएमवी, बीएचयू की प्रो. नीलम श्रीवास्तव ने बताया कि कैसे यह कार्यक्रम बुनियादी विज्ञान में उच्च अध्ययन के लिए अपने भविष्य की योजना बनाने में युवा महिलाओं को मदद, प्रेरित और प्रोत्साहित करेगा। समापन सत्र के मुख्य अतिथि प्रो. ए.के. त्रिपाठी, निदेशक, विज्ञान संस्थान, बीएचयू ने अपने प्रेरक भाषण से छात्रों को प्रेरित किया और विज्ञान प्रदर्शनी के विजेताओं को पुरस्कार प्रदान किए। हाई स्कूल बालिका वर्ग के अंतर्गत लोक बंधू राजनारायण टिकरी वाराणसी को प्रथम पुरस्कार मिला। जी एच एस बढैनिकला वाराणसी स्कूल ने दूसरा और अभिनव सरकारी स्कूल ने तीसरा पुरस्कार जीता। इंटरमीडिएट बालिका वर्ग के अंतर्गत राजकीय बालिका कॉलेज जख्खिनी को प्रथम पुरस्कार मिला। जी एच एस महामना मालवीय अन्तर कॉलेज बच्छाव वाराणसी ने दूसरा और लोकबन्धु राजनारायण राजकीय बालिका कॉलेज ने तीसरा पुरस्कार जीता। विज्ञान प्रदर्शनी के निर्णायक प्रख्यात वैज्ञानिक प्रो. एन.के. दुबे, प्रो. एस.बी. अग्रवाल, वनस्पति विज्ञान विभाग से, प्रो. डी.एस. पाण्डेय रसायन विज्ञान विभाग से और प्रो. आर.के. सिंह, भौतिकी विभाग बीएचयू से। छात्रों ने उत्साहपूर्वक मूल्यांकनकर्ता के साथ बातचीत की और पूरे दिन की गतिविधियों में सक्रिय रूप से भाग लिया। प्रदर्शनी और विश्वविद्यालय के दौरे का उद्देश्य विश्वविद्यालय के सामाजिक कल्याण की जिम्मेदारियों के प्रति योगदान देने वाले विज्ञान और उच्च अध्ययन के प्रति युवा मन को प्रज्वलित करना था। इस कार्यक्रम में वाराणसी और पूर्वी उत्तर प्रदेश के 9 सरकारी स्कूलों की शिक्षक-शिक्षिकाओं के साथ-साथ 56 छात्राओं ने भाग लिया, जिनका चयन NASI टीम द्वारा पूर्व में आयोजित प्रतियोगी दौरो के आधार पर लगभग 800 छात्रों में से किया गया था। भाग लेने वाले स्कूल लोकबंधु राजनारायण सरकारी बालिका इंटर कॉलेज, टिकरी वाराणसी, सरकारी बालिका हाई स्कूल, गोरखपुर माफ़ी, मिर्जापुर, जी.एच.एस. बढैनिकला अरजीलाइन्स वाराणसी,



जगतपुर इंटर कॉलेज जगतपुर वाराणसी, शासकीय अभिनव विद्यालय, राजकीय कन्या इंटर कॉलेज जखिनी वाराणसी, महामना मालवीय इंटर कॉलेज, बच्छां वाराणसी, जीएचएस अदलपुरा मिर्जापुर, श्री अम्बिका प्रसाद सिंह भैरव नाथ इंटर कॉलेज।



NASI टीम के सदस्यों में प्रो. ऋचा रघुवंशी, डॉ. शैलजा एस. सुनकारी और डॉ. गौतम गीता जीवतराम के सहयोग से इस सत्र का सफल आयोजन किया गया ।







## The National Academy of Sciences, India (NASI)

### 92<sup>nd</sup> Annual Session & Symposium

on

**‘Science & Technology - a vehicle for social transformation’**

***Dedicated to ‘Azadi ka Amrit Mahotsav’***

**December 4 - 6, 2022**



*Hosted by*

**The National Academy of Sciences, India (NASI) HQ  
5, Lajpatrai Road, Prayagraj-211002, India**



## The National Academy of Sciences, India (NASI)

**Dates: December 4 - 6, 2022**  
**92<sup>nd</sup> Annual Session & Symposium**

on

**‘Science & Technology - a vehicle for social transformation’**  
*(in Hybrid Mode)*

**Symposium (4<sup>th</sup> & 5<sup>th</sup> Dec.) Programme**

Registration: 10:00 am

Lighting of the lamp & Floral Tributes to the Founder President Prof. Meghnad Saha: 10:25 am

**Day 1: December 4, 2022**

(Ms Archana Pant, YWS, NASI to Compere)

**Inaugural Session (10:30 - 11:45 am)**

<b>Welcome</b>	<b>Prof. Madhoolika Agrawal</b> Dean, Faculty of Science, BHU, Varanasi; General Secretary (HQ), NASI Email : <a href="mailto:madhoo.agrawal@gmail.com">madhoo.agrawal@gmail.com</a>
<b>Genesis of the programme</b>	<b>Prof. Manju Sharma</b> Chairperson, NASI-New Initiatives; Former Secretary, Department of Biotechnology, Govt. of India; Former President, NASI Email : <a href="mailto:manjuvps@gmail.com">manjuvps@gmail.com</a>
<b>Keynote Address</b>	<b>Prof. G Padmanaban</b> NASI Hon Scientist; Former Director, Indian Institute of Science, Bangalore; Former President, NASI Email: <a href="mailto:geepee@alumni.iisc.ac.in">geepee@alumni.iisc.ac.in</a>
<b>Title</b>	<b>Science &amp; Technology-A vehicle for social transformation</b>
<b>Presidential Address</b>	<b>Prof. Ajoy Ghatak</b> President, NASI Email: <a href="mailto:ajoyghatak5@gmail.com">ajoyghatak5@gmail.com</a>
<b>Inaugural Address by the Chief Guest</b>	<b>Prof. Ajay Sood</b> Principal Scientific Adviser to the Government of India Email: <a href="mailto:asood1951@gmail.com">asood1951@gmail.com</a>
<b>Felicitation of Guests</b>	<b>Dr. Niraj Kumar</b> Executive Secretary, NASI



<b>Vote of thanks</b>	<b>Prof. Jayesh Bellare</b> Department of Chemical Engineering, IIT, Mumbai; General Secretary (OS), NASI Email: <a href="mailto:jb@iitb.ac.in">jb@iitb.ac.in</a>
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**Tea Break: 11:45am - 12:00 noon**

## **Session-2: Food Security & Healthcare (12:00 - 2:00 pm)**

<b><i>Food Security</i></b>	
<b>Chairman</b>	<b>Prof. Akhilesh Tyagi</b> Prof. Meghnad Saha Fellow, NASI; Department of Plant Molecular Biology, University of Delhi, South Campus; Former President, NASI Email: <a href="mailto:akhilesh@genomeindia.org">akhilesh@genomeindia.org</a>
<b>Co-Chair</b>	<b>Prof. Paramjit Khurana</b> JC Bose National Fellow; Department of Plant Molecular Biology, University of Delhi, South Campus Email: <a href="mailto:param@genomeindia.org">param@genomeindia.org</a>
<b>Plenary Speaker-1</b>	<b>Prof. Ashok Kumar Singh</b> Director, IARI, New Delhi Email: <a href="mailto:director@iari.res.in">director@iari.res.in</a>
<b>Speaker</b>  <b>Title</b>	<b>Prof. Ashwani Pareek</b> Executive Director, National Agri-Food Biotechnology Institute (NABI), Mohali Email: <a href="mailto:edoffice@nabi.res.in">edoffice@nabi.res.in</a> <b>Are we ready to feed nine billions</b>
<b><i>Healthcare</i></b>	
<b>Chairman</b>	<b>Prof. Balram Bhargava</b> DG, ICMR; and Secretary, DHR, Govt. of India, New Delhi Email: <a href="mailto:balrambhargava@yahoo.com">balrambhargava@yahoo.com</a>
<b>Co-Chair</b>	<b>Prof. Nikhil Tandon</b> Head, Department of Endocrinology & Metabolism AIIMS, New Delhi Email: <a href="mailto:nikhil_tandon@hotmail.com">nikhil_tandon@hotmail.com</a>
<b>Plenary Speaker-2</b>	<b>Dr. Rajesh Gokhale</b> Secretary, DBT, Govt. of India, New Delhi Email: <a href="mailto:secy@dbt.nic.in">secy@dbt.nic.in</a>
<b>Speaker</b>	<b>Prof. Shiv Sarin</b> President, National Academy of Medical Sciences;

	Director, Institute of Liver & Biliary Sciences (ILBS), New Delhi Email: <a href="mailto:shivsarini@gmail.com">shivsarini@gmail.com</a>
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**Lunch Break: 2:00 - 2:30 pm**

### Session-3: Entrepreneurship and Employment (2:30 - 4:30 pm)

<b>Chairman</b>	<b>Prof. V P Kamboj</b> NASI Senior Scientist; Formerly Director, CDRI; Chairman, Board of Directors, BCIL, Delhi; Former President, NASI Email: <a href="mailto:kambojvpk1511@gmail.com">kambojvpk1511@gmail.com</a>
<b>Co-Chair</b>	<b>Prof. Rohit Srivastava</b> Himanshu Patel Chair Professor, Department of Biosciences & Bioengineering, IIT, Mumbai Email: <a href="mailto:rsrivasta@iitb.ac.in">rsrivasta@iitb.ac.in</a>
<b>Plenary Speaker -3</b>	<b>Dr. Ashok Jhunjunwala</b> Institute Professor, IIT, Madras; President, IITM Research Park, IITM Incubation Cell & RTBI Email: <a href="mailto:ashok@tenet.res.in">ashok@tenet.res.in</a>
<b>Speaker</b>	<b>Dr. K R Suresh Nair</b> CEO, Design Alpha; CTO, Foundation for Innovation in Social Entrepreneurship(an initiative of Tata Trust), Infopark, Kakkanad, Kochi Email: <a href="mailto:drkrsnair@gmail.com">drkrsnair@gmail.com</a>
<b>Title</b>	<b>Entrepreneurship leading to Social Impact</b>
<b>Special Lecture</b>	<b>Dr. Renu Swarup</b> Former Secretary, Department of Biotechnology, Govt. of India Email: <a href="mailto:renuswarup01@gmail.com">renuswarup01@gmail.com</a>

**Tea Break: 4:30 - 5:30 pm**

### NASI FOUNDATION DAY LECTURE

**(5:30- 6:00 pm)**

<b>Chairman</b>	<b>Dr. Anil Kakodkar</b> Former Secretary, Department of Atomic Energy, Govt. of India; Former President, NASI Email: <a href="mailto:kakodkaranil@gmail.com">kakodkaranil@gmail.com</a>
<b>Co-Chair</b>	<b>Prof. Amit Ghosh</b> JC Bose Chair Distinguished Professor of NASI ICMR-NICED, Kolkata Email: <a href="mailto:amitghosh24@yahoo.com">amitghosh24@yahoo.com</a>
<b>Speaker</b>	<b>Prof. Chandrima Shaha</b> President, INSA Email: <a href="mailto:cshaha0@gmail.com">cshaha0@gmail.com</a>



<b>Title</b>	<b>Creativity and Innovation during the Pandemics</b>
<b>Vote of thanks</b>	<b>Prof. U C Srivastava</b> Formerly Professor, University of Allahabad; Treasurer, NASI Email: <a href="mailto:ucsrivastava@rediffmail.com">ucsrivastava@rediffmail.com</a>

## Day 2: December 5, 2022

(Dr. Santosh Shukla, AES, NASI to compere)

### Session-4: Information Technology and Electronics (10:00am -12:00 noon)

<b>Chairman</b>	<b>Dr. K N Vyas</b> Chairman, Atomic Energy Commission; & Secretary, Department of Atomic Energy (DAE), Govt. of India
<b>Co-Chair</b>	<b>Prof. Anurag Sharma</b> J. C. Bose Fellow & Prof. Emeritus, IIT Delhi; Vice President, NASI Email: <a href="mailto:asharma@physics.iitd.ac.in">asharma@physics.iitd.ac.in</a>
<b>Plenary Speaker-4</b>	<b>Shri S Somanath</b> Secretary, Department of Space Chairman, Indian Space Research Organization (ISRO), Bengaluru Email: <a href="mailto:chairman@isro.gov.in">chairman@isro.gov.in</a> <b>Space Technology: A vehicle for development of IT &amp; allied fields</b>
<b>Plenary Speaker-5</b>	<b>Prof. Ramgopal Rao</b> Pillay Chair Professor, Department of Electrical Engineering, IIT, Delhi Former Director, IIT, Delhi
<b>Speaker</b>	<b>Prof. Shantannu Chaudhary</b> Director, IIT, Jodhpur Email: <a href="mailto:director@iitj.ac.in">director@iitj.ac.in</a> <b>Computer Vision and Machine Learning for Social Good</b>
<b>Speaker</b>	<b>Prof. Sukhdev Roy</b> Head, Department of Physics & Computer Science, Dayalbagh Educational Institute (Deemed University) Dayalbagh, Agra Email: <a href="mailto:sukhdevroy@gmail.com">sukhdevroy@gmail.com</a>
<b>Speaker</b>	<b>Prof. Jayant Haritsa</b> Department of Computer Science & Automation, IISc, Bengaluru Email: <a href="mailto:haritsa@iisc.ac.in">haritsa@iisc.ac.in</a> ; <a href="mailto:jharitsa@gmail.com">jharitsa@gmail.com</a> <b>Data Science: The Good, the Bad and the Ugly</b>

### Lunch Break (12:00- 1:15 pm)

### Concluding Session (1:15-2:15pm)

<b>Chairman</b>	<b>Prof. Ajoy Ghatak</b> President, NASI
<b>Co-Chair</b>	<b>Prof. Manju Sharma</b> Chairperson, NASI-New Initiatives;

	Former Secretary, Department of Biotechnology, Govt. of India; Former President, NASI
<b>Special Lecture</b>  <b>Title</b>	<b>Dr. Mukul Das</b> Director, Shriram Institute for Industrial Research, Delhi <b>Green Hydrogen: Emerging area for entrepreneurs</b>
<b>Summing up</b>	<b>Prof. Manju Sharma (Convener)</b> Chairperson, NASI-New Initiatives; Former Secretary, Department of Biotechnology, Govt. of India; <b>Former President, NASI</b> & <b>Prof. Anurag Sharma (Co-Convener)</b> JC Bose Fellow & Prof. Emeritus, IIT Delhi; <b>Vice-President, NASI</b>
<b>Concluding Remarks</b>	<b>Prof. Ajoy Ghatak</b> President, NASI
<b>Brief Comments &amp; Vote of thanks</b>	<b>Prof. S K Barik</b> Director, NBRI, Lucknow; Vice President, NASI Email: <a href="mailto:sarojbarik@gmail.com">sarojbarik@gmail.com</a>





# **Programme of the Annual/Scientific Session**

## **Day 2: Dec. 5, 2022**

- **Distinguished Guests/Participants Resuming the Session at 2.45 pm in the Bot. Deptt., UoA (just after the Concluding Session of the Symposium)**
- **3.00 pm- Poster Session to continue till 5.30 pm; followed by Tea**
- **Fellows' Meeting at NASI Auditorium at 6.00 pm**
- **Annual General Body Meeting at NASI Auditorium at 7.00 pm**
- **Cultural Programme & Dinner at 8.30 pm at Hotel Grand Continental, Civil Lines (in front of PVR), Prayagraj**

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**Day 3: Dec. 6, 2022**

**Presidential Addresses by the Sectional Presidents-  
10:00-11:00 am at NASI Auditorium**

- Title of the Presidential Address (Biological Sciences): Phytochemicals a natural prospect towards Healthcare- Tryst with KARANJIN **to be delivered by Prof. Latha Rangan, Deptt. of Biosciences & Bioengineering, IIT Guwahati, Assam, India**
- Title of the Presidential Address (Physical Sciences): Selenium- a wonder element in life & for life **to be delivered by Prof. Vimal Kumar Jain, Director, UM-DAE Centre for Excellence in Basic Sciences, Nalanda Building, University of Mumbai, Kalina Campus, Santa Cruz (E), Mumbai**

**Tea**

**(Now, parallel sessions for the Biological and Physical Sciences Sections in two separate Halls)**

**Biological Sciences Session:** (Coordinated by Dr Smita Venkatesh, Technical Editor, NASI, with the assistance of Mr Raghavendra Pratap, NASI)

**(To be Presided over by Prof. Latha Rangan, Deptt. of Biosciences & Bioengineering, IIT Guwahati, Assam, India)-**

**11.30 am-01.30 pm: Oral Presentations (including invited Talks):**

**Total 8 presentations; and one Invited Talk by –**

Dr Manoj Prasad, Ph.D. FNA, FNASc  
Senior Scientist (Professor) & JC Bose National Fellow,  
National Institute of Plant Genome Research (NIPGR)  
Aruna Asaf Ali Marg, P.O. Box No. 10531  
New Delhi - 110 067  
(Title of the talk: Virus under siege: unravelling novel defense mechanism in plants)

**Lunch**

**2.15 – 4.15 pm: Oral Presentations (including invited Talks):**



## **Total 8 presentations; and one Invited Talk by –**

**Dr. Gayatri Venkataraman, Ph.D.**

Senior Principal Scientist

M.S. Swaminathan Research Foundation

3<sup>rd</sup> Cross Street, Taramani Institutional Area

Chennai, 600 113

(Title of the talk: Salinity tolerance: Lessons from wild rice and the way forward for cultivate rice)

**4.30 – 6.00 pm: Oral Presentations (Total 8 presentations)**

**Physical Sciences Session:** [\(Coordinated by Dr Pavitra Tandon, Asstt. Executive Secretary, NASI, with the assistance of Mr Shaktisheel Chaturvedi, NASI\)](#)

**[\(To be Presided over by Prof. Vimal Kumar Jain, Director, UM-DAE Centre for Excellence in Basic Sciences, Nalanda Building, University of Mumbai, Kalina Campus, Santa Cruz \(E\), Mumbai\)-](#)**

**11.30 am-01.30 pm: Oral Presentations (including invited Talks):**

## **Total 8 presentations; and one Invited Talk by –**

**Dr. Daya Shankar Pandey**

Department of Chemistry

Faculty of Science

Banaras Hindu University

Varanasi - 221 005 (U.P.)

(Title of the talk: BODIPY Dyes as Most Versatile Fluorophores Ever: Recent progress towards

Aggregation-Induced Emission (AIE) and multi-functional characteristics)

### **Lunch**

**2.15 – 4.15 pm: Oral Presentations (including invited Talks):**

## **Total 8 presentations; and one Invited Talk by –**

**Dr. S. M. Yusuf,**

Outstanding Scientist

Director, Physics Group

Head, Solid State Physics Division

BHABHA ATOMIC RESEARCH CENTRE

TROMBAY, Mumbai 400 085, (Title of the talk: Magnetic Neutrons in Condensed Matter Research)

**4.30 – 6.00 pm: Oral Presentations (Total 8 presentations)**

**[Concluding Function with High Tea](#)**

## Prayagraj at a glance

