

# The National Academy of Sciences, India

5, Lajpatrai Road, Prayagraj-211002, India



## Summary of the Activities, held in the month of January 2023

1. The report of the Biotechnology Open House Programme (which was organized in the end of December 2022), has been received (enclosed herewith-**Annex. 1**). The aim of hosting this event was to expose the high school students to the latest trends in diverse fields of Biotechnology; the programme was very much successful.
2. The "**Pride of India Expo**," was held concurrently with the 108th **Indian Science Congress** at RTM Nagpur University, Nagpur from January 3rd to 7th, 2023; the NASI also participated in the programme and established its corner with the display of the exhibits (please see the detailed report-**Annex.2**).
3. Workshop on Materials for Energy and Sustainability (please see the program-**Annex. 3**) was organised by the NASI-Jharkhand Chapter on 20th January 2023 in joint collaboration with the CSIR-NML, Jamshedpur; it was attended by several Fellows/Members/Students, and the programme was very successful.
4. A conference on 'Recent Trends in Space Sector' was organized by the NASI-Hyderabad Chapter on 20<sup>th</sup> Jan. 2023 in joint collaboration with other esteemed institutions at Hyderabad (**Annex. 4**).
5. A Meeting of the Inter- Academy Panel on 'Women in STEMM' is scheduled to be held on Jan. 28, 2023 at NASI, Prayagraj; the report will be sent soon after that.
6. A one day Science Communication Programme jointly with the celebration programmes of the Constitution Day, will be held on 31<sup>st</sup> Jan. 2023 at NASI, Prayagraj (**Annex. 5**).
7. Several Chapters of the Academy also organised Science-Society Programmes of the NASI; the publication of the NASI-Journals also achieved their time-lines.



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## BIOTECHNOLOGY OPEN HOUSE PROGRAM

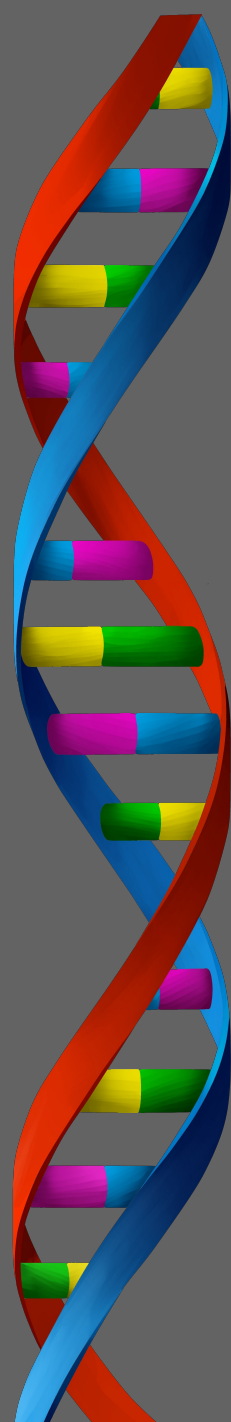
**University School of Biotechnology** organized a *Biotechnology Open House* for school children on 20<sup>th</sup> -21<sup>st</sup> December 2022 as part of Silver Jubilee celebrations of the University. This event was supported by the National Academy of Sciences-Delhi Chapter and the IPU-Innovation and Incubation Foundation. The aim of hosting this event was to expose the high school students to the latest trends in diverse fields of Biotechnology. Over 60 students from classes 10<sup>th</sup> -12<sup>th</sup> from **Sri Venkateshwar International School, St. Gregorios School, Delhi International School Edge and Paramount International School** attended the event. Students were given informative lectures on cutting-edge research in the fields of Plant and Animal sciences, Microbiology and Bioinformatics. A campus tour was given by B.Tech./M.Tech. students to showcase landmark facilities in the campus such as the Atal Incubation Centre, Greenhouse, Library, Sewage Treatment Plant and Biowaste Disposal Facility. After a relaxing lunch in campus lawns children and teachers visited Biotechnology research labs and interacted with research scholars. They attended hands-on-training sessions and scientific demonstrations in the fields of Moss Epigenomics, Yeast Biology, Cancer Biology, Virology, Proteomics and Cell Biology. At the end of the day-long program teachers were felicitated and students were given Participation Certificates by Dean USBT. Students and teachers were highly impressed and found the event extremely informative. Feedback from students and teachers showed majority found the program “Excellent” and more than 75% of the students said they may consider taking up Biotechnology as their career option.



# University School of Biotechnology



Prof. Meenu Kapoor  
Dean USBT



**UNIVERSITY SCHOOL OF BIOTECHNOLOGY**  
Guru Gobind Singh Indraprastha University  
Sector-16C, Dwarka, New Delhi-110078

## BIOTECHNOLOGY OPEN HOUSE

- Program:**
- Interaction with Professors
  - Talks on Current Science
  - Walk Around the Campus
  - Hands-on Training in:
    - Genomics
    - Proteomics
    - Animal Biotechnology
    - Plant Biotechnology
    - Cell & Microbiology
    - Bioinformatics

**Supported by:**  
National Academy of Sciences Delhi Chapter & IPU Innovation and Incubation Foundation

December 20-21, 2022; 9:30 AM – 5 PM



**FACULTY COORDINATORS**  
Dr. Ram Singh Purty  
Mr. Sayan Chatterjee  
Dr. Namrata Yadav

**Contact details:**  
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**BIOTECHNOLOGY OPEN HOUSE**  
Venue: E-Block Auditorium  
20-21 December 2022

### Morning Session

- 9:30 - Registration (E Block Auditorium)  
Tea & snacks  
Kulgeet
- 9:45 - Welcome Address by Dean
- 10:00 - Talk by Prof. N. Raghuram
- 10:30 - Talk by Prof. Ranjith Kumar CT
- 11:00 - Talk by Dr. Sudeep Kumar
- 11:30 - Walk around the Campus
- 13:00 - Lunch

### Afternoon Session

- 14:00 - Cell Biology & Plant Biotechnology Lab
- 14:30 - Proteomics Lab
- 15:00 - Moss Epigenomic & Functional Genomics Lab
- 15:30 - Animal Biotechnology Lab
- 16:00 - Bioinformatics (E Block Auditorium)
- 17:00 - Valedictory and Feedback (E Block Auditorium) followed by Tea



**PROGRAM SCHEDULE**



**GURU GOBIND SINGH  
INDRAPRASTHA UNIVERSITY**  
NEW DELHI

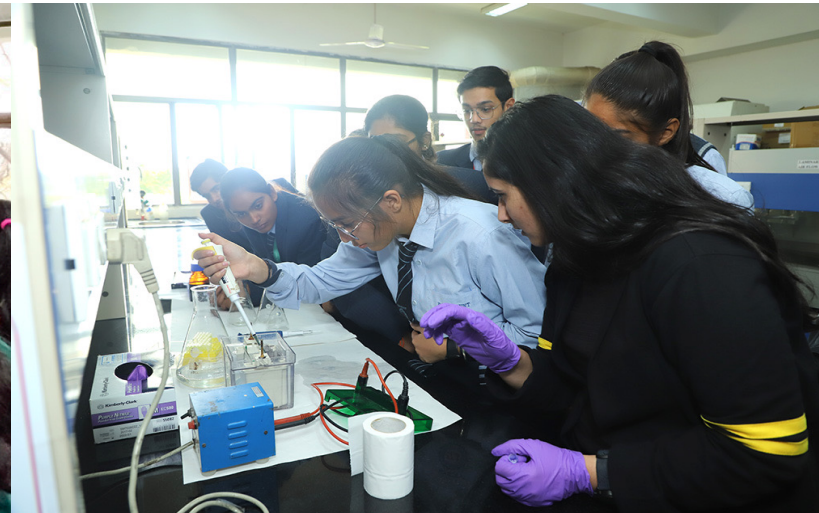
**IPU INNOVATION & INCUBATION FOUNDATION (IPU-IIF)**  
(CIN: U80300DL2021NPL390329)

- The IPU Innovation & Incubation Foundation (IPU-IIF) is set up as **Not for Profit Section 8 Company**.
  - The foundation is focused at **promoting and enabling Research & Development (R&D), Innovation and Incubation activities** in the Guru Gobind Singh Indraprastha University (GGSIPU) by **creating internally and externally integrated ecosystem**.
- The Objectives of IPU Innovation & Incubation Foundation (IPU-IIF) are to:
- Provide **360 degree incubation support** to new, promising and innovative technology based start-ups/companies in the areas of IT/ITES, Clean Technology, Renewable Energy, Education, Health, Hygiene/Sanitation, Environment, Waste Management, Agriculture and Food Technology, Pharma, Biotechnology, Electronics and Telecommunication, Cyber Security, Social Innovation etc.;
  - Create an **enabling environment** for nurturing the **impactful ideas into commercializable innovative products, technologies, services and S&T based solutions** which can **benefit the society** and **foster synergy** between industry and academia on one hand and with the National Laboratories and IITs on the other hand.
  - Make available incubates **translational research facilities, incubation facilities, technical support system, office space & support** and an **enabling ecosystem** and to undertake **R&D activities** for incubating/entrepreneurial mind set, skills and expertise in an end to end manner.
  - Develop and **scale up ideas (beyond proof of concept), prototypes, products, technologies** from the University faculty or those received from outside the University into commercial entities and build/entrepreneurs around them.
  - **Accept endowment funds/CER funds and Grants** from the registered individuals/firms/Company/Ministry for meeting the objectives.
  - Connect seamlessly with the National and International innovation system and technology and business incubators in particular.
  - Organize resources and services to entrepreneurs, including working space and offices, technical expertise, management mentoring, assistance in compiling an effective business plan, shared/administrative services, technical support, business networking, advice on intellectual property, embourses of financing, markets as well as strict admission and exit rules.
  - Arrange **cost effective, value added services, administrative support, office equipment, patent/invention and training** the new organization and facilitate knowledge creation, innovation and entrepreneurship activities.
  - Identify technologies/innovations which have **patent** (or) for commercial ventures and incubating early stage technology based innovative entrepreneurial ventures.
  - **Build** the physical infrastructure and support systems for business incubation activities and promote entrepreneurship spirit, and
- Facilitate formation of a **collaborative environment** between industry and academia by developing and operationalizing **joint research projects** and consulting assignments.

# Interaction With Professors



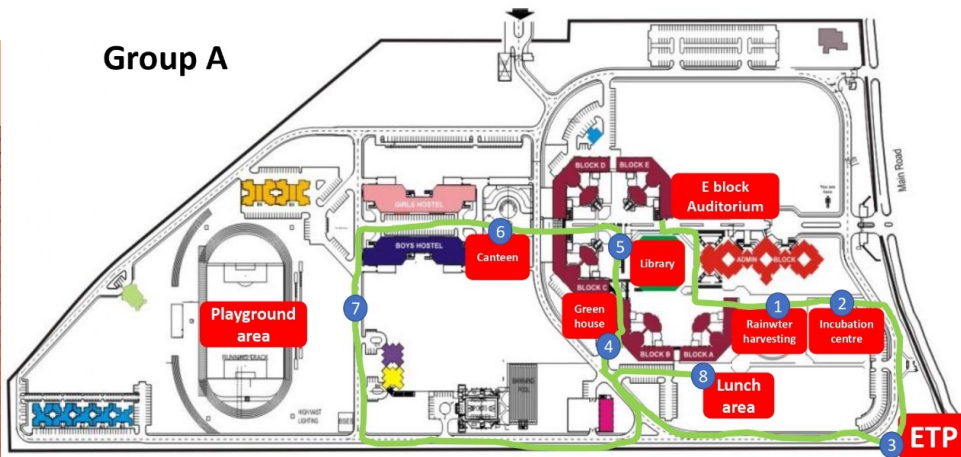
# Visit to Research/Teaching Labs



# Campus Tour



Atal Incubation Center



Group A



Sewage Treatment Plant



Green house



Rain water harvesting

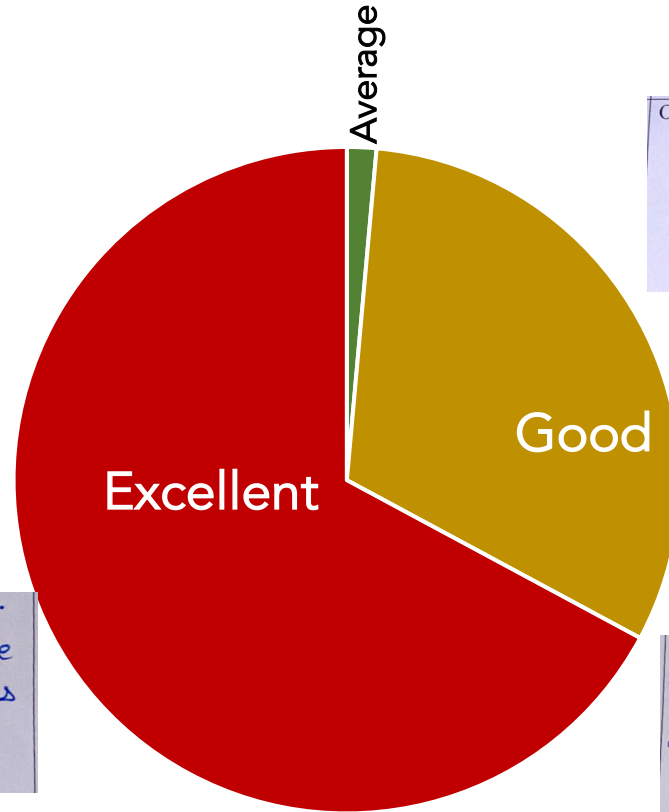
# Felicitations





# Feed back

7	Opinion about GGSIPU & USBT: Great exposure to the students. The labs are excellent. wonderful experience to visit all the labs.			
8	Overall experience of Open House	Average	Good	Excellent ✓
Any other feedback: Great experience. looking forward for more such programs.				



Opinion about GGSIPU & USBT:  
Different labs and visioniers promote BioTech. And motivate children to take Biotech as Career. Very Beautiful Campus!! ✓

Opinion about GGSIPU & USBT: it was a great experience to visit the labs and to interact with the professors. for me the most interesting lecture was the last one That was really interactive. In future I would like to attend such events in future.

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Opinion about GGSIPU & USBT:  
Its a very good and considerable career option. Also to know more about this was a pleasure and sorted many things for future.

Opinion about GGSIPU & USBT: It was a great experience to visit the labs and have a one on one interaction with the professors as well as the students, It was interesting to to look science closer.

"Pride of India Expo," was held concurrently with the 108<sup>th</sup> Indian Science Congress at RTM Nagpur University, Nagpur from January 3<sup>rd</sup> to 7<sup>th</sup>, 2023.

The 108th Science Congress was virtually inaugurated by the **Hon'ble Prime Minister, Shri Narendra Modi**, in the august presence of Maharashtra's Governor, Sh. Bhagat Singh Koshiyari, Union Ministers, Sh. Nitin Gadkari and Dr. Jitendra Singh, and Maharashtra's Chief Minister, Sh. Eknath Shinde, and Deputy CM, Sh. Devendra Fadnavis, among others.

The **Pride of India Expo (POI)** was inaugurated by the **Hon'ble Minister of States (IC) for S&T and Earth Sciences, Dr. Jitendra Singh**, in the presence of **Deputy CM Sh. Devendra Fadnavis, Dr. S Chandrasekhar, Secretary DST and other dignitaries**. The dignitaries took time out of their busy schedules to visit the expo and were impressed by all of the exhibitors' outstanding efforts to promote science and technology.

The PoI Expo received a tremendous response from the delegates and visitors. It had participation of almost all premier research institutions, innovators, govt depts corporates, educational institutes, start-ups etc. Thousands of national and international delegates, prominent R&D heads, policymakers, bureaucrats, distinguished scientists, ICT & allied industry leaders, technocrats & academicians, innovators, entrepreneurs, social activists, corporate & industry executives, lakhs of fervent students, and the general public attended the exhibition over the five days. NASI Exhibits also received very good response and wide publicity; it was showcased on the direction/suggestion of the DST/NASI-Council. Dr Santosh Shukla, AES, NASI displayed the exhibits there; and the Chairperson & other Office-bearers of the NASI-Nagpur Chapter were also present there on this occasion (please see photographs enclosed herewith).





**Final Technical Program for Workshop on Materials for Energy and Sustainability**  
**20<sup>th</sup> January 2023**

**Venue: CSIR-NML, Jamshedpur**

**Annex. 3**



**0900 AM**

**Registrations (NML Auditorium)**

**0945 AM onwards**

**Inaugural Session (NML Auditorium)**

<b>Time</b>	<b>Sub-Program</b>	<b>Moderator</b>
0945	Welcome Address by Director, NML	Abhilash
0950	About NASI by Dr. Neeraj Kumar, Executive Secretary, NASI, Allahabad	Abhilash
0955	About the workshop by Dr. R.K.Sahu/Dr. S.G.Choudhary	Abhilash
1000	Introduction of Chief Guest- Dr. Karunesh Kr. Shukla, Director, NIT Jamshedpur	S.G.Choudhary
1005-1015	Inaugural Speech by Chief Guest	
1015-1025	Felicitations	Abhilash
1025	Vote of Thanks	RKSAHU/SGC

**1030-1045**

**High Tea**

**1045-1300**

**Technical Session-1**

**(Chairman: Dr. Arvind Sinha)**

**1045**

*Keynote Talk: Dr. Pralay Maiti, IIT BHU, Varanasi*  
*Sustainability in the Energy Sectors using Polymers*

**1130**

*Invited Talk: Dr. Mamoni Dash, Institute of Life Sciences, Bhubaneswar*  
*Polymers as bio-materials*

**1200**

*Invited Talk: Dr. Srabanti Ghosh, CSIR-CGCRI, Kolkata*  
*Surface Engineering of Functional Nanostructures for Hydrogen Generation*

**1230**

*Invited Talk: Dr. Basab Chakraborty, IIT Kharagpur*  
*Energy storage in e-mobility*

**1300-1415**

Group Photograph followed by Lunch (NML Auditorium)

**1415 -1530**

**Technical Session-2**

***E-Poster Presentations in Auditorium***

**1545-1630**

Valedictory Session with Best E-Poster Awards  
Distribution of Participation Certificates



**Academy for Science, Technology & Communication, Hyderabad**

Jointly with

**National Academy of Sciences, India - Hyderabad Chapter**

Cosponsored by

**National Geophysical Research Institute, Hyderabad**

**National Remote Sensing Centre, Hyderabad**

**Space Federation of India, Hyderabad**

**Cordially invites to the Seminar on**

**‘Recent Trends in Space Sector : New India’**

**Time: 9.30 am, 20th January 2023**

**Venue: Balakrishna Hall, CSIR- National Geophysical Research Institute (NGRI) Hyderabad**

**Dr. (Smt.) TAMILISAI Soundararajan**

Hon'ble Governor of Telangana & Hon'ble Lt. Governor of Puducherry

has graciously agreed to be our Chief Guest

**Dr. A. S. Kirankumar**

Former Chairman, Indian Space Research Organisation

has kindly consented to be the Guest of Honour & deliver keynote address

**Dr. M. Ravichandran**

Secretary, Ministry of Earth Sciences, Govt. of India

has kindly agreed to be the Guest of Honour & deliver ASTC-Dr. S. Balakrishna Memorial Lecture

**Dr. Ch. Mohan Rao**

Former Director, CCMB,  
Chairman, NASI -Hyd. Chapter

**Dr. Prakash Kumar**

Director, NGRI, Hyderabad

**Sri.C.L. Narasimha Rao**

Convenor-SAC, ASTC

Please be seated by 9.15am

RSVP: +91 9849682937 or [astc.academy@gmail.com](mailto:astc.academy@gmail.com)

# Seminar on "Recent Trends in Space Sector - New India"

Jointly Organised by ASTC & NASI- and Co-sponsored by NGRI, NRSC and SpaceFed

## Programme

**20th January 2023**

**09.30 am : INAUGURATION**

**09.30 : Arrival of Hon'ble Governor at the Balakrishna Hall, NGRI.  
Proceed to the dais & Presentation of Bouquet to the Chief Guest**

**09:30 : National Anthem**

**09:31 : Lighting of the lamp by the Chief Guest**

**09.33 : Welcome Address :**

**Dr. Prakash Kumar**, Director, CSIR- NGRI

**09.38 : About the ASTC and the Seminar :**

**Sri. C.L.Narasimha Rao**, Convenor-SAC, ASTC

**09.42 : Message by the Guest of Honour :**

**Dr. M.Ravichandran**, Secretary, MoES, Govt. of India

**09.50 : Message by the Guest of Honour :**

**Dr. A. S. Kirankumar**, Former Chairman, ISRO

**09.57 : Presidential Address :**

**Dr. Ch. Mohan Rao**, Chairman-SAC,ASTC & NASI- Hyd.

**10.02 : Felicitations to Space Start-Ups & eminent Scientists :**

**Dr. (Smt.) TAMILISAI Soundararajan**, Hon'ble Governor of Telangana & Hon'ble Lt. Governor of Puducherry

**10.08 : Address by the Chief Guest :**

**Dr. (Smt.) TAMILISAI Soundararajan**, Hon'ble Governor of Telangana & Hon'ble Lt. Governor of Puducherry

**10.20 : Presentation of Memento to the Chief Guest by the Chairman, ASTC**

**10.22 : Vote of Thanks : Sri. C.L. Narasimha Rao**, Convenor-SAC, ASTC

**10.24 : National Anthem**



# राष्ट्रीय विज्ञान अकादमी, भारत

**The National Academy of Sciences, India**

5, लाजपराय मार्ग, प्रयागराज-211002 \*\*\* 5, Lajpatrai Road, Prayagraj -211002

**CELEBRATING NATIONAL CONSTITUTION DAY**

&

*Science Communication programme*

**Theme: New Education Policy and Scientific Temper**

on

**Date: January 31, 2023**

**Time: 10.00 am to 3.00 pm**

*-- Programme --*

- ❖ **Welcome & Introductory Remarks:** Prof. U.C. Srivastava, Coordinator, Sc. Comm. Prog., NASI
- ❖ **Thematic Lecture :** Dr. Niraj Kumar, Executive Secretary, NASI
- ❖ **Technical Lecture-1 :** Prof. S.M.Prasad, Head, Dept. of Botany, University of Allahabad, Prayagraj
- ❖ **Concluding Remarks :** Prof. Madhoolika Agrawal, Dean, Faculty of Science, BHU, Varanasi;  
General Secretary, NASI

*-- Break --*

- **Technical Lecture-2:** Prof. C.K.Dwivedi, Former Head, Dept. of Electronics & Mass Communication, University of Allahabad, Prayagraj
- **Technical Lecture-2:** Prof. B. Tripathi, Head Dept. of Mathematics, CMPPG, College, Prayagraj

*(Lunch pack will be served in between the programme)*