

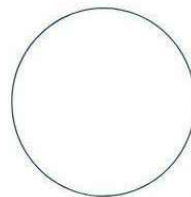
2024



Indian National Young Academy of Sciences
भारतीय राष्ट्रीय युवा विज्ञान अकादमी

INYAS Annual Newsletter

January-December
2023



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BARC Mumbai



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IIT Indore



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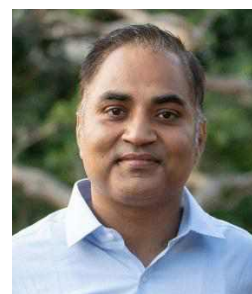
Editors



Dr. Rakesh Pilania
PGIMER, Chandigarh



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ICAR-IARI, New Delhi



Dr. Veerendra Sharma
BARC, Mumbai

Message from the Chair

Dear Esteemed Readers and enthusiastic Colleagues!

Greetings from the Indian National Young Academy of Science (INYAS),



As a representative of the young scientist community in India, feels exceptionally privileged to fondly reflect on the significant milestones of INYAS in 2023. I am immensely enchanted to unfold the panoramic view of the profound achievements that have raised the benchmarks of INYAS throughout the year. As we trace back to history, in December 2014 with 20 pioneering members selected by INSA, INYAS has evolved into a dynamic force comprising 107 members from diverse disciplines in the year 2023. INYAS inherited its division, mission and vision as the body of young dynamic leaders in the scientific community who aspire to contribute in science outreach and communication for the benefit of our society.

This year has been noteworthy, as INYAS vehemently decided the inclusion of 30 new members from 9 different scientific disciplines during the 2024 membership drive. The INYAS 2024 Membership's success percentage stands proudly around 7.8%, reflecting the accomplishment of our perpetual efforts to incorporate outstanding talents into our fraternity. Additionally, INYAS holds a strong commitment of balanced gender representation, therefore, 11 female and 19 male members have been selected from geographically around the country, ensuring a healthy balance in our ranks. This enormous expansion has contributed significantly to our collective expertise and diversity.

Throughout the gigantic 2023, our dedication towards national & international collaborations along with local outreach has been successful in organizing and executing diverse activities. From initiatives in remote and rural areas to science awareness camps, INYAS aimed to follow its compassion of bridging the gender gap in the scientific realm. From events celebrating women in science and sustainability workshops, INYAS honestly dedicated itself to uplift the representation of women in science and also supported the ideology of sustainable development through activities in exotic locations across India. INYAS commemorated National Science Day and hosted conferences, seminars and webinars to exponentially increase the connection of science to society. This year India witnessed the celebration of G20 by being the host nation for 2023. INYAS along with various ministries and science academies and institutions hosted special events that targeted the S20 engagement group to proliferate science in its myriad forms. Also, INYAS organized (in collaboration with ministry of youth affairs, GoI) a Panel Discussion on "Empowering Young Scientists in Governance" in Youth20/G20 event at Bhubaneswar, and a session on the theme: "Health, Wellbeing and Sports: Agenda for Youth" during Y20 Pre Summit at Leh, Ladakh.

INYAS victoriously organised its Flagships events namely PRAYOJAN, RuSETUP & WiSDom in pursuit of our vision, deeply rooted in the spirit of scientific inquiry and collaboration. In addition to this INYAS also supported outreach events like remote area lecture series and science awareness camps to target the underprivileged section of society. Through capacity building programs, training programs and scientific meetings, INYAS aims to extend its multidimensionality to young researchers and academicians. Additionally, our commitments

also extend globally through collaborations with other Young Academies worldwide. The academy organises various competitions like Saransh - Thesis Presentation Competition, National Competition for Research Excellence, Sci-Art Image Competition, Model G20 Initiative and school level competitions to encourage students and scholars. I also feel delighted to share that our members have consistently demonstrated excellence in research, garnering awards, recognition, and achievements throughout this year.

I am also very happy to share that for the first time we got funding from international platform, namely Inter Academy Partnership (IAP) where we established the collaboration with national academies of neighbouring countries like Nepal, Bangladesh, Czech Republic, Benin, South Africa. Through these projects we will work on topics like ethics in science publishing, awareness about predatory journals, science diplomacy, etc.

As we commemorate this growth, it is essential to acknowledge the seven local zones present across the nation that have been pivotal in amplifying our impact. Working hand in hand with local institutions, schools and colleges, these zones have initiated activities at the grassroots level, reinforcing our commitment to the outreach of science at the minimal atomic level possible. As we collectively reflect on the past 10 years of this majestic journey, let us carry forward the spirit of the 4 I's of INYAS Inculcate, Illuminate, Integrate & Innovate that defines us. The anecdotes of INYAS's journey is not only about the events we organise or the accolades we receive, but it is actually about the collective impact we create in society as our national contribution. Let us embark upon the journey and celebrate the jubilee of the remarkable 10 years of INYAS. We plan to celebrate 10th year of INYAS by reaching out to every part of the country and make a great positive impact in rural/remote area.

I perceive extraordinary honor and contentment to share this yearly newsletter with the readers. The newsletter is a compilation of the events undertaken and organised by INYAS in all its capacity. The milestones that the events achieved is just the tip of the iceberg, and INYAS extends its heartfelt gratitude to INSA for their constant encouragement and humongous support through the year. I protract my profound appreciation to the INYAS members, core committee members and INYAS office for their sincere dedication and expertise in organizing the events nationwide to contribute back to the society. I am obliged to the honourable guests, distinguished speakers and attendees for their valuable time and knowledge in INYAS events. We also thank all the funding agencies/organizations for the fiscal support towards various events conducted by INYAS.

The dedication of the entire team fuels our mission and INYAS will continue to be pioneers in fabricating the future canvas of science, technology and innovation. I hope INYAS spreads its vibrant wings in its future endeavours and outshine itself in the field of science communication and outreach for the benefit of our society.

Sincerely,

Prof. Rajendra S. Dhaka

Chairperson, INYAS and Associate Professor, IIT Delhi

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1. ABOUT INYAS

INYAS was founded in December 2014 by INSA with 20 members. The INSA council selected the INSA Young Scientist Medal recipients as its founding members. Currently, INYAS has 107 members from various disciplines. INYAS is an INSA-recognized academy of young scientists in India with the following vision:

Vision

- ✓ Promotion of science education and outreach
- ✓ Encouragement of networking among young scientists
- ✓ Supporting young scientists in career independence
- ✓ Engagement in interdisciplinary & intergenerational scientific dialogues
- ✓ Boosting science capacity in the country
- ✓ Collaboration with other young Academies of the world

Local Zones

INYAS is committed to international collaborations as well as local outreach. INYAS has formed the following seven local zones (formerly local Zones). These local zones will also liaise with INSA local Zones to initiate new activities and exponentially increase the impact on the ground.

Zone Name	Coordinator	Co-coordinators
National Capital Territory	Dr. Kalpana Nagpal (Amity Uni, Noida Campus)	Dr. Subhash Babu (ICAR-IARI, New Delhi)
North	Dr. Santanu Mukherjee (Shoolini University, Solan)	Dr. Vijay Kr Sharma (NIT Srinagar)
North Central	Dr. Rishemjit Kaur, (CSIR-CSIO, Chandigarh)	Dr. Arun Jugran, (GBPNIHE, Uttarakhand)
Central	Dr. Jai Prakash (AMU, Aligarh)	Dr. Sanjay Singh (IIT-BHU)
East	Dr. Praveen Kumar (IACS, Kolkata)	Dr. Ejaz Ahmad (IIT-ISM, Dhanbad)
North East	Dr Akshai Kumar A.S. (IIT Guwahati)	Dr. Mayuri Chabukdhara (Cotton University)
West	Dr. Mohit Tyagi (BARC, Mumbai)	Dr. Shamin Padalkar (TISS, Mumbai)
West Central	Dr. Tarun Sharma (GBU, Gandhinagar)	
South	Dr. Vinayak B. Kamble (IISER TVM)	Dr. A. Subbiah (CSIR-CECRI)
South East	Dr. Priyanka Bajaj (NIPER, Hyderabad)	Dr. Sai Santosh Kumar Raavi (IIT Hyderabad)

2. INYAS CORE COMMITTEE MEETINGS

INYAS Core Committee meetings were held 14 times between 1 January – 31 December, 2023.

S.N.	Meetings	Date
1.	CC Meeting	January 5, 2023
2.	CC Meeting	February 18-19, 2023 (in-person at INSA, Delhi)
3.	CC Meeting	March 22, 2023
4.	CC-meeting	March 22, 2023
5.	CC-meeting	May 6, 2023
6.	CC-meeting	June 7, 2023
7.	CC-meeting	July 16, 2023
8.	CC-meeting (special agenda GYA)	July 23, 2023
9.	CC-meeting	Sept 8, 2023
10.	CC-meeting	Sept16, 2023
11.	CC-meeting	Sept 29, 2023
12.	CC-meeting	Oct 29, 2023
13	CC-meeting	Dec 3, 2023
14	CC-meeting	Dec 24-25, 2023 (in-person at INSA, Delhi)

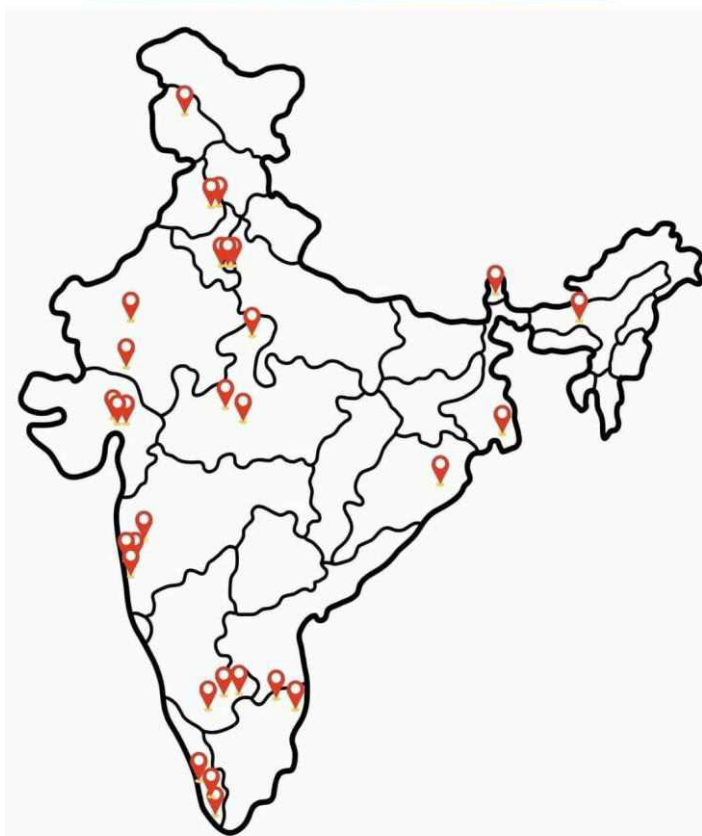


3. NEW MEMBERSHIP (2024-2028)

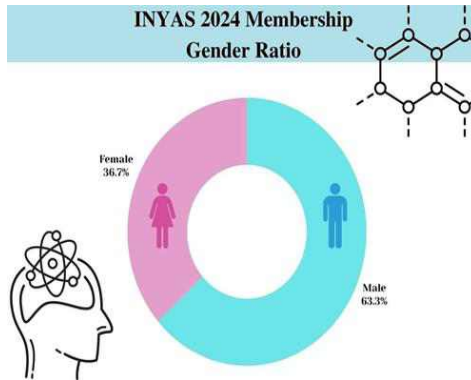
INyas Membership 2024

Totan Adak ICAR - NRI Odisha	Nisha Singh GBU Gujarat	Reshma Gills ICAR - CMFRI Kerala	Sandeep Rawat GBPNIE Sikkim	Divya Kumar JSS Medical College Karnataka	Seshadri K S Ashoka Trust for Research in Ecology & the Env., Karnataka	Brindaban Modak BARC & HBNI Maharashtra	Archana Singh CSIR - AMPRI Madhya Pradesh
Sandhya Lakshmanan CSIR - NISCP New Delhi	Meena Krishania Choudhary CIAB Punjab	Aijaz Ahamad Dar (In) University of Kashmir Jammu & Kashmir			Ashwani Kumar Tiwari JNU New Delhi	Manjil Saikia Ahmedabad University Gujarat	Ramu Adela NIPER Guwahati Assam
Manoj K. Patel CSIR - CSIO Chandigarh	Amit Vernekar CSIR - CLRI Tamil Nadu	Chhama Awasthi DST New Delhi	Ankush Bhaskar ISRO Kerala	Shabnam Iyyani Syamsunder IISER TVM Kerala	Riddhi Datta Dr. A. P. J. Abdul Kalam Govt. College West Bengal	Rakesh Joshi CSIR - NCL Maharashtra	Devendra Singh Basera GMC Sirohi Rajasthan
Hitesh Pawar ICT Maharashtra	Vineet Vashista IIT Gandhinagar Gujarat	Nishant Kumar IIT Jodhpur Rajasthan	Paramita Das IISER Bhopal Madhya Pradesh	Sakthivadivel Duraisamy VIT Tamil Nadu	Anuraj Singh ABV-IIITM Gwalior Madhya Pradesh	Krishna Kumar Singh BARC Maharashtra	Sujit Das IISc Bangalore Karnataka

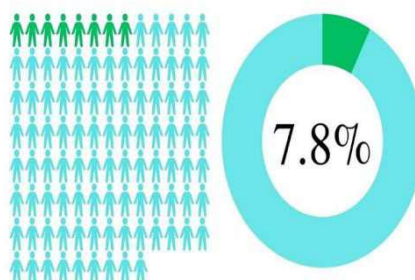
INyas Membership 2024



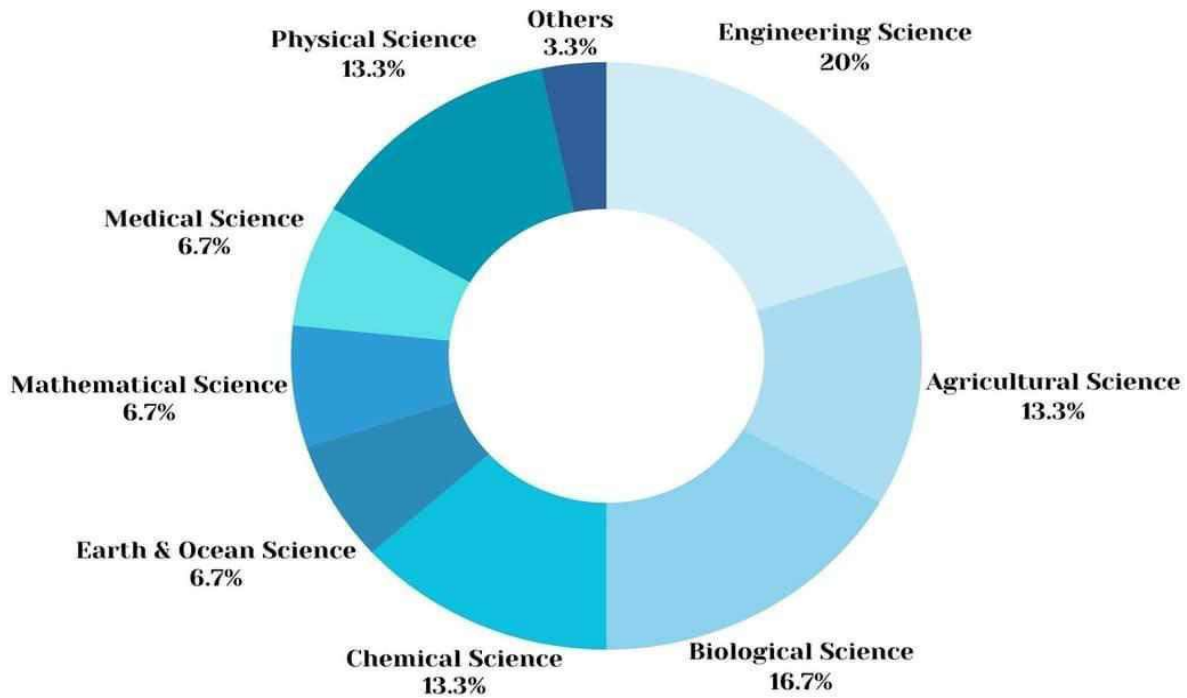
INyas 2024 Membership Gender Ratio



INyas 2024 Membership Success Percentage stands at 7.8%



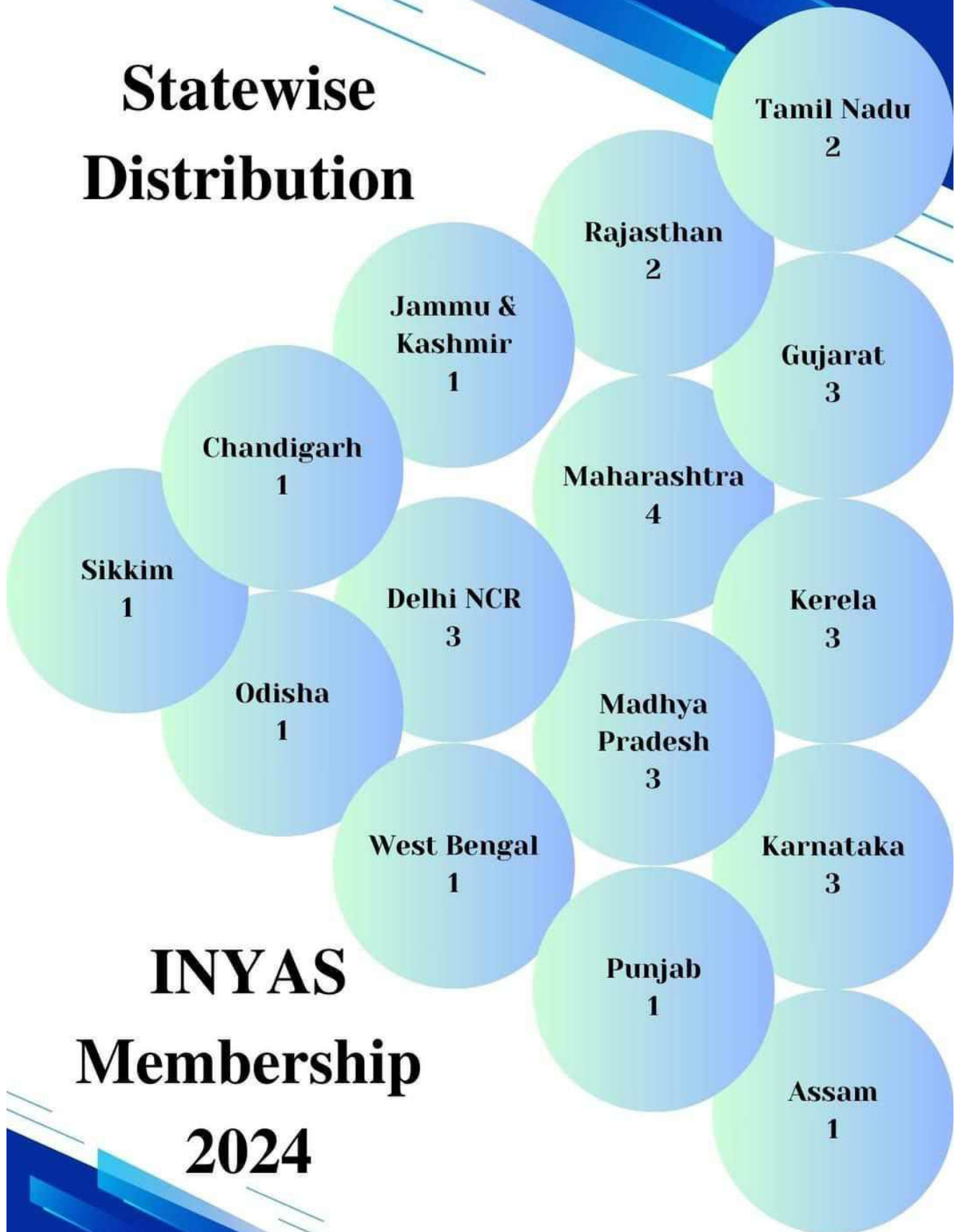
IN-YAS 2024 Membership Subject-Wise Distribution



IN-YAS Membership 2024 New Institutes



Statewise Distribution



INyas Membership 2024

4. INYAS 8th GENERAL BODY MEETING

Date: 17-19 February 2023

The 8th General Body Meeting (GBM) of INYAS was organized at INSA, New Delhi, on February 17–19, 2023. The event was graced by the presence of Prof. Ashutosh Sharma (President, INSA) and Ms. Meeta Rajiv Lochan, IAS (Secretary, Ministry of Youth Affairs and Sports, Government of India), on Day 1 and 2, respectively. New INYAS members (2023) were inducted during the GBM, and they presented a brief about their research and their vision for INYAS activities. INYAS members brainstormed on various aspects of how to carry forward the mission and vision of INYAS. Four new Core Committee members were elected to the CC team and 4 members completed their terms as CC members. Outgoing batch members and outgoing CC members were felicitated during the GBM.



5. INYAS FLAGSHIP ACTIVITIES

INYAS Flagship Activities

- I. Post-PhD: Research, Academia, and Industry Opportunities, Science Journalism, Grant Writing, and Networking (PRAYOJAN)
- II. Women in Scientific Domains (WiSDom)
- III. Rural Science Education and Training Utility Program (RuSETUP)
- IV. Saransh 2023: Three Minute Thesis Competition

I. PRAYOJAN: Post-PhD: Research, Academia, and Industry Opportunities, science Journalism, grant writing, and Networking

CC Coordinator: Dr Pooja Devi and Dr Dwijendra Pandey

Organizers PRAYOJAN 2023: Santosh, Shweta, Vinayak, Arun, Namisha, Nivedita, Santanu, and Veda

“PRAYOJAN” is a flagship event of INYAS targeted for students, including post PhDs, post-docs, and early career researchers. The event was conducted from 23-24th April 2022 and aims to provide awareness about career opportunities post-Ph.D. in various sectors like research, industry, academic writing, science communication, etc. This program also aims to provide information about various national/international postdoctoral opportunities and provides soft-skill training for grant writing and CV building. The inception of this event by INYAS was triggered by the huge gap in this domain and caters to students to get awareness about career opportunities as well as enhancing professional skills. The event was started in the year 2022 in online mode and has been a successful activity of INYAS, with more than 200 online registrations/participants every year. This event is conducted annually and includes the following sessions:

Session 1: National Post-Doc Opportunities

Session 2: International Post-Doc Opportunities

Session 3: Experience Sharing by INYAS Members

Session 4: Career Opportunities in Academia and Industries

Session 5: Career Opportunities in Academic Publishing and Science Communication

Session 6: Grant Writing and CV Building



G20 **S20**

Indian National Young Academy of Science (INYAS)
Flagship Event for Post-PhD Opportunities
PRAYOJAN
(22nd-23rd April 2023)

Chief Guest

Inaugural Address

Dr. Akhilesh Gupta
Secretary, Science and Engineering Research Board (SERB), Govt of India

Date and Time
April 22, 2023
9:30 AM

INYAS Flagship Event
PRAYOJAN APRIL 22-23, 2023

Post-PhD: Research, Academia and Industry Opportunities, Science Journalism, Grant Writing and Networking

WHO CAN APPLY:

- Final Year PhD Students
- Postdoctoral Researchers
- Early Career Researchers

REGISTRATION FEE: Rs. 500/-



LAST DATE: April 10, 2023

REGISTRATION LINK: <https://forms.gle/e5eghLEmw7uutayr5>

CONTACT US PHONE NUMBER +91-7579024082
EMAIL ADDRESS inyasooffice@gmail.com, prayojan.inyas@gmail.com
WEBSITE <https://inyas.in/>

G20 **S20**

Indian National Young Academy of Science (INYAS)
Flagship Event for Post-PhD Opportunities
PRAYOJAN
(22nd-23rd April 2023)

Chief Guest

Valedictory Address

Prof. T.G. Sitharam
Chair, All India Council for Technical Education, Govt of India

Date and Time
April 23, 2023
5:15 PM



II. Women in Scientific Domains (WISDOM)

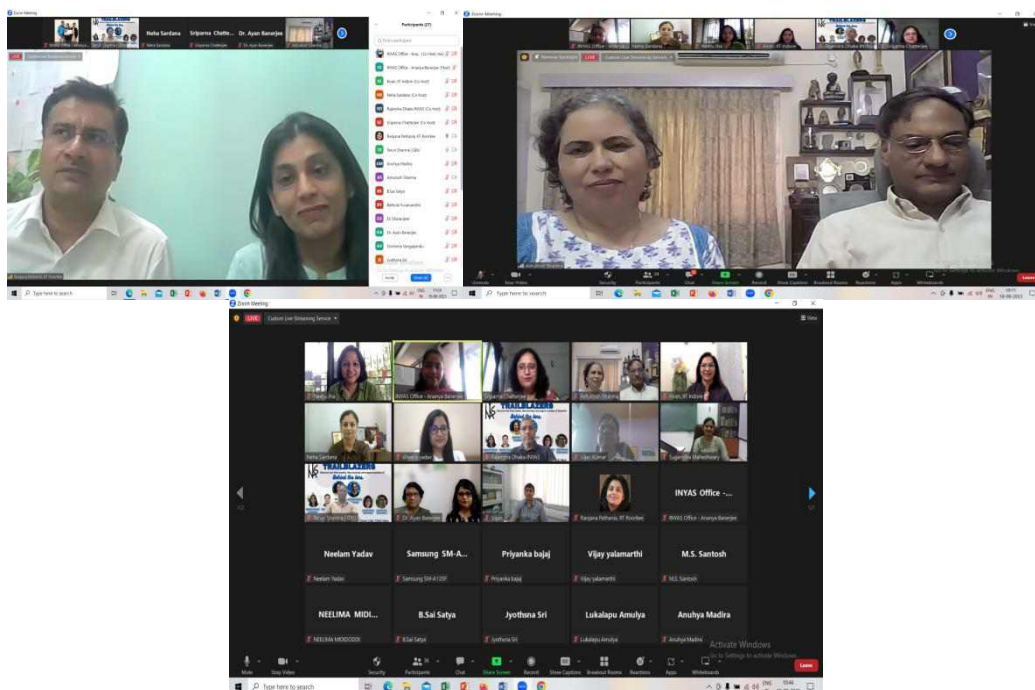
Event: Trailblazers (under WiSDom)

Date: 18th August, 2023

Organizers: Neha Sardana, Neetu Jha, Tarun Sharma, Shweta, Sriparna, Pooja

No. of Participants: 50

The event started with an introduction to the WisDom event by Dr. Neha Sardana, followed by the introduction to INYAS by Dr. Rajendra Dhaka, and an introduction to the Trailblazer event by Dr. Neetu Jha. The inauguration of Reels and Podcasts was done by Prof. Ashutosh Sharma, INSA president. The first session was chaired by Dr. Neha Sardana, and discussions on the life and work-life balance of Prof. Ashutosh Sharma and Mrs. Neeti Sharma went on with the takeaway message to Keep humor alive throughout your life. The second session was chaired by Dr. Sriparna Chatterjee, and discussions were with Prof. Bhadra (first INYAS chair) and her spouse, Prof. Aryan Banerjee, and ended with the takeaway message to be true to our kids and keep the dialogue open. The last and final session was chaired by Dr. Tarun Sharma, and discussions were with Prof. Ranjana Pathania and Prof. Naveen Navani. The 3rd session ended with a takeaway message that hang in there when you have difficulties; it will pass. The vote of thanks was given by Dr. Kiran Bala, and the session was concluded.



Event: Online Poster Competition on "Achievements of Women in Science"

Date: 10 March 2023

Organizer: INYAS Kolkata Bhubaneswar Zone

INYAS Kolkata Bhubaneswar Zone organized an online poster competition on "Achievements of Women in Science" to mark and celebrate International Women's Day (IWD) 2023. The

result of the competition is announced in an online event on March 10, 2023. The program is available on the INyas YouTube channel.



Event: Women In Science (WISe)

Date: 11 March 2023

Organizer: Nishima Wangoo

No. of participants: ~ 19

The brainstorming was held amongst WINYAS members to discuss the potential strategies to be employed to dilute the gender gap in STEM. Various ideas were discussed and these initiatives discussed would be taken up in the flagship event WisDom.

Event: Poster Making Competition on "Achievements of Women in Science" followed by a Webinar (INyas Kolkata-Bhubaneshwar Zone)

Date: 10 March 2023

Organizer: Chirasree Roy Chaudhuri, Sriparna Chatterjee

No. of Participants: 50

The poster competition was well received by the school students and in spite of the coincidence with the final examinations in some schools, there was an overwhelming response by around 50 participants. They presented innovative ideas which were judged by eminent members: Dr. Bitan Ghosh from BARC Mumbai, Dr. Anindita Bhadra from IISER

Kolkata, and Dr. Amrita Satpathy from IIT Bhubaneswar. The results were declared on 10th March which was followed by a webinar where the jury members enlightened the audience with the importance of artistic depiction in science. It was well attended by the participants.



Event: Symposium on “Women in STEM as Enablers of Change in Amrit Kaal”

Date: 31 May 2023

Organizer: Shweta Yadav

No. of Participants: 100 physical and several online



With a goal to motivate, encourage and actualize women's participation in (Science, Technology, Engineering, and Mathematics) STEM disciplines, the Central University of Jammu and Indian National Young Academy of Sciences (INyas) organized a National Symposium on “Women in STEM as Enablers of Change in Amrit Kaal” on 31st May 2023 in the campus of Central University of Jammu, J&K. Convener Dr. Shweta Yadav moderated the discussions and Co-conveners (Dr. Neha Sardana, Dr. Vijay Kr Sharma, Dr. Jayaram Kolleboyina and Dr. Sharanjeet Dhawan) introduced the speakers and moderated the respective sessions.

In this event, women achievers from six countries: Prof. Ulrike Lohmann (Switzerland), Prof. Vera Sergeeva (Russia), Dr. Frida Sidik (Indonesia), Dr. Alma Oracevic (UK), Dr. Raaga (Egypt), Dr. Dulce M. Morales (Netherlands) along with Dr. Sudha Bhattacharya, INSA senior scientist, Ashoka University, India shared their story and encouraged the audience to choose and sustain in STEM (Science, Technology, Engineering, and Mathematics) disciplines. Apart from this INyas members also shared their encouraging stories.

Event: The STEAM Gap: Nurturing next generation women leaders

Date: 07th - 08 July 2023

Organizers: Dhiraj Bhatia, Neeldhara Mishra, Pankaj Barah

No. of Participants: ~92

This was a 1.5-day focused workshop with approximately 90 participants from different parts of the country and women to men in a 75:25 ratio to discuss various points about limited women's visibility in Indian academic leadership roles. Multiple women leader icons gave talks on their career journeys, and many sessions involving gender gaps, women leadership, and p, inputs from Govt. of India were discussed. A full report in the form of a white paper will be published very soon. The event was attended by students, teachers, professors, scientists, doctors, industry people, healthcare attendees, and funding agencies, and the overall feedback was very positive. This event, conducted by the INyas Flagship Initiative entitled WiSDom, proved to be insightful, and the topics discussed were essential for the development of the nation.



Event: ICONIC Women scientist under the Wisdom flagship program

Date: 12 July 2023

Organizers: Sugandha Maheswary, Jiban Jyoti Panda, Mayuri Chabukdhara, Rishemjit Kaur, Shobhna Kapoor, Namisha Sharma

No. of Participants: 80

INYAS conducted an event, “**ICONIC WOMEN SCIENTISTS OF INDIA,**” on July 12, 2023, as part of its flagship program, **WisDom (Women in Scientific Domain)**. This event aimed to cultivate a scientific mindset among school students and ignite their curiosity. The event served as a platform to honor and celebrate the exceptional achievements of women who have pushed boundaries, leaving an important mark on the world of knowledge. These extraordinary individuals have not only excelled in their respective scientific fields but have also paved the way for future generations of women scientists. The event started with a message from Dr. Rajendra Dhaka, Chair of INYAS, who briefed the audience about the diverse range of activities undertaken by INYAS. Further, the invaluable motivational talks by the esteemed guest speaker, Prof. Sudha Bhattacharya and Prof. Gagandeep Kang (recorded), captivated the audience. It also featured two storytelling sessions, delivered by INYAS members Dr. Neha Sardana and Dr. Nishad Fatima (alumni), which shed light on the extraordinary lives of iconic Indian women scientists Kalpana Chawla and Anandibai Joshi. Through these sessions, the attendees were immersed in the awe-inspiring journeys of these trailblazing women, learning about their determination, and ground-breaking contributions to the scientific community. As a part of the event, a quiz competition and a poster competition were also organized, themed on women scientists. The event was coordinated and organized by INYAS members Drs. Sugandha Maheshwary, Jiban Jyoti Panda, Rishemjit Kaur, Shobhna Kapoor, Namisha Sharma and Mayuri Chabukdhara. The event was a great success and was well-received by students, as reflected by huge participation and feedback received. For the students, this event served as an invaluable opportunity to not only gain knowledge but also to be inspired by the remarkable stories of these pioneering women. Wisdom team would like to acknowledge the support extended by INYAS alumni Dr. Mahak Sharma for the prizes and evaluation support by INYAS member Dr. Sonu Gandhi and alumni Dr. V Ram.



Indian National Young Academy of Sciences
 G20 2023 INDIA PRESENTS S20 SCIENCE BEING INDIA
ICONIC WOMEN SCIENTISTS OF INDIA
 Under INYAS Flagship Event
WisDom - Women in Scientific Domain
 Date: 12 July 2023 Time: 10:00 am - 12:00 PM Venue: Online
 Anandibai Gopabao Joshi
 First Indian Female Doctor of Western Medicine
 Kalpana Chawla
 First Woman of Indian Origin to Fly to Space
Guests of Honor
 Prof. Sudha Bhattacharya
 IISc Senior Scientist, India's Top Scientist
 Prof. Gagandeep Kang
 Professor, IISc, IISER
Speakers
 Dr. Nishad Fatima
 Chief Scientist at CSIR-IGIB
 Dr. Neha Sardana
 Assistant Professor at IISc
Competitions for School Students Zoom Link: <https://www.zoom.us/j/92888328009>
 Event Coordinators: Dr. Jiban Jyoti Panda, Dr. Rishemjit Kaur, Dr. Namisha Sharma, Dr. Mayuri Chabukdhara
 For any query email us at: wisdom@inyas.ac.in
POSTER MAKING COMPETITION
 Under Indian National Young Academy of Sciences (INYAS)
Flagship event
“WisDom”
(Women in Science Domain)
Theme: Iconic Women Scientists
 Sub-themes: Iconic Women Scientists in India/World, Challenges and coping strategies for a Woman Scientist, Role of Women Scientists in national building.
Rules
File format: PDF/JPEG only
Poster format: Posters can be an E-Poster or can be drawn / painted on a paper. Drawing / painting posters must be ideally drawn on A4 size sheets. Photographs, and other 3D objects are not acceptable. Entries should include a caption (50 words) or a short write-up.
Participants: School students of grade 6 to grade 12.
Submission: Level 1 is for grade 6 to 8 | Level 2 is for grade 9 to 12. Last date to submit the individual entries is 3rd July 2023, 11:59 pm. Scan here for submission.
 Top 3 best posters at each level will be awarded with certificates and exciting gift hampers.
 For any query email us at: wisdom@inyas.ac.in

III. Rural Science Education and Training Utility Program (RuSETUP)

Several events were organized by INYAS members under RuSETUP in regional languages for school teachers, as listed below.

Event: RuSETUP-2023

Date: 19th – 20th August, 2023

Organizers: Rajendra Singh Dhaka, Kalpana Nagpal, Subhash Babu, Veda Krishnan

No. of Participants: 41

The INYAS-NCR Zone, in collaboration with the prestigious Indian Institute of Technology, Delhi, organized a two-day program during 19-20 August 2023 aimed at empowering high school and intermediate science teachers. This enlightening event was focused on the theme: "Next Generation Science Standards: Learning by Performing," coupled with an enlightening exposure visit to an advanced laboratory. A total number of 27 school science teachers from different states participated. There were various deliberations by the different experts of diverse fields on the different topics linked with Next Generation Science Standards: Learning by Performing. Furthermore, hands-on training exercises were conducted. The event was coordinated by Drs. Rajendra Singh Dhaka, Kalpana Nagpal, Subhash Babu, and Veda Krishnan.



Event: RuSETUP event: Basic Training on Molecular Biology Techniques for College Teachers in Rural Areas

Date: October 6 - 7, 2023

Organizers: Budhaditya Mukherjee and Nishant Chakravorty

No. of Participants: 30

In a bid to boost basic scientific knowledge in molecular biology and improve rural education in West Bengal, India, a workshop called "Basic Training on Molecular Biology Techniques for College Teachers in Rural Areas" was successfully held on October 6 - 7, 2023. This collaborative effort was conducted jointly by School of Medical Science and Technology (SMST) at IIT Kharagpur, in partnership with the Indian National



Young Academy of Science (INYAS), as part of INYAS' flagship event, "Rural Science Education Training Utility Program" (RuSETUP). Dr. Budhaditya Mukherjee and Dr. Nishant Chakravorty, faculty members of SMST and INYAS members, led this endeavor, with support from INYAS East Zone members. The workshop welcomed 14 college teachers from various Paschim Medinipur institutions, including Hijli College, Kharagpur College, Medinipur College, K.D. College of Commerce and General Studies, and Vidyasagar Institute of Health. The workshop aimed to address the scarcity of access to modern molecular biology knowledge and technologies in rural education. The workshop featured a carefully curated agenda, blending theory with hands-on training to equip participants with practical molecular biology skills. The program included inspiring speeches from Dr. Rajendra Singh Dhaka, INYAS Chair, and Prof. Soumen Das, SMST Chairperson. It also involved engaging lectures and hands-on training sessions led by SMST faculty and student volunteers. The participants highly valued the workshop, expressing a strong desire for future workshops and opportunities for rural college students to directly participate in such events. Beyond immediate benefits, RuSETUP's impact extends to enriching science education in rural areas and nurturing interest in biotechnology, medicine, and agriculture among young minds, contributing to regional development.

IV. Saransh-2023 - Three-Minute Thesis Competition

The third edition of **Saransh: Three Minute Thesis Competition** for PhD students was conducted between September 2023 and January 2024 with the support of Anton-Paar India Pvt. Ltd.

This competition offers a unique platform for emerging scientists of our country to present their research to a broader audience, particularly those with limited understanding of their field. The competition is available to all senior PhD students enrolled in State/Central

Institutions or Universities across India and focuses on Physical and mathematical Sciences (P&MS), Chemical Sciences (CS), Life Sciences (LS), and Engineering Sciences (ES). A total of 63 entries were received for the preliminary round of the competition in 2023 from participants who uploaded their presentations on YouTube. These entries were evaluated by a panel of INyas jury members (Physical & Mathematical Sciences: Dr. Sanjay Singh, Dr. Rohit Shahi, Dr. Veerendra Sharma, Dr. Praveen Sharma and Dr. Sharanjeet Dhawan; Chemical Sciences: Dr. Santosh Gupta, Dr. Ramendra Sundar Dey, Dr. M. S. Santosh and Dr. Ramkrishna Matte; Engineering Sciences: Dr. Ejaz Ahmad, Dr. Rishemjit Kaur, Dr. Sonu Gandhi and Dr. Ali Haider; Life Sciences: Dr. Rajib Deb, Dr. Namisha Sharma, Dr. Rakesh Pilonia, Dr. Jiban Jyoti Panda and Dr. Vishal Mishra). The jury shortlisted a total of 24 participants (Physical & Mathematical Sciences: 6; Chemical Sciences: 6; Life Sciences: 6, and Engineering Sciences: 6). The final round of the competition was held via live video conferencing using Zoom platform over a period of two days (17th and 18th January 2024). The final round jury comprised INyas members (Dr. Sanjay Singh for P&MS, Dr. Ramkrishna Matte for CS, Dr. Rishemjit Kaur for ES, Dr. Rajib Deb for LS, and Dr. Meher Wan as science communication expert), and school science teacher (Mr. Amlan Sinha, Balarampur Abhoy Ashram Naitalim Vidyapith (H.S). The event was coordinated by Dr. Nishant Chakravorty and Dr. M. S. Santosh. The final results were announced on 31st January 2024. The YouTube videos for winning presentations are available at: <http://tinyurl.com/inyas-saransh23>

Saransh 2023
Thesis presentation in three minutes!
A National Level Competition for PhD scholars

Disciplines:
Physical/ Mathematical Sciences
Chemical Sciences
Life Sciences
Engineering Sciences

Languages: English or Hindi

Dates:

- Submissions open: 22.09.2023 (Friday)
- Last date for submission: 08-10-2023 (Sunday) 22.10.2023 (Sunday)
- Results of Preliminary Round (tentative): 15-11-2023 (Wednesday) 22.11.2023 (Wednesday)
- Final Round (tentative): Nov/Dec 2023
- Award declaration: Dec, 2023

Registration link: <https://tinyurl.com/saransh-2023>

Event Sponsor
Anton Paar

For enquiries: inyas.saransh@gmail.com
inyasoffice@gmail.com

Indian National Young Academy of Science
Congratulates
Winners of Saransh (सारांश)-2023

Physical/Mathematical Sciences

- 1st Prize: Kishore Kumar, IISER Bhopal
- 2nd Prize: Niharika Shukla, IIT Guwahati
- 3rd Prize: Anvika Bhowmik, The Inst. of Math. Sci., Chennai

Engineering Sciences

- 1st Prize: Nishant Chakravorty, IIT Guwahati
- 2nd Prize: Shikha K M, IIT Guwahati
- 3rd Prize: Pankaj Mishra, IIT Bombay

Chemical Sciences

- 1st Prize: Rishika Ghosh, IITM Mumbai
- 2nd Prize: Shantanu Das, IIT Kharagpur
- 3rd Prize: Anshuman Das, Jodhpur Centre for Advanced Scientific Research

Life Sciences

- 1st Prize: Akshita Prasad, IITM
- 2nd Prize: Sushita Chakravorty, National Institute of Biomedical Genomics
- 3rd Prize: Writu Tragi, National Institute of Biomedical Genomics
- 4th Prize: Debarshi Mukherjee, IIT Kharagpur

6. INyas mid-year meeting: Technical symposium on “Science and Technology for sustainable future (STSF 2023)”

INyas in collaboration with IIT-ISM, Dhanbad organised a three-days technical symposium on “Science and Technology for sustainable future (STSF 2023)” during 15-17th September, 2023 at IIT-ISM Dhanbad



7. INYAS White Papers 2023-24

INYAS has been at the forefront of addressing critical issues in the realm of science and education through its insightful white papers. INYAS team has taken the initiative to work on the following white papers on survey-based responses and further assessment:

- Fate and future of Postdoctoral Fellows working in India

- The Unused Workforce
- Conditions of science teachers and school laboratories in India

Under "Fate and Future of Postdoctoral Fellows working in India," INYAS sheds light on the challenges faced by postdoctoral researchers in the country, providing a comprehensive analysis of their current status and proposing strategies for a more supportive environment. Additionally, the white paper on "The Unused Workforce" delves into the untapped potential of skilled individuals in the country, offering solutions to harness this workforce for national development. Lastly, the survey-based white paper on "Conditions of Science Teachers and School Laboratories in India" critically examines the state of science education infrastructure, emphasizing the need for improvements to foster a more conducive learning environment. Through these white papers, INYAS contributes valuable insights to shape the future of scientific research, education, and workforce development in India.

Digital Survey for Fate and Future of Postdoctoral Fellow Working in India

Take part in this survey and contribute in shaping future India

Scan the QR Code and take the survey

Or Click the Link <https://tinyurl.com/3dt7d5db>



**Indian National Young Academy of Science (INYAS),
INSA, New Delhi**



Indian National Young Academy of Sciences (INYAS) is the first and only recognized young scientist academy of India. INYAS promotes Science education and networking among young scientists at National as well as International level. INYAS is attempting a survey to explore

- (i) reasons for trained personnel not working presently
- (ii) motivation for working beyond the retirement age
- (iii) identify challenges, trends and gaps and propose recommendations for positive change

The underutilized workforce: A digital survey

for trained personnel (Masters / PhD's / Post Retirement professionals) who can be useful workforce



<https://inyas.in/>
<https://tinyurl.com/3sxeptfs>

*Read the terms and condition before filling the survey

8. Outreach Activities

Event: National Brainstorming Session on Empowering Young Scientists (EYS) of India

Date: 24-25 January 2023

Organizers: PSA, INYAS, IT BHU

No. of survey respondents ~ 1800

The Office of the Principal Scientific Adviser (PSA) to GoI, in association with INYAS and IIT (BHU), Varanasi, organized a "National Brainstorming Session on Empowering Young Scientists (EYS) of India" during January 24–25, 2023, at IIT (BHU), Varanasi. This brainstorming session was a follow-up to the nationwide survey (1800 respondents) conducted among young scientists and an international webinar on Empowering Young Scientists. The conclusion of the event may serve as input for a policy document to be prepared for empowering young scientists in India. INYAS members actively participated in the brainstorming session, representing different institutions as well as national labs in the country.



Event theme: Science: Challenges and Opportunities

Date: 13 February 2023

Organizers: Arun Kumar Jugran and other INYAS Roorkee-Srinagar Zone members, INYAS

No. of participants: ~ 93 students and 12 teaching staff

A one-day program was organized with the school students on the theme "Science: Challenges and Opportunities" at Devbhumi Public School, Nakot, Uttarakhand, jointly by INYAS Roorkee-Srinagar Zone and GBPNIHE, Srinagar Garhwal, Uttarakhand. The purpose of the program was to increase science sensitization and awareness among school students in order to spread awareness of the importance of science education and introduce various opportunities in science. Ninety-three students, along with 12 teaching staff members of the school, actively participated in the program. The program started with an introduction and welcome session for the speakers and all the participants. A brief introduction of the program, INYAS, and GBPNIHE society was given to students by Dr. Arun Kumar Jugran, Scientist-D, and Member-INYAS. Dr. Shriram Yadav, Associate Prof. and INYAS Member, IIT Roorkee, delivered the lecture on the topic "Science: Challenges and Opportunities". Dr. Yadav highlighted various government schemes available for the students and their benefits.

Further, Head and Scientist F of GBPNIHE, GRC, Dr. K. Chandra Sekar, welcomed all the professors, teachers, students, and participants and highlighted the various ongoing activities of GBPNIHE. This was followed by a brief lecture on "INyas and Opportunities for Young Students" by Dr. Rajendra Singh Dhaka, Chair INyas and Associate Prof. IIT Delhi. Dr. Dakha organized an interactive session in which students were sensitized toward raising scientific questions. Shri B.S. Dhanai, Principal of Devbhoomi Public School Nakot, Srinagar, thanked all the organizers and participants of the program and requested that more such programs be organized in the near future. The program ended with a group discussion with students, followed by feedback collection from all attendees. It was gratifying to receive such positive comments from the students.



Event: Winter School-2023 on “Hands on Training on Instrumentation and Analytical Techniques for Atmospheric Aerosol Measurements and Source Apportionment Studies”

Date: February, 20-25, 2023

Co-ordinator: Dr. Shweta Yadav

No. of Participants: 100

This winter school aligns with the National Clean Air Program and Swacch Bharat Abhiyaan, and it was a blend of in-class, theory-based training and hands-on operational training on air-sampling and analytical instruments as well as receptor modeling and remote sensing – geographical information system software/applications. The momentous kick-off ceremony of Aerosol Winter School-2023 took place on 20th February 2023 with the blessings and inaugural address of Hon'ble Lieutenant Governor Sh. Manoj Sinha ji. The tutorials by eminent scientists provided a clear understanding of the importance of a particular chemical component of aerosols, along with details on the stepwise method of analysis using instrumentation and analytical techniques. This winter school has been conceptualized for faculty/scientists/scholars. The IoR representatives/faculty, Pollution Control Board representatives/scientists/consultants, and Ph.D. scholars from >15 States/UTs, along with representatives from urban local bodies and the Pollution Control Board of J&K, attended this winter school. The trained pool of participants/stakeholders from this winter school shall be further imparting training to stakeholders in their respective states/UTs for conducting aerosol source apportionment studies and for achieving clean air goals.



Event: Bioinoculant-based Farming

Date: 14-15 March 2023

Organizer: Arun Jugran

No. of participants~ 70



A two-days program was organized with the stakeholders on the theme "bioinoculant-based farming" at Kothiyara village, Rudraprayag district, Uttarakhand. The program was jointly organized by INYAS, Roorkee-Srinagar Zone, and GBPNIHE, Srinagar Garhwal, Uttarakhand. The purpose of the program was to create awareness of organic and bioinoculant-based farming among local farmers in Jakholi Block, Uttarakhand, and promote the use of bioinoculants and organic farming among the local farmers. A total of 70 farmers (Male and female), along with some social activists from nearby areas, actively participated in the program. The first day of the program started with the introduction of INYAS and a welcome session for speakers and all the participants by Dr. Arun Kumar Jugran, Scientist-D and Coordinator, INYAS Roorkee Srinagar Zone. Thereafter, an introduction about the program, the GBPNIHE institute, and its activities in the Indian Himalayan Region was presented by Dr. K. Chandra Sekar, Head GRC NIHE, Srinagar, Uttarakhand. The introductory session was followed by the technical sessions, in which lectures on the importance and use of bioinoculants in hill-based farming and demonstrations of bioinoculant treatment were presented and explained by the faculties and scholars of GBPNIHE, Srinagar, Uttarakhand. This was followed by a lecture on "Livelihood enhancement and marketing of local products," which was briefly discussed with farmers by the social activist and president of WSHGs, Jakholi, Mrs. Anita Kothari. On the second day, a lecture on "Using Beejamrit and Jeevamrit in Yield Enhancement" was presented by social activist and progressive farmer Mr. H.S. Rana, followed by a practical demonstration of bioinoculants in the farmer's field. The last technical

session was followed by a brief group discussion and interaction with the farmers. Finally, the program ended with a vote of thanks.

Event: National Seminar to celebrate World Water Day under the banner of India's G20 Presidency in 2023

Date: March 20, 2023

Co-ordinator: Shweta Yadav

No. of Participants: 200

Internal Quality Assurance Cell (IQAC), Government Degree College Paloura, in collaboration with the Indian National Young Academy of Sciences (INYAS), organized a one-day National Seminar to celebrate World Water Day under the banner of India's G20 Presidency in 2023. The theme of the seminar was "Accelerating Change to solve the Water and Sanitation Crisis". Dr. Ashu Vashisht, Principal of the college, in her address, welcomed the participants and introduced the esteemed guests. She further highlighted that World Water Day, 2023, is about accelerating change and creating awareness on proper management and utilization of water and its resources so as to secure the future for green life. She also thanked INYAS for providing intellectual and partial financial support for conducting this event. Dr. Yadav explained the role of INYAS in pioneering, promoting, and propagating science. She elaborated upon various outreach activities and flagship programs of INYAS and also encouraged participants to take part in INYAS activities. In her expert lecture, Dr. Yadav spoke on world water celebrations over the last decade and lessons learned to accelerate the change at national and international levels. Dr. S.P. Saraswat, Nodal Principal, highlighted that G20 recognizes the importance of collective action in tackling environmental challenges and climate change while promoting a more sustainable future, and as we are stakeholders of higher education, we should collaborate to make voluntary commitments to solve the water and sanitation crisis.



Event: Science Outreach Program: Materials Science and Technology for Society

Date: 24 March 2023

Organizers: Vijay Kumar (INYAS) and other members from the University of Kashmir

No. of Participants: ~100

To encourage creative thinking and innovation among school students, the Chairman of INYAS, Dr. Rajendra S. Dhaka, delivered an expert talk at Syed Maqsood Model School in Kurhama, in central Kashmir's Ganderbal district on "Material Science and Technology for Society. The event was attended by 100 students and teachers. The event was coordinated by Dr. Vijay Kumar, Assistant Professor, NIT Srinagar, and a member of INYAS. Local arrangements were made by Dr. Gulzar Bhat, University of Kashmir. On the occasion, Dr. Vijay Kumar, Assistant Prof. (NIT Srinagar), said that the program was conducted under the themes of G20 and S20. Such programs are the need of the hour, and they motivate students to choose careers in science. Overall, it was a very motivating lecture, and I hope that students benefited from it," he said. Under INYAS, Prof. Dhaka said that the mandate of INYAS is to motivate young students, and our main focus is to do outreach activities in remote areas. He congratulated Dr. Vijay Kumar for the successful conduct of the expert talk and for reaching out to the grassroots. The program was covered by various local newspapers.



Event: Technology-based Entrepreneurship Development Program on Food Processing

Date: 25-26 March 2023

Organizer: M. S. Santosh

No. of Participants: 25

The program was intended to provide information to the Farmer Producer Organization (FPO) members about business opportunities in the food processing sector and the agro-processing sector and motivate them to start processing activity-based enterprises, with the possibility of seed funding support from AIC-JITF. There were 25 participants from two FPOs, viz., Mukteshwara Mahila Farmer Producer Organization (All Women FPO) and Sri Pragati

Raitara Utpadakara Samsthe, at Chintamani Taluk, Chikkaballapur District. The training program was conducted at the Mukteshwara Mahila FPO office at Gollapalligadda, Murugamalla, and Chintamani. The training sessions were handled by Mr. Yeshaswi Nag, Mentor, AIC-JITF, and Dr. Nanjappa, Senior Scientist, Defense Food Research Laboratory (DFRL). The first day comprised inputs on Business Opportunities in Food Processing and Agro-processing, along with inputs on FPO business operations. The second day comprised practical inputs on three products: ready-to-serve beverages, minimal processing technology, and ready-to-eat tomato rasam paste. The participants were given certificates at the end of the program. The participants were found to be motivated to start processing activity-based enterprises.



Event: Aahar Kranti

Date: 15 April 2023

Organizer: Vishal Mishra

No. of Participants: 50

This lecture was to sensitize students about the intake of an appropriate diet in their routine under the theme Unnat Bharat Abhiyan (UBA), Government of India. The workshop was jointly organized by INYAS, UBA, the Government of India, and the National PG College, Lucknow. This lecture is likely to impact the socio-economic status of farmers as it will boost the selling and purchasing of locally grown vegetables, fruits, cereals, and other natural products rather than packed and processed food.



Event: Micro Scale Energy Systems

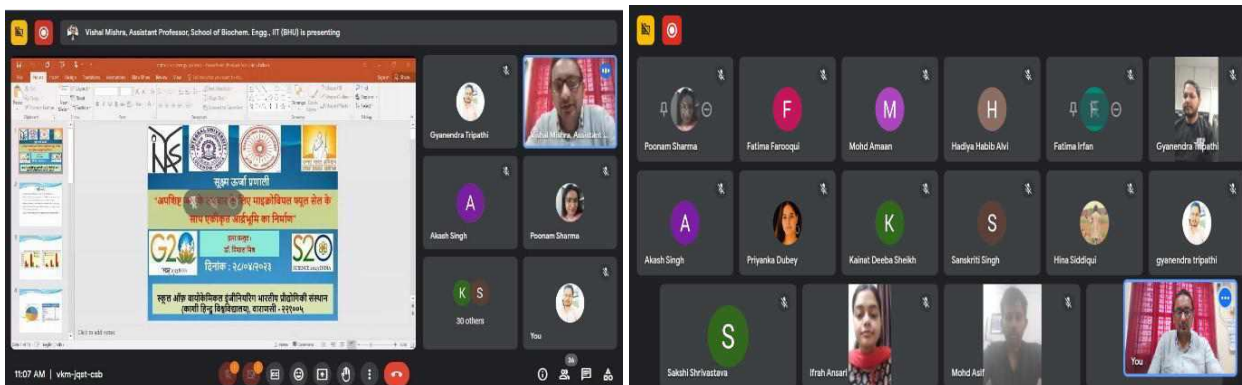
Date: 28 April 2023

Organizer: Vishal Mishra



No. of Participants: 30+

This lecture was for students of the Integral University to educate them about the implementation of microbial fuel cells in the pastoral parts of the country.



Event: Opportunities in Nuclear Science (ONuS-2023)- INYAS Zone Event

Date: 13 May 2023

Organizer: Mohit Tyagi

No. of Participants: ~ 500 (Online & Offline)

An outreach activity on "Opportunities in Nuclear Science (ONuS)" was organized to celebrate National Technology Day in collaboration with the Indian Nuclear Society (INS) and Nehru Science Centre. It was mainly focused on spreading awareness about the role of nuclear science in daily human life and giving information about various career opportunities in the field of nuclear science. More than 500 students from all over India registered for this event. About 200 students from various universities attended the offline session at the Nehru Science Center's Mumbai Auditorium. The invited talks were arranged by eminent nuclear scientists. Chief guest Sh. Mukesh Singhal, Ex-Director, Human Resources Department, Nuclear Power Corporation India Ltd., briefed about the various peaceful uses of nuclear energy. Dr. A. K. Dureja, Head of the Human Resources Development Division, Bhabha Atomic Research Centre, explained the various facilities available in the Department of Atomic Energy (DAE) and the various selection procedures in the DAE for various posts. Sh. Sanjeev Sharma and S. S. K. Yadav, Scientific Officer G, NPCIL, delivered invited talks about "Nuclear Energy: A Green Energy Source" and "Generation 1 to Generation 4 Nuclear Reactors". Prof. B. N. Jagtap, President of the Indian Nuclear Society, presented a concluding remark and described it as one of the best events organized by the young team.



Event: Communicating science to students

Date: 28th July, 2023

Organizer: Kiran Bala

No. of Participants: 50

This event is organized to provide undergraduate students with a platform for a space to fathom career opportunities in science and academia in a comprehensive manner, along with familiarizing promising and budding young minds with research progress in the scientific interface. The event was organized at IIT Indore with the support from INYAS. The event was coordinated by Dr. Kiran Bala, Associate Professor, Department of BSBE, IIT Indore. 50 participants, pursuing their B.Tech. degrees from Chameli Devi's group of institutions, Indore visited IIT Indore along with their professors for an interactive session on the aforementioned program. The event started with a talk by Dr. Kiran Bala with useful insights from her outstanding career in academia, followed by a talk on “Career opportunities in STEM” by Dr. Bikash Kumar. Along with that, Mr. Dinesh Parida familiarized the participants with some of the instrumentation techniques that are used extensively in Biological Sciences, followed by a demonstration session in the lab. The lab visits and the sessions were coordinated by Mr. Dinesh Parida and Ms. Konica Katare.

IIT INDORE
In association with
Indian National Young Academy of Sciences
PRESENTS
CoST: Communicating Science To college students

Purpose
To create awareness among students about research and future career opportunities.

Speakers
Dr. Bikash Kumar
BSBE, IIT Indore
Dr. Kiran Bala
BSBE, IIT Indore

Date: 28 July 2023; **Time:** 2-4:30 P.M.;
Venue: 1D-105, IIT Indore



Event: Challenges and opportunities in science

Date: 8th August, 2023

Organizer: Arun Jugran

No. of Participants: 200+

The aim of the event is to inspire and engage school students in the fascinating world of science by exploring and understanding the various challenges faced in the field and the exciting opportunities it offers. Also, empower students to consider careers in science, technology, engineering, and mathematics (STEM) fields by demonstrating the exciting prospects these fields offer. Keeping in view the above, Garhwal Regional Centre, G. B. Pant National Institute of Himalayan Environment, Srinagar, Uttarakhand, and Indian National Young Academy of Science (INYAS) jointly organized a science awareness event entitled “Challenges & Opportunity in Science at Shemford Futuristic School, Belkandi, Srinagar on 08 August 2023. The programme was conducted in offline as well as online mode. Over 200 students (from 9 to 12th), along with school teachers and staff participated in this program. All the students were standard of school. The workshop was started with a welcome address by Dr. Arun K. Jugran, Scientist ‘D’ & Member INYAS, and the coordinator of the program. He welcomed all the participants, guests & experts of the event. He provided the overview of the programme and highlighted the main objectives of the program and role of INYAS. This was followed by a technical session in which Dr. K. Chandra Sekar, Head GRC GBPNIHE encouraged the participants to opt natural science as a career option in science stream. Dr. Sugandha Maheshwary created a wide awareness about future opportunities in science and road map to grab the opportunities in future. Dr. Maheshwary suggested several schemes and scholarships to students in the field of science such as INSPIRE and others. Further, Dr. Shri Ram Yadav informed the students toward opportunities after intermediate in the field of biological sciences and suggested schemes in higher studies for girl students. Principal Mrs. Kalavati Negi also encouraged the students about the value of this type of training programme and thanked the coordinator and team for choosing their school for this program. This was followed by a presentation by Dr. Arun K. Jugran on Challenges and opportunities in science. Dr. Jugran provided vast knowledge of the background of science in India, the importance of science education, challenges in science (lack of exposure, curriculum limitation, language barrier, gender disparity, etc.), and informed about the benefits of schemes and awards. He also highlighted several scholarships of government provided at the national and state levels. He focused on scholarships such as DST, CSIR, UGC, INSPIRE award-Manak, Pradhan Mantri Research Fellowship (PMRF), and scholarship schemes for OBC, SC, and ST category students. The program was concluded by presenting a vote of thanks by Dr. Kusum Pandey, Scientist-C of GB Pant National Institute.





Event: Aspects of effective teaching

Date: 30th – 31st July, 2023

Organizers: Kirtimaan Syal

No. of Participants: 55

Under INYAS – Zone event, this Workshop began at 0900 HRS on the July 30, 2023. Dr. Kirtimaan Syal from BITS Pilani Hyderabad Campus delivered a greeting address at the inauguration ceremony. Prof. P Yogeswari from BITS Pilani Hyderabad Campus delivered a lecture on Unlocking chemistry in the classroom. She delivered a presentation on empowering and engaging students in the classroom. Dr. Kirtimaan Syal from the BITS Pilani Hyderabad Campus spoke on the topic of memory and learning's scientific underpinning. After the pause for tea, Professor M Muthamilarasan from the University of Hyderabad delivered a presentation on Effective presentation for teaching. Prof. Abhinav Gupta from St. Stephen's College, Delhi, discussed the application of artificial intelligence and machine learning for undergraduates. Following the lunch break, Professor Chandra Shekhar Sharma from IIT Hyderabad spoke about research-based teaching practices. Following his presentation, there was a panel discussion on the subject of Artificial intelligence in Teaching/Learning and its opportunities and challenges. Professor Thiruvikraman discussed assessment and evaluation in teaching after the tea break. The first day concluded with an iXR Labs virtual reality system demonstration and discussion, followed by a networking dinner. Prof. Aniket Sule from HBSCE, Mumbai, began the second day of the conference at 9.30 a.m. with a presentation on the function of rational thinking in teaching sciences. Prof. Kannan from the BITS Pilani Goa Campus delivers a lecture on classroom engagement strategies. After the pause for tea, Professor Ajay Thakur from IIT Patna spoke about Pedology and physics beyond. After the presentation, iXR Labs hosted a panel discussion on the transformative impact of VR on higher education. Prof. Vijayakumar from the BITS Pilani Hyderabad Campus spoke on Education and values, to begin the afternoon session Prof. Tapomoy Guhari from the BITS Pilani, Pilani campus, spoke about the required pedagogical changes. The entire session was interactive, with the speakers addressing many participant questions. Prof. Rahul Nigam and Dr. Kirtimaan Syal, BITS Pilani Hyderabad campus, delivered the vote of thanks, followed by the distribution of certificates. INYAS-Hyderabad Zone and the Teaching and Learning Centre, BITS Pilani, Hyderabad campus, organized the entire program. INYAS is duly acknowledged for funding this two-day event. Prof. Rajan Dhaka is acknowledged for their support and guidance throughout.

Event: Research and Career Opportunities in emerging science streams

Date: 22nd August, 2023

Organizer: Vinayak Kamble

No. of Participants: 60



The event was conducted at the National College,



Trivandrum, on 22nd Aug 2023 with the help of INYAS and the college science club. The event was inaugurated by the principal of the National College, Trivandrum, and joined by the vice principal as well as faculty members. The coordinator, Dr. Vinayak Kamble, made a brief presentation about INYAS and its objectives. The event was attended by 50-60 undergraduate (BSc), graduate (MSc), and research students of the college, mainly working on Biotechnology, life science, industrial biology, etc. The speaker, Dr. Veda Krishnan, from the Indian Agricultural Research Institute, New Delhi, delivered an elaborate talk on the career options in science streams, planning careers, and making choices. She also discussed the emerging areas in biochemistry and allied life sciences, such as food and agricultural sciences. Her talk was very well received by the students, and she participated by asking doubts or questions about a career in science. The number of girl students was significant (about 50%) in the audience. The program ended with a vote of thanks by the HOD of the Botany Dept, thanking INYAS and its members for taking the initiative for this program.





Event: Lecture series: Lecture 1 on Career avenues in agriculture sciences

Date: 24th August, 2023

Organizers: Sharanjeet Dhawan

No. of Participants: 150

In the series of lectures, "Career avenues for agriculture sciences," organized by CCSHAU COA Bawal, Haryana, on August 24, 2023, Dr. Muthamilarasan discussed various career opportunities for the students of B.sc. agriculture. He focused on different fully funded schemes being offered by the Govt of India to pursue a career in agriculture sciences. Students were highly motivated by the talk.



Event: Intellectual Property Rights: Opportunities and Challenges

Date: 24th and 25th August, 2023

Organizers: Kiran Bala

No. of Participants: 30

A webinar on Intellectual Property Rights: Opportunities and Challenges was delivered on August 24-25, 2023. IIT Indore and INYAS jointly organized the event. The webinar was conducted from the 1D-105 (VCR), CHROMIUM BUILDING, IIT INDORE. Over 30 participants attended the live and interactive webinar, which aims to provide valuable awareness and insights on the various aspects of IPR that could be further utilized in their research journey. The event was coordinated by Dr. Kiran Bala, Associate Professor, Department of BSBE, IIT



Indore. DAY 01: 24 August 2023 Participants were welcomed by coordinator Dr. Kiran Bala at 2:30 p.m., followed by providing the background of the webinar. During her address, she highlighted the importance of IPR, its relevance in these times, and its necessity for the advancement of research and development in India. She also introduced the speaker of the day. The speaker, Mr. Nilanshu Shekhar (Founding partner at KAnalysis Consultants(P) Ltd.), spoke on the topic of "Indian Patent System vis à vis biology Patents Perspective". His lecture started with an introduction to Intellectual Property Laws and spanned across the different disciplines related to IPR. DAY 02: 25 August 2023 The Speaker, Dr. Sriparna Chatterjee (CSIR-IMMT), spoke on the topic of "A Journey: Concept to Commercialization," where she introduced her patent on "Ultrafast synthesis of max phases by reactive flash sintering and a method thereof." This session concluded by 03:45 after addressing the queries of participants



Event: Workshop on organic farming

Date: 2nd September, 2023

Organizers: Subhash Babu, Kalpana Nagpal, Rajendra Singh Dhaka

No. of Participants: 47

The INYAS-NCR Zone, in collaboration with the prestigious Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi, organized a one-day workshop on organic farming on 2nd September 2023. The workshop aimed to create awareness about the principles and practical utility of organic farming among farmers for a better understanding of the importance of organic farming and its role in environmental protection. Furthermore, participants were also sensitized about the quality of organic food and healthy soil and life.

The event had 47 participants. Various experts deliberated on different aspects of organic farming: Seeing is the believing session: exposure visit to advanced research field was also conducted. The event was coordinated by Dr. Subhash Babu, Dr. Kalpana Nagpal, and Dr. Rajendra Singh Dhaka.



Event: Science for Society

Date: November 3, 2023

Organizers: Neetu Jha

No. of Participants: 108

The "Science for Society" event, conducted by the INVAS on November 3, 2023, provided a unique platform for 108 attendees, including students and researchers, to delve into the latest scientific advancements. The event featured 3 distinguished speakers who covered a wide range of topics. Speaker 1: Prof. Gopal Dixit, IIT Bombay, a renowned expert in the field of attosecond physics, initiated the event with his insightful presentation on 'Attosecond Physics: An Avenue for Quantum Technologies at Ambient Conditions'. In his discussion, he addressed a critical issue that has been a roadblock in the world of computing and technology - the challenge of processing speed. Professor Dixit highlighted that, in our increasingly

digitalized world, we have access to massive storage capabilities, but the processing speed of devices often lags behind. This limitation hampers the seamless execution of complex algorithms, simulations, and data processing, hindering progress in various fields such as artificial intelligence, data analytics, and scientific research. He explained how attosecond physics can work to speed up processing speeds and revolutionize technology. Speaker 2: Prof. Mohan Narayan provided a comprehensive 'A Bird's Eye View' of Particle Physics. He unraveled the mysteries of the subatomic world, making it accessible to all attendees. His presentation offered valuable insights into the fundamental building blocks of our universe and the remarkable experiments and discoveries in particle physics. Speaker 3: Dr. Ajay Singh, the third speaker of the event, discussed "Defect and Interface Engineering to Realize High-Performance Thermoelectric Materials and Power Generation." He explored innovative strategies for sustainable energy solutions and how manipulating defects and interfaces in materials can lead to high-performance thermoelectric devices, potentially revolutionizing energy generation and conservation for space applications. Conclusion: The 'Science for Society' event, organized by INYAS, proved to be a remarkable opportunity for undergraduate, postgraduate, and PhD students to gain insights into cutting-edge scientific research. The three distinguished speakers covered a wide spectrum of topics, addressing issues of processing speed in technology, unlocking the mysteries of the subatomic world, and the potential for sustainable energy solutions. The event successfully fulfilled its purpose of disseminating knowledge, fostering intellectual curiosity, and connecting the scientific community to innovative research. As we embrace the potential of attosecond physics, explore particle physics, and delve into materials science for energy solutions, we are on the path to solving complex challenges and advancing the frontiers of knowledge. The event undoubtedly left a lasting impact, igniting the spark of curiosity and inspiration among all attendees. For those who missed the event, we encourage you to stay connected with INYAS and keep an eye out for future opportunities to engage with the ever-evolving world of science and technology. The journey to unlock the frontiers of knowledge continues, and we look forward to more ground-breaking discussions in the future.



Event: Embarking on the Research and Industry Odyssey

Date: November 6, 2023

Organizers: Jayaramulu Kalleboyina

No. of Participants: 50

The seminar, titled "Exploring Opportunities at BARC," led by Dr. Veerender Sharma, a distinguished scientist from the Solid-State Physics Division of Bhabha Atomic Research

Center (BARC), offered a profound exploration of ground-breaking research in condensed matter physics and neutron scattering. Dr. Sharma emphasized the substantial societal impact of his work, highlighting the vital role these advancements play in driving technological innovation and societal welfare. Dr. Sharma's presentation delved deep into his pioneering studies, focusing on the intricate dynamics of particles within solid materials. He underscored the pivotal role of neutron scattering techniques in unraveling the fundamental behavior of matter at atomic and molecular levels. His research not only deepened our understanding of materials but also paved the way for the development of advanced materials applicable across diverse sectors, including energy, healthcare, and environmental protection. The seminar outlined the rigorous pathways to BARC, detailing the stringent entry requirements for Master's and Ph.D. programs. Prospective students need relevant bachelor's or master's degrees and must undergo rigorous examinations and interviews to assess their knowledge and research aptitude. Additionally, BARC offers competitive postdoctoral positions, selecting researchers based on their publication records and alignment with BARC's research priorities. Dr. Sharma also highlighted job opportunities at BARC, detailing the meticulous interview process where candidates are evaluated based on their academic achievements and research potential. BARC provides competitive pay scales and comprehensive benefits such as healthcare, housing allowances, and research grants. Furthermore, Dr. Sharma encouraged students pursuing various academic levels, including Master's in chemistry, Ph.D. candidates, and B.Tech students, to explore internship opportunities at BARC. These internships provide invaluable hands-on experience, enabling students to engage in cutting-edge research projects under the guidance of seasoned scientists, often serving as a gateway to future career prospects within BARC. In summary, Dr. Sharma's seminar provided an illuminating overview of BARC's research landscape, offering aspiring scientists a clear roadmap to engage with this esteemed institution. His inspiring presentation not only captivated the audience but also motivated them to consider BARC as a premier destination for their academic and professional journeys, setting the stage for the next generation of scientists to contribute significantly to the fields of condensed matter physics and neutron scattering.



Exploring Internship and Career Pathways: Opportunities at BARC Institute

November 06, 2023
2:00-3:00 PM
Venue – Classroom 220

Open to Masters and PhD Students

[Interactive Talk & Discussion with](#)



Dr. Veerendra K. Sharma
Scientist in Solid State Physics Division
of Bhabha Atomic Research Center.

Assistant Professor of HBNI



Event: Workshop on Intellectual Property Rights (IPRs) for Academics & Research

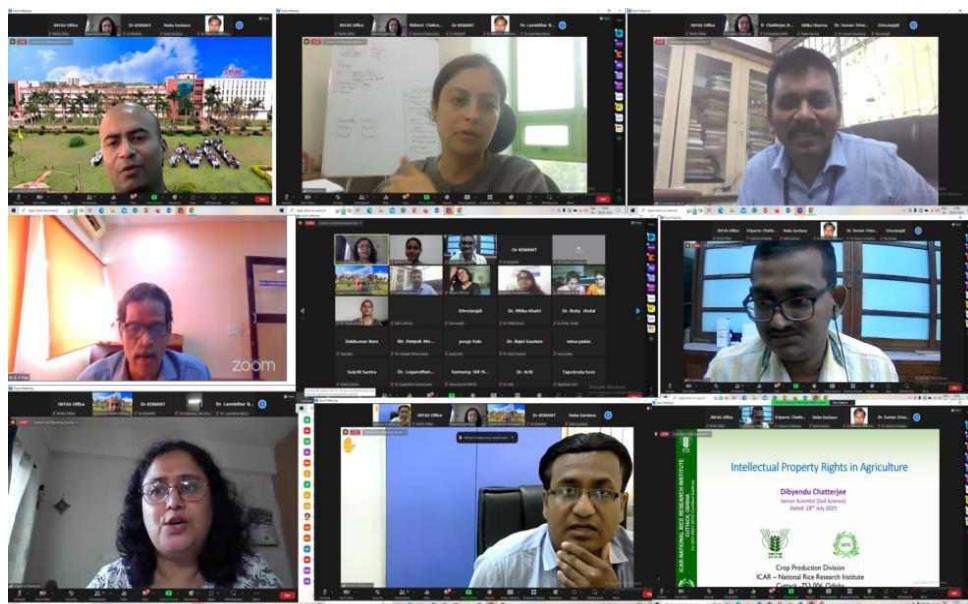
Date: July 28, 2023

Co-ordinator: Sriparna Chatterjee

No. of Participants: approx. 50

GOI declared July month as the National Intellectual Property Festival as part of Azadi Ka Amrit Mahotsav and assigned a greater responsibility of large-scale sensitization on the aspects of IPR to the masses (students, researchers, faculty, scientists, startups, working professionals, and others interested). In this connection, a half-day workshop on Intellectual property rights was organized by INYAS to sensitize the masses on various aspects of Innovation and Intellectual Property jointly with CSIR-IMMT, Bhubaneswar. The workshop was attended by more than 50 participants nationwide. Four invited lectures were delivered by eminent faculties and scientists of our country. Dr. T Pavan Kumar, Dr. Laxmidhar Besra, Dr. Neha Sardana, and Dr. Dibyendu Chatterjee shared their vital experience on various issues of IPR.

75th Azadi Ka Amrit Mahotsav
 Government of India
 Department of Scientific and Industrial Research | Department for Promotion of Industry and Internal Trade
 INTELLECTUAL PROPERTY INDIA
 NIPAM
 संरचना
राष्ट्रीय बौद्धिक संपदा महोत्सव
National Intellectual Property Festival
 नवाचार हेतु विचारों का पोषण
 Nurturing Ideas to Innovation
 01 से 31 जुलाई, 2023 | 01 to 31 July, 2023
 Workshop on
Intellectual Property Rights (IPRs) for Academics & Research
 July 28, 2023 @9.00 AM CSIR - Institute of Minerals and Materials Technology
 Contact: Dr. T. Pavan Kumar (pavantogapur@immt.res.in) and Dr. Sriparna Chatterjee (sriparna@immt.res.in)



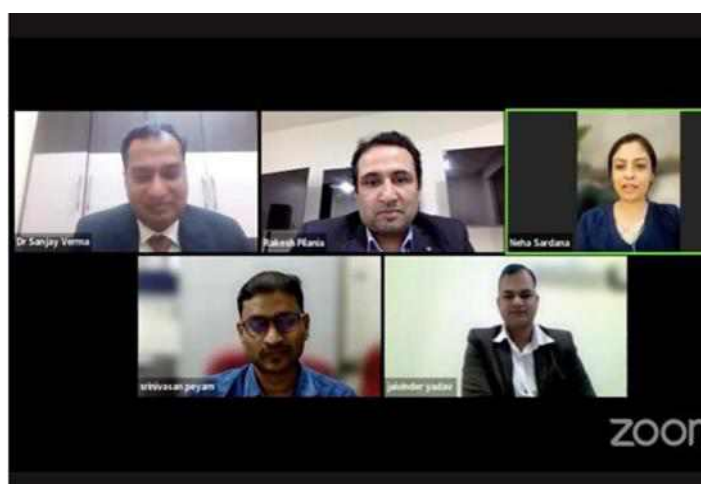
Event: Happy and Healthy Children’s Day

Date: 25th November, 2023

Organizers: Neha Sardana, Rakesh Kumar Pilonia

No. of Participants: 59

The "Happy and Healthy Children's Day" event, organized by the Indian Young Academy of Sciences (INYAS) and moderated by Dr. Neha Sardana and Dr. Rakesh Kumar Pilonia on November 25, 2023, centred on fostering the well-being of children. Tailored for parents of young children, the event delved into pivotal health topics through insightful talks. Dr. Sanjay Verma enlightened attendees on the ‘Importance of Vaccination in Children’, debunking myths and providing practical guidance. Dr. Jaivinder Yadav concentrated on ‘Promoting Healthy Growth and Nutrition in Children’, offering accessible tips for parents to ensure the well-rounded growth of their wards. Dr. Srinivasn P addressed ‘Anemia in Children’, covering early detection, preventive measures, and dietary solutions. This event, directed specifically towards the health of children, exemplified INYAS's commitment to community education. The talks not only imparted valuable knowledge but also encouraged open discussions, creating a supportive virtual environment.

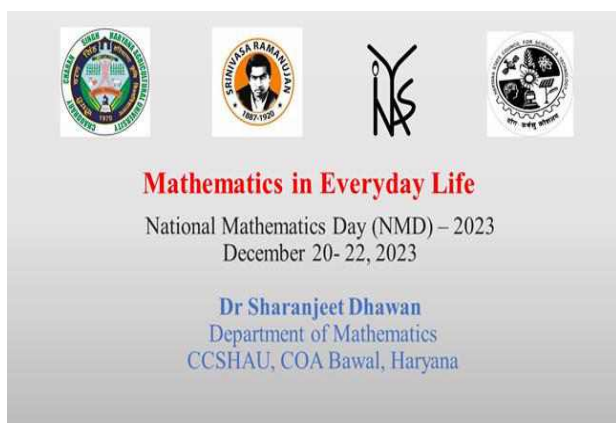


Event: Lecture series: Lecture 4 on Career avenues in agriculture sciences**Date: November 21, 2023****Organizers: Sharanjeet Dhawan****No. of Participants: 84****Title of talk: Foundations of Career Counselling by MS Tonk, ONGC**

INYAS organized talk titled 'Foundations of career counselling'. During the session, Dr. MS Tonk, ONGC, India, emphasized the challenges presented by a competitive environment for students. He explored various opportunities and encouraged students to discover their passions and abilities for a promising career. Engaging in activities such as problem-solving sessions, Dr. Tonk highlighted the significance of communication skill and overall personality development.

**Event: National Mathematics Day****Date: December 20, 2023****Organizer: INYAS and CCS Haryana Agricultural University Hisar, Haryana****No. of Participants: approx. 350**

Dr. Sharanjeet Dhawan, Member, INYAS, delivered an invited talk on "Mathematics in everyday life". The targeted audience was students of different schools of Hisar and Students of B.Sc., M.Sc., and Ph.D. Mathematics, and faculty members. The lecture was about the applications of mathematics in our daily life. How Arithmetic, Trigonometry, Geometry, Data Analysis, and probability are practiced every day in our routine activities like Shopping and Budgeting, Cooking, household activities, Navigation and Travel, Music, Dancing and exercising, and Business deals. It was focused that Mathematics Education develops the inner resources of growing children and makes them thinking individuals in society.



Event: One Week Celebration of Nuclear Energy Day

Date: 1st and 4th December, 2023

Co-ordinator: Neetu Jha, Santosh Gupta (Zonal Event)

No. of Participants: 202

1. Venue: VES College, Chembur, Mumbai Date: 1st Dec 2023 No. of Participants: 152 SEMINARS ON "NUCLEAR POWER - CLEAN AND GREEN POWER FOR SUSTAINABLE DEVELOPMENT" - on 1st December 2023. Department of Physics, VES College of Arts, Science and Commerce had organized seminar talks on the occasion of World Nuclear Energy Day in collaboration with the Indian National Academy of Science (INyas). Firstly, Dr. Sarla Rathi welcomed and introduced all the guests of the seminars to the students of various departments. She also spoke on World Nuclear Energy Day and its significance. World Nuclear Energy Day is celebrated on 2nd December. It is also the 80th anniversary of Fermi's self-sustaining reaction. This year's theme is "POWER TO THE PEOPLE", which supports the engagement of people in support of the positive benefits that nuclear power brings. She also spoke about nuclear benefits to society. After this, the principal of VES College, Dr. Anita Kanwar, was invited to speak about our college, share the reasons behind the event, and give thoughts on World Nuclear Energy Day. She spoke about the various features of VES College and highlighted the achievements in every possible field of the students of VES College. All the guests were Felicitated by the memento of Swami Vivekananda by Dr. Anita Kanwar. Then Dr. Sarla Rathi introduced and invited Dr. Neetu Jha, a professor from ICT, to speak on INyas. She spoke all about INyas and its various features it as well as the different programs conducted by them to help out students of science to clear their concepts on difficult topics through their YouTube channel. Thereafter, Dr. Vivek Parkar, a scientist from BARC, was introduced and invited by the I/C HOD of the physics department, Dr. Devidas Gulwade. He explained the Nucleus and atoms as well as various terms related to it with different examples and Peletron-related experiments. Dr. Parkar also enlightened us on Radioactivity and its positive applications to society. Then, for a talk on nuclear power for sustainable development, Mr. UDAY KASHELIKAR sir was introduced and invited by Mr. Shrikant Ghodke sir. Mr. Uday sir

shared the actual facts of nuclear energy with students and informed them how nuclear energy will help the nation in the future. He also spoke on different types of reactors. He also played a video on NPCL Tarapur reactors, which was so fascinating. He also showed a comparison between coal and nuclear energy. Then he showed carbon emissions are least in nuclear energy compared to other sources of other energy. With examples, he showed us how nuclear power is clean and green power for sustainable development. Thereafter, many students asked their doubts in the form of questions to the speakers; for example, one question was how nuclear waste is managed. There was a total of 140 students from different departments of VES College present for this event. The session was very interactive and informative for all of us. The vote of thanks was given by Dr. Sarla Rathi to all the guests of the event and students. In the end, the Department of Physics, in collaboration with INYAS, organized a small snack treat for the students to celebrate one of the greatest days in the science field.

2. Venue: ICT Mumbai Date: 4th Dec 2023 No. of Participants: 50 The Indian National Young Academy of Sciences (INIAS) celebrated "Nuclear energy week-Energy for Society" event, a platform dedicated to enriching the scientific community with cutting-edge knowledge. This event was scheduled on December 4, 2023, from 2:00 PM to 4:00 PM, and is designed to cater to a diverse audience, 50 students attended this program, including undergraduate, postgraduate, and PhD students. The event held at the Institute of Chemical Technology, Mumbai, featured two distinguished speakers who shared profound insights into their respective fields.

Speaker 1: Mr. Uday Kashelkar Mr. Uday Kashelkar, a Science graduate in Physics from the University of Mumbai with professional training from BARC, brought over three decades of experience in Radiation Protection to the event. Having served at the Kakrapar Atomic Power Station in Gujarat, Mr. Kashelkar delved into the intricacies of nuclear power generation. His presentation included a detailed explanation and showcased illustrations of nuclear power generation through a video format. Participants gained valuable insights into the nuances of radiation protection, enriched by Mr. Kashelkar's extensive practical experience in the field.

Speaker 2: Dr. Ashish Kr Mishra, Assistant Professor, School of Mat. Sci. & Tech, IIT (BHU) Dr. Ashish Kr Mishra, the second speaker, addressed the crucial topic of "TMDs Nanostructures for Electrochemical Energy Generation and Storage." Recognizing the escalating global energy consumption, Dr. Mishra emphasized the need for advanced sustainable energy solutions as alternatives to conventional fossil fuels. He highlighted the scientific community's interest in various energy generation systems and rechargeable batteries. Dr. Mishra specifically focused on electrochemical hydrogen production as a key method for green hydrogen production. Furthermore, he discussed the significance of metal-air batteries as next-generation devices, emphasizing their high energy density, cost-effectiveness, safety, and environmental friendliness. The talk centred around the utilization of transition metal dichalcogenides as active materials for electrochemical hydrogen production and zinc air batteries.

The INyas event provided a valuable platform for attendees to gain insights into both the practical aspects of radiation protection in nuclear power plants and the cutting-edge developments in electrochemical energy generation and storage technologies. The combination of Mr. Kashelkar's experience and Dr. Mishra's expertise contributed to a comprehensive understanding of these vital fields, fostering knowledge exchange and collaboration among the participants.



Event: Interactive Discussion On “Clear Understanding of Hazy Skies”

Date: December 19, 2023

Co-ordinator: Shweta Yadav

No. of Participants: 70

Jammu & Kashmir Pollution Control Committee & Indian National Young Academy of Science jointly organized “Interactive Discussion on Clear Understanding of Hazy Skies” on 19th December, 2023. This program aligns with National Clean Air Programme (NCAP) & Swachh Bharat Abhiyaan. Central University of Jammu is Institute of Repute (IoR) and serving as technical partner to Jammu & Kashmir Pollution Control Committee under NCAP. Dr. Shweta Yadav, being the Nodal Faculty, NCAP and IoR Representative coordinated this program. Air Pollution is the biggest problem India is facing today and persistent Haze events result in poor visibility particularly in winters and thus disrupts daily life. This interactive discussion helped in disseminating knowledge about fundamentals of haze development. Work of renowned scientist Prof. Sachin S. Gunthe on solving the mystery of air pollution was recently captured

by Nature Spotlight: India on 13th December, 2023. Prof. Gunthe along with other speakers interacted with stakeholders to provide a clear understanding on causes of severe haze episodes. This discussion helped in bridging the gap between scientists and policymakers and will surely help stakeholders in designing region specific interventions to minimize regional air pollution episodes.



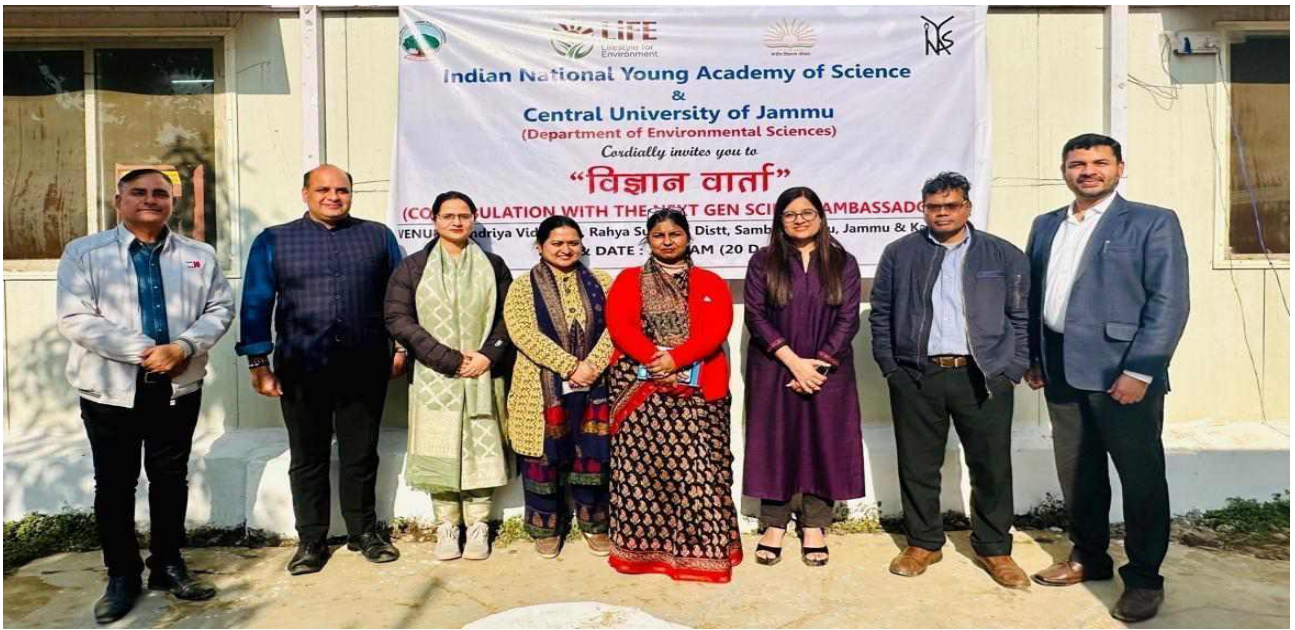
Event: “विज्ञान वार्ता” (Confabulation with the Next Gen Science Ambassadors)

Date: December 20, 2023

Co-ordinator: Shweta Yadav

No. of Participants: 100

INYAS in collaboration with Central University of Jammu has started a series called “Vigyan Varta: “Confabulation with Next Gen Science Ambassadors” to bridge the gap between seasoned scientists and young budding minds in Jammu region, J&K. The first event under this initiative took place on December 20, 2023, at Kendriya Vidyalaya, Rahya-Suchani, District-Samba in collaboration with the Department of Environmental Sciences, CUJ. This initiative is envisioned to foster meaningful dialogue between established scientists and high school students to understand their interests, nurture logical and rational thinking and to encourage and ignite young minds to adapt scientific temperament as a perspective in life for contributing to society through informed decisions. During the event, students interacted with invited speaker Prof. Sachin S. Gunthe from IIT Madras and also with the faculty members from the Department of Environmental Sciences, CUJ. Poster and quiz competitions were conducted during the event and students asked several questions related to fundamental science as well as career guidance.



Event: Interactive Session on International mobility: How to achieve and what to expect

Date: December 20, 2023

Co-ordinator: Shweta Yadav

No. of Participants: 70

The Office of Dean of International Affairs, Central University of Jammu, has launched the "International-Connect (I-Connect) Lecture Series in collaboration with the Indian National Young Academy of Science (INyas)". To initiate, sustain and strengthen international collaborations, eminent speakers with extensive international experience will be interacting with CUJ fraternity under this lecture series. This initiative will help in fostering international collaborations and knowledge exchange. The I-Connect Lecture series aims to provide a platform for CUJ fraternity to connect, collaborate, and contribute to the global academic community. The first lecture of the series was delivered on "**International mobility: How to achieve and What to expect**" by Prof. Sachin S. Gunthe, Coordinator, CACS & Professor in Civil Engineering, IIT Madras at 3:30 pm on 20th December 2023, in Brigadier Rajinder Singh Auditorium, Central University of Jammu, Dist. Samba, J&K. Dr. Swarkar Sharma, Director, Centre for Molecular Biology, advised the scholars to search for fundamental science questions in their domain and then look for international collaborators to find solutions to the unsolved scientific mysteries. Dr. Shweta Yadav, Associate Dean, International Affairs and Member, INyas, shared that the Office of Dean of International Affairs is working to especially promote international mobility for young faculty and PhD scholars. This initiative aligns with the vision of INyas to promote scientific excellence through international cooperation among young researchers. Together, we aspire to create a vibrant ecosystem for collaborative research and innovation with improved international connections.



9. Remote and Rural Areas Dedicated Activities

Event: Remote Area Lecture

Date: 28 January 2023

Organizers: Ramesh, Dinesh

No. of participants: ~ 100

A remote area lecture at Kovai Public School, Karumathampatti, Coimbatore (Tamil Nadu) was conducted. This school is located in one of the semi-remotest parts of Tamil Nadu, particularly in Coimbatore District, and it is represented by students from various rural parts. The remote lecture was attended by 100+ students from 8th to 12th grades. Dr. Dinesh, Associate Professor, IIT, Palakkad, delivered a lecture on "Let's Talk Chemistry," which emphasized applying the learning to solve problems in society. How the chemistry around us is essential to our day-to-day activities Dr. Ramesh, Senior Scientist, SACON, Coimbatore, delivered a lecture on "Importance of Wildlife Conservation". The students were extremely interactive and asked a series of questions during the talks. The students also interacted and were interested in knowing about the possibility of being enrolled at IIT in the future. The lecture session was facilitated by the School's Principal, Dr. Jagadeesh, and other teachers.



Event: INYAS-NCR Zone Event - "Vigyan Vistar"

Date: 28 -30 January 2023

Organizers: Rajendra Dhaka, Veda Krishnan, Kalpana Nagpal and other NCR Zone members

No. of participants: ~ 40

A three-day INYAS-NCR Zone event, "Vigyan Vistar," was held for 8th to 12th standard students hailing from the schools of rural areas of Rajasthan and Uttar Pradesh. It was organized at the Department of Physics, IIT Delhi, jointly with the Delhi Zones of INYAS, INSA, and NASI to commemorate the International Day of Women and Girls in Science. Around 40 students from host schools, along with their teachers, participated in this camp. The importance of curiosity and hands-on learning in science was highlighted by Prof. Monika Kaul (Hansraj College, Delhi University) in the inaugural talk. Other sessions on Day 1 were Energy and Society, My Passion, My Life, and Non-traditional Careers in STEM. A visit to the state-of-the-art labs of IIT Delhi and Biogas, as well as waste-to-wealth model plants, were the other major highlights of Day

1. Day 2 showcased relevant topics like the Indian lifestyle as well as the environment, organic farming and integrated farm management, and the importance of fellowships and opportunities for school students. The sessions were followed by hands-on training on accelerator physics, Na-ion batteries, superconductivity, shape memory, DNA isolation, pH, etc. Day 2 ended with a visit to the RuTAG facility at IIT-Delhi, which showcased the need-based technologies innovated for rural India. Day 3 students visited the National Science Center in Delhi. The event concluded with a valedictory session where feedback from students as well as teachers was taken. Microgreen kits were distributed along with participation certificates to all students. Science kits (chemistry, physics, and biology) were also distributed to schools to promote hands-on experience of science in a better way.



Event: Rural Area Lecture

Date: 25 February 2023

Organizers: Vishal Mishra, IIT BHU

No. of participants~ 23 farmers

A rural area lecture was conducted at IIT BHU with the active participation of 23 farmers. They are briefed about the CW-MFC system. By using waste, we can reduce start-up costs, and it also helps us reduce waste around the world. CW-MFC removes some organic and inorganic pollutants. Waste can produce energy. This is the energy of the future, because of which, along with improving the rural economy, the youth will also benefit from starting start-ups. Work on their commercial production and its economic aspect is also needed. The CW-MFC system was developed to provide continuous power for public toilet lighting.



Event: North Eastern Regional Level Science Exhibition

Date: 27 February 2023

Organizers: Pankaj Barah

No. of participants: 120

inSCIgnis of Tezpur University is one of the leading and biggest science fests in North East India. It is celebrated on the occasion of National Science Day, every year. INVAS has supported the North Eastern Regional Level Science Exhibition (NERLSE), which is the most highlighted event of inSCIgnis. NERLSE is one of the biggest science exhibitions in the NE India region. In total 50 teams participated from various schools and colleges. There were around 5000 visitors to the entire inSCIgnis event. In total six participating teams were selected from both school and UG/PG levels.



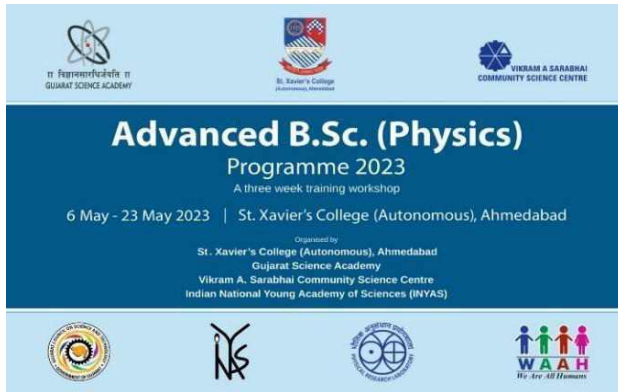
Event: Advanced B. Sc. (Physics) Program 2023 for rural students of Gujarat

Date: 6–23 May 2023

Organizers: Arvind Singh (INVAS) and other members from PRL

No. of Participants: ~35

Amongst the students who opt for doing a Bachelor's in Science there are a few who want to go the depth of their area of specialization and are motivated to challenge themselves further if given the opportunity. The aim of the Advanced B.Sc. Program in Physics is to provide such students with a curriculum that can be challenging, interesting, and inspiring. The Advanced B.Sc (Physics) Program ran during 6-23 May 2023. More than 30 second Year (SEM-IV) B.Sc. students participated in it. It included weekly lectures in Physics, visits to research institutes, career guidance, and summer projects. The course consists of lectures in Electromagnetism, Quantum Mechanics, and laboratory sessions for performing experiments. The program was conducted as a residential program. This allowed students from outside Ahmedabad and Gandhinagar to also participate in the program. The program was coordinated by a committee consisting of scientists, college lecturers and science educators of institutions of Ahmedabad and Gandhinagar.



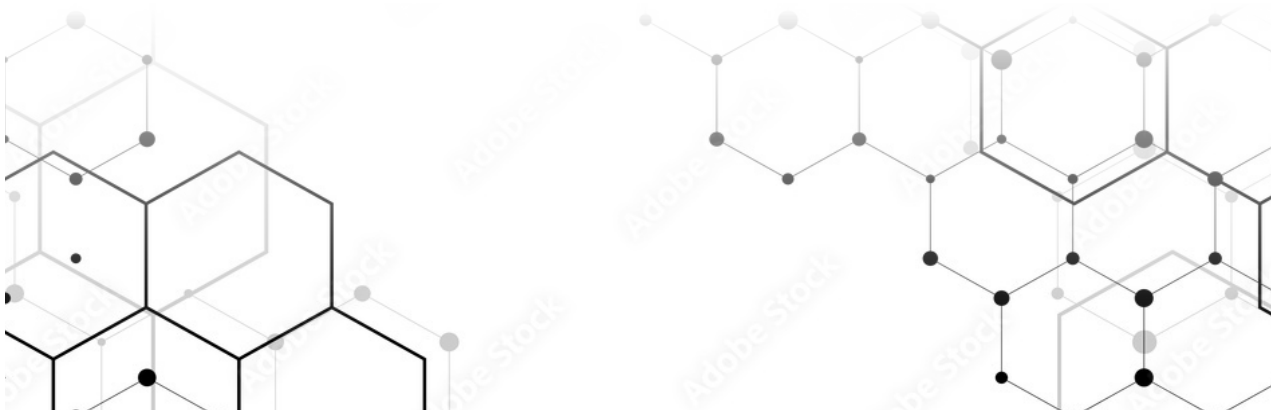
Event: Krishak Gosthi on Integrated Farming Systems

Date: October 26, 2023

Organizers: Subhash Babu, Kalpana Nagpal, Veda Krishna and Rajendra Singh Dhaka

No. of Participants: 114

The INYAS-NCT Zone, in collaboration with the prestigious Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi, organized Krishak Gosthi on Integrated Farming Systems at S.B.I.C. Salarpur, Garh Mukteshwar, Hapur, Uttar Pradesh on 26th October 2023. The aim of the program was to create awareness among the farmers about resource optimization among the various components of Integrated Farming Systems for enhancing resource use efficiency and profitability. There were three deliberations on the various aspects of the integrated farming systems. There were 114 participants in the event. There was various deliberation by the different experts of IFS. Pusa Vegetable seed kits were also distributed among the farmers. The event was coordinated by Dr. Subhash Babu, Dr. Kalpana Nagpal, Dr. Veda Krishna, and Dr. Rajendra Singh Dhaka.





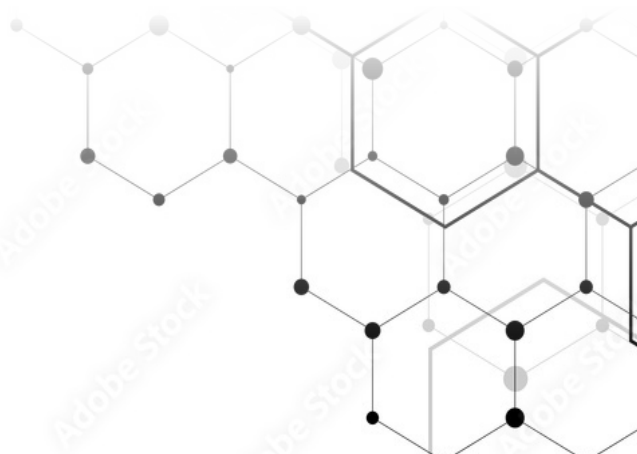
Event: Remote area awareness program on "Preventing Antimicrobial Resistance Together"

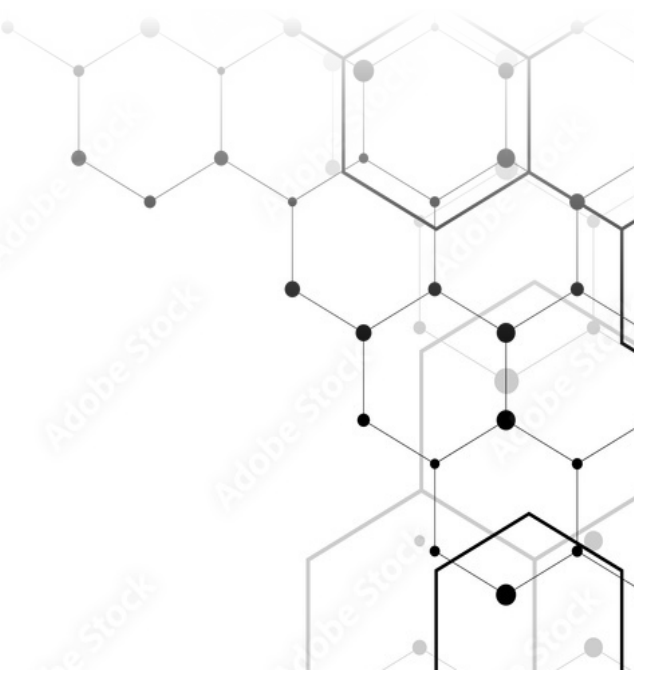
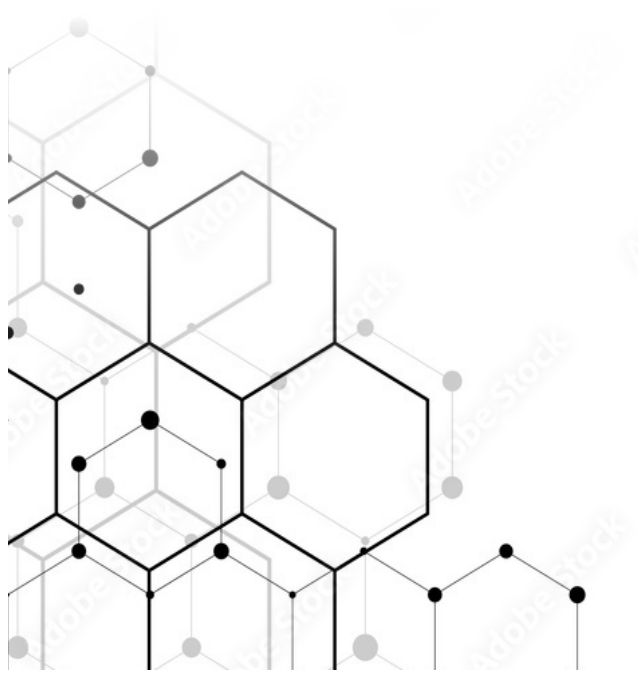
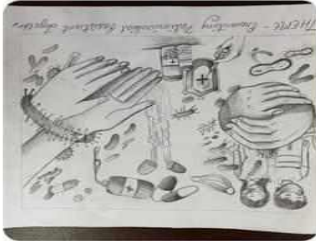
Date: November 24, 2023

Co-ordinator: Rajib Deb

No. of Participants: 93

An on spot inter-college/university pencil sketch competition was organized for young students with the theme of ‘Preventing Antimicrobial Resistance (AMR) Together’. During this competition, students participated for pencil sketch diagrammatic representation on the thematic area. Students were allowed to present their concept in front of evaluators before awarding them. A total 93 students from different college and Universities were participated for expressing their innovative ideas on prevention of AMR.





10. Science Awareness Camps



Event: Science Awareness Camp

Date: 31 January 2023

Organizer: Rohit Ranjan Shahi

No. of participants: ~ 150

A science awareness camp was organized at the Middle school in Nepa, Fatehpur, with 150 participants. The awareness camp opened their eyes to the fact that science is making life better and the world a better place to live. Dr. Rohit Ranjan Shahi introduced the objective of the INyas and its role in the development of the country. Students learned about renewable and non-renewable energy, the importance of renewable energy, and how to use solar energy efficiently to fulfill daily requirements. Students were fascinated to see the cap with a fan that runs on solar energy. Prizes were distributed to encourage students to take part actively during the lecture session. Various interesting models and demonstrations included the laws of reflection, refraction, diffraction, acids, bases, and salts, demonstrations related to pressure and density, good and bad conductors, automatic streetlights, electrolysis, etc. Children were amazed to see through the microscopes and telescopes.

SCIENCE AWARENESS CAMP		
Organized by :-		
Indian National Young Academy of Sciences (INyas)		
And		
Department of Physics, Central University of South Bihar, Gaya		
		
Audience	Activities	
Class 6 to 8 Students	Science Awareness and Demonstration Session	
On		
Speakers:	January 31, 2023	Demonstrators:-
Dr. Rohit Ranjan Shahi (INyas member)	Venue:-	Mr. Amit Kumar Gupta Mrs. Priyanka Kumari Mr. Shashi Kant Mohapatra
Dr. Vijay Raj Singh Dr. Nitin Chandra	Middle school Nepa, Fatehpur, Gaya	Ms. Aradhana Kumari Ms. Riya Dawri Ms. Sanjuktta Jena Mr. Aryan Singh



Event: Science Camp

Date: 28 February 2023

Organizer: Rohit Shahi, INyas

No. of participants~ 150

A one-day Science Camp for 9th and 11th grade students of different schools were organized jointly by the INyas and the department of Physics of the Central University of South Bihar (CUSB). Dr. Rohit Ranjan Shahi introduced the objective of the INyas and its role in the development of science and technology in the country. Around 150 meritorious students from Delhi Public School Gaya, Magadh International School Tekari, and Higher Secondary School Tepa participated in the camp. Dr. R. R. Shahi also interacted with the students and lectured on a sustainable energy source to run vehicles without emitting greenhouse gases. His lecture also contained the role of science in our lives, how it makes our lives better and more accessible, and the science behind climate change and global warming.



Event: Science Camp

Date: 28 April 2023

Organizer: Sharanjeet Dhawan

No. of Participants: 100

INYAS organized the science camp "Enlightening Young Minds" at Kendriya Vidyalaya, Leh-Ladakh. Dr. Sharanjeet Dhawan, University of Ladakh, was the convenor of the event. Targeted students during this science camp were students from grades 9th to 12th. Around 100 students participated in the camp. A team of six resource persons from INYAS were present: Dr. Rajendra Dhaka, IIT Delhi (Chairperson of INYAS), Dr. Pankaj Barah, Tezpur University, Assam; Dr. Kalpana Nagpal, Amity University in Noida, Uttar Pradesh; Dr. Dhiraj Bhatia, IIT Gandhinagar; and Dr. Shalini Arya, Institute of Chemical Technology in Mumbai, Dr Sharanjeet Dhawan, University of Ladakh. Being in a cold desert with a fragile environment, students face many issues and feel a lack of guidance towards higher studies. Keeping in view all these difficulties, team INYAS interacted with the students and discussed various career opportunities for them. Along with this, various aspects related to their health and wellbeing were discussed. All the students participated enthusiastically in the daylong discussion. They felt quite motivated and inspired by science and research. At the end, refreshment was arranged by INYAS for all the students and staff of the Kendriya Vidyalaya, Leh-Ladakh.



Event: An Awareness Camp on World Hypertension Day Theme ‘Measure Your Blood Pressure Accurately, Control it, Live Longer’

Date: 19 May 2023

Organizer: Kalpana Nagpal

No. of participants: 59

INYAS conducted an awareness camp on World Hypertension Day, jointly organized with RKGIT College of Pharmacy, Ghaziabad, at Composite School Milak Rawli, Rawli Road, Muradnagar, on May 19, 2023, aimed at educating young students about hypertension and healthy lifestyle choices. The camp included interactive presentations and activities, including a drawing competition where the winners were distributed with exciting science kits. Healthy refreshment was distributed to the students, including fruits that provide potassium and antioxidants, aiding heart health and blood pressure regulation, monitoring the blood pressure of students and staff, and promoting nutritious eating, physical activity, and stress management. Students actively participated in discussions and demonstrations, gaining a basic understanding of hypertension and the importance of maintaining optimal blood pressure. The event successfully raised awareness, instilled healthy habits, and empowered students to make informed choices for their cardiovascular health.

Indian National Young Academy of Science
celebrates
World Hypertension Day
An Awareness Camp on world Hypertension day
Theme-‘Measure Your Blood Pressure Accurately,
Control It, Live Longer’.
Jointly organized by
Indian National Young Academy of Science (INYAS)
and
RKGIT College Of Pharmacy, Ghaziabad.
Date: 19 May, 2023; 11 am onwards

Discussion on preventive measures for a good and long-lasting cardiovascular health, right from childhood.

Live monitoring of blood pressure among the local population

Drawing competition on 'Importance of measuring the Blood Pressure'

Event Co-ordinators

Exciting Prizes for the winners

Venue: Composite School Milak Rawli,
Rawli Road, Muradnagar 201206



Event: Awareness Campaign for Single Use Plastic Free Campus

Date: 2 June and 5 June 2023

Organizer: Mayuri Chabukdhara

No. of Participants: ~140

The Department of Environmental Biology and Wildlife Sciences, in association with INYAS, celebrated World Environment Day 2023 on June 5, 2023, at Cotton University. The event was celebrated for two days, i.e., June 2nd and 5th, 2023, wherein students from four Government schools in Guwahati were invited to participate. The main aim of the event was to raise awareness among young students regarding plastic pollution and a single-use plastic-free campus. The first day of the event was marked by an "On-the-spot Essay Competition" among students in two groups: classes 8th to 10th and classes 11th to 12th. The topic of the essay was "Solutions to Plastic Pollution". Students from Government schools in Kamrup Metro district, namely: Gopal Boro Girls Higher Secondary School, Cotton Collegiate Government Higher Secondary School, Bengali Higher Secondary School, and Kamrup Academy Higher Secondary School, participated in the competition. Prominent speakers, Prof. (Retd.) Kaliprasad Sarma, Department of Environmental Science, Tezpur University, and Dr. Akshai Kumar A. S. (INYAS Member and Associate Professor, IIT Guwahati), talked about plastic pollution and solutions. The announcement of the essay winners and prize distribution were done on the same day. Afterward, there was a documentary screening, followed by an open quiz competition. The event ended with a vote of thanks.



WORLD ENVIRONMENT DAY

#BeatPlasticPollution



"On-spot Essay Competition"

Organized by INYAS (Indian National Young Academy of Sciences) and Department of Environmental Biology and Wildlife Sciences, Cotton University

Theme: "Solutions to Plastic Pollution"
 School students: Class VIII to Class XII (For selected schools in Guwahati)

Prizes: Exciting prizes for top 3 winners with certificate & 2 consolation prizes with certificate

Spot Registration
 Date: 2nd June, 2023
 Venue: Room No. 311, MCB Building, Cotton University
 Time: 10:30 hrs onward (45 minutes)
 Contact Numbers: 8638759709/9101960744

Convener: Dr. Mayuri Chabukdhara (Cotton University)
 Co-Conveners: Dr. Akshai Kumar A.S. (IIT Guwahati), Dr. Rajib Deb (ICAR, National Research Centre on Pig), Dr. Pankaj Barah (Tezpur University)
 Coordinators: Dr. Nabajit Hazarika, Dr. Leena Borah, Dr. Narayan Sharma



WORLD ENVIRONMENT DAY

#BeatPlasticPollution





Speaker:
Prof. Kaliprasad Sarma
Professor (Retd.), Department of Environmental Science, Tezpur University



Speaker:
Dr. Akshai Kumar A.S.
Associate Professor and Head, Center for Nanotechnology, IIT Guwahati

Date: 5th June, 2023
 Venue: Room No. 311, MCB Building, Cotton University
 Time: 10:15 hrs onwards

OPEN QUIZ CONTEST

Convener: Dr. Mayuri Chabukdhara (Cotton University)
 Co-Conveners: Dr. Akshai Kumar A.S. (IIT Guwahati), Dr. Rajib Deb (ICAR, National Research Centre on Pig), Dr. Pankaj Barah (Tezpur University)
 Coordinators: Dr. Leena Borah, Dr. Nabajit Hazarika, Dr. Narayan Sharma



Event - FEST 2023 - Fostering Education in Science & Technology

Date: September 31, 2023 – 01 October 2023

Organizers: Rajendra Singh Dhaka, Veda Krishnan, Subhash Babu, Kalpana Nagpal

No. of Participants: 35

The Indian National Young Academy of Science successfully organized the science camp program titled "FEST 2023 - Fostering Education in Science & Technology." This enriching event spanned two days at the Indian Institute of Technology Delhi, taking place from September 30, 2023, to October 1, 2023. The program was tailored for 30 female students from the Government Girls Senior Secondary School in Sujampur, Punjab. Featuring a diverse range of activities, including enlightening talks by renowned scientists and hands-on training, FEST 2023 empowered young women by expanding their knowledge and nurturing their curiosity for future opportunities in STEAM (Science, Technology, Engineering, Arts, and Mathematics). The program kicked off with the Inaugural Session, where the students received a comprehensive briefing on the program's objectives. Professor Rajendra Singh Dhaka, Chair of INYAS and Associate Professor at IIT Delhi, provided an insightful glimpse into the mission and vision of INYAS. Subsequently, Session 1 commenced with an in-depth discussion led by Professor Surendra Kumar Dhaka from Delhi University, focusing on "Chandrayaan 3 and Aditya L1." This discussion left the students in awe of the sophistication and intricate engineering behind these missions. The eagerly anticipated second talk of Session 1 was delivered by Professor Amita Das, an INSA Fellow, delving into the "Fourth State of Matter - Plasma and Sun." This talk exposed the students to captivating scientific concepts, igniting their interest in intriguing research. Following the intellectually stimulating Session 1, the hands-on-training phase began with an experiment conducted by Dr. Veda Krishnan, Secretary of INYAS and Senior Scientist at ICAR-IARI, titled "Hands-on-Biology: DiET & DNA." During this session, students were not only given demonstrations but also actively engaged in experiments such as DNA extraction and the preparation of natural pH indicators. This experience introduced the concept of the simplicity of science and brought genuine amusement to the young school students. In Session 2, Dr. Meher Wan, an INYAS Member and Scientist at CSIR-NIScPR, shed light on "Open Access Knowledge Sources," emphasizing the effective use of online resources provided by government institutes and repositories. These resources, in the form of animations, podcasts, and videos, aimed to uncover hidden treasures, enriching students' learning experiences. The first day of the event concluded with a visit to the lab facilities at the Inter-University Accelerator Centre, where students were exposed to sophisticated machinery and labs used for groundbreaking scientific research. The second day began with a talk in Session 4, titled "Opportunities in Agricultural Science & Importance of Organic Farming for Health & Environment," delivered by Dr. Subhash Babu, INYAS Delhi-NCR Zone Co-coordinator and Senior Scientist at ICAR-IARI. This talk encouraged students to develop an interest in agricultural science and raised awareness of the diverse opportunities in this field. Subsequently, Dr. Gitanjali Yadav, an INYAS Alumni and Staff Scientist at NIPGR, delivered the second talk of Session 4, inspiring students to choose careers as young climate champions while emphasizing the importance of preserving the environment. Session 5 was dedicated to motivating girls to pursue careers in science and technology, aiming to bridge gender and socio-economic gaps in higher scientific fields.

Professor Rajendra Singh Dhaka led this session with a talk titled "Why Science for Future Career?" addressing the fundamental questions that young minds often grapple with when contemplating a career in science. Following this talk, the majority of girls were enthusiastic about envisioning their future in the field of science and technology. In the concluding Session 6, Dr. Umesh Kumar Sharma, a



Scientist at DST, presented "Fellowship Opportunities for Inspiring & Nurturing Students." This informative session proved highly valuable for the young girls, as they gained insights into various scholarship programs and examinations that were previously unfamiliar to them. Dr. Sharma also highlighted gender-centric scholarship opportunities, providing the girls with updated information. The second talk of Session 6, delivered by Dr. Kalpana Nagpal, INYAS Delhi-NCR Zone Coordinator and Associate Professor at Amity University, focused on "Essential Components for Personal Growth," with an interactive discussion that left students feeling confident about their place in the world of science. After a day filled with talks and discussions, students were treated to another hands-on experiment conducted by research scholars from IIT Delhi, exploring topics such as batteries, superconductivity, ion accelerators, shape memory, and thermoelectric materials. The students were fascinated by these demonstrations of groundbreaking research, providing them with practical insights into the application of science. The FEST 2023 event marked another significant milestone for INYAS in its mission to promote science for society. The key message absorbed by the young women in attendance was clear: "In science, we either succeed or learn; there is no failure in science." Additionally, the event emphasized that "Curiosity is the backbone of success in life." The event concluded with an energetic interaction and valedictory session, during which each student shared their personal experiences and provided feedback. Therefore, the event played a vital role in contributing to the vision of India@2030, focusing on innovation, inclusivity, and investment in the field of science.

Event: जिज्ञासा: A Science Adventure for Everyone

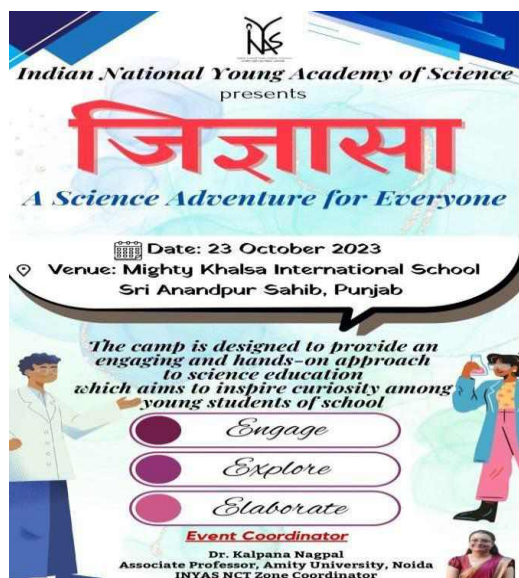
Date: October 23, 2023

Organizers: Kalpana Nagpal

No. of Participants: 63

जिज्ञासा: A Science Adventure for Everyone, a day-long Science camp program, was organized under the umbrella of INYAS at Mighty Khalsa International School, rural area of Punjab on October 23, 2023, Sri Anandpur Sahib. More than 60 students participated in the science

camp. This camp was designed to spark students' curiosity and passion for science through a series of engaging and interactive hands-on experiments. The event was coordinated by INyas NCT Zone Co-ordinator Dr. Kalpana Nagpal (Associate Professor at Amity Institute of Pharmacy, Amity University Uttar Pradesh (Noida Campus), who guided the students through exciting science experiments and helped them understand the scientific concepts behind the experiments. Students enjoyed science with their peers and learned by hands-on experiments in a fun and engaging way. Through this camp, the students got the opportunity to learn about the world around them through hands-on activities, such as by conducting interesting experiments like magical water, sinking ice, the science of effervescence, exciting, colorful chemical bead formation, etc. This was followed by a motivational lecture for the students to interact with them and mentor them to overcome the challenges they might be facing. The students learned about a variety of scientific concepts and developed critical thinking and problem-solving skills. Students learnt team working in collaboration and communication of their thoughts effectively. They were inspired to pursue careers in science and technology.



Event: Science Awareness Lecture "Thermal Processing of Food and Biological Materials"

Date: October 27, 2023

Organizers: Vishal Mishra

No. of Participants: 91

This science awareness lecture aimed at educating and training undergraduate students about recent developments in food processing techniques. Students were taught how to implement various food processing technologies/ methodologies in pastoral parts of the country. The event was jointly organized by NASI "Varanasi local Zone," INYAS New Delhi, and Bansal Institute of Engineering and Technology, Lucknow.



Event: Science awareness event on "Challenges and Opportunities in Science"

Date: December 12, 2023

Co-ordinator: Arun K. Jugran

No. of Participants: 120

G. B. Pant National Institute of Himalayan Environment, Garhwal Regional Centre, Srinagar, Indian National Science Academy (INSA) and Indian National Young Academy of Science organized a science awareness event with school student and teachers entitled "Challenges & Opportunities in Science" at Government Inter Collage, Triyuginarayan, Rudraprayag, Uttarakhand on 12 December 2023. The programme was conducted on offline as well as online

mode. Around 120 participants (students & teachers) were participated in this program. All the students were from 9 to 12th standard of school.

The aim of the event was to inspire and engage school students in the fascinating world of science by exploring and understanding the various challenges faced in the field and the exciting opportunities it offers. Also, empower students to consider careers in science, technology, engineering, and mathematics (STEM) fields by demonstrating the exciting prospects these fields offer. The event would provide a platform for learning including interactive sessions, expert talks, and fostering a deeper understanding of scientific concepts and encouraging critical thinking. The outcome of event is increased awareness and interest in science among students, enhanced critical thinking and problem-solving skills, exposure to real-world scientific challenges and potential career options, opportunities for students to interact with experts and mentors.

The lecture session was deliberated by Dr. K. Chandra Sekar, who encouraged the participants to challenges in natural science and options in the science stream and shared knowledge about our basic science experiment with examples of many innovations by researchers. After that, Dr. Arun K. Jugran presented a very informative presentation on Challenges and opportunities in science. Dr Jugran provided a vast knowledge of the background of science in India, the importance of science education, challenges in science (lack of exposure, curriculum limitation, language barrier, gender disparity, etc.), and informed about the benefits of schemes and awards in future students. He is also aware of several scholarships given at the international, national, and state government levels. He focused on scholarships such as CSIR, UGC, INSPIRE award-Manak, Pradhan Mantri Research Fellowship (PMRF), and scholarship schemes for OBC, SC, and ST category students. Then, school Principal Mrs. Antia Bindola's mam also encouraged the students about the value of these types of training programs for students and special thanks to the speakers of this event and organizing agencies. Another speaker of the lecture session, Dr. Kusum Pandey, Scientist C, GBP-NIHE, gave a wide awareness about future opportunities in science and a road map for grabbing this opportunity from participants. Suggested several schemes and scholarships and opportunities after intermediate in the field of biological sciences along with suggested schemes in higher studies for female students. After the lecture session, concluding remarks were given by the school science teacher, Mr. Vinay Jamloki. He appreciated the workshop organized by the Institute and said that the way nature is being exploited in a developing and scientific era is a matter of concern. A vote of thanks was given by Mr. Ashish Kumar (Research scholar); first, he thanked the Head of the GRC for giving permission to organize the workshop. Thereafter, I extended thanks to all INSA & INVAS academies for given the opportunity to organize such type of event for Rural school students. Afterward, he extended sincere thanks to the Principal, teachers, students, and supporting staff of the school. He expressed big appreciation and thanks to the coordinator of the program, Dr. Jugran, for organizing such type of event and for Dr. Kusum Pandey.



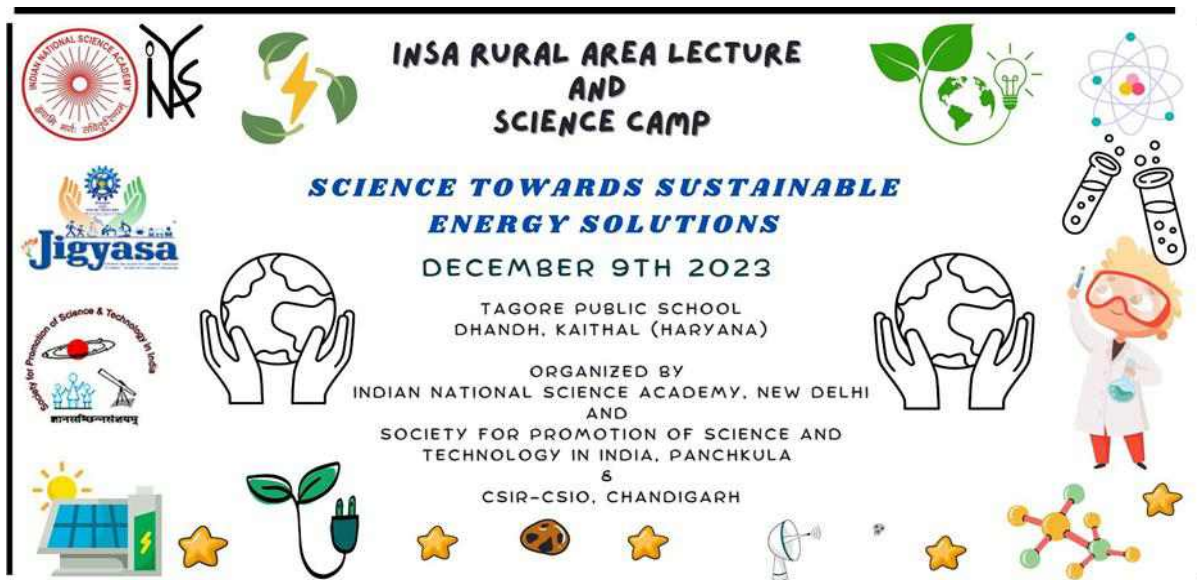
Event: INSA Rural Area Lecture and INyas Science Camp

Date: 9th December 2023

Organizer: Pooja Devi

No. of participants: 120

An INSA rural area lecture and science camp was organized by Dr. Pooja at Tagore Public School, Dhandh, Kaithal. The event included a lecture on sustainable energy and a hands-on session on physics and chemistry activities to inspire the students for science careers. Dr. Neha Sardana (member, INyas) interacted with students and conducted an experiment with laser.





Event Name: Career Guidance workshop for Class X students of ZPHS school, Cherial, Telangana

Organizers: Raavi Sai Santosh Kumar, Aravind Kumar Rengan, INYAS Hyderabad Zone activity

The INYAS Hyderabad Zone organize the Career Guidance session for Class X students At ZPHS School in Cherial, Telangana. The event's goal was to offer students thoughtful advice and support as they approached a pivotal point in their academic careers. The goal of the workshop was to encourage students to make well-informed decisions by providing them with information about various career pathways, educational opportunities, and skill development. This project produced a student body that was more self-assured and knowledgeable, with the skills and information needed to successfully navigate their future academic and professional ambitions. The constructive outcome of this important session demonstrated the INYAS Hyderabad Zone's dedication to supporting professional and educational growth.

Event: Girls in Science

Date: 10 February 2023

Organizer: Neha Sardana

No. of participants: ~ 160

INYAS, in association with IIT Ropar, has observed International Day for Women and Girls in Science with about 160 participants from nearby government schools. The event witnessed invited talks from diligent women scientists, Prof. Keya Dharamvir and Dr. Sunita Mishra, followed by literary, slogan-writing, and painting competitions for students.



Event: Popular Science Lectures for High School Girl Students

Date: December 8, 2023

Co-ordinator: Chirasree Roy Chaudhuri

No. of Participants: 57

This INYAS Zone event was successfully conducted with three lectures and hands-on demonstrations. Prof. Syed Minhaz Hossain of the Department of Physics at IEST Shibpur discussed the various concepts of optics and electricity through interesting experiments. Prof. Upasana Ray, senior scientist of the Virology Department at the Indian Institute of Chemical Biology, delivered lectures on various aspects of viral infection and created awareness. Prof. Santi Prasad Maity of the Department of IT at IEST Shibpur enlightened the students with his lecture on artificial intelligence using nature-inspired examples. 57 female students participated, and they interacted enthusiastically with the speakers. The school authorities also expressed their desire to organize such programs in the future.



11. Sustainability Lecture Series

Event theme: Sustainability lecture - 1 (bimonthly & online)

Date: 11 February 2023

Organizers: INyas-NCR Zone

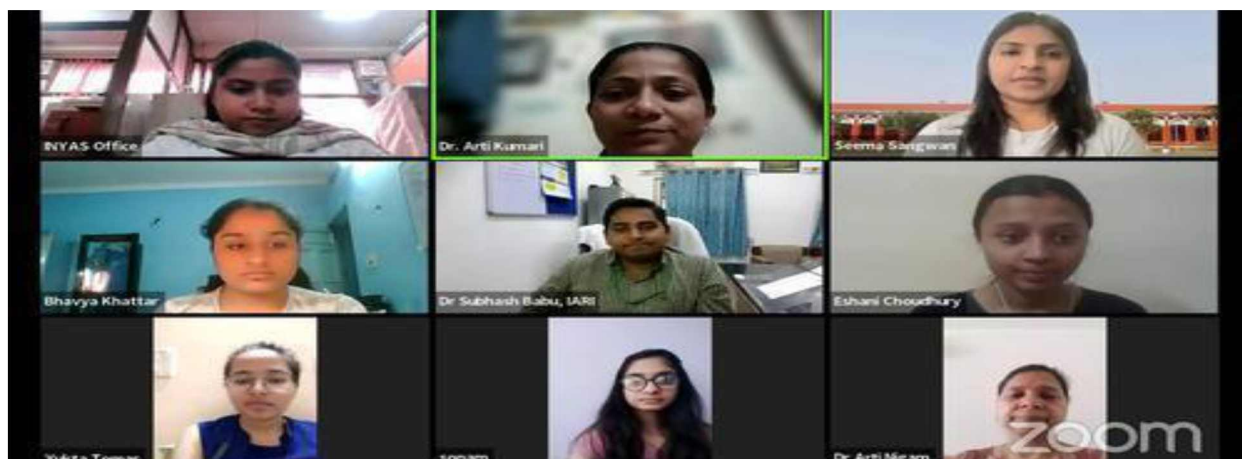
The sustainability lecture series (bimonthly and online) is initiated by INyas -NCR Zone in collaboration with the Department of Microbiology, Institute of Home Economics, Delhi University, and MBSI (Microbiologist Society, India). The theme is “Role of Science in Sustainable Development: An Indian Perspective. Undergraduate students of related disciplines are the potential audience of the series. We are pleased to inform you that the first talk was delivered by Dr. Amit Chandra Kharwal, Dy. Director and Associate Professor, Amity University.

Event theme: Sustainability lecture series- 2 (bimonthly & online)

Date: 25 February 2023

Organizers: INyas-NCR Zone

INyas conducted - Lecture 2 of the Sustainability lecture series (bimonthly & online) as initiated by INyas -NCR Zone in collaboration with the Department of Microbiology, Institute of Home Economics, Delhi University and MBSI (Microbiologist Society, India). The theme is “Role of Science in Sustainable Development: An Indian Perspective. Undergraduate students of related disciplines are the potential audience. This second talk was delivered by Dr. Seema Sangwan, Scientist (Senior Scale), Division of Microbiology, Indian Agricultural Research Institute, New Delhi.



Event: Sustainability lecture series (bimonthly & online)

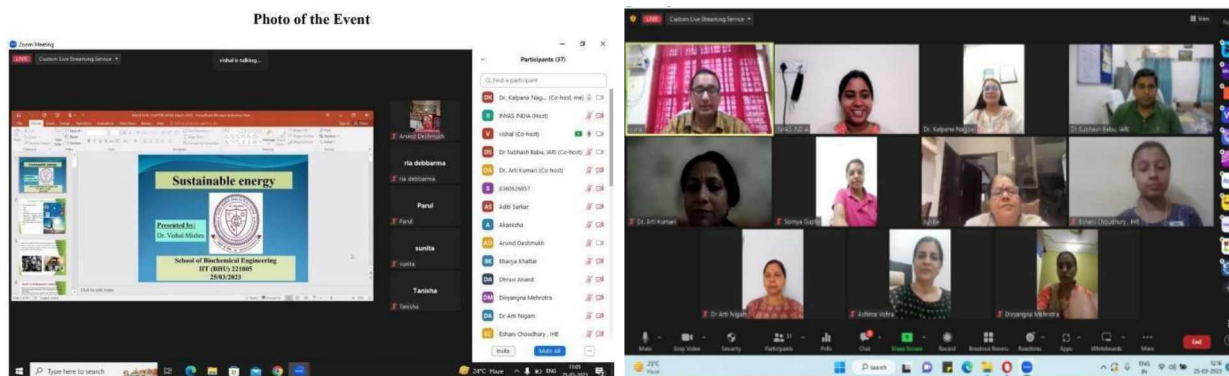
Lecture 3: Sources of Sustainable Energy

Date: 25 March 2023

Organizer: Kalpana Nagpal and Subhash Babu

No. of Participants: 60

The sustainability lecture series (bimonthly and online) is initiated by the INYAS -NCR Zone in collaboration with the Department of Microbiology, Institute of Home Economics, Delhi University, and MBSI (Microbiologist Society, India). The theme is “Role of Science in Sustainable Development: An Indian Perspective. The third talk in this series was delivered by Dr. Vishal Mishra, Assistant Professor, School of Biochemical Engineering, IIT (BHU) Varanasi, and member INYAS, INSA New Delhi. The talk was also broadcast by a YouTube channel. YOUTUBE LINK: <https://youtube.com/live/F5iPkadJAIY?feature=share>



Event: Sustainability lecture series (bimonthly & online)

Lecture 4: Role of Science in Sustainable Development: An Indian Perspective

Date: 8 April 2023

Organizer: Kalpana Nagpal and Subhash Babu

No. of Participants: 50

The sustainability lecture series (bimonthly and online) is initiated by the INYAS -NCR Zone in collaboration with the Department of Microbiology, Institute of Home Economics, Delhi University, and MBSI (Microbiologist Society, India). The theme of the series is the “Role of Science in Sustainable Development: An Indian Perspective.” The audience for the talk was the Postgraduate and Undergraduate students of related disciplines. In this series, the fourth talk was delivered by Dr. Sanjay Singh Rathore, Principal Scientist, Division of Agronomy, ICAR-IARI, New Delhi, who is also the National Coordinator of National Agricultural Higher Education Project (NAHEP), ICAR, New Delhi-110012. The title of his talk was ‘NAHEP- A Revolutionary Tool for Strengthening Agricultural Education in India. The talk was delivered on 8th April at 11 am onwards. The total number of participants was around 50. The talk was also broadcast on YouTube channel.

YOUTUBE LINK: <https://www.youtube.com/live/RmGyvfM7fZQ?feature=share>.

Event: Lecture Series on "Optical Sciences for a Better Society" at IIT Hyderabad

Organized by: Raavi Sai Santosh Kumar, Aravind Kumar Rengan

INyas Hyderabad Zone activity.

The IITH OPTICA student Zone, in collaboration with the Indian National Young Academy of Sciences (INyas), has organized the lecture series on "OpticalSciences4Society." The Lecture Series "Optical Sciences for a Better Society" is a fascinating investigation of how the profound principles of optical science can be used to create positive change and improve the well-being of our communities. This series digs at optical sciences' multiple applications in a variety of disciplines, including healthcare, sustainable energy, telecommunications, and environmental monitoring.

Event - Lecture series - Career avenues for agriculture sciences

Date: September 21, 2023

Organizers: Sharanjeet Dhawan

No. of Participants: 100

Under the umbrella of "Career avenues for agriculture sciences" coordinated by Dr Sharanjeet Dhawan at CCS Haryana Agricultural University COA, on September 21, 2023, Dr. Santanu Mukherjee (member INyas) delivered an expert talk. Dr Mukherjee from the School of Agriculture, Shoolini University of Solan, emphasised Agricultural- Career Prospects and Research Opportunities and Biochar for Contaminants Remediation. He explained how agro-based and other industries play a pivotal role in the nation's sustainable economic growth. He further explained that following the concept of "Aatmanirbhar Bharat" and "Make in India," the scenario of agriculture education has shown a paradigm shift in the last decades. He also focused on different career opportunities in the field of agriculture sciences, highlighting sectors like agricultural engineering, farm management, plant breeding, food processing industry, dairy farming, forestry, and different private and government agencies/societies. Along with this, he discussed the possible work opportunities abroad. In the second part of his talk, he highlighted Biochar: A sustainable solution for environmental pollution. He discussed that the Chir pine forests are native ecosystems in the North-Western Himalayan (NWH) region that produce more than 6 Mg ha⁻¹ of pine needles annually, which increasingly act as a catalyst for forest fire, releasing approximately 1.35 Tg C year⁻¹ into the atmosphere. The dry summer season from March to June usually coincides with the shedding of needles by Chir Pine trees. Therefore, regular removal of the needles from Chir forests will reduce the risk of wildfires, which may create an enormous amount of forest biomass that is wasted without any value addition. To convert the "waste" (fallen dry pine needles) into "wealth" (waste recycling), this ongoing project aims to develop affordable and effective biosorbents (biochar) for the removal of bioactive compounds from the pharmaceutical wastewater for the first time in the Indian perspective. An improved understanding of the transport and retention of emerging pharma compounds in the environment will provide a critical

knowledge base for producing safe drinking water. Around 100 participants were present in the lecture. His lecture was very fruitful for the students and young faculty members.



Event: Lecture series "Career avenues for agriculture sciences"

Date: November 18, 2023

Organizers: Sharanjeet Dhawan

No. of Participants: 50

Under the umbrella of the lecture series "Career avenues for agriculture sciences," an expert lecture was organized by CCS Haryana Agriculture University, College of Agriculture Bawal, Haryana, jointly with Indian National Young Academy of Sciences (INIAS). Two experts, Dr. Hardeep Singh, IAS (Rtd.), and Dr. SP Goyal, Plant pathologist, expressed their views on "Ethics and Morality--role in governance and private life." Along with this, students were trained in interpersonal skills, which will be beneficial for them in their professional lives.



**LECTURE SERIES JOINTLY ORGANISED
BY CCS HAU COA, BAWAL AND
INDIAN NATIONAL YOUNG ACADEMY OF
SCIENCES(INIAS)**

***Ethics and Morality-role in governance
and private life***

Speakers

**Dr Hardeep Singh IAS(Rtd.)
Dr S P Goyal, Plant Pathologist**

**18/11/23 | 10-00 AM
Lecture Hall 6**

**Convenor: Prof. Naresh Kaushik
Coordinator: Dr. Sharanjeet Dhawan**



Event 5: Embarking on the Research and Industry Odyssey: Explore, Experiment, Innovate, and Celebrate Discoveries

Date: October 13, 2023

Organizers: Jayaramulu Kolleboyina

No. of Participants: 60

This distinguished lecture series was meticulously crafted to inspire and empower master's and Ph.D. students, offering a comprehensive focus on a myriad of post-master's and Ph.D./Postdoc research opportunities both domestically and internationally. The event showcased renowned programs such as Humboldt, Marie Curie, JSPS, DAAD, Erasmus Mundus, Fulbright, and specialized women-centric fellowships in India and abroad. Dr. Shwetha Yadav, an esteemed member of INYAS and Fulbright alumna, delivered a captivating presentation, elucidating the intricate world of international research opportunities. She provided invaluable guidance on prestigious programs and scholarships available globally, emphasizing the significance of crafting compelling proposals and understanding specific application timelines. Her detailed exploration of esteemed fellowships like Fulbright and Humboldt Foundation enlightened ambitious students across master's, B.Tech, and Ph.D. levels, empowering them to navigate the intricate landscape of global research. Additionally, Professor Rakesh Singhai, Dean of Continuing Education and Outreach at IIT Jammu, shared profound insights on the transition from academia to industry. His enlightening talk focused on the practical facets of research, spotlighting the transformation of innovative concepts into tangible prototypes. He underscored the pivotal link between research findings and their real-world application in industries, illuminating research's crucial role as a parameter for industrial innovation. Professor Singhai's expertise underscored the vital collaboration

12. National Science Day Celebration

National Science Day at INSA

Date: 28 February 2023

Organizers: INYAS and INSA

INYAS and INSA jointly celebrated National Science Day on February 28, 2023. Padma Shri Dr. Anil K. Rajvanshi delivered the Keynote speaker during the event. INYAS also released its newsletter in four regional languages. Saransh: 2022 winners were felicitated during the event



National Science Day at Panjab University

Date: 01 March 2023

Organizers: Nishima Wangoo, Chandigarh Zones of INYAS, NASI and INSA

No. of participants: ~ 100

To celebrate National Science Day and to know the real story behind this day and the saga involved, SPSTI, in association with Chandigarh Zones of INYAS, NASI, and INSA organized a hybrid lecture by former Vice Chancellor of Panjab University and a renowned scientist Prof Arun Kumar Grover on "C V Raman and the 1930 Nobel prize in physics at the seminar hall of Central Instrumentation Laboratory at Panjab University Chandigarh. The lecture witnessed the participation of a huge number of students from Physics and other allied subjects.



सीवी रमन को किया याद

कुरुक्षेत्र। सोसाइटी फॉर प्रमोशन ऑफ साइंस एंड टेक्नोलॉजी इन इंडिया (एसपीएसटीआई) ने एक विशेष व्याख्यान का आयोजन किया। यह व्याख्यान राष्ट्रीय विज्ञान दिवस पर आयोजित किया गया था। व्याख्यान में पूर्व कुलपति पंजाब विश्वविद्यालय और एसपीएसटीआई के उपाध्यक्ष प्रोफेसर अरुण के गोवर की ओर से विचार रखे गए। उन्होंने सर सीवी रमन को नोबेल पुरस्कार के बारे में कई दिलचस्प एवं महत्वपूर्ण तथ्य रखे। कहा कि सर सीवी रमन न केवल प्रतिभाशाली भौतिक विज्ञानी थे, बल्कि उन्हें अपने काम की गुणवत्ता पर अधिक भरोसा था। उन्होंने बताया कि सीवी रमन की याद में ही आज राष्ट्रीय विज्ञान दिवस मनाया जाता है। इस मौके पर प्रो. राजीव पुरी और डा. विशाल शर्मा सहित बड़ी संख्या में छात्र-छात्राएं मौजूद रहे। सफल

13. Conferences/Seminars/Webinars

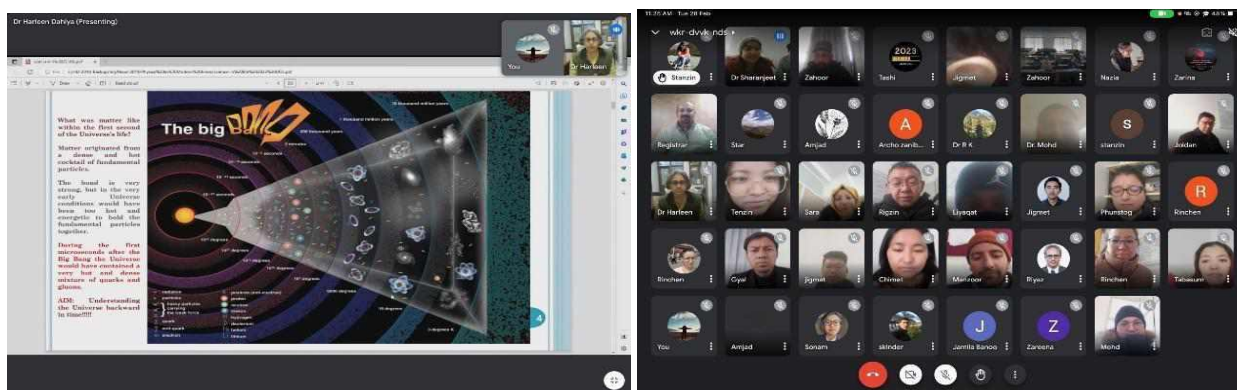
Event: Science in Everyday Life (Webinar)

Date: 28 February 2023

Organizer: Sharanjeet Dhawan

No. of participants: ~ 50

Under the guidance and support of H'ble Vice Chancellor Prof. S. K. Mehta, UOL Mathematics Club, Department of Mathematics, University of Ladakh, Leh Campus, in collaboration with INYAS (Indian National Young Academy of Sciences), celebrated National Science Day 2023 on February 28, 2023, by organizing a One-day webinar on "Science in Everyday Life." Dr. Harleen Dahiya, Associate Professor, NIT Jalandhar, India, was the key speaker. The webinar was inaugurated at 11:00 a.m. by Hon'ble Registrar Prof. Ashok Kumar Sharma, University of Ladakh. He addressed the participants, focusing on the importance of science in everyday life, in which he emphasized that one should be innovative and must have a multidisciplinary approach. Dr. Dahiya delivered her lecture entitled "Science in everyday life" in which she focused on how science surrounds us and plays an important role in our daily life. At the end of the talk, all the participants enthusiastically discussed their queries with Prof. Dahiya. The session was concluded at 12:15 p.m. by presenting a formal vote of Thanks by Mr. Tundup Namgyal, Assistant Professor, Department of Mathematics, UOL.



Event: National Symposium 'Gurukul in Emerging Areas in Modern Biology and Medicine'

Date: 02-03 March 2023

Organizer: Pankaj Barah

No. of participants: ~ 120

A national-level mentoring symposium 'Gurukul in emerging areas in modern biology and medicine' was jointly organized by INYAS, in collaboration with the Department of Molecular Biology and Biotechnology, Tezpur University. More than 120 students and research scholars from different institutes participated in the event along with 28 scientific posters. They were mentored by twenty resource persons from different reputed organizations in India. With scientific poster sessions, group mentoring sessions, and evening cultural programs performed by the students, it was a vibrant atmosphere.



Event: National conference on Advanced Nanomaterials and Applications 2023

Date: 20-22 March 2023

Organizer: Rohit R Shahi

No. of Participants: 110

Department of Physics, CUSB Gaya organizing a three days National conference on Advanced Nanomaterials and Applications 2023. The Inaugural function of this conference held on 20 March 2023 at Vivekannad Lecture Complex of CUSB Gaya. The conference was proposed by Dr. Rohit R shhai and his team of Department of physics. The chief guest of the inaugural function was Pror. Avinash Chand Pandey Director Inter University Accelerator Center (IUAC –New Delhi). Chief Guest of the inaugural function Prof. Pandey congratulated the organizer for organizing such an event. He said that the research of the past 30 years is nominated over the research of the past 300 years in the area of nanomaterials. The program was presided over by the Honorable Vice Chancellor Prof. Kameshwar Nath Singh. Dr. Rohit Shahi, convener of the conference talks about the aim and objectives of the conference, he told the conference's main aim was to motivate the students and develop the scientific temperament of the research in this region of the county. He also added more than 23 renowned speakers from different IITs, CSIR labs, central universities, research institutes, and CSIR Laboratories to deliver lectures. This conference also had 23 oral and 57 poster presentations occurred. Dr. Shahi also described how the properties of materials change with reducing their size to the nanometre range and talked about the relevance of this conference. Also, one of the mandates of the conference is to create networking among the IN-YAS members. Out of 23 keynote and invited speakers, six IN-YAS members delivered their talk and finalize several future collaborative research.



Event: Science 20 Thematic Conference on “Connecting Science to Society & Culture”

Date: 16-17 June 2023

Participants: Kirtimann and Kiran Bala

It was an excellent event where representatives from different countries kept their views on how science connect with society. Role of AI and new technologies in progression of society was discussed and appreciated. However, most delegates agreed that we should set up the accountability and regulations before launching a new technology. This event successfully hosted a platform for international collaboration, cooperation, and knowledge sharing to address global challenges, enhance collective capacity, harmonize policies, and share best practices for the responsible development and deployment of disruptive science and technology in pursuit of SDGs.



14. G20 Dedicated Events

The Model G20 initiative, IIT Hyderabad in collaboration with INYAS

Under the aegis of the Ministry of Education (Government of India), IIT Hyderabad in collaboration with INYAS conducted a National Level Youth Challenge called Model G20 initiative. The challenge was divided into three stages - Zonal, Inter Zonal, and National - and took place across six zones in India.

The focus themes of Model G20 Initiative, were:

1. Environment and Climate Change
2. Health and Pandemics
3. Trade and Investment
4. Digital Economy and Artificial Intelligence
5. Inclusive Development
6. Innovation and Technological Transformation

Over 60,000 colleges nationwide were invited to participate, resulting in the submission of 4000+ entries in the form of essays, constituting the first stage of the competition. A panel of 52 reviewers from the Indian National Young Academy of Science (INYAS) evaluated these essays, shortlisting 121 for the next round across six zones. Zonal finals, conducted at six IITs, involved a debate competition to select 32 finalists. On October 13, 2023, winners from each theme were honored at IITH.

Winning ideas shared by students include:

1. Divyansh Joshi, Vellore Institute of Technology, Bhopal, Madhya Pradesh - Women Empowerment: Advocating for women's central role in development, emphasizing the need to change societal perceptions of their strength. Joshi proposed a 3-step model for women's empowerment and developed the Poshion-Tracker app.
2. Sourav Jyoti Baishya, College of Agriculture, Agricultural University, Assam - Life (Lifestyle for Environment): Proposing a sustainable lifestyle to safeguard the environment and promote a healthier planet by integrating wise life choices with government policies.
3. Sumirini Puppala IMS & SUM Hospital, Siksha'O' Anusandhan University, Odisha - Progress on Sustainable Development Goals: Outlining a roadmap to achieve Sustainable Development Goals through awareness, community inclusivity, all-strata integration, and responsible resource utilization.
4. Sushree Sangeeta Behera, Samanta Chandrasekhar College, Puri, Odisha - Climate Change and Its Impact: Highlighting the urgent need to address climate change, emphasizing its profound impact on the planet and humanity's responsibility to act.

5. Hitaishi Chakravarty, KD Dental College and Hospital, Mathura, Uttar Pradesh - Transforming Aspirations into Actions for a Better and More Sustainable World.

6. Anaya Degloorkar, ICFAI Business School, Hyderabad, Telangana - Revitalizing Global Governance: Proposing a blueprint for a more effective, inclusive, and sustainable future in international governance.

7. Malvika Jayakumar, IIT, Bombay, Maharashtra - Circular Economy and Lifestyle for Environment: Drawing examples from ancient heritage, Jayakumar highlighted circular economy practices within Buddhist Sanghas and the Japanese art of Kintsugi. She emphasized the benefits of circularity for the environment and industries, promoting a continuous loop of value creation and sustainable supply chains through improvements in global waste trade, increased indigenous representation in decision-making, urban forestry, and skill training.






Congratulations

Model G20 Winners

 Divyansh Joshi Vellore institute of Technology, Bhopal, Madhya Pradesh	 Malvika Jayakumar Indian Institute of Technology, Bombay, Maharashtra	 Saurav Jyoti Baishya College Of Agriculture , Agricultural University, Assam	 Hitaishi Chakravarty KD Dental College and Hospital, Mathura, Uttar Pradesh
 Anaya Degloorkar ICFAI Business School, Hyderabad, Telangana	 Sumirini Puppala, IMS & SUM Hospital, Siksha 'O' Anusandhan University, Odisha	 Sushree Sangeeta Behera Samanta Chandrasekhar College, Puri, Odisha	





Event Name: North Zone Stage 2 of Model G20 Initiative

Date: 01 July 2023

Venue: IIT, Delhi

The INyas, in collaboration with IIT Hyderabad and the Ministry of Education, Government of India, organized the magnanimously successful event of Model G20 Initiative. The crystal-clear motto of INyas is to provide a platform to the students from the early stages, which was the ultimate motto of the Model G20 initiative, which is to absorb the skills of – Critical Thinking, Communication, and Civic Engagement. The event spanned months to conduct 3 stages of the competition for graduate and postgraduate students. Stage 1 included an essay writing competition, followed by stage 2, a debate competition at the zonal level, and stage 3, an elocution competition at the national level. All these activities play a crucial role in the development of budding students and their contributions to nation-building. The aim behind conducting these activities is not just academic exercises, but they provide students with a range of skills and knowledge that are essential for their personal and societal growth. The seven core themes were. (1) Progress on sustainable development goals; (2) Climate change and its impact; (3) Reforms for multilateral institutions; (4) Circular Economy & Lifestyle for Environment; (5) Digitalization of Agriculture/Trade/Skilling; (6) Women at the core of the development and (7) LiFE – Lifestyle of Environment. Stage 2 of the debate competition for North Zone was organized on July 01, 2023, at IIT Delhi. The event was coordinated by Prof. Rajendra Singh Dhaka and Dr. Veda Krishnan. Among the 21 participating students from Stage 1, they grabbed the opportunity to showcase their debating skills in Stage 2. Among them, 7 winners, each from one theme, were selected for the final round of the elocution

competition. The event was conducted successfully with inspiring feedback from the jury members and the organizing committee team.



Event: G20 Awareness Program on Environmental and Socio-Economical Issues of Ladakh Region

Date: 27 March 2023

Organizer: Sharanjeet Dhawan

No. of Participants: 100

University of Ladakh and INYAS jointly celebrated the G20 awareness program on environmental and socio-economic issues of the Ladakh region. Dr. Mohd Hussain was the convener of the program, and Dr. Sharanjeet Dhawan was the Co-convener. The Registrar of the University of Ladakh graced the occasion, and while addressing the gathering, he encouraged and emphasized the students to adopt innovative skills in their routine activities in order to protect and preserve the fragile environment of Ladakh. The program started with a Quiz competition in which eight teams participated from different schools of Leh City viz. Govt. Boys Higher Secondary School Leh, Govt. Girls Higher Secondary School Leh, Kendra Vidyalaya, and Jawahar Navodaya Vidyalaya. The 1st position was secured by the K.V. team, while the second and third positions were secured by J.N.V Leh and Govt. Girls Hr. Sec. School Leh respectively. This was followed by a speech competition, with each participant delivering a unique and thought-provoking speech on a topic of their choice within the given themes. Sonam Ladol of UOL, Bhuvu Pandita of K.V. Leh, and Liyaquat Ali of UOL secured 1st, 2nd, and 3rd positions, respectively, by impressing the judges with their confidence, delivery, and use of language. The last event was a photography exhibition cum competition where students of the University of Ladakh, namely Padma Angmo, Stanzin Yaoutan, and Mudasir Ahmed Mir, secured 1st, 2nd, and 3rd positions, respectively.



Event: Plenary Session on "Empowering Young Scientists in Governance" at Y20

Date: 14 - 15 April 2023

Organizer: INYAS

No. of Participants: 200

INyas was happy to conduct the plenary session on "Empowering Young Scientists in Governance" at the Y20 Consultation at KIIT, Bhubaneswar. The session was moderated by Sriparna Chatterjee and Kutub Joy (Kutubuddin Molla). Distinguished panellists were Dr. KC Bansal from NAAS, New Delhi, Dr. Chandra Neha Sharma from IIT Hyd, Dr. Rajendra Dhaka from IIT Del, Dr. Nishant Chakravorty from IIT Kgp, and Dr. Anindita Bhadra from IISER Kolkata. The session was attended by Mrs. Meeta Rajivlochan, Secretary, Youth Affairs, Govt. of India, and more than 200 participants from different parts of the country. The Panel discussed the status of Young Scientists in India, roadblocks to empowering, assessment criteria, initiatives of INyas for empowering young scientists, and Best practices to adopt.





Event: Youth20/G20 Pre Summit at Leh-Ladakh

Date: 26-28 April 2023

Organizer: INYAS

INyas organized a session on the theme: "Health, Wellbeing and Sports: Agenda for Youth "Youth20/G20 Pre Summit at Leh during April 26-28, 2023. Y20 delegates are from Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the U.K. and the U.S., as well as the European Union. India's special invitee guest countries are Bangladesh, Egypt, Mauritius, Netherlands, Nigeria, Oman, Singapore, Spain and UAE. G-20's invited international organisations are UN, IMF, World Bank, WHO, WTO, ILO, FSB, OECD, AU Chair, NEPAD Chair, ASEAN Chair, ADB, ISA and CDRI. Happy to represent India Dr. Rajendra Dhaka , Dr. Kalpana, Dr. Shalini, Dr. Dhiraj, Dr. Pankaj Barah and Dr Sharanjeet Dhawan on behalf of INYAS.



Event: SCIENCE20 THEMATIC CONFERENCE ON UNIVERSAL HOLISTIC HEALTH

Date: 1-2 May 2023

Organizer: Science 20 Engagement group and Indian National Science Academy (INSA)

Presenter: Rakesh Kumar Pilia

No. of Participants: 45

This was a Science20 Thematic Conference on “Universal Holistic Health” held in Lakshadweep from May 1-2, 2023. Experts on Health Sciences deliberated and explored various aspects of disruptive science and how it can interact with the healthcare ecosystem to better serve the society. Dr. Rakesh Kumar Pilia, PGIMER, Chandigarh attended the conference as Guest Invitee and represented the INYAS.



Event: Stage II: Debate competition of Model G 20 program organised jointly by IIT Hyderabad and INYAS under the aegis of Ministry of Education

Date: 30 June 2023; Organizer: Kiran Bala; No. of Participants: 20



This event is designed to provide the participants with a platform for thought-provoking discussions, persuasive arguments, and showcase their oratory skills. The event was organized in the central zone at IIT Indore. The event was coordinated by Dr. Kiran Bala, Associate Professor, Department of BSBE, IIT Indore. The debate competition was judged by Dr. Mahaveer Sharma, ICAR-IISR, Indore Dr. Kiran Bala, IIT Indore and Dr. Elangovan Manivannan, DAVV, Indore. 21 participants, were selected as per the essay competition held as part of Stage One on Zone 5 (Central) to participate in stage II.

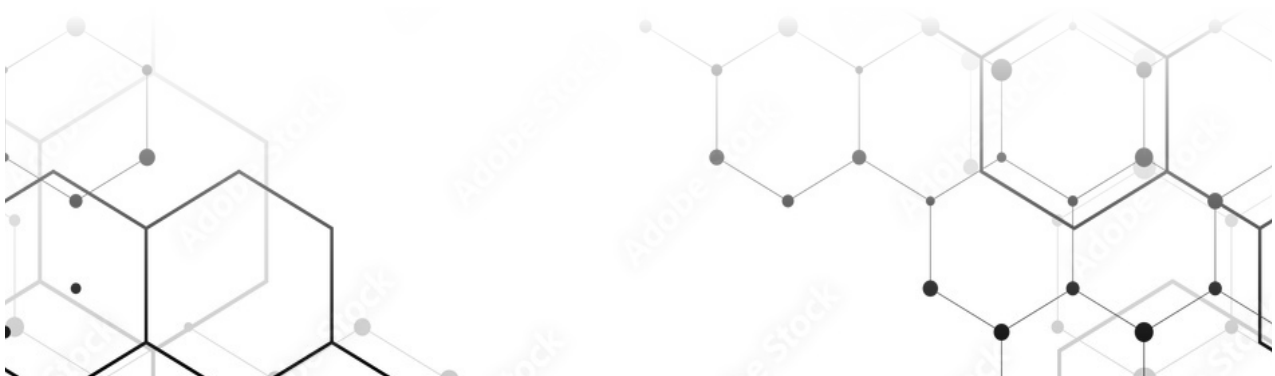
Event: Stage 2: Debate competition of Model G 20 program organised jointly by IIT Hyderabad and INYAS under the aegis of Ministry of Education

Date: 24 June 2023

Organizer: Sriparna Chatterjee

No. of Participants: 35

Stage 2: Debate competition of Model G 20 program organized jointly by IIT Hyderabad and INYAS under the aegis of the Ministry of Education was hosted at the School of Basic Sciences, IIT Bhubaneswar on June 24, 2023, with 21 shortlisted participants from Eastern zone. Thanks to the participants who came all the way from Jharkhand, Bihar, West Bengal, and Odisha to participate and make the event a grand success. A special thanks to jury members, Prof. Rajan Jha, Prof. Dinesh Topwal, and Dr. Sriparna Chatterjee. The program was graced by the presence of invited guests Prof. Shreepad Karmalkar, Director IIT BBS, Dr. Manju Unnikrishnan from CSIR-IMMT, and Prof. Shyamal Chatterjee from IIT BBS.



15. Workshops

Event: Ed-Vantage Career Workshop

Date: 01-02 April 2023

Organizer: Neha Sardana

No. of Participants: 130

The two-day career workshop by MetSoc was designed to help individuals identify their strengths, set career goals, and develop the skills and confidence needed to succeed in their chosen fields. The workshop featured speakers from diverse career fields, including the army, software engineering, industrialists, professors, and entrepreneurs. The workshop aimed to provide participants with insights and guidance on career planning and development, as well as opportunities to network with professionals from different fields. The day started with an inspiring keynote speech from a successful industry leader, Mr. Sachit Jain (Managing Director, Vardhman Special Steels), who shared his own career journey and offered valuable insights into the current job opportunities in the core engineering field. This was followed by a series of interactive sessions by influential personalities like Dr. Manish Kumar Hooda (Head Technology Development Division at Scl), Prof. BS Murty (Director, It Hyderabad), Dr. Dinesh Pal (Scientist G; And Technology Director, TBRL DRDO), and Dr. Vijayendra (CEO, Yourpedia Global). The interactive session of the second day started with IRS officer Mr. Kumar Gaurav Dhawan (Dupty Director, PGIMER Chandigarh), followed by Dr. Ashish Sahani (Ass. Prof. IIT Ropar), Dr. Balwinder Sodhi (Ass. Prof. IIT Ropar), Mr. Ashish Kaushik (SDE at Microsoft), and Col. Prabir Sengupta (Honored by VSM by the President of India). Each speaker shared their career journey, challenges they faced, and key lessons learned. The army speaker talked about the skills and values that the military teaches, such as leadership, teamwork, and discipline, which are transferable to any career field. The software engineer shared insights on the growing demand for tech skills and the importance of continuous learning and upskilling in the field. The entrepreneur speakers shared their experiences of starting and growing a business, the challenges they faced, and how they overcame them. Following the panel discussion, there was a Q&A session where participants had the opportunity to ask the speakers specific questions related to their career fields.

ED-Vantage
FOR UG, PG & PHD SCHOLARS

CAREER WORKSHOP
LOCATION: SENATE HALL IIT ROPAR
DATE: 1ST & 2ND APRIL
TIME: 10 AM - 5 PM
REGISTER
OPEN TILL FRIDAY

ED-Vantage is an interactive and informative event designed to help individuals gain insights and develop strategies for achieving their professional growth. Participants can expect to engage in activities, receive expert advice, and network with peers to enhance their career prospects.

SPEAKERS :

- MR. SACHIT JAIN**
MANAGING DIRECTOR
VARDHMAN SPECIAL STEELS
- PROF. B.S. MURTY**
DIRECTOR, IIT HYDERABAD
- DR. MANISH HOODA**
HEAD TECHNOLOGY
DEVELOPMENT DIVISION
AT SCL MOHALI
- COL. PRABIR SENGUPTA**
HONORED BY VSM,
TEDx SPEAKER
- DR. DINESH KUMAR PAL**
SCIENTIST G,
TECHNOLOGY DIRECTOR AT
TBRL DRDO
- MR. KUMAR GAURAV DHAWAN**
IRS, DEPUTY DIRECTOR
PGIMER
- DR. ASHISH SAHANI**
ASSISTANT PROFESSOR
CBME, IIT ROPAR
CO-FOUNDER OF EPILEPTO
- DR. BALWINDER SODHI**
ASSISTANT PROFESSOR
CSE, IIT ROPAR
- DR. VIJAYENDRA SINGH**
CEO, YOURPEDIA
- MR. ASHISH KAUSHIK**
SDE AT MICROSOFT
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Event: Workshop on Characterization of Coating Materials

Date: 08 May 2023

Organizer: Sudhanshu Shekhar Singh

No. of Participants: 40

The workshop was on mechanical characterization techniques for the development and quality control of coated materials was organized. The audience was given a brief introduction to the INYAS and its activities along with IIM Kanpur Zone and Material Advantage. Dr. Ankit Jain, Mr. Jitendra Singh, and Mr. Abhishek Singh (industry experts) were invited from Anton Paar for the workshop. They conducted presentations to introduce the researchers to the X-ray diffraction spectroscopy equipment and the related solutions to combat different challenges related to various sample conditions for XRD analysis. The session provided participants with the opportunity to interact with industry experts and gain practical experience. It featured practical training with a variety of cutting-edge surface characterization tools, including Calotest testers, nano-indentation, scratch testers, and tribometers. There was also an online training for handling extremely complicated tribometer and scratch testing equipment.



Event: National Workshop on Molecular Docking & Electroanalytical Techniques (MDET -2023)

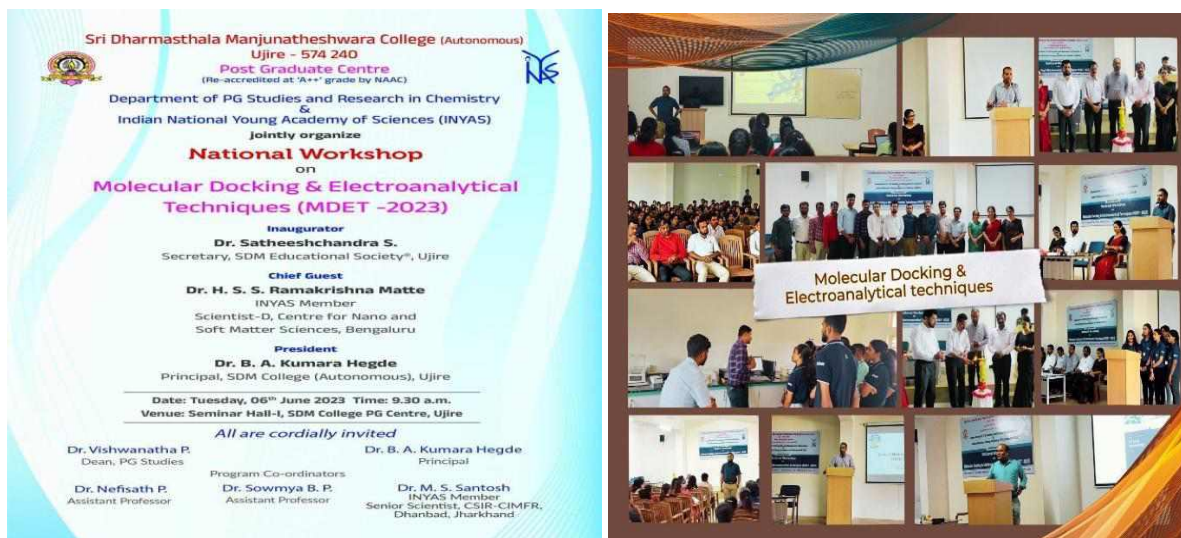
Date: 06 June 2023

Organizer: M. S. Santosh

No. of Participants: 187

Dr. Ramakrishna Matte, scientist from Bengaluru, emphasized the importance of societal accountability in finding constructive solutions. Speaking at the Workshop he stressed that scientists have a responsibility to communicate their work and apply scientific methodologies to solve immediate social problems. According to Dr. Matte, scientific research should extend beyond the confines of laboratories and encompass various aspects of daily life to provide meaningful solutions to societal crises. Dr. Satheeshchandra S., the Secretary of SDM Educational Society, inaugurated the program and highlighted the significance of molecular docking and electroanalytical techniques in addressing health, climate, and food production challenges. Dr. B A Kumara Hegde, the Principal of the college, emphasized the importance of curiosity and its role in scientific advancements. The workshop featured a keynote address

by Dr. Matte, two technical sessions, and hands-on training sessions conducted by Dr. Manjunatha J G and Dr. Ramith Ramu. The event concluded with a valedictory session addressed by Dr. Ramu, where opinions were shared by delegates from different institutions.



Event: National Workshop on “Waste Literacy and Management” (Online)

Date: 27 May 2023

Organizers: Shweta Yadav

No. of participants: 100

National Workshop on “Waste Literacy and Management” was organized by Central University of Jammu and INYAS in online mode. In Session I, renowned expert Dr. Arup Kr Mishra, Chairman, Assam PCB discussed the Best Practices for Sustainable Waste Management. In Session II, INYAS members Dr. Nikhil Dhawan from IIT Roorkee gave a wonderful lecture on electronic waste recycling. In Session III, INYAS member Dr. Ejaz Ahmad from IIT (ISM) Dhanbad talked about Understanding Low and High Temperature Technologies for Solid Waste Management and In Session IV, INYAS member Dr Vishal Mishra from IIT BHU discussed the application of Solid waste based Microbial Fuel cells in waste management. In this program, CUJ faculty members moderated the sessions and the experts suggested innovative waste management strategies. Convener Dr Shweta Yadav thanked all the speakers and participants.



Event: Demystifying Science Olympiad: An Interactive Session with Hands-on Experiments

Date: 03 June 2023

Organizer: Arnab Dutta

No. of Participants: 94

Science Olympiad has been an excellent platform over the past few decades for nurturing the natural knack of school students towards fundamental science. Despite the fact that India is one of the leading countries in this global event, the knowledge of this program has seldom penetrated the student community beyond the major cities. To address this issue, Prof. Arnab Dutta (INYAS member from IITB) developed this program titled "Demystifying Science Olympiad: An Interactive Session with Hands-on Experiments" along with Prof. Ankush Gupta from Homi Bhabha Center for Science Education. This interactive program was initiated with an overview of the Science Olympiad, including its brief history, eligibility criterion, sample questions, preparation, and success stories of a few participants. Next, the resource persons exhibited candle flame and redox chemistry experiments while discussing the underlying chemistry. In this interactive session, the students participated in the experiment and displayed their inquisitive minds with multiple interesting queries. Mr. Vishal, Mr. Chandan, Mr. Somnath, and Mr. Manodip aided in executing the experiments and discussed them with the participants at length. INYAS alumni Dr. Vivek Parkar also participated in this program and helped us immensely in organizing this program.



Demystifying Science Olympiad

An Interactive Session with Hands-on Experiments

Organized by

Indian National Young Academy Sciences (INYAS)
&
Homi Bhabha Center for Science Education (HBCSE)

Venue: Vidyaniketan Convent School, Kasal, Maharashtra
Date: June 3, 2023 (10-00 AM)


Event: A working group online meeting on Peer-Reviewed Preprints: Benefits and Limitations for Young Indian Researchers

Date: 9 June 2023

Organizers: Sriparna Chatterjee, Kutubuddin Molla

No. of Participants: 53

The scientific publishing industry is undergoing rapid transformations, with Open Access (OA) publishing gaining traction over the subscription model. The extremely high costs charged by many scientific journals are causing problems for academic institutions. Motivated by profit, these journals increase prices faster than the inflation rate. This drains library budgets, leaving very little money to improve the systems and services that support researchers. The exploration of technical solutions to modernize scientific publishing has gained prominence. Initiatives like peer-reviewed preprints are gaining momentum. In response to these evolving dynamics, INYAS, in partnership with the International Science Council (ISC) and the Department of Science and Technology's Centre for Policy Research (DST-CPR), conducted an online workshop titled "Peer-Reviewed Preprints: Benefits and Limitations for Young Indian Researchers" on 9 June 2023 between 14.00 HRS to 16.30 HRS. The workshop commenced with an introduction by Rajendra Dhaka, INYAS Chair and Professor, Indian Institute of Science, Delhi. Following this, Ludo Waltman, Professor and Deputy Director of Centre for Science and Technology Studies (CWTS), Leiden University, delivered a lecture on "Preprinting and Preprint Peer Review- An opportunity to reshape scholarly publishing." Next in line were eight parallel panel discussion sessions in breakout rooms, where participants who are INYAS members discussed the potential benefits of preprints and challenges in broader adoption. A moderator guided the discussions in each breakout room. In the final segment of the workshop Sridhar Gutam, Senior Scientist, ICAR-Indian Institute of Horticultural Research, Bangalore, gave a lecture on the current status of preprint usage in India.

The poster features logos for INYAS, International Science Council, and DST-CPR. The main text reads: "A Working Group Online Meeting PEER-REVIEWED PREPRINTS: BENEFITS AND LIMITATIONS FOR YOUNG INDIAN RESEARCHERS" on 9 June 2023 (Friday) from 14:00 HRS to 16:15 HRS. It includes a background paragraph about the scientific community's evolution and preprints. At the bottom, it lists coordinators: Dr. Sriparna Chatterjee (ICSR-MMIT, IHubChatterjee@INYAS member), Dr. Kutubuddin Molla (NRRI, Cuttack, INYAS member), and Dr. Moumita Koley (DST-CPR, ISC, Bangalore Consultant, ISC). It also mentions Prof. Ludo Waltman (CWTS, Leiden University) and Dr. Sridhar Gutam (Senior Scientist, ICAR-IHHR, Bengaluru).



Event: High-End Workshop on "Leveraging molecular laboratory skills on the development of molecular gadgets for diagnosis and prevention of livestock diseases"

Date: 15-28 June 2023

Organizer: Rajib Deb

No. of Participants: 25



The ICAR-National Research Centre on Pig in Guwahati, Assam, has scheduled a two-week High-End Workshop on "Leveraging molecular laboratory skills on the development of molecular gadgets for diagnosis and prevention of livestock diseases" from June 15th to June 28th, 2023. The Workshop was co-organized by the Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India, as part of the KARYASHALA Scheme, a SERB Initiative in conjunction with the Indian National Young Academy of Sciences. Dr Rajib Deb, Senior Scientist & INYAS Member acted as Event organizer for the event. The "KARYASHALA" is solely dedicated to boosting the research output of promising Post-Graduate and Ph.D. students from Universities and Colleges through high-end seminars on specialised topics. The Hands-on High-End Workshop Programme on Molecular Tools and Techniques aims to provide opportunities for selected 25 students (MVSc and Ph.D. Level) from various disciplines, primarily from Agricultural Universities including IVRI and NDRI and state veterinary colleges from different parts of India, to acquire specialised research skills and gain hands-on experience. The programme was aimed to provide participants with hands-on experience with modern molecular biology tools and methodologies for the development of diagnostics, including point-of-care technologies, for livestock diseases. Students also had the opportunity to practise utilising several bioinformatic tools used in the creation of diagnoses. They also learned about additional common laboratory procedures used in conjunction with basic molecular biology research tools. The trainees were subjected to pre- and post-evaluation examinations. The selection committee devised numerous criteria for awarding the best team and best trainee. Participation and achievement certificates were distributed during the valedictory session on June 28, 2023. All of the participants provided their feedback reports.





Event: Science in Action: A one-day workshop featuring experiment demonstrations

Date: October 10, 2023

Organizers: Kiran Bala

No. of Participants: 52

The event's primary objective was to provide school students with a distinctive opportunity to gain hands-on experience in a well-equipped science laboratory and engage in fundamental scientific experiments. Dr. Kiran Bala played a pivotal role in coordinating the event and motivated students about career in science by showing experimental facilities and hands on experience. A group of 52 students, currently enrolled in secondary and higher secondary education at Simrol Government School in Indore, embarked on an educational visit to IIT Indore, accompanied by their teachers. Dr. Bikash Kumar (NPDF, IIT Indore) conducted experimental demonstration on Microbial media preparation and sterilization, Gas Chromatography system, with support from Ph.D. students, who assisted the students throughout the experiment. The students also had the opportunity to explore the AETS lab, where Dr. Kiran Bala introduced them to instrumentation techniques commonly employed in Biological Sciences. Additionally, the participants were treated to an informative session on polyhouse culture facilities, where they gained insights into the large-scale cultivation of algae. This educational outing provided the students with a rich and engaging experience in the world of science and research.

IIT INDORE
In association with
Indian National Young Academy of Sciences
PRESENTS
**Science in Action : A One-Day Workshop Featuring
Experiment Demonstrations**

Purpose
Participants will have the opportunity to witness laboratory experiments and gain insights into best practices and precautions.

Speakers
Dr. Bikash Kumar
Dr. Kiran Bala

Date: 10 October 2023; Time: 10-03:00 P.M
Venue: BSBE, IIT Indore

Event: Awareness workshops on ‘Peaceful uses of atomic energy’

Date: October 6-7, 2023

Organizers: Mohit Tyagi


No. of Participants: 400

Two workshops on ‘Peaceful uses of atomic energy’ were conducted during 6-7 October 2023 at SSPM College of Engineering, Kankavli and Vidyaniketan Convent School, Kasal at Sindhudurg district of Maharashtra. The workshops were jointly organized by Indian Nuclear Society (INS), Indian National Young Academy of Sciences (INYAS), Mumbai Zone and Nuclear Power Corporation of India Limited (NPCIL). On the first day on 6th October at SSPM college of Engineering, Kankavli more than 200 students from 11th and 12th standard of various colleges in Sindhudurg district as well as some engineering students attended. The workshop started with the inaugural function in the presence of Dr. B. N. Jagatap, President INS and all the speakers of the workshop along with college Principal Dr. Mahesh Satam. In the chief guest address by Dr. Jagatap, he has mentioned about the need of nuclear energy and suggested to clear the doubts about it in the workshop. Second day of the workshop was organized on 7th October at Vidyaniketan Convent School, Kasal, Sindhudurg. At the venue, more than 200 school students from nearby schools gathered. The school children in the age group of 8-16 were very curious and asked many questions to all the speakers. The excitement was evident in the faces of students. The message of safe green nuclear energy was conveyed to the students in the two workshops and appealed them to convey it further to the surrounding people.

**AWARENESS WORKSHOP ON
PEACEFUL USES OF
ATOMIC ENERGY**

6th October 2023

Organized By
Indian Nuclear Society
in Association with
**Indian National Young Academy of
Sciences (Mumbai Chapter)**
&
**Nuclear Power Corporation of India
Limited**




PROGRAM SCHEDULE

Time	Event
10:00-10:30	Inauguration
10:30-10:45	संगणक प्रयोग प्रदर्शन Dr. Vivek Parkar, BARC
10:45-11:30	संगणक आणि सौर Mr. V. V. VAZE, BARC
11:45-12:30	संशोधन कार्य : शिक्का, सौर प्ले प्रदर्शन Mr. S. Malhotra, IISc-DAE
12:45-13:00	Opportunities in DAE Dr. Mohit Tyagi, BARC
14:30-15:30	Nuclear Power: An Inevitable Option for Clean and Green Electricity Generation. Mr. Uday Kashikar, NPCIL
15:30-17:30	Exhibition of Reactor Models by NPCIL Team

ORGANISERS
Dr. Vivek Parkar, Dr. Mohit Tyagi, Dr. Jayavant Gunjekar, Mr. S Bansal, Mr. O. P. Rai

LOCAL CONVENOR
Prof. Darshan Mhapsekar, SSPM, Kankavli, Sindhudurg
Contact: 7517206125

Hosted By:
Sindhudurg Shikshan Prasarak Mandal's College Of Engineering, Kankavli, Sindhudurg
<https://sspmcoe.ac.in/>

Registration Link
<https://forms.gle/et8ir81DyBw77SH58>

Indian Nuclear Society (INS) is registered professional body founded in the year 1988 which aims to promote the advancement of nuclear science and the technology together with other sciences & arts and to aid in the integration of the several disciplines constituting Nuclear Science, Engineering and Technology. For more details: <https://ins-india.org/>

Nuclear Power Corporation of India Limited (NPCIL) is a Public Sector Enterprise under the administrative control of the Department of Atomic Energy (DAE), Government of India founded in the year 1987. NPCIL is responsible for design, construction, commissioning and operation of nuclear power reactors. NPCIL is presently operating 23 commercial nuclear power reactors with an installed capacity of 7480 MW. NPCIL has 9 more reactors under construction with a total capacity of 7500 MW. For more details: <https://npcil.nic.in>

Day 1 : 6th October : SSPM College of Engineering, Kankavli



Media coverage



कणकवली एसएसपीएम अभियांत्रिकी महाविद्यालयात भाभा अणुसंशोधन केंद्राच्या शास्त्रज्ञांनी केले मार्गदर्शन

अणुऊर्जेचा वापर कार्यशाळा आणि अनुभूती प्रदर्शन

कणकवली (प्रतिनिधी):

अणुऊर्जेचा वापर जनजागृती कार्यशाळेचे उद्देश्य अणुऊर्जेचा वापर जनजागृती करणे हे होते. या कार्यशाळेचे उद्देश्य अणुऊर्जेचा वापर जनजागृती करणे हे होते.



कणकवली एसएसपीएम अभियांत्रिकी महाविद्यालयात अणुऊर्जेचा वापर कार्यशाळा आणि अनुभूती प्रदर्शन संपन्न झाले.

अणुऊर्जेचा वापर जनजागृती कार्यशाळेचे उद्देश्य अणुऊर्जेचा वापर जनजागृती करणे हे होते. या कार्यशाळेचे उद्देश्य अणुऊर्जेचा वापर जनजागृती करणे हे होते.

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Day 2 : 7th October : Vidyaniketan Convent School, Kasal



Event: Workshop on "Awareness on Intellectual Property Rights among young researchers"

Date: November 28, 2023

Co-ordinator: Rajib Deb

No. of Participants: 55

Workshop on 'Awareness on Intellectual Property Rights among young researchers' was organized for sensitizing young researchers and students on intellectual property rights. During the workshop participants were given opportunity for attending lectures on IPRs by the Patent experts followed by brainstorming discussion with the faculties.



Event Name: Mera Yuva Bharat - Ek Samvad

Date: 28 October 2023

Venue: IIT, Delhi

INYAS and IIT, New Delhi in collaboration with Ministry of Youth Affairs & Sports, Government of India, TiE Delhi NCR and CKIC - Delhi Research Implementation & Innovation organized a brainstorming session on 'Mera Yuva Bharat - Ek Samvad' a platform for Youth by Government of India on 28 October 2023 at Indian Institute of Technology Delhi. The event aimed to provide a common platform to young entrepreneurs, scientists and professors to discuss and deliberate upon the existing problems and potential solutions for the gap in education and skill-based employment in India. The Yuva Bharat platform aims to provide a single viable platform for experiential learning and job portfolios suitable for students in

schools and colleges. The initiative aims for the development of skills in youth for diverse and exotic job opportunities. The session was inaugurated by Prof. Rajendra Singh Dhaka, Chair INyas and Associate Professor at IIT Delhi. Prof. Dhaka welcomed the audience and presented a brief presentation on the mission, vision and possible challenges to be addressed by the My Yuva Bharat platform. Additionally, he presented the ideology of INyas that is already



working as a stakeholder in the field of science communication and outreach to young science enthusiasts. Followed by the first talk was delivered by Dr. Srikant Sastri, TiE Delhi Zone who emphasized on connecting rural India to Yuva Bharat Entrepreneurship by minimising the language barrier and providing opportunity for AI related jobs. The second talk was presented by Prof. Vivek Kumar, Coordinator Unnat Bharat Abhiyan and Professor at IIT Delhi presented the solution of developing an incubation unit for grassroots innovators and field experimentalists. The Government can support rural indigenous startups by connecting higher educational institutes to society. The third talk of the session was presented by Prof. Chandra Shekhar Sharma, Dean R&D at IIT Hyderabad who emphasized on several areas of concern such as promotion of vernacular language in Government digital platforms, skill development and entrepreneurship programs from primary level at school, role of social media and digital platform to reach maximum audience. Continuing the course of dialogue, Dr. Sarita Ahlawat, Founder Botlab Dynamics presented the dire need of tracking the right skill set in the young generation for work allocation and distribution in startups. She also focused on the need of building hardware ecosystem in India and addressing the fiscal problems faced by young business tycoons. The fifth and final expert talk was delivered by Dr. Veda Krishnan, Scientist at ICAR-IARI who focused on the establishment and promotion of agri-based startups such as food renovation, food security, etc. Along with regular mentoring of the working professionals by introducing certification-based programs. After the insightful thoughts from experts, the dice was open for discussion and ideation on the Mera Yuva Bharat platform by the participants. The participants presented the following sustainable solutions.

1. To create awareness surveys and collect data is a must. Therefore, the government should undertake surveys on mass scale to find facts and numbers and analyse the data to find the best suitable module based on numbers.
2. Sustainable technology needs to be more accessible.
3. Young entrepreneurs need to be trained for creating their own revenue generating model.



4. To break the vertical hierarchy of knowledge sharing the T1 city students can be recruited as campus ambassadors from schools and colleges. They can then be trained to provide assistance and reach out to Tier 2 and Tier 3 city students. In this way the educational and knowledge disparity could be tackled.

5. State level youth empowerment should be focused and then the program can be nationalized.

6. Phygital approach needs to be undertaken to minimize the digital divide.

As a concluding remark Shri Raghvendra Singh, DIC My Yuva Bharat mentioned and acknowledged the topics discussed and solutions provided from this round table conference. He informed about the future vision of the My Bharat Platform to proliferate its reach to college and higher institutions as well. He presented his questions and further points of discussions to be undertaken by the participants for further discussion and finding the solutions. The entire session was thus concluded by Prof. Rajendra Singh Dhaka by congratulating the participating members for a healthy and impactful discussion.

16. CELEBRATION OF IMPORTANT DAYS

Event Name: INTERNATIONAL WOMEN'S DAY 2023

TO CELEBRATE INTERNATIONAL WOMEN'S DAY 2023 (IWD' 2023), INYAS NCR Zone in collaboration with Amity Institute of Pharmacy (AIP), Amity University Uttar Pradesh (AUUP), Noida Campus celebrated International Women's Day by organizing 'Panel Discussion' on "Sharing the life journey of women scientists of India in healthcare industry" at AUUP, Noida Campus, 09 March, 2023. The event's objective was to salute the contribution and celebrate the feminism within, eminent group of panellist were invited to share life journey of women scientists of India in healthcare industry the event was followed up with a question answer round to which panel answered effortlessly and kept their strong feet forward in emphasizing women as great leaders, fair policies, prioritizing tasks and empowerment of women Sanitary Pads were also distributed on the occasion of International Women Day to highlight the importance of menstrual hygiene among students, teachers, villagers and staff members at rural place at and near Composite School Milak Rawli, Rawli Road, Muradnagar.

Indian National Young Academy of Science
celebrates
INTERNATIONAL WOMEN'S DAY
Sharing the life journey of women scientists
of India in healthcare industry

Date: 9 March 2023 Session chair Time: 12:00-2:00 PM

Dr. Nutan Kaushik
Director General, Food & Agriculture Foundation, Amity University

Dr. Rohini Garg
Associate Professor, SNU
INyAS Alumni

Dr. Veda Krishnan
Scientist, ICAR-IARI
Secretary, INYAS

Ms. Kavita Vaswani
CEO
Qualtile Pharma

Dr. Subhash Babu
Senior Scientist, ICAR- IARI
INyAS Member

Dr. Kalpana Nagpal
Associate Prof, Amity University
NCR Chapter Coordinator, INYAS

Dr. Kriti Soni
Head R&D
Kapiva Ayurveda

Organizing Committee
Dr. Kalpana Nagpal, Associate Professor, Amity University (INyAS NCR Chapter Coordinator)
Dr. Veda Krishnan, Scientist, ICAR-IARI (INyAS Secretary)
Dr. Archana Sharma, Associate Professor, AIP, AUUP Noida
Dr. Tanveer Naved, Professor & Centre Head Pharmacognosy & Natural Products, AIP, AUUP Noida

Dr. Nutan Kaushik, Director General, Food & Agriculture Foundation, Amity University, Noida Campus (Session chair), Dr. Rohini Garg, Associate Professor, Department of Life Sciences, School of Natural Sciences (SNS), Shiv Nadar University, Greater Noida Uttar Pradesh, India and INYAS Alumnus, Dr. Veda Krishnan, Scientist, Division of Biochemistry, ICAR-Indian Agricultural Research Institute and Secretary INYAS, Ms. Kavita Vaswani, CEO, Qualtile Pharma, Dr. Kriti Soni, Head R&D, Kapiva Ayurveda, formerly served as head formulation Development, Dabur Research Foundation, Sahibabad Dr. Subhash Babu, Senior Scientist, Division of Agronomy, ICAR- Indian Agricultural Research Institute, New Delhi-110 012 (India) NCR Zone Co-coordinator INYAS and Dr. Kalpana Nagpal, Associate Professor, Amity Institute of Pharmacy, Amity University and NCR Zone Co-ordinator INYAS were the Panellists.



Event: International Women's Day

Date: 02 March 2023

Organiser: Neha Sardana

No. of Participants: ~130

INYAS in association with IIT, Ropar celebrated International Women Day 2023 today with plethora of activities and lectures by eminent speakers. Roughly 130 students and faculty attended the event. The guest of honor, Dr. SARMISHTHA BHATTACHARYA talked about the Cyclotron to probe nuclei and its applications. Dr. Lipika Gautam, discussed the Antibiotic Resistance: The road to post-antibiotic era. Doctor Subina Narang shared about Retinopathy of prematurity followed by Poster making, slogan writing and Rangoli making competitions for all students. Ms. Anita Budhiraja, of NIELIT discussed on the topic, Women Empowerment by skill development followed by a talk of Ms. Arvinder Kaur, on Women Nutrition and Health. The day was concluded by giving prizes to the winners from events carried by INYAS on 10th Feb and 2nd March 2023.



Event: International Day for women and girls in science

Date: 10 February 2023

Organiser: Neha Sardana

No. of Participants: ~165

INYAS in association with IIT Ropar has observed International Day for Women and Girls in Science with 160 participants from nearby government schools on 10th February 2023. The event witnessed invited talks from diligent women scientists, Prof. Keya Dharamvir and Dr. Sunita Mishra followed by literary, slogan writing and painting competitions for students.



Event: International Day for Women and Girls in Science

Date: 11 February 2023

Organizer: Pankaj Barah

No. of participants: ~ 130

INYAS has organized an event to celebrate the International Day of Women and Girls in Science by collaborating with Tezpur University. Approximately 130 female students (UG Science) from four rural colleges in the Sonitpur District of Assam participated in the event. They were given orientation and mentoring for pursuing higher studies in science. The students were also taken around Tezpur University's campus to see different modern scientific facilities.



Event: International Women's Day

Date: 17 March 2023

Organizer: Kiran Bala

No. of participants: ~ 70

International Women's Day is celebrated at IIT Indore, which was jointly conducted by the Women Cell at IIT Indore and INYAS. On March 9th and March 16th, various competitions, such as poster making and essay writing, were organized for IIT Indore and Simrol Govt. School students. On March 17th, the women's cell convener gave a brief overview of different activities conducted with a warm welcome to all the audience members gathered. The institute's director, Prof. Suhas Joshi, and Dean of administration, Prof. Sandeep Chaudhary, motivated and addressed the students and other audience members present in the hall. Following the Institute dignitaries' speeches, there were speakers from academia, industry, the UN Women, women, and child departments to motivate and raise awareness on different topics. A talk by Mr. Gaurav Sharma from Adventure Training Academy titled "Youth and Courage" thrilled the audience with his adventurous experience of climbing Mount Everest. Dr. Nishima Wangoo, Assistant Professor at Punjab University, delivered a talk titled "Women in Science: The Way Forward" and enriched the audience's knowledge about Indian women scientists and their remarkable contribution towards the development of science and technology. Dr. Savita from UN Women ICO, Madhya Pradesh, spoke on women's empowerment through her talk titled "Gender equality and government programs and schemes for women". Also, for the outreach activities, the Women's Cell of IIT Indore, in association with the INYAS, conducted a poster-making competition in Simrol for school students. These competitions are kind of brainstorming sessions that give us pictures of their understanding of women, their struggles and achievements, etc. The prizes were distributed to the winners of the competitions.



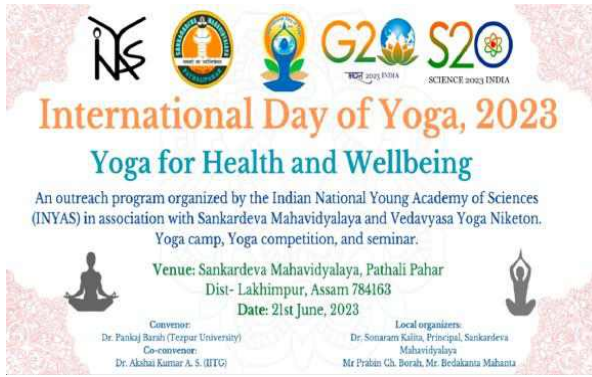
International Day of Yoga

Date: 21 June 2023

Organizer: Pankaj Barah

No. of Participants: ~250

INYAS organized an event to celebrate the International Day of Yoga in association with Sankardeva Mahavidyalaya and Vedavyasa Yoga Niketon, Lakhimpur district of Assam. The event witnessed participation from over 250 students, teachers from various schools and colleges, as well as villagers. The event featured scientific seminars, yoga demonstrations, and yogasana competitions among school children. Dr. Pankaj Barah from Tezpur University, and Dr. Akshai K. A. S. from IITG, coordinated the event.



International Day of Yoga, 2023
Yoga for Health and Wellbeing

An outreach program organized by the Indian National Young Academy of Sciences (INYAS) in association with Sankardeva Mahavidyalaya and Vedavyasa Yoga Niketon. Yoga camp, Yoga competition, and seminar.

Venue: Sankardeva Mahavidyalaya, Pathali Pahar
Dist- Lakhimpur, Assam 784163
Date: 21st June, 2023

Convener: Dr. Pankaj Barah (Tezpur University)
Co-convener: Dr. Abhisai Kumar A. S. (ITG)

Local organizers: Dr. Sonaram Kalita, Principal, Sankardeva Mahavidyalaya
Mr Prabir Ch. Borah, Mr. Brikakanta Mahanta



17. Awards, Recognitions, and Achievements by INYAS members

Ankur Gupta: "JMM Emerging Leader 2023" by Journal of Micromechanics and Microengineering.



Ankur Gupta: Selected for a "Scientific High-Level Visiting Fellowship (SSHN)" to visit University in France 2023 by the French embassy of India, July 2023

Aravind Kumar Rengan: G D Naidu Young Scientist Award 2023.

The award is conferred by "People's Thinking Forum," of Tamil Nadu to recognize scientists under the age of 40 doing outstanding research work, as evidenced in publications. The award carries a shield and a cash prize of INR 1 Lakh. The award has been given to him for the development of novel nanotechnology-based cancer therapy.



Dibyendu Chatterjee: Associate of the National Academy of Agricultural Sciences (NAAS), NASC Complex, New Delhi 110012, India



Subhash Babu: Associateship of the National Academy of Agricultural Sciences (NAAS), NASC Complex, New Delhi 110012

Subhash Babu: Associateship of the Indian Society of Agronomy, IARI, New Delhi 110012



Santosh Kumar Gupta: CRS Silver medal for outstanding contribution in chemical science and research for societal benefits

Santosh Kumar Gupta: Elected as a Fellow of Maharashtra Academy of Sciences

Santosh Kumar Gupta: Elected as a life Fellow of the Indian Chemical Society

Santosh Kumar Gupta: Admitted as a Fellow of Royal Society of Chemistry



Dr. Veerendra K. Sharma: Indian Physics Association (IPA) Buti Foundation Award for Excellence in Theoretical Physics, Astrophysics and Biophysics.

Dr. Veerendra K. Sharma, BARC has been awarded IPA Buti Foundation Award in recognition of his outstanding contributions in membrane physics and soft matter on February 15, 2023. Indian Physics Association gives this award biennially to a scientist below the age of 40 years, who has made outstanding contributions in the area of Theoretical Physics, Astrophysics or Biophysics.



Dr. Veerendra K. Sharma (BARC, Mumbai), Dr. Mohit Tyagi (BARC, Mumbai) and Dr. Neetu Jha (ICT, Mumbai): SMC Bronze Medal 2023

Dr. Veerendra K. Sharma, **Dr. Mohit Tyagi** from BARC and **Dr. Neetu Jha** from ICT have been selected for Society for Materials Chemistry (SMC) Bronze medal 2023.



Rishemjit Kaur: IEI Young Engineers

Rakesh Kumar Pilania: Selected for prestigious the National Academy of Sciences (NASI), India Membership 2023

Pooja Devi: CSIR Raman Research Fellowship

Dr Pooja Devi received CSIR Raman Research Fellowship for the year 2023 to visit Drexel University, USA to work with



Prof. Yury Gogotsi on MXene in Hydrogen Generation.

Pooja Devi: Nano Alumni Award, IIT Roorkee (2023)

Dr Pooja Devi received the Nano Alumni Award from Center of Nanotechnology from IIT Roorkee for her academic and research achievements.



Kirtimaan Syal: NASI Young Scientist Platinum Jubilee Award 2023

Sonu Gandhi: Travel Award by Department of Science & Technology (DST)-IGSTC, New Delhi to avail Connect Fellowship.

Sonu Gandhi: Connect Fellowship by Alexander von Humboldt Foundation for Indo-German collaboration at Fraunhofer Institute for Silicate Research, Wurzburg, Germany



Vinayak Kamble: 2023 Rising Star in Materials Science

Awarded to early-career investigators who are pushing scientific boundaries by conducting research at the forefront of materials science and interfacing disciplines



Vivek Dogra: RD Asana Gold medal Award 2023

Awarded by Indian Society of Plant Physiology (ISPP) for outstanding contributions in Plant Physiology

Vivek Dogra: Young Scientist Award 2023

Awarded Indian Society of Plant Physiology (ISPP) at 5th International Plant Physiology Congress at NABI, Mohali



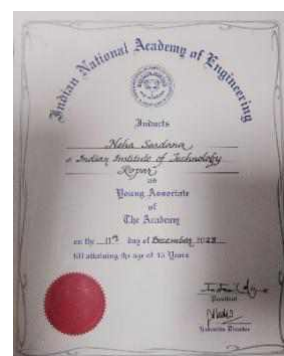
Neha Sardana: Assistant Professor, Metallurgical and Materials Engineering, Indian Institute of Technology Ropar

Dr. M. S. Santosh was elected as a Fellow of the Royal Society of Chemistry (FRSC) in February 2023

Dr. M. S. Santosh was selected for the Membership of NASI in October 2023.

ACS has invited Dr. M. S. Santosh to deliver a talk as part of their flagship program ACS Science Talks on 17th January 2024.

Dr Sai Santosh Kumar Raavi, Selected as a Member of NASI in 2023





INYAS members have received INSA Associate Fellowship 2023 in the recently concluded INSA 89th AGM at Hyderabad.

Drs. S Babu, R S Dey, M Khandelwal, R K Piliaia, M S Sharma, T K Sharma, P K Singh, V Vishal, and M Muthamilarasan were awarded as INSA Associate Fellowship at the INSA 89th AGM at Hyderabad.

Dr. Sriparna Chatterjee, Dr. Jiban Jyoti Panda, and Dr. Rohini Garg were selected STI Capacity Building Programme for Female Researchers and Entrepreneurs to promote the Bio-Circular-Green Economic Model in Bangkok organized by the United Nations Conference on Trade and Development (UNCTAD) and Thailand Science, Research and Innovation (TSRI). From Monday 7 to Saturday 12 August 2023, seventeen women researchers from nine countries took part in a week of intensive training. This training provided the participating female researchers and entrepreneurs with an understanding of the BCG Model allowing them to adapt and multiply its concept in their respective countries, using the skills they received in Thailand to train others and to contribute in raising awareness back home on the interface between gender equality, science and technology, and sustainable development. This workshop marks the start of a global community and network of BCG model collaboration and best practice sharing between the participating female researchers, enterprises in their countries that adopt the model, policy-makers, and local Thai BCG enterprises.



**Indian National Young Academy of Sciences
(INYAS)**

**Indian National Science Academy,
2, Bahadur Shah Zafar Marg,
New Delhi-110 002, India**



Indian National Young Academy of Sciences
भारतीय राष्ट्रीय युवा विज्ञान अकादमी



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