

INDIAN NATIONAL SCIENCE ACADEMY

9-10 December 2024

Institute of Science and Technology, Chennai.



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Important Events/Meetings

90th Anniversary General Meeting (9-10 December 2024)

90th Anniversary General Meeting (9-10 December 2024) of the academy was held in SRM Institute of Science and Technology, Chengalpattu, Chennai.



During AGM (9-10 December 2024) following activities were organized:

9 December, 2024

Presidential Address: "Structure and Processes of S&T together with that Vexing Question of Sustainability" delivered by Professor Ashutosh Sharma, President, INSA.



Professor Ashutosh Sharma, President, INSA, delivering Presidential address at 90th Anniversary General Meeting of the Academy at SRM, Chennai

After the Presidential lectures, parallel lectures were delivered by new INSA Fellows, INSA Young Associates, INSA Associate Fellows, INSA Distinguished Lecture Fellows-I, INSA Distinguished Lecture Fellows-II, INSA History of Science Young Associate and INYAS Chair during 9-10 December, 2024.

Lectures were delivered by following New Fellows elected under 'Science in Translation' and 'Science for Society'. The session was chaired by Professor Ashutosh Sharma, President, INSA.

- Dr Anil Kakodkar
- Dr VK Saraswat
- Dr S Somanath
- Dr SV Kamat
- Dr Krishna M Ella
- Dr KN Sivarajan
- Dr Abhay Bang
- Mr S Kris Gopalakrishnan
- Ms Vartika Shukla
- Mr Arvind Gupta
- Dr Rajendra Singh



The following sessions were conducted during the meeting:

Session 1

Sectional Committee I - Chair: Professor Kapil Paranjape

Lecture by New Fellows

1. Professor Mahesh Kakde
2. Professor Neela Nataraj

Lecture by INSA Young Associate

1. Dr Ratna Pal

Lecture by INSA Associate Fellow

1. Dr Manas Ranjan Sahoo

Lecture by previous INSA Associate Fellow

1. Dr Haripada Sau

Sectional Committee II - Chair: Professor Kalobaran Maiti

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Rajesh Gopakumar

Lecture by New Fellows

1. Professor Dipankar Bhattacharya
2. Professor Sanjay Kumar

Lecture by INSA Distinguished Lecture-1 Fellow

1. Dr Veerendra Kumar Sharma

Lecture by INSA Young Associate

1. Dr Sourav Dutta

Lecture by INSA Associate Fellows

1. Professor Kamal Priya Singh
2. Professor Raghunath Sahoo

Lecture by previous INSA Associate Fellow

1. Dr Kasturi Saha

Session 2

Sectional Committee III - Chair: Professor M Lakshmi Kantam

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Srinivasan Natarajan

Lecture by New Fellows

1. Professor Rahul Banerjee
2. Professor Swagata Dasgupta
3. Professor Abhishek Dey
4. Professor Jayanta Halder
5. Professor Sankar P Rath
6. Professor AK Sahoo
7. Professor Balasubramanian Sundaram
8. Professor KM Sureshan

9. Professor Siva Umapathy

Lecture by INSA Distinguished Lecture-1 Fellow

1. Dr Ramendra Sundar Dey

Lecture by INSA Young Associates

1. Dr Awadhesh Narayan
2. Dr Pankaj Chauhan
3. Dr Mrinmoyee Basu

Lecture by INSA Associate Fellows

1. Professor Chidambaram Gunanathan
2. Professor Sukhendu Mandal
3. Dr Surya Prakash Singh

Lecture by INSA History of Science Young Associates

1. Dr Asadulla Asraf Ali

Session 3

Sectional Committee IV - Chair: Dr Kalachand Sain

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Harsh Kumar Gupta

Lecture by New Fellow

1. Dr VVSS Sarma

Lecture by INSA Distinguished Lecture-1 Fellow

1. Professor Vikram Vishal

Lecture by INSA Young Associate

1. Dr Rishitosh Kumar Sinha

Lecture by INSA Associate Fellows

1. Professor Supriyo Mitra
2. Dr Tanushree Bhattacharya

Sectional Committee X - Chair: Dr MS Chauhan

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Rup Lal

Lecture by New Fellows

1. Dr Parveen Chhuneja
2. Professor DA Nagegowda
3. Dr AK Shasany

Lecture by INSA Distinguished Lecture-1 Fellow

1. Dr Amit Kumar Rai

Lecture by INSA Young Associates

1. Dr Md Iqbal Raja Khan
2. Dr Veda Krishnan
3. Dr Kalikrishna Hazra

Lecture by INSA Associate Fellows

1. Dr Sudhir Pratap Singh
2. Professor Kashmir Singh

Lecture by New Foreign Fellow(Video Lecture)

1. Professor Prabhu Pingali

Session 4

Sectional Committee V - Chair: Professor Santosh Kapuria

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Sankar Kumar Pal

Lecture by New Fellows

1. Professor Sivaji Chakravorti
2. Professor Sirshendu De
3. Professor Animangsu Ghatak
4. Professor Debdeep Mukhopadhyay
5. Professor Satyam Suwas

Lecture by INSA Distinguished Lecture-1 Fellow

1. Professor M Tanveer

Lecture by INSA Young Associate

1. Dr Surendra Nadh Somala
2. Dr Sriparna Saha

Lecture by INSA Young Associates

1. Dr Bahni Ray
2. Dr Swatantra Pratap Singh

Lecture by INSA Associate Fellows

1. Professor Parag Ratnakar Gogate
2. Professor Vineeth N Balasubramanian
3. Professor Neetu Singh
4. Professor Neelima Satyam

Lecture by previous INSA Associate Fellow

1. Dr Sandeep Anand

Lecture by New Foreign Fellow

1. Professor Santokh Singh Badesha

Lecture by INSA History of Science Young Associates

1. Dr Swathy Manohar

Session 5

Sectional Committee VI- Chair: Professor Nirupama Mallick

Lecture by INSA Distinguished Lecture-2 Fellow

1. Dr Eklabya Sharma

Lecture by New Fellow

1. Professor SP Sane
2. Professor TNC Vidya

Lecture by INSA Young Associate

1. Dr Gaurav Majumdar

Lecture by INSA Associate Fellow

1. Dr Anzar Ahmad Khuroo

Lecture by previous INSA Fellow

1. Professor SK Barik

Lecture by previous INSA Associate Fellow

1. Dr Arjun Srivathsa

Sectional Committee IX - Chair: Professor Rakesh Aggarwal and Dr T Ramamurthy

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Kumaravel Somasundaram

Lecture by New Fellows

1. Professor Sanjay Behari
2. Professor Neerja Bhatla
3. Professor Jayanta Bhattacharya

Lecture by New Fellows

1. Professor GK Makharia
2. Professor VB Patravale
3. Professor Ashish Suri

Lecture by INSA Distinguished Lecture-1 Fellow

1. Dr Tarun Kumar Sharma

Lecture by INSA Young Associate

1. Dr Neha Jain

Lecture by INSA Associate Fellows

1. Dr Girdhari Lal
2. Dr Biswanath Maity

Session 6

Sectional Committee VII - Chair: Dr Sagar Sengupta

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor Vidita Ashok Vaidya

Lecture by New Fellows

1. Professor Amit Awasthi
2. Professor AK Banerjee
3. Dr Santosh Chauhan
4. Dr Manoj Majee
5. Dr Ellora Sen
6. Professor Amit Singh

Lecture by INSA Young Associate

1. Dr Jogender Singh

Lecture by previous INSA Associate Fellow

1. Dr Mahak Sharma

Sectional Committee VIII - Chair: Dr Rajan Sankaranarayanan

Lecture by INSA Distinguished Lecture-2 Fellow

1. Professor JB Udgaonkar

Lecture by New Fellows

1. Professor Gautam Basu
2. Professor Radhakrishnan Mahalakshmi
3. Professor Rishikesh Narayanan
4. Professor Pinaki Talukdar

Lecture by INSA Distinguished Lecture-1 Fellow

1. Dr Jiban Jyoti Panda

Lecture by INSA Young Associate

1. Dr Gaurav Ahuja

Lecture by INSA Associate Fellow

1. Professor Timir Tripathi

INyas Lecture was delivered on 10 December, 2024 by Dr Nishant Chakravorty, Chairperson, INyas. The session was chaired by Professor Indranil Manna, Vice-President (Science & Society), INSA.



**Dr. Nishant Chakravorty, Chairperson, INyas
delivering lecture at INSA Anniversary
General Meeting**

On 10th December 2024, in the Anniversary General Meeting the sad demise of Dr Sukh Dev, Professor Rohini Madhusudan Godbole, Professor Anil Kumar, Professor Satya Priya Moulik, Dr Satinder Kumar Sikka and Professor Mahendra Singh Sodha were reported.

During the Anniversary General Meeting, President, INSA presented Scrolls and Angavastram to the 60 new Fellows (w.e.f. 1.1.2025 including previous Fellows) and one Foreign Fellow and inducted them to the Fellowship.

17 INSA Young Associate Fellows, 25 INSA Associate Fellows (including 7 previous IAFs), 2 INSA History of Science Young Associates received the Certificate and Angavastram from President, INSA. They also took oath, signed the Register and have been inducted. In addition, 16 INSA Distinguished Lecture Fellows I and II received the Citation and Angavastram from President, INSA.

The Special Council Meeting was held on 18 December, 2024 regarding proposal of the Council on the extension of the tenure of the Council and other agenda items.

The Special Council Meeting was held on 24 December, 2024 regarding to consider and approve a compliance report to be submitted to DST regarding Reversion of staff structure of 2012.

Professor Sandhya S. Visweswariah has been selected as the President-Elect of (International Union of Biochemistry and Molecular Biology) IUBMB and will serve as President from 2027 onwards for a term of three years.

The Indian and UK chairs of the two themes for the 5th Yusuf Hamied Bilateral Workshop met virtually on October 4, 2024, to discuss the meeting agenda.

An INSA delegation led by Prof. Ashutosh Sharma, President INSA, met with Prof. Karin Jacobs, Vice President, DFG German Research Foundation on October 23, 2024, to exchange views on strengthening Indo-German academic collaborations.

As nominated by the academy, Professor Narinder K Mehra, Vice President, INSA attended 6th General Assembly of AASSA, hosted by AASSA and the National Academy of Science and Technology, Philippines, on 30th October 2024 in Manila, Philippines, coinciding with the AASSA-NAST PHL Symposium on Digital Transformation in Healthcare on 29-30 October 2024. Prof. Mehra is also a candidate for the AASSA Executive Board for the 2024-2027 term, with elections scheduled during the assembly.

The Academy nominated Prof. Rup Lal to attend the International Union of Microbiological Societies (IUMS) Congress in Florence, Italy during 23-25 October 2024.

Dr Alison Noble, Foreign Secretary, Royal Society, UK visited INSA on 8th November 2024 to discuss about the possible avenues of the bilateral cooperation between the two academies.

A 24 member's delegation led by Prof. Ashutosh Sharma,

President INSA visited the Royal Society UK to attend the 5th INSA-RS Yusuf Hamied Bilateral Workshop held from 26-27 November, 2024.



5th INSA-RS Yusuf Hamied Bilateral Workshop

The bilateral meeting between the Presidents of the Academies, Prof. Ashutosh Sharma of INSA and Sir Adrian Smith of the Royal Society UK was held on 25th November 2024 at the Royal Society's premises in the UK. The two Presidents explore avenues for enhancing research partnerships, facilitating knowledge exchange, and promoting science diplomacy for advancing Indo-UK relations in science, technology, and innovation.

An online meeting with all the INSA local Chapter Conveners was held on 4th October 2024.

An online meeting of INSA Ethics committee was held on 4th October 2024.

Professor (Dr) Deepak Kumar, Amity Institute of Information Technology, Amity University, Noida and Visiting Professor of Fayetteville State University (A Constituent Institution of the University of North Carolina), USA delivered a lecture on waste management for all Academy staff members on October 25, 2024, at INSA auditorium.

INSA-ACS Faculty Leadership Summit was organised during 24-26 October 2024 at INSA.

The online Selection Committee meeting for the India Science Research Fellowship Program (ISRF) 2024 was held on 7th November 2024. The meeting was chaired by Prof. Amol Dighe, FNA and attended by all the 12 subject experts, DST representative and INSA officials. The committee evaluated all the 75 eligible applications received from the neighboring countries.

Financial Assistance by INSA

Eleven Indian scientists were supported by the Academy for attending the Non ISC (International Science Council) sponsored conferences abroad.

One Indian scientists were supported by the Academy for attending the ISC (International Science Council) sponsored conferences abroad.

Science Policy

Workshop on Navigating PhD and Beyond during 30-31, 2024, at IIT Kanpur: The Indian Institute of Technology Kanpur (IITK), in collaboration with the Indian National Science Academy (INSA) and the American Chemical Society (ACS), organized a unique workshop titled "Navigating PhD and Beyond" on December 30-31, 2024, at IIT Kanpur. The event aimed to empower PhD students with essential research skills, insights into sustainability, mental health awareness, and valuable career guidance.

Prof. Ashutosh Sharma, President of INSA, delivered an inspiring talk titled "Shaping Up Culture and Behaviour." In his address, Prof. Sharma celebrated India's growing prominence in research and innovation while encouraging young researchers to embrace originality, collaboration, and purpose-driven work.



Professor Ashutosh Sharma, President, INSA addressing the event

Professor Ashutosh Sharma's Visionary Talk at Women in Optics and Photonics India 2024: At the Women in Optics and Photonics in India 2024 (6-8 Dec), Prof. Ashutosh Sharma, President of INSA, delivered a thought-provoking talk on "Diversity & Sustainability: Structure and Processes of S&T with Policies and Perspectives on Women in Science."



Professor Ashutosh Sharma, President, INSA delivering talk



Women in Optics and Photonics in INDIA 2024

Science Beyond Borders INSA at IISF 2024 (30 Nov to 3 Dec, 2024) : At IISF 2024, during the thematic event Global S&T Alliance, Professor Ashutosh Sharma, President of INSA, chaired the technical session on "Science Beyond Borders: Policies, Opportunities, and Challenges". Setting the stage for a vibrant discussion, he engaged a distinguished panel of experts, including Nitin Seth (Director, CEFIPRA), Shri R. Madhan (Director, IGSTC), Dr Praveen Kumar S (Head-IC, DST), Dr Rama Swami Bansal (Head-ISTAD, CSIR), and Dr Yelloji Rao (International Convener, GSIT Forum).

The session explored the role of international partnerships in advancing scientific research, emphasizing how

collaborations foster knowledge sharing, resource utilization, and diverse perspectives. Professor Sharma posed thought-provoking questions about the role of policies in enabling effective collaborations and addressed the institutional challenges and achievements in building global science alliances.

Speakers shared insights on leveraging partnerships to solve global challenges, highlighting the importance of resource sharing, capacity building, and inclusive frameworks. Professor Sharma's leadership guided the dialogue, reaffirming the transformative power of international collaborations in advancing science and technology for societal benefit.



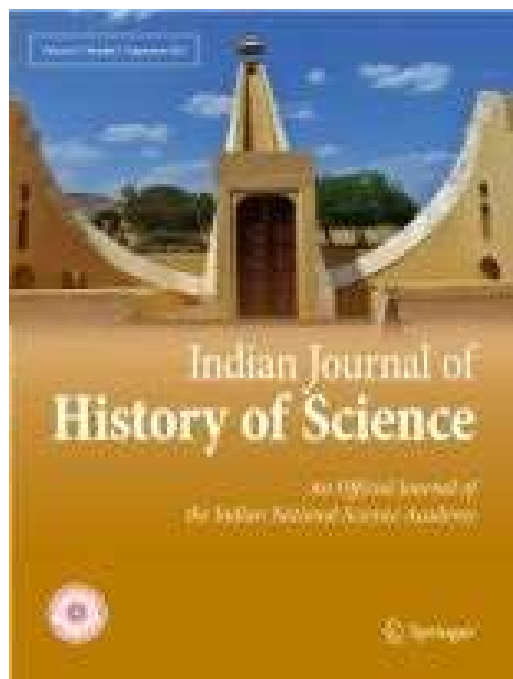
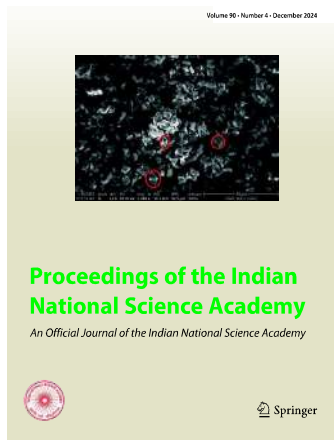
Technical Session at IISF

Recent Publications of the Academy

Proceedings of the Indian National Science Academy: Vol 90 No.4 (December 2024 issue): Published.

Indian Journal of Pure and Applied Mathematics, Vol 55 No. 4 (December 2024 issue): Published.

Indian Journal of History of Science, (59.3) 2024 (September 2024 issue): Published.



Indian National Young Academy of Sciences (INYAS) Activity

The Indian National Science Academy established Indian National Young Academy of Sciences (INYAS) in December 2014. Following outreach activities have been carried out by INYAS members.

Science for Society

The "Science for Society" program, held on October 4, 2024, at the Institute of Chemical Technology (ICT) Mumbai, brought together researchers, scientists, and students to discuss the intersection of science and societal development. Under the theme "Science for Society," the event featured keynote talks by Dr Arindam Sarkar, Dr Mohanapriya K, and Dr RR Deshmukh. Topics ranged from decoupled Zn-air rechargeable batteries to plasma applications and non-lithium-based green battery technology. The program emphasized the role of scientific innovation in addressing global challenges like energy transition and sustainability. The enthusiastic participation of students and stakeholders highlighted the growing interest in leveraging science for societal improvement.



Lecture Session during Science for Society Event

Addressing Chemical Complexity through Molecular Simulations for Engineering Applications

On October 17, 2024, INYAS, in collaboration with the Indian Concrete Institute and the Department of Chemistry at IIT Jammu, organized a seminar on "Addressing Chemical Complexity through Molecular Simulations for Engineering Applications." The event featured a talk by Prof. Balasubramanian Sundaram from JNCASR, Bangalore, who delved into advanced computational techniques such as coarse-graining, enhanced sampling, and machine-learned potentials. Using case studies on

water harvesting, gas storage, and transmembrane processes, Prof. Sundaram demonstrated how molecular simulations could solve chemical complexities in engineering. The seminar was attended by 100 participants from diverse disciplines, offering them valuable insights into the practical applications of computational modeling in science and engineering.



Seminar on "Addressing Chemical Complexity through Molecular Simulations for Engineering Applications."

Beyond the Classroom: A Journey into Science Careers

On October 14, 2024, a workshop titled "Beyond the Classroom: A Journey into Science Careers" was conducted at IIT (BHU), Varanasi, for high school students from grades 10 to 12. Coordinated by Dr Sanjay Singh, the workshop aimed to inspire students to pursue careers in science by providing an in-depth understanding of the opportunities available in the field. Esteemed IIT professors, who are also INYAS members, shared personal experiences and professional insights, offering students an invaluable perspective on the scientific landscape. The event included guided tours of cutting-edge facilities at IIT (BHU), such as the Central Instrumentation Facility, Supercomputer Center, and Precision Hub, giving students a glimpse into advanced research and technology. An interactive Q&A session followed, where students engaged with the speakers to clarify doubts and discuss future career possibilities. Feedback from the 110 participants revealed a renewed enthusiasm for science and a deeper interest in exploring careers in the field. The workshop successfully broadened students' perspectives and motivated them to think critically about their contributions to science and technology.



"Beyond the Classroom: A Journey into Science Careers" was conducted at IIT (BHU), Varanasi

RuSETUP: Fostering Curiosity Science for Young Minds

To celebrate the 10th anniversary of INYAS, a five-day program titled "RuSETUP: Fostering Curiosity Science for Young Minds" was held from October 21 to 25, 2024, in Ladakh. Organized by CCS Haryana Agricultural University, Hisar, CSIR NIScPR, and the University of Ladakh, the event aimed to spark scientific curiosity among young students and inspire them to embrace science education. The program included expert talks on diverse scientific topics, addressing the challenges faced by students and presenting practical solutions. Hands-on mathematical activities enhanced logical thinking and problem-solving skills, while sessions conducted in remote locations, such as local schools and the University of Ladakh, made science accessible to all. A career guidance



"RuSETUP: Fostering Curiosity Science for Young Minds" was held from October 21 to 25, 2024, in Ladakh

kit developed by INYAS was distributed, providing valuable resources to students for their educational and professional journeys. The event received high praise from participating school faculty members, who commended INYAS's efforts to ignite a passion for science among young learners in Ladakh.

Creativity, Innovation, and Research Opportunities in Mathematical Sciences

From October 24 to 26, 2024, the North East Zone of INYAS, in collaboration with Jawaharlal Nehru College, Boko, Assam, hosted sessions on "Creativity, Innovation, and Research Opportunities in Mathematical Sciences" as part of the College's International Conference on the Emerging Role of Mathematics in Science and Technology. The event featured prominent speakers such as Prof. Pratulananda Das of Jadavpur University, Dr. Manjil P. Saikia, Dr. Mayuri Chabukdhara of INYAS, and Prof. Kanhaiya Jha of Kathmandu University, among others. The sessions covered topics such as fuzzy logic applications, fixed-point theory, space research, and the role of mathematics in science and society. Participants learned about career opportunities at local, national, and international levels, as well as the importance of creativity and innovation in mathematical sciences. With over 150 attendees, the event successfully highlighted the diverse applications of mathematics, fostering enthusiasm and interest among students and researchers alike.



Sessions on "Creativity, Innovation, and Research Opportunities in Mathematical Sciences"

Science Awareness Camp for Students and Farmers

On November 16-17, 2024, the NCR Zone of INYAS conducted a two-day Science Awareness Camp in Agra. The program, coordinated by Drs. Ashwani Kumar Tiwari,

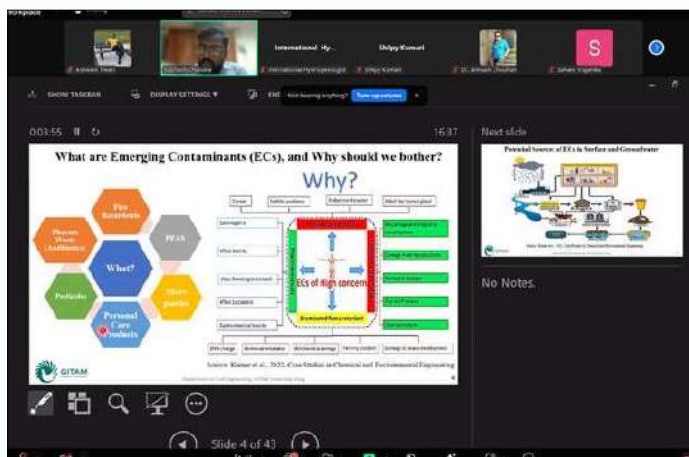
Subhash Babu, Pankaj Kumar, and Ranjit Kumar, targeted students and farmers to promote science education and sustainable farming practices. On November 16, events for students from classes 6 to 8 were held at Seth Haridas Vidyalaya, and for classes 9 to 12 at DEI, REI Intermediate College, attracting 68 and 92 students, respectively. The sessions included discussions on significant science topics, demonstrations of scientific instruments, and the distribution of science kits. The following day, a Farmer Awareness Camp in Manoharpur village engaged over 70 farmers, encouraging them to adopt organic farming practices. Mustard seeds were distributed as part of the initiative, and the program's success was highlighted in local newspapers. The event was well-received by both students and farmers, fostering an appreciation for science and sustainable practices.



NCR Zone of INYAS conducted a two-day Science Awareness Camp in Agra

Emerging Pollutants in Groundwater Resources and Their Treatment Methods

On November 4, 2024, an online lecture coordinated by Ashwani Kumar Tiwari under the NCR Zone attracted 40 participants. The session discussed emerging contaminants in surface and subsurface waters, their effects on aquatic systems, and methods for their treatment. With 59 registered participants, including students from diverse backgrounds like Geology and Environmental Science, the lecture was highly interactive and concluded with an engaging Q&A session, leaving attendees with valuable insights.



Online lecture on Emerging Pollutants in Groundwater Resources and Their Treatment Methods

Igniting Curiosity: A One-Day Symposium on Advanced Science for Young Researchers

Held on November 8, 2024, at Goa University's School of Chemical Sciences, this symposium, coordinated by Amit Ashok Vernekar, brought together 135 participants. It featured talks on advanced scientific topics, such as sustainability, sensors, and energy, delivered by emerging scientists. The event served as an excellent platform for interdisciplinary research discussions, sparking curiosity and inspiring attendees to pursue sustainable scientific solutions.



Igniting Curiosity: A One-Day Symposium on Advanced Science for Young Researchers

1. Biology Beyond Books: Hands-On Experience with Advanced Zoology Tools and Techniques in Modern Biology

On November 28, 2024, at the Central University of Jammu,

Shweta Yadav coordinated a science camp for 60 participants. The event targeted 12th-grade students from rural areas, providing them with practical exposure to advanced biological tools and techniques. The camp emphasized creativity, curiosity, and problem-solving, leaving students inspired by their interactions with scientists and the hands-on experience they gained.



Biology Beyond Books: Hands-On Experience with Advanced Zoology Tools and Techniques in Modern Biology

2. Lab in a Box

On December 1, 2024, at Ranjit Singh Rozi Shiksha Kendra, IIT Kanpur, Sudhanshu Shekhar Singh led an engaging session for 30 students from classes X and XI. Through practical demonstrations, the session helped students connect theoretical science concepts with real-world applications, enhancing their understanding of science in an enjoyable and interactive manner.



Lab in a Box

3. World Nuclear Energy Day

A series of events celebrating World Nuclear Energy Day took place on December 2, 9, and 10, 2024, at VJTI, SIES, and Sathey College in Mumbai. Coordinated by Neetu Jha, Hitesh Pawar, and Vivek Parkar, these sessions engaged 192 participants. They highlighted the advantages of nuclear energy, its environmental benefits, and its role in sustainable development. Interactive discussions and Q&A sessions sparked a newfound interest in nuclear energy among students.



A series of events celebrating World Nuclear Energy Day

4. Career Opportunities After School Education in India

On December 7, 2024, at PM Shree School Jawahar Navodaya Vidyalaya, Mirzapur, Sanjay Singh guided 200 participants through an engaging session on career opportunities. The session emphasized the importance of



Career Opportunities After School Education

skill development and higher education while inspiring students to explore diverse fields based on their interests. The students expressed interest in visiting IIT (BHU) facilities and gained valuable direction for their future endeavors.

5. Hands-On Session on Wearable Robotics for School Students

On December 11, 2024, at the Human-Centered Robotics Lab, IIT Gandhinagar, Vineet Vashista coordinated a session for 15 students. This hands-on experience introduced participants to wearable robotics through live demonstrations of sensors, actuators, and controllers. The session successfully piqued interest in robotics and its applications, inspiring young minds to innovate and explore this exciting field further.



Hands-On Session on Wearable Robotics for School Students

6. Exposure Visit for School Students

On December 14, 2024, Jai Prakash hosted 350 participants at the Department of Physics, Aligarh Muslim



Exposure Visit for School Students

University. The students explored advanced scientific facilities, including the Nuclear Physics Laboratory, and observed the Sun's surface through a telescope. This enriching visit inspired attendees and fostered enthusiasm for pursuing careers in science, showcasing the university's commitment to scientific awareness.

7. Communicating Science to Society: From Plastic to Bioplastic

On December 20, 2024, at IIT Indore, Kiran Bala engaged approximately 400 participants in a session focused on addressing plastic pollution and exploring bioplastic alternatives. The event combined interactive quizzes with informative discussions, motivating participants to adopt sustainable practices and combat environmental challenges through innovative solutions.



Communicating Science to Society: From Plastic to Bioplastic

Obituary Notes

Fellows

SUKH DEV

Sukh Dev (*b* 17 June, 1923; *d* 16 October, 2024) obtained PhD and DSc from Indian Institute of Science (IISc), Bangalore. Dr Sukh Dev made significant contributions to our knowledge of organic chemistry by uncovering scores of novel, complex, plant secondary metabolites. He also worked on the Indian economic raw materials, such as lac, Indian turpentine oil, *devadaaru*, and Indian medicinal plants. He was the Head, of the Division of Organic Chemistry, National Chemical Laboratory, Pune (1960-74), and Research Director, Malti-Chem Research Centre, Vadodara (1974-88).

Dr Sukh Dev was elected as a Fellow of the Indian National Science Academy in 1968 and served its Council as Member (1986-88).



ROHINI MADHUSUDAN GODBOLE

Rohini M Godbole (*b* 12 November 1952; *d* 25 October 2024) obtained PhD from the State University of New York at Stony Brook. She was an Indian physicist and academic specializing in elementary particle physics: field theory and phenomenology. She was Professor at the Centre for High Energy Physics, Indian Institute of Science, Bangalore. Her work regarding hadronic structure of high-energy photons outlined a variety of ways in which to study it and has had implications for the design of next generation electron positron colliders.

Professor Rohini M Godbole was elected as a Fellow of the Indian National Science Academy in 2003 and served its Council as Member (2011-13).



ANIL KUMAR

Anil Kumar (*b* 25 June, 1941; *d* 9 November, 2024) obtained PhD in Physics from IIT Kanpur. He joined the Indian Institute of Science (IISc) to start the first high-field NMR Research Facility established in India. His area of research includes double resonance techniques in NMR; developments in two-dimensional NMR spectroscopy; study of strongly coupled spins and molecules partially oriented in liquid crystal matrices; relaxation studies; study of cross-correlations in NMR; developments in solid-state NMR; pure NQR studies using two-dimensional techniques; and, most recently, applications of NMR to quantum computing (QC) and quantum information processing (QIP). Professor Anil Kumar has done pioneering work in this field and established an internationally recognized "NMR QC and QIP Group" in Bangalore. He was an INSA Emeritus Scientist at Department of Physics and NMR Research Centre, Indian Institute of Science, Bangalore.

Professor Anil Kumar was elected as a Fellow of the Indian National Science Academy in 1989 and served its Council as Member (2013-15).



SATYA PRIYA MOULIK

Satya Priya Moulik (*b* 13 April, 1936; *d* 21 July, 2024) obtained PhD from University College of Science (Kolkata) and DSc degree from Calcutta University. Professor Moulik worked on inorganic chelate complexes, and ion conductance in disperse media. He also worked on thermodynamics of ionization of substituted pyridines and blood coagulation. Dr Moulik extensively worked on the physical chemical aspects of self-organizing systems such as micelles, reverse micelles, microemulsions, polymer (biopolymer) interaction with surfactants and lipids, oscillatory reactions, nanomaterials, etc. He was INSA Emeritus Scientist, Department of Chemistry, Jadavpur University, Kolkata.

Professor Satya Priya Moulik was elected as a Fellow of the Indian National Science Academy in 1998.



SATINDER KUMAR SIKKA

Satinder Kumar Sikka (*b* 22 November, 1942; *d* 21 June, 2023) obtained PhD from Bombay University. He was involved in India's nuclear weapon programme since 1969 and was leader of the design team for the 1998 nuclear test series. He set up diamond anvil cells for static pressure generation, gas gun for shock waves and techniques using high explosives which were unique facilities in India. Dr Sikka rose to become Distinguished Scientist and Director of Atomic and Condensed Matter Physics Group at BARC and was Scientific Secretary to Principal Scientific Advisor to the Government of India.

Dr Satinder Kumar Sikka was elected as a Fellow of the Indian National Science Academy in 1988.



MAHENDRA SINGH SODHA

Mahendra Singh Sodha (*b* 8 February 1932; *d* 12 October, 2024) obtained DPhil degrees from Allahabad University. Professor Sodha pioneered research in a number of contemporary areas in physics and energy studies. His outstanding contributions in plasma physics relate to nonlinear interaction of electromagnetic waves with plasmas and application of Akhmanov's formulation to optical waveguides was also very novel. Professor Sodha served HoD and Deputy Director at IIT Delhi and Vice Chancellor of Devi Ahilya Universtiy, Lucknow University and Barkatulla University.

Professor Mahendra Singh Sodha was elected as a Fellow of the Indian National Science Academy in 1978.



HR Activities

Observance of Vigilance Awareness Week (VAW) from 28th October, 2024 to 3rd November, 2024

The INSA staff took E-Pledge through the hyperlink “E-integrity Pledge” available at INSA website www.insaindia.res.in or website <https://pledge.cvc.nic.in>

During this week an Essay competition was organized on the following topic “Culture of Integrity for Nation's Prosperity” at 11.00 am to 12.00 noon on 28th October, 2024 in room no 606, 6th Floor Jubilee Centre in INSA.

Central Vigilance Commission (CVC) has circulated jingles regarding anti-corruption for use during the campaign of Awareness Week (VAW), 2024. INSA has circulated the circular vide dt 22.10.2024 for all INSA staff members to increase awareness about it for different purpose public announcements, caller tunes etc.



All the staff members participated in the integrity pledge on 28th October, 2024 in Multi-Purpose hall

Rashtriya Ekta Diwas (National Unity Day) : Pledge ceremony

Birth of Anniversary of Sardar Vallabhbhai Patel the architect of national integration of independent India is observed as “Rashtriya Ekta Diwas (National Unity Day) on 31st October every year. On this occasion the INSA staff took E-Pledge through the hyperlink “E-Rashtriya Ekta Diwas Pledge” available at INSA website www.insaindia.res.in or <https://pledge.mygov.in/unity-2022/> on 31st October, 2024 at 11 a.m.

Dekho Apna Desh People' Choice Nation-wide poll

Prime Minister has launched the “Dekho Apna Desh People's Choice national- wide poll on 7th March, 2024 to encourage citizens to vote for their most preferred tourist destinations. In this connection, Ministry of Tourism has designated the 11th November, 2024 as the “Dekho Apna Desh People's choice” as Voting Day. On this occasion the INSA staff voted through <https://bit.ly/DADPC> on 11th November, 2024.

Celebration of Samvidhan Diwas (Constitution day) and reading of Preamble on Constitution day, 26th November, 2024

India commemorated a historic milestone on 26th November, 2024, on the subject “Humara Samvidhan, Humara Swabhimaan” marking the 75th anniversary of the adoption of the Constitution of India. To honor and acknowledge the contribution of Founding Fathers of the Constitution day, all the staff members read the preamble online through the link available on mygov.in.