



The National Academy of Sciences, India

5, Lajpatrai Road, Prayagraj-211002, India

Monthly Summary for the month of January 2022



Happy Republic Day

NASI continued to contribute to the 'Science & Society' as per its mandate, observing COVID appropriate behaviour during the re-spread of the coronavirus. The office of the Academy also followed the necessary orders of the govt. regarding the preventive strategies and norms, during the pandemic; however, several programmes were organised online, as-

- An interesting and informative programme was organised by the NASI-Rajasthan Chapter on 12th January, under the NASI's Science – Society Programme for the scientists and entrepreneurs to sketch the strategy for the implementation of the **Lab to Commercialisation** initiatives. Several luminaries and eminent scientists participated in the programme, as **Prof. V. Ramgopal Rao, Prof. Kylie Vincent, Dr Rakesh Roshan**, and others (please see **Annex. 1 'a & b'**, for further details). The programme was coordinated by **Dr Suphiya Khan** of Vanasthali Vidyapith, Rajasthan; it was attended by several participants.
- A very conceptual and illustrative webinar was organised by the NASI-Lucknow Chapter on 18th January, in collaboration with the Regional Science City, Ministry of Culture on an advance topic of research – '**Why do we age: Intervention for healthy aging**'. The webinar was attended by many, and several interactive queries were made (please see the details as **Annex. 2**). **Prof. Ramesh Sharma** delivered the lecture on the said topic; the programme was coordinated by **Dr R D Tripathi**, NBRI, Lucknow.
- The **Academy-HQ at Prayagraj** launched a programme to combat the menace of the pandemic and make the people aware about the coronavirus, through a campaign in collaboration with the **ICMR, New Delhi**. At Mysuru (under **Dr S L Hoti**, FNASc), the documentary films were prepared in the regional languages; the themes of these movies have been designed based on the interaction with school students and village youths. The scripts have been written by a Cine Director and also directed by him. Several students from the performance art school of Mahajan College, Mysore have put in a lot of efforts, and their talent as actors has been very well expressed in bringing the theme of COVID-19 appropriate behavior to live in these movies. Further, at Rajasthan (under **Dr Kiran Katoch**, FNASc), the NASI ICMR Covid awareness project is going on in Jaipur region in full swing.
- **Delhi Chapter** of The National Academy of Sciences, India (NASI) is organising a Webinar on **60th Anniversary of Fibre Laser**, on Jan. 22-23, in collaboration with the **DBT, GoI** and **Deen Dayal Upadhyay College**, as a part of the celebrations of *Azadi ka Amrit Mahotsav*. **Prof. Ajoy Ghatak**, President, NASI, is also associated directly with this programme (for further details, please see **Annex.**

3).

Several NASI Chapters, as Mumbai, Kolkata, Bhopal and others, also organized online scientific activities. A few other programmes were also undertaken by other groups.



The Road from Lab Research to Commercialization
 Supported by: **NASI-Rajasthan Chapter**
 Organized by: **Dept. of Bioscience and Biotechnology, Banasthali Vidyapith**



12th January 2022 (Wednesday), 3:00 pm to 6:30 pm IST
 (Participants and organizers join at 02:30 pm, speakers at 2.50 pm)

Today, more than ever, scholars are looking to take their essential discoveries, whether advanced at university, research facility, or company, wants to convert into commercial ventures.

Universities are the engine for discovery, then startups/ spinouts are the vehicle for innovation. However, the related issues around start-up ventures are meaningfully different from those encountered in the research laboratory. Many of the scientists have never thought expansively about intellectual property, freedom to operate, route to market, operating capital, and other problems which arises in the commercialization process. "Good science is not enough". The evolution from a credible technical revolution in the lab to a product ready for sale and maintenance is a path loaded with obstacles. There is a critical need for mentoring and guidance at a very initial stage.

Happy to introduce our Chief Guest, Prof. V. Ramgopal Rao (Director, Indian Institute of Technology, New Delhi), and other key note speakers including Prof. Kylie Vincent (Professor, Department of Chemistry & Academic Champion for Women in Entrepreneurship, University of Oxford), Prof. Rohit Srivastava (Professor and Head, Department of Biosciences and Bioengineering, IIT Bombay), Prof Avinash Sonawane (Professor, Department of Biosciences and Biomedical Engineering, Indian Institute of Technology, Indore), Dr. Rakesh Roshan (CEO, OXSIGHT Spinout company from University of Oxford), Dr. Mahesh Kumar (Associate Professor, Indian Institute of Technology, Jodhpur).

We will discuss some of the vital aspects such as:

- Challenges associated with the commercialization of the idea.
- Innovation ecosystem and funding opportunities available for students, faculties, young budding entrepreneurs and scientist.
- Their lived skills overwhelming the tasks involved in commercializing lab ideas.
- Technology transfer experience.



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Webinar Program Schedule

Date – 12-01-2022 (Wednesday), 3:00 pm to 6:30 pm IST

S. No.	Time (IST)	Schedule
1.	3:00 pm - 3:15 pm	Welcome of Dignitaries: Dean (R & D), Banasthali Vidyapith Introduction to Programme and brief about National Academy of Sciences (NASI), India (Rajasthan Chapter): Prof. H. N. Verma , FNASc, Chairman, NASI Rajasthan Chapter; Vice-Chancellor Jaipur National University
2.	3:15 pm - 4:00 pm	Inaugural Address: Prof. V. Ramgopal Rao Director Indian Institute of Technology IIT Delhi
3.	4:05 pm - 4:30 pm	Prof. Kylie Vincent Academic Champion for Women in Entrepreneurship, Professor of Inorganic Chemistry University of Oxford, UK
4.	4:35 pm - 5:00 pm	Prof. Rohit Srivastava Prof and Head, Department of Biosciences and Bioengineering, IIT Bombay
5.	5:05 pm - 5:30 pm	Prof. Avinash Sonawane Professor, Department of Biosciences and Biomedical Engineering, IIT Indore.
6.	5:35 pm - 6:00 pm	Dr Rakesh Roshan CEO OXSIGHT, University of Oxford, UK
7.	6:05 pm - 6:30 pm	Dr. Mahesh Kumar , Associate Professor, Department of Electrical Engineering, IIT Jodhpur
8.	6:35 pm - 6:45 pm	Vote of thanks: Prof. N.K. Lohiya , FNASc, NASI Senior Scientist & Secretary-NASI Rajasthan Chapter Department of Zoology, University of Rajasthan, Jaipur



The Road from Lab Research to Commercialization

12-01-2022, | 03:00 PM to 06:30 PM (IST)

Chief Guest



Prof. V. Ramgopal Rao
Director, Indian Institute of Technology, Delhi

Keynote Speakers



Prof. Kylie Vincent
University of Oxford



Prof. Rohit Srivastava
IIT Bombay



Prof. Avinash Sonawane
IIT Indore



Dr. Rakesh Roshan
CEO OXSIGHT Spinout, Oxford



Dr. Mahesh Kumar
IIT Jodhpur

Supported by: NASI-Rajasthan Chapter

Organizer: Dept. of Bioscience & Biotechnology, Banasthali Vidyapith - Rajasthan



REGISTER NOW

<https://forms.gle/8SYAiSStGbTuS6uf6>



E-Certificate will be provided to all participants

No Registration Fee

Interested Students and Colleagues can join by registering through the Zoom Link for Registration: https://zoom.us/webinar/register/WN_HdYmlQn-RNmxfgmO9f0qhQ



The National Academy of Sciences, India (NASI)
- Delhi Chapter -

and

Deen Dayal Upadhyaya College

(University of Delhi)

Under the aegis of DBT Star College Program

Jointly Organizes



Online Symposium

- To celebrate the **60th Anniversary of the Fiber Laser** -
January 22-23, 2022

January 22, 2022 @ 11:30 am IST



High power fiber lasers: Challenges and Opportunities

Dr. B. N. Upadhyaya

Raja Ramanna Centre for Advanced Technology (RRCAT),
Indore, India

January 22, 2022 @ 07:30 pm IST



The Fibre Laser Revolution: From the Past to the Future

Professor Sir David Payne KBE CBE FRS FREng

Director, Zepler Institute of Photonics and Nanophotonics
Co-Director of The Photonics Institute, NTU, Singapore;
PI of the National Manufacturing Hub in Future Photonics

January 23, 2022 @ 10:30 am IST



Optical Communications: Innovations and Applications Abound

Prof. Alan Eli Willner

Distinguished Prof. ('21), Ming Hsieh Dept. of Elect & Comp.
Eng., Viterbi School of Engg., Univ. of Southern California

January 23, 2022 @ 07:00 pm IST



New Concepts in High-Power Femtosecond Fiber Lasers

Professor Frank Wise,

School of Applied and Engineering Physics,
Cornell University, Ithaca, NY 14853