



# The National Academy of Sciences, India (NASI)

5, Lajpatrai Road, Prayagraj-211002, India

## Monthly Summary for the month of August 2020

1. NASI-HQ at Prayagraj and the Chapters collaborated/organised 'WEBINARS/Online Workshops', in joint collaboration with several institutions for the UG/PG students and researchers, with kind cooperation/support of its Fellows/Members. Prof. Satya Deo, Emeritus Professor at HRI, Prayagraj, delivered the Key-note Address, in online Faculty Development Programme, on "Applicability of Mathematical Sciences in Emerging World" held during 28 July to 2 August 2020, organized by the Department of Applied Science & Humanities, Faculty of Science, Invertis University, Bareilly. Further, other WEBINARs were also held under the auspices of NASI Delhi Chapter, Uttarakhand Chapter and Bhopal Chapter; details are attached herewith as [Annex. 1 'a', 'b' & 'c'](#). The main topics covered were - Learning Physics with Conceptual & Problem Based Approach; Covid-19 Lockdown - Coping with Stress; Research Article Writing, and so on.
2. NASI received a letter from the Secretary, SERB, DST, New Delhi regarding its collaboration/association to support the 'Accelerate Vigyan' programme; which was widely circulated among the Fellowship of NASI ([Annex. 2](#)).
3. On the auspicious occasion of the Independence Day, the Academy started two Online Contests for the school students ([Annex. 3](#)); hundreds of entries have already been received. Essay contest is also the part of 'Constitution Day Celebrations', while, the Painting Contest will be dedicated to the Independence Day programmes only.
4. A draft matter for the [Coffee Table Book & film](#) sent to the DST for inclusion in the celebration programmes/activities of the [Golden Jubilee of the DST](#); also uploaded on the website of NASI (<http://nasi.nic.in/NASI-a%20Brief%20Write-Up.pdf>). The preparation of film will start soon.
5. A comprehensive book on 'Vector Biology', is ready to be released at the earliest ([Annex. 4](#)); other publications of NASI are also on time including the Annual Report-2019-20.

[Several other NASI Chapters also organized online scientific activities.](#)

Avail this incredible opportunity to learn from eminent & highly experienced educators in their field!

A best way to achieve your goals in Physics !

Annex. 1 'a'



# LEARNING PHYSICS WITH CONCEPTUAL & PROBLEM BASED APPROACH

Organized by

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

A 10-week course starting on 27<sup>th</sup> July, 2020

*Eminent Speakers*

Prof. Patrick Das Gupta (*HOD Department of Physics and Astrophysics, DU*)

Prof. S Annapoorni (DU)

Prof. T R Seshadri (DU)

Prof. Amarjeet Kaur (DU)

Prof. Samit Mandal (DU)

Prof. S A Hashmi (DU)

Dr. P Senthil Kumar (DU)

Dr. Sourav Sur (DU)

Dr. Sumalay Roy (DU)

Dr. Partha Goswami (Deshbandhu College)

Dr. Sanjay Kumar (St. Stephens College)

Dr. Rachana Kumar (Kalindi College)

Dr. Pushpa Bindal (Kalindi College)

Dr. Ashok Kumar (Ramjas)

Dr. Sudha Gulati (Kalindi College)

Dr. Seema Gupta (Kalindi College)

Dr. Vandana Luthra (Gargi College)

Dr. Punita Verma (Kalindi College)

Dr. Savinder Kaur (SGTB Khalsa College)

Dr. Poonam Kasturi (DDU College)

Dr. Geetika Jain (Maharaja Agrasen College)

Dr. Sneha Kabra (Shaheed Rajguru College)

Dr. Geetanjali Sethi (St. Stephens College)

Dr. Aditya Saxena (Deshbandhu College)

Dr. Rajveer Singh (ARSD College)

Dr. Triranjita Srivastava (Kalindi College)

Dr. Neetu Agrawal (Daulat Ram College)

Dr. Yogesh Kumar (Deshbandhu College)

Dr. Savita Sharma (Kalindi College)

Dr. Shyam Kumar (Kirori Mal College)

Ms. Poonam Jain (Sri Aurobindo College)

*And more...detailed schedule per week*

## *Highlights:*

- E certificates for students.
- Attendance is mandatory.
- Study material.
- PPT aided-learning .
- Live discussions with subject - experts

## *Who can attend:*

- Student of B.Sc. 3rd year passing in 2020
- B.Sc. Completed students
- Student of M.Sc. Pursuing
- M.Sc. Completed students

## *Subjects to be covered:*

*27<sup>th</sup> July to 9<sup>th</sup> Aug.*

- *Classical Dynamics*
- *Electromagnetic Theory*
- *Statistical Mechanics*

*20<sup>th</sup> Aug. to 11<sup>th</sup> Oct.*

- *Classical Mechanics*
- *Thermal Physics*
- *Quantum Mechanics*
- *Mathematical Physics*
- *Electronics*
- *Atomic & Molecular Phy.*
- *Solid State Physics*
- *Nuclear Physics*

**TIMINGS : 5.00 to 8.00 pm everyday**

**Registration: FREE**

**Limited Seats**

**Register as early as possible**

**Register at :**

<https://forms.gle/f4UsERFuvapgrq9T7>

**For enquiries, write to:**

[nasilearningphysics20@gmail.com](mailto:nasilearningphysics20@gmail.com)

*Special Lecture*

*by*

**Prof. Ajoy K. Ghatak**

(NASI Meghnad Saha Distinguished Prof.,

Formerly Prof. at IIT Delhi

Chairman, NASI-Delhi Chapter)

**Convener**

**Dr. Punita Verma (Member NASI)**

**Co-Convener**

**Dr. Pushpa Bindal**

**Organizing Committee**

**Dr. Triranjita Srivastava**

**Dr. Neetu Agrawal**



Annex. 1 'b'



# Covid-19 Lockdown – Coping with Stress



AUGUST 15, 2020



11:00 AM

## EMINENT PANELISTS



**Dr Umakant Panwar, (Retd IAS)**  
Former Secretary  
Govt. of Uttarakhand



**Dr Anjan Ray**  
Director, CSIR-IIP, Dehradun

## MODERATOR



**Dr Rajendra Dobhal, FNASc**  
Director General, UCOST



**Mr G.S Rautela**  
Advisor, Science City Dehradun



**Dr Harish Shetty**  
Renowned Psychiatrist, Mumbai

**PANEL  
DISCUSSION**

on **zoom**

To Join on Zoom, click  
[https://zoom.us/j/9796157043?](https://zoom.us/j/9796157043?pwd=WXA1Wno4ejU1cy93Zjd5YVvk3bUh6UT09)  
[pwd=WXA1Wno4ejU1cy93Zjd5YVvk3bUh6UT09](https://zoom.us/j/9796157043?pwd=WXA1Wno4ejU1cy93Zjd5YVvk3bUh6UT09)

OR

**Meeting ID: 979 615 7043**  
**Password: VigyanDham**

**Streaming will also be done through  
Facebook & YouTube Live**

**Contact :**  
**8193099198/7500582048**  
**pic.ucost@gmail.com**





Annex. 1 'c'

# Govt. Girls' Post Graduate College, Ujjain

(A Centre for Excellence) 'A' Graded by NAAC (Two Cycles)

## Zoology & Biotechnology Department and Internal Quality Assurance Cell

In Association with

THE NATIONAL ACADEMY OF SCIENCES, INDIA, BHOPAL CHAPTER Organize

Faculty Development Programme on

### Research Article Writing and Online Academic Presentation

Supported by: MPHEQIP, Govt. of Madhya Pradesh Funded by World Bank (IDP)

17<sup>th</sup> - 23<sup>rd</sup> August 2020

Chief Guest of Inaugural function

Chief Guest of Valedictory function

#### Eminent Resource Persons



**Prof. Arun K. Pandey,**  
Vice-Chancellor, Mansarovar  
Global University, Bhopal (M.P.)



**Prof. U. C. Srivastava**  
Emeritus Professor (UGC)  
University of Allahabad, Allahabad.



**Prof. Balkrishna Sharma**  
Vice-Chancellor  
Vikram University Ujjain (M.P.)

Moderator

Moderator



**Dr. Anand Kar**  
Prof. & Head, School of life sciences  
Devi Ahilya Vishwa Vidyalya, Indore, M.P.



**Dr. Shivesh Pratap Singh**  
Professor and Head, Zoology Dept.,  
Govt. Autonomous P. G. College, Satna



**Dr. Adarsh Pandey**  
Head, Botany Dept.,  
SS College Shahjanapur, UP



**Dr. Jeetendra D. Soni**  
Head, Geography Dept.  
Govt. Arts College, Sikar, Rajasthan



**Dr. Anuj Hundet**  
Professor of Physics & Trainer,  
DoPT, Gol, IEHE, Bhopal, M.P.



**Dr. Rakesh Ranjan**  
Asst. Prof. CDPR,  
Tata Institute of Social Sciences, Mumbai, M.S.



**Dr. Harish**  
Asst. Prof. Botany Dept.,  
M.L.S. University, Udaipur, Rajasthan



**Dr. Dilip Kumar Rathore**  
Asst. Prof. Botany Dept.,  
Govt. College, Bundi, Rajasthan



**Dr. Ashish Kumar**  
Deputy Commissioner, Mid-Day  
Meal Prog. Govt. of Rajasthan, Jaipur



**Dr. D. K. Verma**  
Dean School of Social Science  
Dr. B.R. Ambedkar University Mhow, Indore, M.P.



NASI Prayagraj &lt;nasi.prayagraj@gmail.com&gt;

---

**Regarding letter no. SERB/Accelerate Vigyan/2017/01; dated 16.07.2020 - Launch of Accelerate Vigyan Scheme**

---

NASI Prayagraj &lt;nasi.prayagraj@gmail.com&gt;

Wed, Aug 5, 2020 at 11:43 AM

To: secretary.serb@nic.in

Cc: Padmanaban Govindarajan &lt;geepee@alumni.iisc.ac.in&gt;

Bcc: Satya Deo &lt;sdeo94@gmail.com&gt;, Paramjit Khurana &lt;param@genomeindia.org&gt;

Professor Sandeep Verma  
Secretary  
SERB, Department of Science and Technology  
Government of India

Dear Professor Sandeep Verma,

Thank you for your letter dated July 16, 2020 regarding "Accelerate Vigyan" in the noble cause of capacity building in the country. On behalf of the National Academy of Sciences, India, I would like to assure that NASI would participate and extend its full cooperation as well. I would like to bring to your kind attention the following:

1. NASI has 21 chapters all over the country and these are extremely active in conducting high end workshops as well as serve the social cause of science in remote areas. Just as an example, I have enclosed the webinar series organized by a college in Delhi, supported by the Delhi Chapter and DBT. There are many such examples and NASI would strengthen the same.
2. We are giving wide publicity among the Fellowship regarding the "high end workshops and "Research Internships" that can be organized in R&D institutions, supported by "ABHYAAS".
3. The Summer Internship organized by the Indian Academy of Sciences, Bangalore is a joint effort between the three Science Academies.

NASI would be happy to contribute in every possible way to promote the Accelerate Vigyan Programme of SERB.

Kind regards,

Professor G.Padmanaban  
President, NASI

--

Professor G.Padmanaban  
Former Director, IISc  
President NASI  
Chancellor CUTN  
NASI-Platinum Jubilee Senior Scientist  
Department of Biochemistry  
Indian Institute of Science  
Bangalore-560012  
Tel: 09900144680  
and  
Senior Science Innovation Adviser  
BIRAC, Department of Biotechnology



**राष्ट्रीय विज्ञान अकादमी, भारत**  
**5, लाजपतराय रोड, प्रयागराज-211002**

**(स्वतंत्रता दिवस एवं संविधान दिवस समारोह के अंतर्गत ऑनलाइन निबंध व चित्रकला प्रतियोगिता)**

**प्रतियोगिता के विषय में आवश्यक सूचना/दिशा-निर्देश:**

'राष्ट्रीय विज्ञान अकादमी, भारत' 15 अगस्त 2020 को 74वां 'स्वतंत्रता दिवस' मना रहा है। नवोदित छात्र वैज्ञानिकों के प्रोत्साहन हेतु अकादमी द्वारा कुछ ऑनलाइन (वेब-आधारित) कार्यक्रमों का आयोजन किया जा रहा है जो विज्ञान छात्रों के लिए एक अवसर के रूप में है, तथा निम्नांकित विषयों में उनकी रुचि के अनुसार है-

- ❖ ऑनलाइन निबंध विषय- "वैज्ञानिक प्रवृत्ति "
- ❖ ऑनलाइन चित्रकला विषय- "महामारी COVID-19 का सामना करने के निवारक उपाय"

**महत्वपूर्ण तिथियाँ:-**

पंजीकरण की अंतिम तिथि: 25 अगस्त, 2020

निबंध और चित्रकला भेजने की अंतिम तिथि: 5 सितंबर, 2020

परिणाम घोषणा की तिथि: 28 सितंबर, 2020

नोट- सभी प्रतिभागियों को प्रमाण पत्र दिया जाएगा और शीर्ष 3-5 छात्रों को पुरुस्कृत किया जाएगा।



## आवश्यक दिशा-निर्देश:

1. निबंध की भाषा केवल अंग्रेजी अथवा हिंदी होनी चाहिए।
2. एक प्रतिभागी केवल एक निबंध और एक चित्रकला ही भेज सकता है।
3. सह-लेखन की अनुमति नहीं है।
4. मूल्यांकन के लिए केवल मूल निबंध और चित्रकला की मौलिकता पर विचार किया जाएगा। इसके अलावा, किसी भी रूप में साहित्यिक नकल को अयोग्यता की श्रेणी में माना जाएगा।
5. सभी प्रतिभागियों को 5 सितंबर, 2020 तक अपना निबंध और चित्रकला [nasi.allahabad1@gmail.com](mailto:nasi.allahabad1@gmail.com) पर भेजना होगा।

## निबंध व चित्रकला प्रारूप संबन्धित दिशा-निर्देश:

1. निबंध अधिकतम 1500 शब्दों में होना चाहिए।
2. निबंध, माइक्रोसॉफ्ट ऑफिस (doc, /Docs.) प्रारूप में ही होना चाहिए।
3. निबंध फ्रॉन्ट "टाइम्स न्यू रोमन", फ्रॉन्ट आकार 12, लाइन स्पेस 1.5 और संरेखण समान होना चाहिए।
4. निबंध सभी व्याकरण और वर्तनी संबन्धित त्रुटियों से मुक्त होना चाहिए।
5. चित्रकला सुस्पष्ट होनी चाहिए।
6. चित्रकला केवल स्कैन (पी.डी.एफ.) प्रारूप में ही भेजें।

## नोट:

इन प्रतियोगिताओं के परिणाम के बारे में अकादमी का निर्णय अंतिम होगा, और इस मामले में किसी प्रकार का कोई संवाद नहीं होगा।

-----



**राष्ट्रीय विज्ञान अकादमी, भारत**

**5, लाजपतराय रोड, प्रयागराज-211002**

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

**5, Lajpatrai Road, Prayagraj-211002**

**(ऑनलाइन निबंध और चित्रकला प्रतियोगिता/ONLINE ESSAY & PAINTING COMPETITION)**

**(REGISTRATION FORM/ पंजीकरण फॉर्म)**

- आप कौन सी प्रतियोगिता में भाग लेना चाहते हैं, कृपया टिक [✓] करें।  
(Please tick [✓] which competition you want to participate.)

❖ ऑनलाइन निबंध विषय- "वैज्ञानिक प्रवृत्ति " (Online Essay Topic- "Scientific Temperament")	
❖ ऑनलाइन पेंटिंग विषय- "महामारी COVID-19 का सामना करने के निवारक उपाय" (Online Painting Topic- "Preventive Measures to Combat the Pandemic COVID-19")	

नाम/Name*	
लिंग/Sex*	
पिता का नाम/Father's Name*	
कक्षा व विषय/Class & Subject*	
ई-मेल/E-mail*	
संपर्क नंबर/Contact Number*	
स्कूल का नाम एवं पता* (Name of School & Address)*	





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

**(Online Essay and Painting Competition under Independence Day & Constitution Day Celebrations)**

**Necessary Information / Guidelines Regarding the Competitions:-**

The National Academy of Sciences, India is celebrating the 74th 'Independent Day' on 15<sup>th</sup> August; 2020. The academy is organizing a few online (web-based) events to give a boost to the zeal of the budding scientists. This comes out as an opportunity for the school students of the science stream to participate in the contests as per their interest on the topics given below-

- ❖ **Online Essay Topic- "Scientific Temperament"**
- ❖ **Online Painting Topic-"Preventive Measures to Combat the Pandemic COVID-19"**

**Important Dates:-**

- **Last Date of Registration: 25<sup>th</sup> August, 2020.**
- **Last Date of Essay & Painting Submission: 5<sup>th</sup> September, 2020.**
- **Declaration of result: 28th September, 2020.**

**Note-** All the eligible participants will get the certificate of participation and the prizes will be given to top 3-5 students.

## **GUIDELINES FOR SUBMISSION:**

1. The essay should be written in English or Hindi only.
2. A participant can send only one essay & one painting.
3. Co-authorship is not permitted.
4. Only original essay & theme of painting will be considered for evaluation. Moreover, any form of plagiarism will result in disqualification.
5. All the Participants have to send their essay & painting on [nasi.allahabad1@gmail.com](mailto:nasi.allahabad1@gmail.com) till 5<sup>th</sup> September, 2020.

## **FORMATTING GUIDELINES FOR THE ESSAY & PAINTING:**

1. The length of the essay should be maximum 1500 words.
2. Manuscript must be made in Microsoft Office (doc, /Docx.) formats only.
3. The essay should be free from all grammatical and spelling errors.
4. The body of the manuscript must be in the font "Times New Roman" font size 12, line spacing 1.5 and alignment "justify".
5. The painting should be explicit.
6. Paintings must be sent in scanned (PDF) version.

## **NOTE:**

The decision of the academy will be final regarding the result of these competitions, and no communication will be entertained in this matter.

-----



## राष्ट्रीय विज्ञान अकादमी, भारत

5, लाजपतराय रोड, प्रयागराज-211002

The National Academy of Sciences, India (NASI)

5, Lajpatrai Road, Prayagraj-211002

**“स्वतंत्रता दिवस एवं संविधान दिवस समारोह के अंतर्गत ऑनलाइन निबंध व चित्रकला प्रतियोगिता”**  
**(“Online Essay and Painting Competition under Independence Day & Constitution Day Celebrations”)**

**(REGISTRATION FORM/ पंजीकरण फॉर्म)**

- आप कौन सी प्रतियोगिता में भाग लेना चाहते हैं, कृपया टिक [✓] करें।  
(Please tick [✓] which competition you want to participate.)

❖ ऑनलाइन निबंध विषय- "वैज्ञानिक प्रवृत्ति" (Online Essay Topic- “Scientific Temperament”)	
❖ ऑनलाइन चित्रकला विषय- "महामारी COVID-19 का सामना करने के निवारक उपाय" (Online Painting Topic-“Preventive Measures to Combat the Pandemic COVID-19”)	

नाम/Name*	
लिंग/Sex*	
पिता का नाम/Father's Name*	
कक्षा व विषय/Class & Subject*	
ई-मेल/E-mail*	
संपर्क नंबर/Contact Number*	
स्कूल का नाम एवं पता* (Name of School & Address)*	





# Vector Biology and Control

## An Update for Malaria Elimination Initiative in India

*Edited by*

**Vas Dev**

M.Sc. (Hons.), Ph.D (Notre Dame), FNASc



**The National Academy of Sciences, India**  
2020