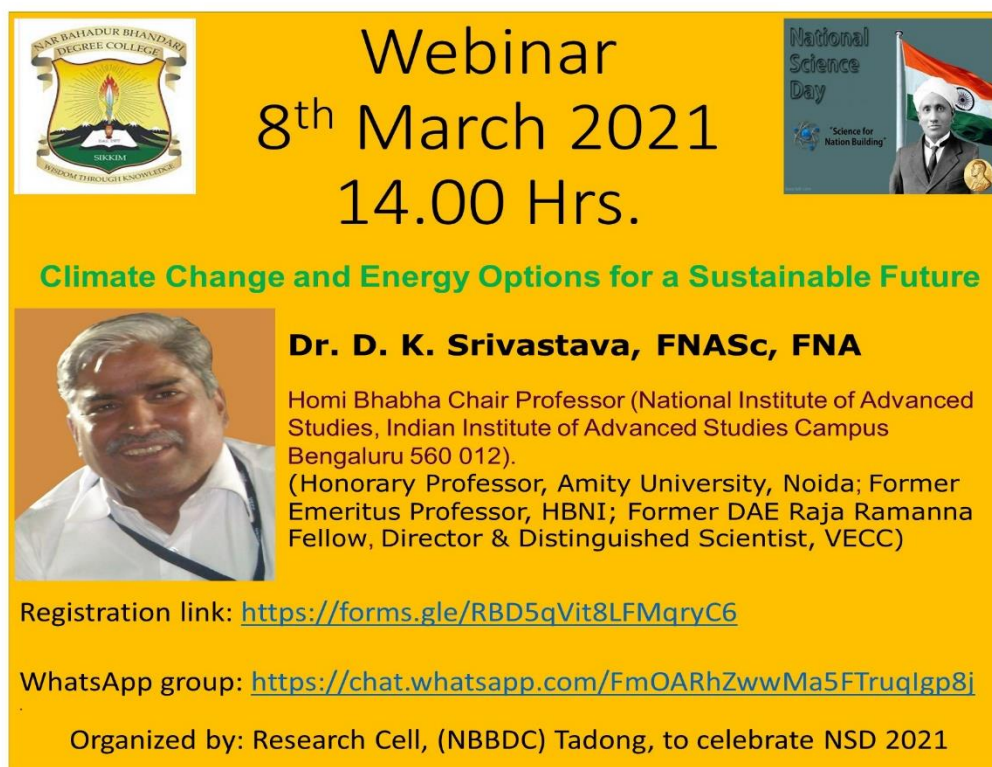


Report of the webinar held on 8th March 2021 “Climate Change and Energy Options for a Sustainable Future” organized by Research cell, NBBDC, Tadong, to celebrate National Science Day 2021.

The webinar was aimed to spread awareness about the importance of science and scientific research. For this, one of the eminent scientists from Dr. D. K. Srivastava was invited to talk about his scientific discoveries and his latest book on climate change and energy options for a sustainable future. The webinar played an important role in motivating students to join the field of research and utilize their research outcomes to solve the problems faced by today’s society related to energy crises and energy management. At the end of the program, the feedback was collected from the participants and e-certificate of participation was also distributed.

The details of program are as follows:



Webinar
8th March 2021
14.00 Hrs.

Climate Change and Energy Options for a Sustainable Future

Dr. D. K. Srivastava, FNASc, FNA
Homi Bhabha Chair Professor (National Institute of Advanced Studies, Indian Institute of Advanced Studies Campus Bengaluru 560 012).
(Honorary Professor, Amity University, Noida; Former Emeritus Professor, HBNI; Former DAE Raja Ramanna Fellow, Director & Distinguished Scientist, VECC)

Registration link: <https://forms.gle/RBD5qVit8LFMqryC6>

WhatsApp group: <https://chat.whatsapp.com/FmOARhZwwMa5FTruqlgp8j>

Organized by: Research Cell, (NBBDC) Tadong, to celebrate NSD 2021

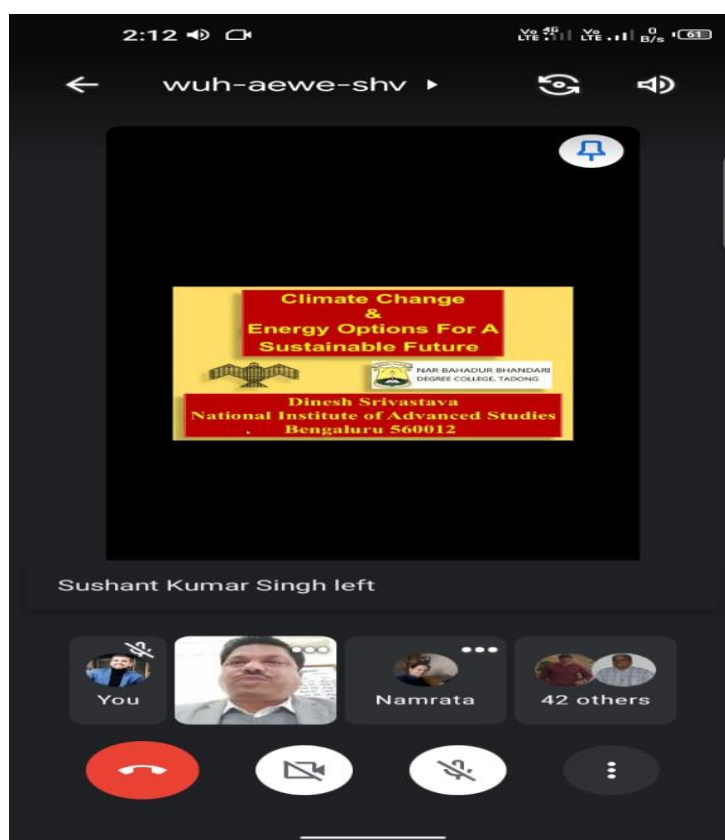
The webinar was attended by about 60 participants comprising, faculty members of different institutions, researchers and students across the country. Apart from these, a very special participant Dr. Rajesh Verma, former head of Tarapur nuclear reactor also wished to join the session and participated in the webinar.

The event started with the opening remarks by the convener of webinar Dr. Homnath Luitel, where he highlighted the fact that the webinar was organized by Research cell, Nar Bahadur Bhandari Degree College, Tadong on 8th of March 2021 on the occasion of National Science Day 2021

which was supposed to be organized on 28th Feb 2021. But, due to technical difficulty, it was organized on 8th march. After that short introduction, the meeting was addressed by Dr. Namrata Tamang, Convener, Research Cell, NBBDC, Tadong.

Dr. Tamang, who is also the HOD, Zoology dept. NBBDC, Tadong highlighted that the national science day is organized every year on 28th Feb to remember and celebrate the discovery of Raman effect by Sir. C. V. Raman, who was awarded Noble price for the year 1930. She formally welcomed all the participants and guests and also gave a brief introduction of the speaker Professor, Dinesh Kumar Srivastav and invited the convener of the webinar to moderate the session.

The meeting was then addressed by Dr. D Purohit, principal, NBBDC, Tadong. In his short speech, the principal gave a brief introduction of college and the different courses carried in the college. Also, he emphasized about the importance of conducting such events to motivate students and in general for the development of science. He congratulates the organizers for hosting such event. At the end, the principal wishes a grand success of webinar and suggested to organized many similar events in future.



The moderator thanked the principal for his motivational words and without delaying a bit, the speaker of the event Dr. D. K. Srivastav was invited to deliver the talk.

The session was then addressed by the speaker, and spoke on the topic 'Climate Change and Energy Options for a Sustainable Future' where he talked about different challenges faced by the

world and its impact on environment in order to meet the growing needs of energy demands. He talked about many alternative sources of energies for the sustainable growth and development.

Power of Animals & Man

Animal	Power (Watts)
Horse	746
Draft Horse	645
Ox	430
Mule	320
Donkey	160
Man	67

Materials Throughput in Tons/TWh by Type of Energy Source

Energy Source	Cement	Concrete	Steel	Glass	Other
Solar PV	1797	2700	7900	350	3700
Hydro	67	14000	1800	92	368
Wind	111	8000	1100	3300	1760
Geothermal	111	1100	160	1760	160
Nuclear	111	1100	160	1760	160

Use of coal leads to global warming, releases radioactivity in the air, and pollutes water.

A 1300 MW thermal power station uses 4.6 million tonnes of coal per year and produces :

- 14.5 million tonnes of CO₂
- 1.3 million tonnes of ash
- 650,000 tonnes of gypsum
- 27000 tonnes of sludge
- 38000 tonnes of nitrous oxide
- 23000 tonnes of sulphur dioxide
- 1300 tonnes of particulate matter
- 6.5 tonnes of uranium!

After the talk for about 1 hour, the forum was opened to all the participants for Q & A session. After a fruitful discussion, the program came to the end.

Finally, the event was concluded with the vote of thanks note by Webinar Coordinator. E-certificate was also provided to all those participants who wish to take it and filled up the online feedback form.

Webinar on Climate Change and Energy Options for a Sustainable Future

Patron: Dr. D. Purohit, Principal NBBDC, Tadong

Advisors

- 1. Dr. Namrata Tamang, Convener Research cell and HoD, Dept of Zoology, NBBDC.**
- 2. Dr. Bhakta Kanwar, Associate professor. Dept of Physics, NBBDC.**
- 3. Mr. Kshittiz Chettri, Dean and HoD, Deptt. of Mathematics, NBBDC.**

And members of Research Cell, NBBDC, Tadong

Convener: Dr. Homnath Luitel, (Assistant Prof, Deptt. Of Physics, NBBDC, Tadong), email id: hlphysics20@gmail.com ; Mob No: 9002100310

Co-convener: Mr. Ronal Rai (Assistant. Prof, Deptt. Of Physics, NBBDC, Tadong.)

Organized by: Research Cell, (NBBDC) Tadong, to celebrate National Science Day 2021 (28th Feb. 2021)



Dr. N Tamang

Convener
Research cell.