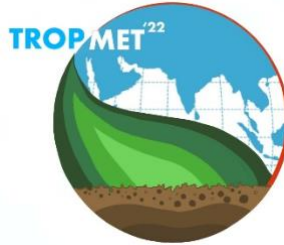




Event Brief

TROPMET-2022



**National Symposium on Advances in Weather and Climate Prediction and
Climate Change Projection over South Asia: Application in Water and
Agriculture Sectors**

Jointly hosted by

*Department of Earth and Environmental Sciences, IISER Bhopal
&
Indian Meteorological Society (IMS)- Bhopal Chapter
29 November - 2 December 2022*

Organized by

Indian Meteorological Society, New Delhi

Venue: Visitor Hostel Auditorium, IISER Bhopal





Under the aegis of the local chapter of the Indian Meteorological Society (IMS), the four-year national symposium **TROPMET-2022** concluded successfully on 2 December at the Indian Institute of Science Education and Research (IISER), Bhopal. TROPMET is a series of national conferences organized annually by the IMS. Every fourth year, the TROPMET is organized at the international level with the name INTROMET. The recently concluded **TROPMET-2022**, from **29 November to 2 December**, focused on weather and climate prediction, including applications in the water and agricultural sectors. The climate varies naturally in space and time. Today's concern is the occurrence of climate changes due to human activities. These changes are manifested as an increase in temperature and extreme weather events such as floods, droughts, heat waves, dust storms, heavy precipitation events, etc. These weather events need constant monitoring to reduce their potential impacts on society. Since observation stations are not available at every spatial point of interest, modelling efforts are required to help assess the situation. Also, process studies are essential to understand the phenomena in greater depth. Keeping these facts in mind, TROPMET-2022 made successful efforts to bring together climate scientists, agricultural scientists, local government bodies, academicians, policymakers and disasters, and other related experts to discuss and share information for the benefit of society.

TROPMET-2022 was organized at Visitor Hostel Auditorium and three seminar halls in parallel sessions at IISER Bhopal. More than 400 participants have presented their work. It was attended by senior scientists, eminent academicians, young researchers, early career scientists, noticeable industry representatives, state government officials, and media

personals actively participated in the symposium. The opening ceremony of the symposium was graced with the presence of distinguished guests by **Dr. Akhilesh Gupta** (Guest of honor, Secretary, SERB, New Delhi), **Prof. Siva Umopathy** (Director, IISER Bhopal), **Professor Sunil Kumar** (Chief Guest, Vice-Chancellor, Rajiv Gandhi University of Technology, Bhopal), and **Dr. Rupa Kumar Kolli** (Chairman IMS).

There were various highlight plenary and keynote lectures by eminent scientists such as **Dr. Akhilesh Gupta**, **Dr. Kalachand Sain** (Director, Wadia Institute of Himalayan Geology), **Dr. Rajeev Mehajan** (Advisor, Ministry of Science and Technology, GoI), **Prof. Ravi Shankar Nanjundiah** (Professor, Divecha Centre for Climate Change, IISc. Bengaluru), **Dr. R. Krishnan** (Director, Indian Institute of Tropical Meteorology, Pune), **Dr. M. Rajeevan** (Former Secretary, Government of India, Ministry of Earth Sciences), **Prof. S. K. Dash** (Ex-Professor, IIT Delhi), **Dr. Nabanshu Chattopadhyay** (Ex-Deputy Director General of Meteorology, Agricultural Meteorology Division, IMD Delhi), **Professor U. C. Mohanty** (Emeritus Professor, IIT Bhubaneswar), **Sri Nilesh M. Desai** (Director, SAC-ISRO, Ahmedabad). The valedictory ceremony witnessed the presence of Chief Guest **Dr. K. Ravichandran, IFS** (Director, IIFM, Bhopal) and Guest of honor **Shri Nilesh M Desai** (Director, SAC-ISRO, Ahmedabad), **Prof. S. K. Tandon** (Adjunct Professor, IISER Bhopal) and **Dr. Pankaj Kumar** (Convenor TROPMET-2022 and Associate Professor IISER Bhopal). During the conference, many scientific papers were presented and discussed. The eminent scientists also discussed one side event how to integrate climate science at the undergraduate level. The successful execution of this national symposium will help to bridge the gap between different sectors. It will be a noticeable change in the techniques related to forecasting weather and climate-related extreme events in India and especially in the entire Madhya Pradesh, including Bhopal, which will be ultimately beneficial for the agriculture and water sector, industry, trade, etc., TROPMET-2022 has been successful in meeting its objectives. A welcome feature of TROPMET-2022 is the active participation of brilliant young researchers from around the country and the opportunity provided for the next generation to benefit from their interaction with senior scientists. Taking advantage of a large number of IMS members attending the TROPMET-2022 sessions, the IMS has also organized an Open General Meeting on 1 December 2022 at the venue, where a major issue discussed was the potential role of IMS to help integrate climate science in the curricula at the undergraduate level.

For more details on TROPMET-2022, please visit <https://conf.iiserb.ac.in/TROPMET/> .

A detailed overview of the successfully coordinated four-day event is given below:

Day 1

29-11-2022 (Day-1)			
8:30-9:30	Registration		
9:30-10:30	Inauguration (LHC Auditorium)		
10:30-11:00	High Tea		
11:00-11:45	Plenary Lecture (LHC Auditorium) Dr. Akhilesh Gupta		
Theme and Venue			
	VH Auditorium	Seminar Hall-1	Seminar Hall-2
	MPP1.1 (Dynamics and climate change)	WCP 1.5. (Ocean Variability and Extremes)	WCP1.6 (Cryosphere and Glaciology)
12:00-12:20	Keynote Lecture (1) Prof. Ravi Shankar Nanjundiah	Keynote Lecture (1) Dr. Anant Parekh	Keynote Lecture (1) Dr. Kalachand Sam
12:20-12:35	Invited Talk (2) Prof. Suneet Dwivedi	Invited Talk (1) Dr. Prasanth A Pillai	Invited Talk (1) Dr. Raaj Ramsankaran
12:35-12:50	Dr. Shailendra Rai		
12:50-13:30	Oral Presentation (4/4)	Oral Presentation (4/4)	Oral Presentation (3/4)
13:30-14:30	Lunch		
Theme and Venue			
	Seminar Hall-1	Seminar Hall-2	VH Auditorium
	WCP 1.1 (Interacting Spheres and Land Use)	CS1.1 (Being Climate Smart)	Sustaining Green Life: Session on Energy
14:30-14:50	Keynote Lecture (1) Dr. Atul Kumar Sahai	Keynote Lecture (2) Dr. Rajeev Mahajan Dr. Satyaban B	Coordinators: Dr. P. Mukhopadhyay Dr. Raghavendra Ashrit
14:50-15:30	Lightning Talks (9/10)	Lightning Talks (7/10)	Speakers:
15:30-16:30	Tea & Poster Presentation (23+8+6+16(LTs) = 53)		Dr. Raghvendra Ashrit (NCMRWF)
16:30-16:45	Invited Talk(2) Dr. S. Abhilash	Invited Talk (1) Dr. Lokendra Thakkar	Mr. Suresh Pillai (ReNew Power)
16:45-17:00	Dr. Samir Pokhrel		Dr. Tripta Thakur (NPTI Faridabad)
17:00-18:20	Oral Presentation (8/8)	Oral Presentation (7/8)	Mr. Seshagiri Rao (Greenko Group) Mr. Anandh Thankaswamy (Adani Greens Energy Ltd.)
18:30-19:30	Cultural Event (LHC Auditorium)		
19:30-21:00	Dinner		

Day 1: Inauguration Ceremony

Date: 29 November 2022

Time: 09:30 am - 11:00 am

Overview and Key Event Information

08:30 - 09:30	Registration and Arrival of Guests	
09:30 - 09:35	Welcome Address	Dr. Pankaj Kumar Convener, TROPMET-2022
09:35 - 09:40	Lighting of lamp	By Dignitaries
09:40 - 09:45	Saraswathi Vandana	IISER Students
09:45 - 09:50	Address by	Dr. D. R. Pattanaik IMS Vice President
09:50 - 09:55	Address by	Dr. Rupa Kumar Kolli IMS President
09:55- 10:00	Address by	Prof. Siva Umopathy Director, IISER Bhopal
10:00 - 10.10	Address by Guest of Honour	Dr. Akhilesh Gupta Secretary, SERB
10:10 - 10:20	Release of Publications (Souvenir & Abstract Volume) & Presentation of IMS Awards	By Dignitaries
10:20 - 10:35	Inaugural Address by Chief Guest	Prof. Sunil Kumar Vice-Chancellor, RGPV

10:35 – 10:40	Vote of Thanks	Dr. R. Balasubramanian Secretary IMS-B Chap
10:40-11:00	High-Tea	

Day 2

Time	30-11-2022 (Day-2)					
9:00-9:45	Plenary Lecture (VH Auditorium) Dr. R. Krishnan					
9:45-10:30	Plenary Lecture (VH Auditorium) Dr. M. Rajeevan					
10:30-10:50	Tea & Coffee					
	Theme and Venue					
	VH Auditorium	Seminar Hall-1	Seminar Hall-2	Board Room-3		
	WCE1.2 (Hydrological Extremes (A))	AWCAL.1 (Agroclimatic perspective)	WCPI.2A (Climate variability and predictability)	MPPI.2 (S2S prediction)		
11:00-11:20	Keynote Lecture (1) Dr. Jasti S. Choudhary	Keynote Lecture (1) Dr. Vinay Kumar Sehgal	Keynote Lecture (1) Dr. Yogesh K. Tewari	Invited Talk (3) Dr. Swarna Panackal Dr. M.L. Sahu Dr. Sumantha Joseph		
11:20-11:35	Invited Talk (1) Dr. (Md) Saqab Saharwardi	Invited Talk (2) Dr. K.V. Ramana Rao Dr. N. Shubash	Invited Talk (1) Mr. Anup Duboliya			
11:35-11:50						
11:50-13:00	Oral Presentation (7/7)	Oral Presentation (7/7)	Oral Presentation (5/7)	Oral Presentation (5/7)		
13:00-14:00	Lunch					
	Theme and Venue					
	Board Room-3	Seminar Hall-1	Seminar Hall-2	Board Room-1	VH Auditorium	
	CMPP 1.3 (Regional Climate Modelling and AI/ML)	RWACP 1.3. (Disaster Risk Reduction + Data Assimilation)	CMPP 1.1. (Weather and Climate Modelling)	WCE 1.4. (Cyclones and WDs)	Sustaining Green Life: Session on Energy (16:00-18:00)	
14:00-14:20	Keynote Lecture (2) Dr. J. Sanjay	Keynote Lecture (1) Dr. S. D. Pawar	Keynote Lecture (1) Dr. A. Sureshchandra Rao	Keynote Lecture (1) Dr. Inghamudha Panda	Coordinators: Dr. P. Mahapatrayy Dr. Raghuveendra Ashrit Speakers: Dr. Anuresh Khosla (Mankaran Analytic Ltd.) Dr. Vikas Kumar Yadav (POSOCC, New Delhi) Dr. Rupa Kumar Koli (IMS) Dr. Mahal Tesari (IBM USA) Dr. P. Mahapatrayy (IITM Pune)	
14:20-15:30	Lightning Talks (13/14)	Lightning Talks (10/14)	Lightning Talks (6/14)	Lightning Talks (8/14)		
15:30-16:30	Tea & Poster Presentation(20+7+10+14+38LTs =88)					
16:30-16:45	Dr. Ratan K. Datta	Invited Talk (3) Dr. Rajendra Kumar Jansamani and Dr. Raju Attada	Invited Talk (1) Prof. Rajeev Bhatia	Invited Talk (2) Dr. Gunav Tewari		
16:45-17:00	Invited Talk (8)	Dr. Arvind Salay		Mr. Aaqub Javed		
17:00-18:40	Oral Presentation (8/10)	Oral Presentation (10/10)	Oral Presentation (8/10)	Oral Presentation (7/10)		
18:30 - 19:30	IMS General Body Meeting					
19:30 - 21:00	Dinner					

Day 3

Time	01-12-2022 (Day-3)				
9:00-9:45	Plenary Lecture (VH Auditorium) Dr. Nabanshu Chattopadhyay				
9:45-10:30	Plenary Lecture (VH Auditorium) Prof. S.K. Dash				
10:30-10:50	Tea & Coffee				
	Theme and Venue				
	VH Auditorium	Seminar Hall-1	Seminar Hall-2	Board Room-3	
	WCE 1.2. (Hydrological extremes (B))	RAWCP1.1. (Eyes in the sky)	CMPP - 1.2. (Modelling strategies and physical processes)	RAWCP 1.2. (Aerosols and Atmospheric Chemistry)	
11:00-11:20	Keynote Lecture (1) Dr. Pankaj Kumar	Keynote Lecture (1) Dr. Atul Varma	Keynote Lecture (1) Dr. V.S. Prasad	Invited Talk (1) Dr. Sumit Kumar Mishra	
11:20-11:35	Invited Talk (2) Dr. P. C. Joshi and Dr.D.R.Pattanaik	Invited Talk (1) Dr. Prashant K. Srivastava	Invited Talk (1) Dr. Rajib Chattopadhyay	Invited Talk (1) Dr. Saroj K. Sahu	
11:50-13:00	Oral Presentation (7/7)	Oral Presentation (6/7)	Oral Presentation (7/7)	Oral Presentation (7/7)	
13:00-14:00	Lunch				
	Theme and Venue				
	VH Auditorium	Seminar Hall-1	Seminar Hall-2	Board Room-1	
	WCP 1.3. (Aerosol and Climate)	WCE 1.1. (Lightening and Thunderstorm)	AWCH1.1. (Hydrological Applications)	JAL: Resource for Life	
14:00-14:20	Keynote Lecture (1) Dr. G. Pandithurai	Keynote Lecture (1) Dr. Abhijit Sarkar	Keynote Lecture (1) Dr. T. Thomas	Invited Talk (2) Mr. Balasubramanian R Dr. Somil Swarnkar	
14:20-15:30	Lightning Talks (14/14)	Lightning Talks (5/14)	Lightning Talks (9/14)	Lightning Talks (13/14)	
15:30-16:30	Tea & Poster Presentation(23+8+11+7+1+41(LTs) = 92)				
16:30-16:45	Invited Talk (1) Dr. B. Lakshmi Madhavan	Invited Talk (1) Dr. Subhadeep Halder	Invited Talk (1) Dr. Sanjeev Jha		
17:00-18:20	Oral Presentation (8)	Oral Presentation (8/8)	Oral Presentation (6/8)		
18:30 - 19:30	Cultural Programme (VH Auditorium)				
19:30 - 21:00	Dinner				

Day 4

Time	02-12-2022 (Day-4)		
9:00-9:45	Plenary Lecture (VH Auditorium) Prof. U C Mohanty		
9:45-10:30	Plenary Lecture (VH Auditorium) Shri Nilesh M. Desai		
10:30-10:45	Tea & Coffee		
	Themes and Venue		
	Board Room-3	TIME →	Board Room-1
	WCP 1.2B & 1.4 (Aerosol Impacts and Climate Variability)		WCE 1.3. (Climate change implications and Temperature Extremes)
10:45-11:05	Keynote Lecture (1)		Keynote Lecture (1)
	Dr. Atul Kumar Srivastava	10:45-11:05 →	Dr. Mukul Tewari
		11:05 - 11:25 →	
11:05-11:20	Invited Talk (1) Dr. Akhilesh Kumar Mishra	11:25 - 11:40 →	Invited Talk (1) Dr. R. Vinnarasi
11:20-12:35	Oral Presentation	11:40 - 12:35 →	Oral Presentation
12:35-13:20	Valedictory Function (VH Auditorium)		
13:20-14:30	Lunch		
14:30-19:00	Local Tour & Departure		

Day 4: Valedictory Function

Date: 2 December 2022

Time: 12:30 pm - 01:30 am

Overview and Key Event Information

12:30 - 12:35	Arrival of dignitaries	
12:35 - 12:45	Conference Summary	Dr. Pankaj Kumar Convener, TROPMET-2022
12:45 – 12:50	Address by	Dr. Rupa Kumar Kolli MS President
12:50 – 12:55	Address by	Prof. S K Tandon Chairman LOC
12:55– 01:00	Address by	Prof. Siva Umopathy Director, IISER Bhopal
01:00 - 01:10	Address by Guest of Honour	Shri Nilesh M. Desai Director, SAC, ISRO Ahmedabad
01:10 - 01:15	Awards for Best Paper	Dignitaries
01:15- 01:25	Address by Chief Guest	Dr. K. Ravichandran, IFS Director IIFM Bhopal
01:25 – 01:30	Vote of Thanks	Dr. R. K. Giri Secretary IMS
01:30 pm	Lunch	

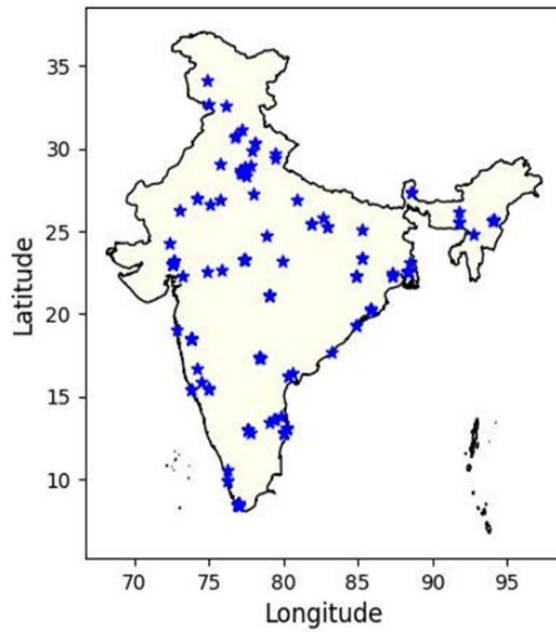


Figure: Location of participants taking part in TROPMET-2022

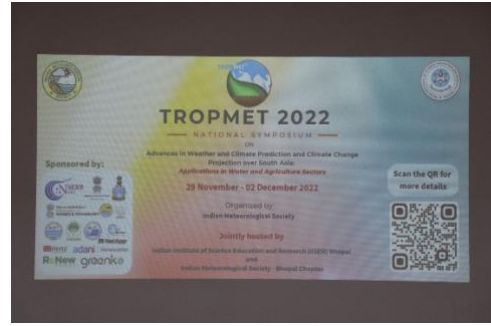
Total abstract received	~470
Category	Approx. Count
Plenary Speakers	7
Keynote Speakers	26
Invited Speakers	36
Oral Talks	148
Lightening Talks	95
Poster Presentation	137
NOC members	49
LOC members	24
Volunteers	68
Total	590

Photos from the Event:

Inauguration Ceremony



IISER Bhopal



Symposium dignitaries in the front row



Symposium auditorium with participants



Lighting of the Lamp by Dignitaries



Convenor TROPMET 2022, Opening Remarks by Dr. Pankaj Kumar



Director, IISER Bhopal, Prof. Siva Umopathy



Address by Guest of Honor, Dr. Akhilesh Gupta



Honorable Chief Guest, Prof. Sunil Kumar presenting the IMS Awards



Release of Souvenir cum Abstract Book



Felicitation of Hon. Chief Guest Prof. Sunil Kumar by IMS President, Dr. Rupa Kumar Kolli



Address by the Chief Guest, Prof. Sunil Kumar



Keynote Lecture by Prof. Ravi Shankar Nanjundiah



Oral Presentation by a participant



Special Event of Industry Connect: Sustaining Green Life: Session on Energy



Symposium auditorium



SPIC-MACAY Cultural Event



SPIC-MACAY Cultural Event

Day-2



Plenary Lecture by Dr. R. Krishnan



Plenary Lecture by Dr. M. Rajeevan



Day-3



Plenary Lecture by Prof. S. K. Dash



Plenary Speakers Dr. Nabanshu Chattopadhyay, Prof. U. C. Mohanty and Prof. S. K. Dash



Oral Presentation by Participant



Presentation by young researchers in different sessions



Poster Session



Felicitation of Dr. Akhilesh Mishra by Dr. D. R. Pattanaik

Day-4 & Valedictory Ceremony



Hon. Chief Guest, Dr. K. Ravichandran IFS, (Director, IIFM Bhopal) and Guest of Honor, Shri Nilesh M. Desai (Director, SAC-ISRO, Ahmedabad)



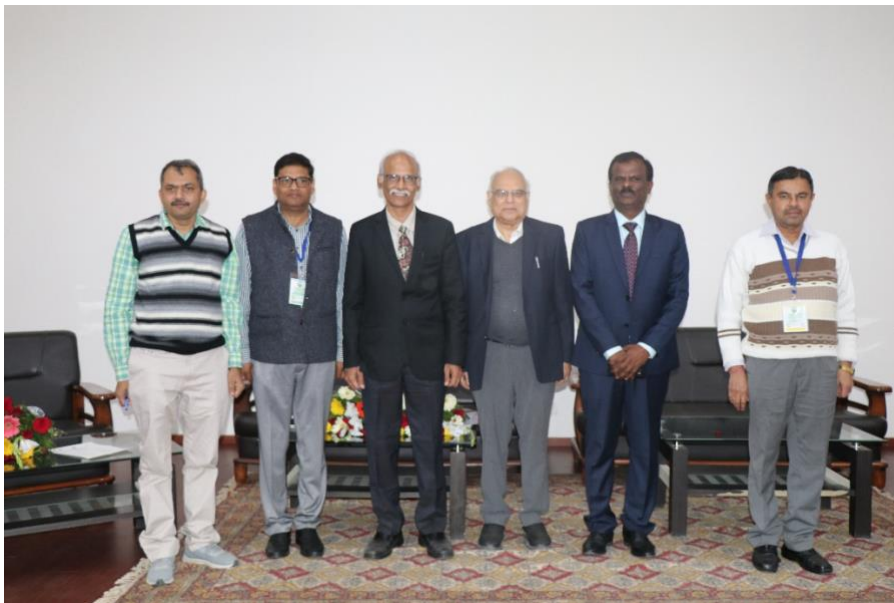
Presenting the Best Poster Awards



Shri K. V. Satya Murty (Registrar, IISER Bhopal) felicitating the Guest of Honor



Shri K. V. Satya Murty (Registrar, IISER Bhopal) felicitating the Chief Guest



Dr. R.K. Giri (Secretary, IMS) with Dr. Pankaj Kumar (Convenor, TROPMET-2022), Dr. Rupa Kumar Kolli (President, IMS), Prof. S.K. Tandon (Chairman, LOC-TROPMET-2022), Dr. K. Ravichandran (Chief Guest, IFS, IIFM Bhopal) and Shri Nilesh M. Desai (Guest of Honor, Director, SAC-ISRO, Ahmedabad)

Press and Media Coverage



Section on DD News Madhya Pradesh

News



News Section in the Dainik Bhaskar



Dainik Bhaskar Online



Director, IISER Bhopal, DPL News



Dr. Akhilesh Gupta, DPL News



ता 1500 मीटर दर्ज की गई टीआइ ने अचानक छोड़ा



मौसम के चक्र में लगातार हो रहा बदलाव: विज्ञानज्ञक अधिक गर्मी और सर्दी का लगातार कम होना ग्लोबल वॉर्मिंग का असर

एनटीवी न्यूज नेटवर्क

भारत में हो रहे बदलाव का असर अधिक गर्मी और सर्दी का लगातार कम होना ग्लोबल वॉर्मिंग का असर है। मौसम के चक्र में लगातार हो रहा बदलाव विज्ञानज्ञक अधिक गर्मी और सर्दी का लगातार कम होना ग्लोबल वॉर्मिंग का असर है।

नई तकनीक के प्रयोग से भविष्यवाणी

कार्यक्रम में शामिल अंतरिक्ष उद्योग के जर्मन के इंसोफेर और नैशनल स्पेस एजेंसी के प्रमुख के नेतृत्व में एक विशेषज्ञ समूह ने मौसम के चक्र में बदलाव का असर और भविष्यवाणी करने के लिए एक नए तकनीक का प्रयोग किया है।

आकाशवाणी भोपाल का लोकप्रिय कार्यक्रम नमस्कार भोपाल

दिनांक 3 दिसंबर 2022 सुबह 7:20 से

भोपाल गैस त्रासदी की बरसी पर गैस पीड़ितों के लिए प्रयास करने वाली चिंगारी ट्रस्ट की रशीदा बी से बातचीत

भारतीय मौसम विज्ञान सोसाइटी IMS द्वारा भोपाल में चल रही राष्ट्रीय संगोष्ठी 2022 की जानकारी टोपमेट के चैयरमैन प्रोफेसर पंकज कुमार से

अंतरराष्ट्रीय दिव्यांगजन दिवस के उद्देश्य और आयोजन की जानकारी क्षेत्रीय पुनर्वास एवम विकलांग केंद्र के प्रोफेसर डॉक्टर गणेश अरुण जोशी से

कार्यक्रम संयोजक: राजेश भट्ट

प्रस्तुतकर्ता: संतोष फिलीपोस

कार्यक्रम में शामिल हुए नीलेश एम देसाई

BANSAL 02:24 PM

BREAKING NEWS जबलपुर

Schedule August Every Year. Note Nil Tuition

मौसम संगोष्ठी: 100 से अधिक शोधकर्तों ने समुद्री चक्रवात, वृष्टि, परिष्कृत विद्युत के रोप कर्मों के बारे में बताया

प्रकृति से छेड़छाड़ का असर, 70 सालों से तापमान में बढ़ोतरी

मौसम में दिख रहा जनबायु परिवर्तन का असर

भारत में हो रहे बदलाव का असर अधिक गर्मी और सर्दी का लगातार कम होना ग्लोबल वॉर्मिंग का असर है। मौसम के चक्र में लगातार हो रहा बदलाव विज्ञानज्ञक अधिक गर्मी और सर्दी का लगातार कम होना ग्लोबल वॉर्मिंग का असर है।

तौन साल से लॉ नीना बना है विलेन, अधिक ठंडक की यही वजह, कम होने के आसार नहीं

9 भवदान केट बढ़े, सराया पहुंची 2022

13.5 फीसदी सर औद्योगिक विकास, अब रिजर्व भूखंड 2016 की याद दिला गया नवम्बर

राष्ट्रीय नवम्बर में औद्योगिक विकास की रफ़्तार

वर्ष	विकास (फीसदी)
2016	12.8
2017	13.0
2018	13.1
2019	13.2
2020	13.3
2021	13.4
2022	13.5



Dr. Rupa Kumar Kolli