

A Report from Indian Meteorological Society and its Local Chapters (October 2019 to March 2020)

1. Seminar on “Lightning Early Warning, its Operationalisation and Safety cum Awareness” October 3-4, October 2019

This seminar was organised by Indian Meteorological Society (IMS) in collaboration with India Meteorological Department (IMD) and Climate Resilient Observing Systems Promotion Council (CROPC). Lightning is the biggest killer in India as against all other natural disasters. As per the National Crime Records Bureau (NCRB) Report, in India more than 2500 people die annually due to lightning. The major challenge has been detection and forecast of lightning. Due to global warming, climate change extremities and depletion of water bodies and forest cover, occurrence of lightning has been on rise, both in terms of intensity and frequency, and hence the fatalities. IMD took the challenge and started lightning forecast since 1st April 2019 by integrating sensors of Indian Air Force (IAF) and network of Indian Institute of Tropical Meteorology (IITM) Pune. IMD added new feathers to its cap by comprehensively undertaking this work. Currently, lightning forecast products based on satellite observations have been giving even 24 hours advance notice followed by now-cast with 2-3 hours advance warning. Such a system is adequate for preparedness and ground level preventive actions. Lightning products of IMD need to be used by the stakeholders such as State Disaster Management Authorities (SDMAs) and ultimately should be used by the community. For outreach and awareness generation, a joint campaign named Lightning Resilient India Campaign along with CROPC and duly supported by IMS, NGOs, IIT Delhi and other concerned institutions has been initiated.

IMS is an active player in the Lightning Resilient India Campaign and its local chapters in Ranchi, Patna, Shillong & Guwahati have organised awareness and safety programmes in this regard. IMS has a great role to play in sensitizing stakeholders and the community towards generating awareness about early warnings, precautionary &



preventive measures and ultimately lightning protection. IMS, in the past, has also been actively involved in educating school children and carrying out awareness campaigns amongst the community. IMS along with CROPC has been instrumental in

educating state authorities about the lightning early warnings, dissemination of warnings to community, awareness and training about lightning safety, research and development and thereby enhance outreach lightning products of IMD. As per the mid-monsoon 2019 Lightning Report published by CROPC on 31 August 2019, 1311 deaths from 1st April to 31st July 2019 in a period of four months have been reported out of which, 96% of deaths were in rural areas which include 71% farmers and 35% children. States like Odisha, Karnataka, Jharkhand, Bihar, Andhra Pradesh, North eastern states have shown proactive approach. Even then there is a lot more to be done by IMS and its partners in large number of states so that the fatalities due to lightning can be reduced. This is more important since lightning strikes are felt promptly during terminal monsoon too. It is imperative that stakeholders from Central Government, State Governments, Academia and Disaster Management Authorities contribute to this effect.

Based on the above back ground, a two day seminar on Lightning Early Warning, its Operationalisation and Safety cum Awareness was organised at Vrishti Sabhagar, IMD Campus, New Delhi on 3-4, Oct 2019. The theme of this event was “Lightning Safety for All”. The technical sessions comprised:

- i) Lightning: as a disaster and its risk management
- ii) Lightning Observation, its detection, forecast and dissemination
- iii) Lightning safety awareness and protection devices
- iv) Experience of the States
- v) Lightning hazard social impact: case study and research presentations

The National Lightning Seminar had participation from Central Government Authorities and Departments, State Disaster Management Departments/Authorities, Academia, NGOs, Researchers, Media and Private sectors working in this field.

2. Panel discussion on “Creating a Weather Ready Globe through Collaboration between Public, Private and Academic (PPA) Sectors”

This panel discussion was held on 4th November 2019 for half-a-day (morning hours) in DGM Conference Room, IMD. Dr. Harinder Ahluwalia, President, IFMS delivered a presentation which consisted of two parts. First he (i) Introduced the International Forum of Met Societies (IFMS) and explained its Role in strengthening Global Weather Enterprise (GWE) and then he went on to (ii) IFMS potential role in Collaboration between Public, Private and Academic (PPA) Sectors. He stated that the World Meteorological Organization (WMO) Congress has already adopted a landmark



declaration on strengthening links between the public, private and academic sectors so that countries can better tackle the risks related to extreme weather, climate, water and other environmental events Both WMO and WBG are on PPA Mission. The Global Facility for Disaster Reduction and Recovery (GFDRR) as part of GWE is a global partnership that helps developing countries better understand and reduce their vulnerability to natural hazards and climate change. He highlighted the fact that National Meteorological Societies such as IMS have members from all three sectors, and hence they can help in involvement of Private Sectors and Academic Sectors in the activities of National Weather Services for the public good.

It was followed by a panel discussion which essentially focused on Indian scenario. The panel discussion was moderated by Prof. S.K. Dash,

President IMS. The other members of the panel consisted of Dr. M. Mohapatra, DGM, IMD; Dr. Ajit Tyagi, Former DGM, IMD; Dr. Akhilesh Gupta, DST and Mr. Raghuvansh Saxena, Earth Watch Institute. Around 50 participants joined the Panel Discussion including representatives from Government Organisations and Private Sectors such as IMD, DST, IITM, IMS, IBM, ICMR, EWI, IES, BKC Weather Sys Pvt Ltd, CROPC and RMSI. All the participants were invited to join in the panel discussion by sharing their opinion on this important issue briefly.

3. Project Operation Healthy Air: Meeting on 11 November 2019 at IIC, New Delhi

IMS in collaboration with World Earth Institute (EWI) organized a brainstorm session on Project Operation Healthy Air (OHA) at the India International Centre, Basement Committee Room III in the Kamla Devi Complex on Monday, 11 November 2019 from 11.00 AM to 1.30 PM. On this occasion, Dr. Mark Chandler, International Director of Research & Programme, EWI, USA was the key speaker who shared his overview regarding the Operation Healthy Air Program



executed in Boston. About 25 distinguished members of IMS including some of its Fellows participated in the brainstorming session. After the presentation of Dr. Chandler, all the participants were invited to share their views on this proposed project to be executed in New Delhi schools. Mr. Raghuvansh Saxena, Chief Executive, EWI India

assured the participants to work in collaborative mode with IMS for the success of the project. This project fully funded by EWI, will help in developing an effective Operation Healthy Air Program.

In this Project OHA, emphasis will be given on Community Science by involving schools in New Delhi. Project OHA is a Citizen Science and Experiential Learning Initiative programme bringing citizens, meteorologists and scientists together to understand the air quality issues. The students will be regularly monitoring air quality in the school campus as part of the project. They will be interacting with meteorologists and scientists to interpret the air quality data and understand the possible impacts. In the long run, students will come up with some recommendations and action plans to improve the air quality in and near the school.

4. Report on IMS Annual Symposium TROPMET

Indian Meteorological Society (IMS) has the tradition of organising Annual Symposium named TROPMET in one of its 32 Local Chapters. Once in every four years, the same event is held as INTROMET with participation of scientists from countries outside India. The theme of this event alters from year to year depending on the importance of the topic in contemporary weather and climate situation. The main objective of this annual symposium is to provide a platform to students and early career scientists in India to present the scientific results coming out of their research activities during the year and thereby get chance to interact with the experts in the field. The symposium is usually structured in such a way that all the members of IMS get chance to actively participate in it either as chairmen of sessions, plenary speakers, invited speaker, oral paper presenter or poster presenter. This annual event has been the flagship event of IMS for the last several years since 1992 with tremendous success.

TROPMET-2019 entitled '*National Symposium on Land, Ocean and Atmosphere Interactive Processes in the Context of Weather and Climate*' was organized by IMS at Andhra University,

Visakhapatnam during 11th to 14th December, 2019. As per the title of TROPMET-2019, the main themes identified for the symposium were; (1) Observations in Climate Variability and Changes, (2) Atmospheric Modelling at Regional and Global Scales, (3) Land-Ocean Interactive Processes, (4) Role of Surface Boundary Conditions in Climate Modelling, (5) Climate, Water and Energy Connections, (6) Impact of Climate Variability/Change on Agriculture, (7) Extreme Weather Events, (8) Weather Forecasting Services at Different Time Scales & Sectoral Applications and (9) Impact of Aerosols on Climate Changes.

This IMS symposium was jointly organised along with IMS Visakhapatnam Chapter and hosted by the Department of Meteorology & Oceanography, Andhra University, Visakhapatnam. TROPMET-2019 was inaugurated on 11th December, 2019 at the Convention Centre of Andhra University by Dr. M. N. Rajeevan, Secretary, Ministry of Earth Sciences (MoES), Government of India (GoI) as Chief Guest in the presence of Prof. P.V.D.G. Prasad Reddy, Vice-Chancellor, Andhra University who was the Distinguished Guest. Dr. S. K. Dash, President IMS presided over the Inaugural Function. The event took place in the presence of Dr. M. Mohapatra, Director General IMD and Dr. Akhilesh Gupta, Advisor Department of Science and Technology (DST), GoI on the dais. The symposium had the international flavor with the participation of Prof. T. Hayashi, DPRI and Prof. T. Narita both from Kyoto University, Japan; Dr. Michael Caruso, USA and Prof. Ibrahim Hoteit, KAUST, Saudi Arabia.

Prof. SSVS Ramakrishna, Chairman of IMS Visakhapatnam Chapter welcomed the dignitaries and participants to the event and gave a glimpse of the origin of TROPMET-2019 starting from the proposal to hold it in Visakhapatnam to the detailed scientific programme. Dr. D.R. Pattanaik, Secretary IMS narrated the activities of IMS highlighting the themes of TROPMET-2019. In his opening presidential address Prof. S. K. Dash, President of IMS stressed on the importance of Meteorology Education and Training programmes by the local chapters of IMS by organising various courses of different durations targeted towards school

children, teachers, stake holders and general public. He mentioned about Global Campus Initiative of WMO and also COMET programme. Prof. P. Suneetha, Head, Department of Meteorology & Oceanography, Andhra University narrated the activities of the department. Dr. Akhilesh Gupta in his remarks highlighted the contribution of the Department of Meteorology & Oceanography, Andhra University in producing several world class Meteorologists and Oceanographers. He encouraged Andhra University to set up a Centre of Excellence in Climate Studies. Dr. M. Mohapatra reiterated the commitment of India Meteorological Department to Weather Forecasting in particular and Meteorology Education and Research in the country in general and briefly elucidated the measures taken in these directions. Prof. Prasad Reddy in his speech promised that Andhra University will welcome setting up of a Centre of Excellence on Climate Studies if sponsored by the Government of India. He also promised all sorts of institutional support for such an effort.

In his Inaugural address Dr. M. Rajeevan emphasized the need for extensive climate studies since the world is experiencing a sea change in terms of climate change and weather extremes. He expressed the interest of MoES in the growth of weather and climate related activities in India. He congratulated IMS for various types of activities undertaken and also assured all sorts of support for further growth. Finally, Dr. C.V. Naidu proposed vote of thanks. The inaugural function included the presentation of IMS International Award called Sir Gilbert Walker Gold Medal, IMS Fellowships & Associate Fellowships and Annual & Biennial Awards to the young researchers for best papers published in reputed journals. The list of awards/fellowships presented to distinguished scientists are given in Table 1. IMS thank NCMRWF, Noida on becoming an institutional patron and in this regard a certificate of appreciation was presented by IMS to Dr. E. N. Rajagopal, Head NCMRWF in this function. The book entitled 'Basics of Atmospheric Dynamics' written by Prof. R. N. Keshavamurty was released in the Inaugural Function along with the recent issue of VayuMandal.

S. No.	Award/Fellowship	Awardee
1	Sir Gilbert Walker Gold Medal	Prof. R. N. Keshavamurty Former Director, IITM, Pune
2	IMS Fellow	Dr. Mrutyunjay Mohapatra Director General of Meteorology, India Meteorological Department
3	IMS Fellow	Prof. S.K. Satheesh Indian Institute of Sciences (IISc), Bangalore
4	IMS Fellow	Dr. (Mrs.) N. Jayanthi Former, Additional DGM, IMD
5	IMS Fellow	Dr. Govindarajalu Srinivasan, Chief Scientist, Climate Applications RIMES, Thailand
6	IMS Associate Fellow	Dr. Sandeep Pattnaik Indian Institute of Technology, Bhubaneswar
7	IMS Associate Fellow	Dr. Ayantika Dey Choudhury Indian Institute of Tropical Meteorology, Pune
AWARDS FOR BEST PAPERS		
8	IMS young scientist award for best paper published on Tropical Meteorology	Authors : Siddarth Shankar Das, K.V.Suneeth, M.V. Ratnam, I.A.Girach and S.K.Das Paper : “Upper tropospheric ozone transport from the sub-tropics to tropics over the Indian region during Asian summer monsoon, Climate Dynamics, Vol No.52 Issue: 7-8 , Page No. 4567-4581, 2018.
9	IMS Award for best paper published on monsoon research (Formerly B N Desai Award)	Authors : Supriyo Chakraborty, A. R. Belekar, A. Datye and N. Sinha Paper : entitled “Isotopic study of intra-seasonal variations of plant transpiration: an alternative means to characterize the dry phases of monsoon, Scientific Reports, Vol No. 8, Page No.8647, 2018.
10	IMS Award for best paper published on Atmospheric observations and Technology (Formerly J Das Gupta Award)	Authors : P. P. Leena, V. Anilkumar, N. Sravanthi, R. Patil, K. Chakravarty, S.K. Saha and G. Pandithurai Paper : entitled “On the precipitation susceptibility of monsoon clouds to aerosols using high altitude ground-based observations over Western Ghats, India, Atmospheric Environment, Vol No. 185, Page No.128-136, 2018”.
11	IMS Award for best paper published on Weather and Climate Services (Formerly Bhavanarayana Award)	Authors : H.R.Biswas and P.K. Kundu Paper : A principal component analysis based model to predict post-monsoon tropical cyclone activity in the Bay of Bengal using oceanic Niño index and dipole mode index, International Journal of Climatology, Vol No. 38, Page No.2415-2422, 2017”.
12	IMS Award for best paper published on Application of Satellite data in Meteorology and Remote Sensing (Formerly P Krishna Rao Award)	Authors : K. V. Subrahmanyam and Karanam Kishore Kumar Paper : “Vertical structure of stratocumulus clouds and associated dynamics over the Arabian Sea during Indian summer monsoon season, Journal of Applied Remote Sensing, Vol No. 12(1), Page No. (016018)1-10, 2018.”
13	IMS Award for best paper published in IMS Journal Vayumandal	Authors : Sanjib K. Deb, Dineshkumar, K. Sankhala and Chandra M. Kishtawal Paper : “Retrieval of Atmospheric Motion Vector using INSAT-3D and INSAT-3DR Imager Data in Staggering Mode, VayuMandal, Vol No. 44 No.2, Page No. 32-47, 2018.”

Fellows, Associate Fellows, Life Members, Senior Scientists and Young Researchers and Students from various Indian Universities and research organizations participated in this symposium. In addition, selected scientists from the industries such as IBM and Skymet also attended the symposium.

To recognize the contributions of late Prof. P. Koteswaram to the field of meteorology, a memorial lecture was organized by IMS in his name. After the inauguration of TROPMET-2019, Prof. P. Koteswaram's Memorial lecture was delivered by Dr. M. N. Rajeevan on "Global Climate Change: Causes, Concerns and Commitments".

During the 4 days of the Symposium, there were 15 Plenary Talks delivered by several eminent scientists which include Dr. M. Mohapatra from IMD, Dr. Akilesh Gupta from DST, Dr. E.N. Rajagopal from NCRMWF, Prof. S.K. Satheesh from IISc, Dr. G. Srinivasan from RIMES, Thailand, Dr. R.K. Mehajan from DST-SERB, Prof. A.D. Rao from IIT Delhi, Prof. Hayashi from Japan, Prof. Ibrahim Hoteit from Saudi Arabia, Dr. A.K. Sahai from IITM, Prof. T. Narita from Japan, Prof. D.V. Bhaskar Rao from Andhra University, Dr. R.R. Rao from NPOL(Retd) and Dr. K. Rupa Kumar from IITM. Special invited talks were also given by Dr. R.K.Dutta from IMD, Prof. K. Ashok from University of Hyderabad, Dr. A. Suryachandra Rao from IITM, Dr. M.V. Ratnam from NARL, Dr. D.R. Pattanaik from IMD and Prof. Someshwar Das from University of Rajasthan.

There were 260 Oral presentations and there were 80 poster presentations spread over four days. The organizing committee conducted all the oral presentations under the above said themes in three parallel sessions each equipped with 10x20 LED screen. 40 Poster presentations were arranged every day of the symposium from 12th December, 2019. The researchers from Northeast India especially from Kohima University actively participated and one of the participants also got the IMS Best Paper Presentation award.

The valedictory function of the TROPMET-2019 was conducted in the afternoon of 14th December, 2019. Sri. N. Sambasiva Rao, Chief Executive

Officer-Gangavaram Port, Visakhapatnam was the Chief Guest and the Distinguished Guest was Prof. V. Krishna Mohan, Registrar, Andhra University. The Organizing Committee distributed the Awards for Best Paper and Best Poster Presentations to the Research Students, Researchers and Young Scientists. All the participants express their views and appreciations to the organizing committee for the Grand Success of the TROPMET2019. Overall, TROPMET2019 left behind a good example for the next TROPMET-2020 to be held at Shillong.

The Organizing Committee unanimously thanked the major sponsors of the symposium: MoES, DST, IMD and NCMRWF. Thanks are also due to the Weather Company IBM, Skymet Weather-wise and also some local sponsors: Gangavaram Port and K. Kumar Raja Projects (P) Ltd, Visakhapatnam for their financial supports for successful completion of the mega event TROPMET-2019.









5. IMS Lectures

5.1 Dr. Jeffrey Kargel, Senior Scientist at the Planetary Science Institute in Tucson, Arizona, USA was invited to deliver IMS Lecture on 14th November, 2019 at ARNAV Hall, Ministry of Earth Sciences, Prithvi Bhawan, Lodhi Road, New Delhi 110003. The title of his lecture was "Changing Climate is causing several very different kinds of hazardous glacier and landslide dynamics in High Mountain Asia" He discussed on the changes in



climate happening world over emphasizing on the state and recent dynamics of glaciers in the Himalaya-Karakoram. He described difficulties in accessing Indian glaciers and reconciling glaciological and geodetic mass balances based on objective data quality assessment. He dwelt on several published papers on climate change related issues such as diarrhoea out break in Nepal, agricultural stubble waste burning in Punjab and other major sources of air pollution based on satellite imagery. The important messages from his lecture are the secular trends in 30-year climate and changes in (i) Short-term weather which indicates that previously uncommon weather phenomena are becoming common, (ii) Extreme weather is becoming more frequent and more extreme changing weather and new weather patterns are a part of climate change and (iii) Every region of the globe has its unique climate change story since every part of the globe is feeling the effects of changing atmosphere and oceans. Not only we observe the changes in the data but also people feel these unusual weather themselves. The good point

is that the Earth scientists are working creatively to fill in the gaps in knowledge and understanding.

5.2 Mr. R. C. Bhatia, Retired ADGM, IMD was invited to deliver IMS Lecture on "Recent Satellite-based Observations on Western Disturbances: their genesis, evolution, interactions, movements and impact on Indian Weather" on 13th February 2020 at DGM Conference hall, IMD. He discussed the developments in the last 5 years on the availability of satellite based data and products. He focused on



the details of few recent Western Disturbance cases highlighting some important satellite related features seen in those events. Mr. Bhatia very lucidly described how critical monitoring & analysis of 15 mt/ 1hr animation sequences of M-8 images /RGB products of M-8 coverage provides lot of useful inputs for better understanding of WDs. He further stated that AMVs and Rain rate products are also useful. He inferred that a large number of WDs quite often indicate preferred areas for initial genesis of WDs in the Eastern periphery of large upper-air anticyclones over Europe & adjoining Northern parts of Asia. Indications of their possible initiation can be very well seen in WV images and air mass products right from the early stages. Genesis in the form of a trough in the Weserlies and/or in the form of a circulation which forms at the tip of the trough can generally be very well delineated from the satellite derived wind products. As per his seminar, use of other satellite products such as divergence, convergence, relative vorticity at various levels is also found to be beneficial for improved analysis.

5.3 IMS Fellowship to Dr. (Mrs.) N. Jayanthi

Due to the availability of Dr.(Mrs.) N. Jayanthi in IMD, New Delhi on 13th Feb 2020, a special event was organised by IMS to present IMS Fellowship to her. It may be noted here that although her Fellowship was announced in Tropmet-2019 held at Visakhapatnam, it could not be presented to Dr. Jayanthi since she could not attend the annual symposium.



6. IMS Ahmedabad (IMSA) Chapter

6.1 Annual Monsoon Lecture 2019 on November 15, 2019: Every year after the completion of Indian summer monsoon (June-September) season, IMSA organizes popular lecture by inviting an eminent scientist involved in monsoon forecasting from IMD. This year also, IMSA organized a popular talk on the topic “2019 South West Monsoon Season: Rainfall Features and Long Range Forecast” at SAC Ahmedabad. The lecture was attended by around 80 students, research trainee and scientists of SAC and Physical Research Laboratory (PRL) Ahmedabad along with members of IMSA. On this occasion Secretary IMSA, Dr. Sanjib K. Deb welcomed all members who have assembled for the function. The Chairman IMSA, Dr. C. M. Kishtawal introduced the speaker of the event, Dr. D. S. Pai, Head, Climate Research and Services, IMD, Pune. The prizes to the winners of Monsoon Photography Contest 2019 were also distributed after the lecture. IMSA newsletter E-Megha Monsoon 2019 issue was also released.



6.2 Vikram Sarabhai Birth Centenary Programme on February 18, 2020: IMSA and Christ College, Rajkot jointly organized a half-day outreach programme on February 18, 2020 at Christ College, Rajkot to celebrate the birth centenary of Dr. Vikram A. Sarabhai. Around 80 participants including students and faculties from Christ College Rajkot attended the event. Dr Sanjib K. Deb, Secretary IMSA briefed about the activities of IMSA to the audience, Dr C. M. Kishtawal, Chairman IMSA briefed about Dr. Vikram Sarabhai and his contribution to Indian Space programmes and narrated as to why IMSA celebrated this event. It was followed by a popular lecture on “Applications of remote sensing for meteorological phenomena” delivered by Dr. A. K Varma. At the end of the programme, one documentary on contribution of Dr. Vikram Sarabhai to Indian Space programmes was screened for the student of

Christ College. This event was appreciated by both students and faculties of Christ College, Rajkot.



7. IMS Chennai (IMSC) Chapter

7.1 Monsoon Seminar: The Seminar on Monsoons held annually was organised for the Monsoon 2019 on 10 February 2020 jointly by IMS Chennai Chapter and Regional Meteorological Centre, Chennai. 30 students from two city colleges, Women's Christian College and Loyola College were invited to attend the Monsoon 2019 seminar as part of the Outreach Programme to popularise Meteorology. Two Ph.D. research scholars from SRM University also attended the meeting. The students interacted with the experts present and posed various questions to the Chief Guest Dr K.

Satyagopal, IAS, Chairman & Managing Director, Tamil Nadu Water Resources Conservation and Rivers Restoration Corporation, Government of Tamil Nadu. The Review of South West Monsoon 2019 was also presented by Dr. N. Puviarasan, RWFC and Dr. S. Balachandran, Head, RMC Chennai. Further, the performance of Northeast Monsoon 2019 was reviewed.



Dr. S. Balachandran felicitated by Dr. R. Suresh



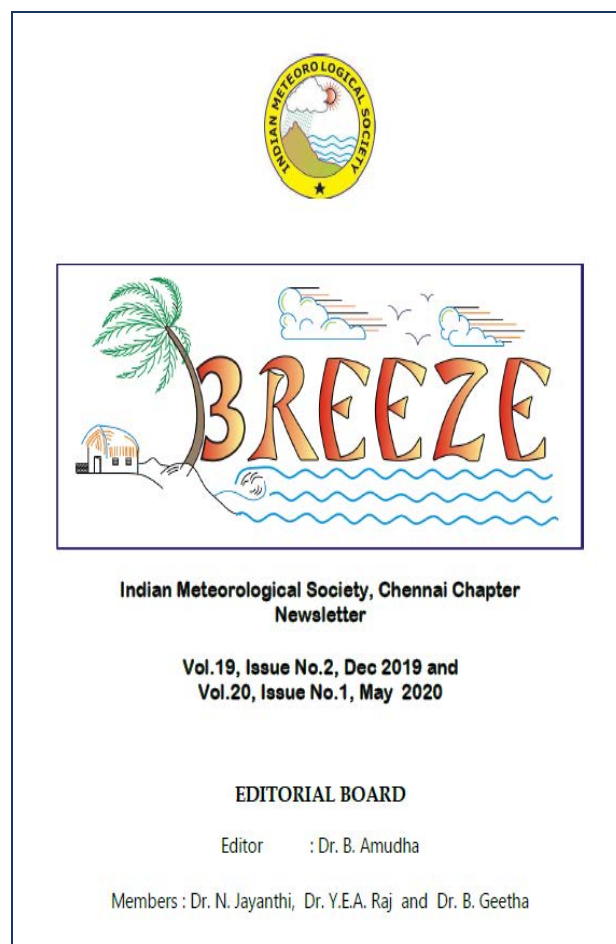
Dr. K. Satyagopal, Govt. of Tamil Nadu





Glimpses from the Event

7.2 The Newsletter of IMS Chennai Chapter “Breeze”: Two issues of Breeze Vol.19-2 & Vol.20-1 were circulated to the members on 2 May (<http://www.imdchennai.gov.in/IMSWEB/imsimd/imsimd.html>) 2020. Articles written and the collection of photographs featured in Breeze are tribute to Late Shri. S. Raghavan, IMS Fellow and Life Member who received appreciation from all the members. A list containing names of Chairman, Secretary and Treasurer from 1997-1999 up to 2018-20 was prepared and included in Breeze.



The first newsletter of IMSC Chapter was released in June 1998. Scanned versions of Newsletter Breeze have been uploaded as archive of newsletters of IMSC and are available at http://www.imdchennai.gov.in/IMSWEB/imsimd/breeze_archives_new.html# for users.

8. IMS Guwahati (IMSG) Chapter

National Science Day was celebrated in the Regional Meteorological Centre, Guwahati on 28th February 2020. The theme of this year was ‘Women in Science’. Dr. Rousy K. Baruah, State Project

Manager, Assam State Rural Livelihood Mission, Guwahati was the Chief Guest of the function. Sri Ajay Narayan, PGT, Geography, Kendriya Vidyalaya, Borjhar, Guwahati was the Guest-of-Honour. On this occasion, Dr. Sanjay O'Neill Shaw, DDGM, RMC Guwahati delivered a lecture on the contribution of women in the field of Science and Technology. Dr. Rousy K. Baruah, in her presentation, stressed on giving opportunities to females in their families to expand their wings. The programme was anchored by Ms. Sandipa Bhattacharya. Vote of thanks was proposed by Ms. Anamika Sarma, Scientific Assistant.



Ajay Narayan, Dr. Sanjay O'Neill Shaw, Dr. Rousy K. Baruah and Ms Sandipa Bhattacharya

9. IMS Pune (IMSP) Chapter

9.1 Lecture: IMSP organized a Special Lecture by Prof. Sulochana Gadgil (renowned Monsoon Meteorologist & Professor, CAOS, I. I. Sc., Bengaluru) on 23rd September 2019 at Meghdoot Complex of IITM Pune. The title of her lecture was "Summer Monsoon of 2019: How and Why?".



9.2 One-day Workshop: In association with NRSC-ISRO Hyderabad and IITM Pune, IMSP organized an one-day workshop on "National Information system for Climate and Environment Studies (NICES) and its activities" at Meghdoot Complex of IITM Pune on 8th January 2020. The workshop was sponsored by NRSC (ISRO) Hyderabad and was jointly organized by NRSC, IMS Pune Chapter (IMSP) and IITM Pune. The workshop had been a grand success. About 400 participants attended the workshop. Lectures were delivered by 3 NRSC (ISRO) Scientists (Faculty: Dr. Hareef Baba Shaeb, Dr. S. S. Prijith and Dr. S. Rajesh) and 3 IITM Scientists (Mr. Mata Mahakur, Mr. Somnath Mahapatra and Dr. Amita Prabhu) and were highly appreciated by the audience. The event was coordinated by Dr. Dibyendu Dutta, Dr. M.V.R. Seshasai and Dr. Hareef Baba Shaeb from NRSC side and Mr. S. Mahapatra, Dr. J. R. Kulkarni and Dr. G. Pandithurai from IMSP side. IMSP received great support from Director IITM and IITM administration for organization of this event.





9.3 Colloquium: In association with IITM Pune, IMSP organized a Colloquium by Dr. Francesco Doblas Reyes, Director, Earth Sciences Department, Barcelona Super Computing Center, (Centro Nacional de Supercomputacion, BSC), Barcelona (Spain) at Varahamihira Hall of IITM Pune on 22nd February 2020 (Saturday), during 14.30 to 15. 30 Hrs. IST (2:30 - 3:30 pm) Topic of the talk was " FROM THE BYTE TO THE

SERVICE: TRANS-DISCIPLINARY CLIMATE RESEARCH".



9.4 Special Lecture: In association with IITM, IMSP organized a Special Lecture by Dr. Eng Lim Goh, Senior Vice President of Hewlett Packard Enterprises (HPE) USA, at Meghdoot Auditorium of IITM Pune on 2nd March 2020. The Title of the talk was “From IoT to Machine Learning, Simulation and Exa-scale”. Dr. Eng Lim Goh is Senior Vice president and Chief Technology Officer for Artificial Intelligence at Hewlett Packard Enterprise (HPE) and has vast experience in in Artificial Intelligence. The lecture was attended by about 250 participants.



9.5 Pisharoty Distinguished Lecture: In association with IITM, IMSP organized Prof. P. R. Pisharoty distinguished lecture by Shri Ashish Lahiri, famous writer and Lexicographer from Kolkata at Meghdoot Auditorium of IITM Pune on 6th March 2020. The title of the lecture was “Life and works of Sri Radhanath Sikdar: a Pioneer Indian Meteorologist of 19th Century, who measured the height of Mt. Everest”. The above lecture was preceded by an introductory address & short lecture by Dr. R. R. Kelkar, Former DGM, IMD. The event was attended by about 250 persons and was highly appreciated by the audience.



Mr. Ashish Lahiri has been a famous writer, translator, lexicographer & a researcher in History of Science, specializing in Science-culture. Visiting Faculty IISER, Kolkata and Member Pavlov Institute, Kolkata



9.6 Bulletin of IMSP (BIMSP): So far, IMSP has made online publications of several issues of BIMSP such as “April 2019 issue, Vol. 18, No. 4”, “May 2019 issue, Vol. 18, No. 5”, Vol.18, No. 6-9, June-September 2019 Special issue etc. Mr. S. Mahapatra contributed in editing & preparing these issues of BIMSP and Mr. Sanjay Sonporate contributed for uploading these on IMSP website.



9.7 WhatsApp Group: IMSP has been maintaining a WhatsApp group and information sharing (on scientific matters, especially related to Earth Sciences) among the IMSP Life members. This group has more than 170 members (including some members from IMS NC also). Mr. Sikandar Jamadar, NEC Member, IMS NC has been very active in coordinating and administrating this WhatsApp group and Dr. J. R. Kulkarni, Chairman IMSP has been very active in explaining various science questions in the group.



9.8 There were some new Life Members in IMSP Chapter, who received memberships through communication between IMSP and IMS NC (HQ), New Delhi.

9.9 IMSP made necessary communication for the IMS NC election for the term 2020-2022 and IMSP EC election for the term 2020-22.

9.10 In association with IITM and Co-organizers S. P. Pune University, IMSP EC made lot of efforts for organization of “Annual Monsoon Workshop (AMW-2019) and National Symposium on Cloud and precipitation processes” (which was scheduled during 12-14 March 2020) and there were several EC meetings of IMSP in this regard, with consultations from Dr. A. K. Sahai, Vice President,

IMS, Mr. Sikandar Jamadar, Member, IMS NC and S. P. Pune University organizing team. IMSP EC, especially Dr. Devendraa Singh, Joint Secretary and Mr. Samuel Jose, Treasurer had contributed a lot for organization of this event. However, the event was postponed. The decision to postpone the event was taken in view of Covid-19 outbreak and corresponding Government advisories in the interest of the nation. The decision was communicated to IMSP members and other stakeholders immediately on 9th March 2020.