

Faculty

Experts in the respective areas from premier Institutions and reputed organisations in the country like Indian Institute of Tropical Meteorology, IITs, National Centre for Medium Range Weather Forecasting, Indian Meteorology Department, Ministry of Earth Science, reputed Universities, Indian Air Force and Indian Navy etc, will contribute to the training program along with the experienced faculty members of Air Force Administrative College.

Age Limit

40 years and below.

Minimum Qualification

Post graduate degree in Physics / Mathematics / Meteorology / Oceanography / allied subjects / M.Tech. (any subject). Those who have appeared for final M.Sc./M.Tech examinations subject to production of results of the latest semester examination and forwarding letter from their respective Heads of Departments / institutions are also eligible. Due weightage will be given to Doctoral students, Post-doctoral fellows, young lecturers, working meteorologists and other candidates nominated by the operational agencies.

Applications

Last date of receipt of completed application forms is 31 Mar 17. All the selected candidates will be intimated through e-mail / post about their selection with other necessary details by 10 Apr 17. The list of selected candidates will be available on the websites.

Workshop Director
Group Captain (Dr.) JK Sahu

Workshop Coordinators
Dr. K Kadirvelu
Group Captain KR Narayana

AFAC

Air Force Administrative College is one of the premier training institute of the Indian Air Force established in 1940. Since then the College has won laurels and applause from all quarters. The College was awarded with Presidential colours in the year 2000. The faculty of Meteorology at AFAC imparts basic and advance training to Met officers of IAF and officers from friendly foreign nations. It is affiliated with Bharthiar University and has distinct feature of being the only faculty imparting specialised training in Aviation Meteorology in the country. The faculty is accredited by NAAC. The faculty has been always striving to promote research in the field and have successfully conducted five DST sponsored SERC schools and two national level seminars in collaboration with Bharthiar University. OBSCON 2017 is one such step forward towards exposing aspiring researchers to the field of NOWCASTING.

BHARATHIAR UNIVERSITY

The Bharthiar University, named after the great national poet Subramania Bharathi, is enshrined with the motto "Educate to Elevate". Established at Coimbatore in 1982, the University is accredited as "A" by the NAAC and ranks 14th among all Indian Universities.

SERB

The Science and Engineering Research Board (SERB) has its origin in the erstwhile Science and Engineering Research Council (SERC) of the Department of Science and Technology (DST), Government of India which was established more than four decades ago. In the year 2009 Parliament passed the bill to institute SERB, under the DST and the same started functioning in 2011. Since then it has many schemes to cater to the funding needs of different segment of researchers, and it funds across 'disciplines' and 'institutions'. SERB is attempting to take Indian science and engineering research funding to the next level in keeping pace with the challenges of the modern era and meeting the expectations of researchers. It aspires to transform India into a significant player in S & T in the global setting.

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**SERB WORKSHOP****OBSERVATIONAL AND COMPUTATIONAL TOOLS FOR NOWCASTING****OBSCON-2017**

15 - 26 May 2017

Air Force Administrative College
Coimbatore

About the Workshop

Nowcasting is a very short range forecast of weather over period of 02-06 hours. Advanced observation platforms like Doppler Weather Radars, High resolution Satellite imageries of clouds and other atmospheric parameters, Microwave Radiometer, Lightning Detectors and Upper Air Sounding Systems have enabled availability of abundant data. New data assimilation approaches offer the potential to integrate data from the four dimensions. High speed computation systems along with advanced communication platforms have enabled us to run meso/micro-scale models to produce high-resolution probabilistic analyses and forecasts. OBSCON-2017 is an attempt to enlighten the young scientists about these developments and motivate them to explore new areas of research. The workshop will also provide exposure on aviation weather hazards faced by pilots and get a first-hand interaction with users. The course contents will cover all aspects of Nowcasting which will include operational experience, theory, modelling, statistical tools and hand-on practice on various software.

Whom will it benefit ?**For Meteorologists:**

It will provide updates and an insight to the state-of-art observational tools, hand-on practice to run Numerical Weather Prediction models and other statistical tools to improve their forecasting skills.

For Scientists:

It will provide an opportunity to understand the requirement of users as well as service providers and also to identify the challenges associated with realtime weather forecasts.

For Research Scholars:

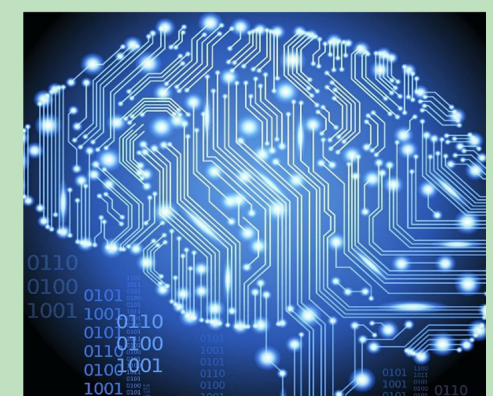
An opportunity to assimilate the information, develop new data assimilation approaches to produce high resolution probabilistic analysis and forecasts and identify new areas of research.

For Students:

It will provide an exposure to pursue Meteorology as a specialisation and career option. The workshop can be an eye-opener to know the opportunities available to join Indian Air Force, Indian Navy and Indian Army as an officer.

Note :

For non-sponsored participants boarding and lodging is free and train travel (AC III) will be reimbursed.

**Topics**

1. Weather forecasting and Nowcasting.
2. Importance of modern observational techniques in Nowcasting.
3. Nowcasting Challenges for aviation with relevant case studies.
4. Doppler Weather Radar, Satellite, Lightning Detector and Microwave Radiometer, Upper Air Sounding System products and their utilisation in Nowcasting.
5. Numerical Weather Prediction and its utilisation in Nowcasting.
6. Statistical Methods (MOS / PPM using Logistic / Power Regression, Factor Analysis, Cluster Analysis etc.)
7. Lab session on NWP modelling & application Software (McIDAS, RAOBS, SPSS, Digital Atmosphere etc.)
8. Field trip to provide first-hand exposure on aviation forecast.