

DWR Chennai No: 22/RMCCHE-21/1/2024-DWRCHE/150Years

Dated: 10.01.2025

DOPPLER RADAR ORIENTATION PROGRAMME - LEARN AND EXPLORE THE TECHNOLOGY

[DROPLET]

An initiative to reach the budding technologists on the measurement and observation techniques deployed in Doppler Weather Radar. The hands-on exposure is for a week [five working days] travelling through basics on the methods deployed, and the base measurements to ensure Data accuracy and quality.

Anticipated outcome of the Programme:

- ✓ Get to understand the Advance State of Art Observational technologies at IMD
- ✓ Scientific institution visit for Technology update and knowledge enrichment
- ✓ Interactive lean from Experts in the domain, on an operational setup.
- ✓ Hand-on exposure to DWR, its calibration and upkeep procedures
- ✓ Carrying out Measurements and Verification of accuracies on a live system
- ✓ Igniting & Enkindling interest to Pursue Technology for day-to-day adaptation.

Targeted Group and Eligibility:

1. Students undergoing Technological curriculum [Electronics, Electrical, Communication, Instrumentation] in any AICTE/UGC/NBA approved institute in an around Chennai or Researchers/Project Scientists/Scientists/Officers in Government Institutions with zeal and zest towards Understanding Technological Advancements and its Applications.
2. Below 25Years as on 15.01.2025
3. Maximum intake for the orientation program is Thirty [30]
4. **Each Institute can nominate maximum of two students [a primary and secondary candidate]** in their institution letterhead as per Proforma

Tentative Timelines & Venue:

Five working days (10.00AM to 16.00AM); 27th – 31st January 2025 at Doppler Weather Radar Facility[<https://maps.app.goo.gl/DJNPtB48qHoZSeW99>], India Meteorological Department, MoES at Chennai.

Topics Covered with Hands-on Measurements & Calculations:

Opening Ceremony with Lighting of Lamps and Special talk by DGM-IMD & Other Dignitaries

Radar Fundamentals, Types of radars, and methods. Doppler Weather Radar Principle – Target Detection: range & velocity measurement methods.

Atmospheric and Terrestrial Interaction with EM Waves [Refraction, Scattering, Absorption, Attenuation]. Beam-blockage and other artifacts

Radar Hardware design principles [Transmitter, Receiver, Servo-Antenna, BITE]

Maintenance and Upkeep [Preventive & Periodic]; External Calibration Methods

Exposure to Measuring devices [Multi-Meter, Megger, Oscilloscope, Power Meter, Spectrum Analyzer, Signal Generator, Frequency Counter, etc.] and using it to measure parameters in the Live Radar

Followed by an Assessment, Review & Certificate Distribution and Valedictory Function

Program Organizing Committee:

Dr. R. Balachandran, Scientist G, ADGM & Head Regional Meteorological Center Chennai

Dr. B. Amudha, Scientist F, Head RIMC, RMC Chennai

B. Arul Malar Kannan, Scientist-F, DWR Chennai

Prayek Sandepogu, Scientist D, DWR Machilipatnam

R. Bibraj, Scientist D, IT-CELL & DWR Chennai

Other Information to Participants/Institutions:

- **Participants would have to meet their own accommodation and travel logistics. No Transportation and Accommodation requests will be entertained.**
- **Institution recommended candidates as per [Proforma](#) on or before **21st January 2025** would alone be considered for shortlisting to undergo the DROPLET program.**
- **The Duly filled proforma shall be sent through e-mail to dwr.chennai@imd.gov.in, dwrchennai@gmail.com. Hard copies need not be sent.**
- **The Shortlisting of the candidature would be through a committee. The decision of the committee is final. Requests/canvassing in any form would not be entertained.**
- **The Shortlisted/Selected candidates would be informed by email/phone as submitted in [Performa](#) with a copy to the institution by 23rd January 2025. Only selected candidates are supposed to attend the Orientation program.**
- **Selected Candidates should carry the institute Valid ID card without fail.**
- **Selected Candidates should be present through out the training period. For getting evaluated attendance on all days is compulsory.**
- **Candidates only qualifying the evaluation test will get a certificate.**
- **The Selected Candidates should adhere the safety and other instructions failing which rusticated from the training and informed to the Institution that he belongs to.**

For Additional Details Contact:

P. Gururaghavendiran , Meteorologist B

Doppler Weather Radar Chennai

Phone: (Office) 044-2951106

(Mob) +91-9444505838 [Preferably between 09.00-19.00IST]

Email: (office) dwr.chennai@imd.gov.in / dwrchennai@gmail.com

Institution Letter Head

PROFORMA

To,

The Organizing Committee [DROPS]

India Meteorological Department, MoES

[dwr.chennai@imd.gov.in]

Dear Sir/Madam,

SUB: Nomination of students for DROPLET program

REF: Your Circular **22**/RMCHE-21/1/2024-DWRCHE/150Years dated 10.01.2025.

With reference to above, we are pleased to nominate

	Candidate Name	Candidate Date of Birth	Enrolment /ID Number	Course undergoing and Year of Study / Designation	Candidate Contact Details
Primary					Email Mobile
Secondary					Email Mobile

for your kind consideration to the DROPLET hands-on orientation program 27-31st January 2025. We understand, mere nomination to the program doesn't qualify the candidate for selection.

It is assured that the selected Candidate will duly report to the Program conveners each day and attend the program without fail on all five days.

Thanks for the perusal

Yours Faithfully,

Signed and sealed by Authorized signatory of the Institution with date