

Terms of Reference
TECHNICAL OFFICER - METEOROLOGICAL SPECIALIST
(TRAINING, RESEARCH AND DEVELOPMENT SUPPORT SERVICES)

1. Introduction

The role and mission of the Caribbean Institute for Meteorology and Hydrology (CIMH) is to improve the meteorological and hydrological services and to assist in promoting the awareness of the benefits of these services for the economic well-being of the CMO countries. This is achieved through training, research and investigations, and the provision of specialised services and advice. The CIMH website is one of the main sources for providing information to the CMO member countries on the training and research opportunities available at the institutions. The website is also one of the main avenues for the institute to showcase the various activities, services, and events available at the institute.

The consultancy supports the CIMH in the execution of its training, research, and development activities.

2. About the Caribbean Institute for Meteorology and Hydrology

The CIMH is an Institution of the Caribbean Community (CARICOM) and the technical Organ of the Caribbean Meteorological Organization (CMO). The mandate of the CIMH is “to assist in improving and developing the Meteorological and Hydrological Services as well as providing the awareness of the benefits of Meteorology and Hydrology for the economic well-being of the CIMH member states. This is achieved through training, research, investigations, and the provision of related specialized services and advice”.

In achieving its mandate, the CIMH in 1973 established an affiliation with the University of the West Indies in which its primary responsibility is the delivery of the B.Sc. programme in Meteorology in the Faculty of Pure and Applied Sciences. The CIMH is recognized regionally and globally as:

- The World Meteorological Organization (WMO) Regional Training Centre for the Caribbean.
- A centre for applied research and development in meteorology, hydrology/water resources, climatology and related areas including disaster risk reduction and impacts forecasting.
- The WMO Regional Instrument Centre for the Caribbean.
- A WMO Centre of Excellence for Training in Satellite Meteorology.
- The WMO Regional Climate Centre (RCC) for the Caribbean.
- The Caribbean Centre for Climate and Environmental Simulations.
- The Climate Data Archive for CMO Member States.
- The Pan American Centre for the WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS).

The CIMH has strong collaborations with other Regional Institutions, national organizations in CMO Member States and the international community. Since 2006, the CIMH has been providing internships opportunities to graduate and undergraduate students registered at regional and international universities. While the majority of internships have supported research and development in Earth and Atmospheric Sciences, in recent years the areas of focus have been expanded to include Social Sciences, Computer Science, and Information Technology. Internships commonly range from 3-months to 1-year with the potential for an increase to two years. Many interns have converted their projects to publications and conference presentations as well as M.Sc. and Ph.D. graduate research programmes.

3. Background

The CIMH Meteorology will need a Technical Officer to assist with the growing training responsibilities with the onset of the new format of the Senior Level Meteorological Technicians' (SLMT) course in 2022. In 2022, it will be the first running of the SLMT in its new format together with the continued adjustment to the UWI Meteorology Programme in its 3-credit format. Both require additional teaching requirements and hence new staff. Also, to build capacity in the section for the future.

4. Objective

The objective of the proposed candidate is to support the training, research, and development programmes of the CIMH. In particular, the candidate will support training in the SLMT and MLMT courses.

5. Scope of Work

The specific duties and responsibilities of the contracted Meteorologist will include:

- i Lecturing/teaching courses at CIMH.
- ii Maintain Meteorological technicians' training in accordance with WMO standards.
- iii Support and promote research and development activities in accordance of the CIMH mandate
- iv Provide severe weather updates to CIMH stakeholders.
- v Prepare organization reports and briefings for internal and external agencies.
- vi Be prepared to represent the CIMH at local, regional, and international meetings/workshops and or seminars when assigned; and be prepared to travel on behalf of the CIMH.

- vii Any other duties deemed necessary by the Section Head or Principal according to training and qualifications.

6. Deliverables

- i In lecturing/teaching courses at CIMH; ensure that:
 - a. the course content is relevant, accurate, and meets the syllabus objectives and standards of WMO and CIMH quality assurance standards.
 - b. classes are taught in accordance with the agreed timetable.
 - c. in the development, marking and grading of assessments are completed within the given timeframe and meet the agreed WMO and CIMH quality assurance standards.
- ii In the maintenance Meteorological technicians' training in accordance with WMO standards, ensure that:
 - a. Classes are organized on schedule in accordance with agreed subject and briefing timetables.
 - b. Exams are set, graded and marks are recorded and submitted appropriately.
 - c. Student reports are prepared and disseminated periodically during the assigned course.
 - d. Adequate safety measures are always in place.
- iii Support and promote the research and development agenda activities of the Institute, ensure that:
 - a. Research duties and reports are completed efficiently and within the given time frame.
 - b. Research projects are conducted and planned accurately; there is the attention paid to detailed data collection, and all is done with a methodical approach to the work.
 - c. Research is conducted with the integrity and standards dictated by the Institute and international standards.
 - d. Research results and studies, when presented accurately and coherently.
- iv In the provision of severe weather updates to CIMH stakeholders, ensure:
 - a. To monitor weather conditions and data over the CMO-defined area over the agreed period.
 - b. That accurate information is gathered at the agreed intervals.
 - c. That urgent and accurate information is delivered to stakeholders.
 - d. That updates are delivered in the required format using the agreed channels.

- v In the preparation of organization reports and briefings for internal and external agencies, ensure that:
 - a. Annual reports are completed to the agreed standard and delivered by the required date.
 - b. Project reports are appropriately prepared and disseminated to stakeholders.
 - c. Committees/board meetings assigned are attended.

- vi In preparation to represent the Institute at local, regional, and international meetings/workshops and or seminars when assigned; and be prepared to travel on behalf of the CIMH ensure that:
 - a. Work on behalf of the Institute for presentation at meetings, workshops, and or seminars are prepared and presented to the agreed standard and delivered to meet the stipulated deadlines.
 - b. The Institute and associated stakeholders and agencies are always represented in a proper and ethical manner.

- vii Any other duties deemed necessary by the Section Head or Principal according to training and qualifications.
 - a. Work on behalf of the Institute as assigned by the Section Head and or the Principal that is inline with the training, research and qualification needs.

7. Qualifications

The contractor should have as a minimum, a BSc Degree in Meteorology, and/or successfully completed studies that meet international recommendations by the World Meteorological Organization (WMO) for a Meteorologist, a definite curriculum known as the Basis Instructional Package for Meteorologist (BIP-M) and has at least 10 years' experience working in a Meteorological Service and as least 5 years as an operational forecaster. A degree on minor in Mathematics, Oceanography, Computer Science, and/or Information Technology will be an asset.

8. Additional Experience

It is expected that the contractor will:

- be familiar with (i) basic knowledge of computer language; (ii) weather programing system (SMARTMet; Digital Atmosphere; METLab; MESSIR; or equivalent program); and (iii) weather forecasting.
- have prior work experience in the Caribbean related to the core disciplines related to this project would be an asset.

- have written and verbal skills in the English language. Knowledge of Spanish and/or French would be an asset.

Given the regional and interdisciplinary nature of CIMH's work, the successful contractor should also possess:

- A good knowledge of teaching methods and techniques.
- Experience training virtually
- Excellent organizational skills.
- Strong cultural and social IQ.
- Excellent written and oral communication skills.
- Excellent conflict resolution.
- Strong critical thinking and innovation skills.
- Highly motivated.

9. Duration

The total duration of the contract of service is for a full-time position for a **minimum of 2 years** (expected to commence April 04, 2022) and could be prolonged subject to the candidate's performance and funding availability.

10. Reporting

The contractor will be reporting directly to the Head of the Meteorology Section and to the Principal and other Heads of Section in required situations. The successful candidate will also be required to provide annual activities report of work done, and a future work proposal.