

Research Fellow (Volcano Seismologist)

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The University of the West Indies (UWI) is a well-established independent university that serves 17 countries of the Commonwealth Caribbean: Anguilla, Antigua & Barbuda, The Bahamas, Barbados, Belize, Bermuda, The British Virgin Islands, The Cayman Islands, Dominica, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, and the Turks & Caicos Islands. Read more ...

Ranked Among the Best

Only Caribbean University Ranked Among BEST IN THE WORLD



- ► WORLD'S TOP 1.5 %
- ► WORLD'S GOLDEN AGE TOP 100
- ► IMPACT RANKINGS 2.5%

An innovative, internationally competitive, contemporary university deeply rooted in the Caribbean, The UWI is an international university, in every respect, with links extending beyond the region to well over 100 universities worldwide.

The Times Higher Education rankings in 2018 and 2019, placed The UWI as the number 1 ranked university in the Caribbean out of over 200 registered institutions across the region; and among the top 3% of some 2,000 registered universities in the wider Latin America and the Caribbean. In 2020 The UWI was ranked among the THE's top 100 "Golden Age" universities established between 1945 and 1967. Read more ...

About UWI

The first of UWI's five campuses began in 1948 at Mona, Jamaica, as a College of the University of London. The St. Augustine Campus in Trinidad & Tobago was added in 1961 and UWI achieved full university status in 1962. St. Augustine was followed by campuses at Cave Hill, Barbados (1963), the Open Campus (2008), and the Five Islands Campus in Antigua & Barbuda (2019). Read more ...

Our 8 Faculties

Teaching at the St. Augustine Campus takes place within eight faculties - Engineering, Food & Agriculture, Humanities & Education, Law, Medical Sciences, Science & Technology, Social Sciences, and Sport. Each Faculty offers a wide range of undergraduate and postgraduate programmes. Find out more ...

Get to Know Us

Visit https://www.uwi.edu/ to find out more about The UWI. For more on the St. Augustine Campus, visit https://sta.uwi.edu/ . Read the latest Campus news in our monthly publication, UWI Today and follow us on social media Facebook, Twitter, Instagram, YouTube, LinkedIn.

About The UWI SEISMIC RESEARCH CENTRE

The UWI Seismic Research Centre (SRC) was set up in 1953 and became part of The UWI in 1962. From its headquarters in Trinidad, it operates a network of seismograph stations extending from Trinidad and Tobago through the Lesser Antilles to St. Kitts. The SRC is responsible for monitoring earthquake and volcanic activity in these 11 islands. Persons interested in this post are strongly advised to visit our website at http://www.uwiseismic.com to learn more

The region in which these islands are located is seismically active and historically has been the site of earthquakes of magnitude greater than 8.0. There are at least 21 live volcanoes in the region, some of which have known historical eruptions. Among the volcanoes that have shown recent eruptions are: La Soufrière in St. Vincent (2020 – 2021), Soufrière Hills Volcano in Montserrat (1995 – present), and Kick 'em Jenny (2017, 2015, 2001, and 1990).

about the operations of the SRC.

The main method of day-to-day monitoring of these phenomena is the operation of over 60 instruments that comprise a mixture of three-component broadband seismograph stations, three-component short-period seismometers, strong motion stations and single vertical component stations. All three-component stations send their data and those from associated single component stations, to Trinidad using satellite and/or internet

technology. Other monitoring techniques in use include ground deformation measurement and thermal and geochemical (gas and water chemistry) measurements. The SRC has an active programme of research in the field of geoscience aimed at complementing hazard awareness, risk assessment and early warning.

The SRC cooperates closely with other seismological and volcanological institutions both within the region and abroad. Although the primary function of the SRC is concerned with public safety, there are ample opportunities for original research and staff members are strongly encouraged to develop independent research projects and to publish their results in the international literature. Since SRC is an integral part of The University of the West Indies, supervision of graduate students is encouraged. The Department offers programmes of study leading to:

Postgraduate:

- M.Phil. Seismology
- M.Phil. Volcanology
- PhD. Seismology
- PhD. Volcanology

A significant proportion of the income of the SRC is raised through external grants. All members of staff are encouraged to develop their skills in soliciting external funding. The SRC is also currently responsible for managing the operations of the Montserrat Volcano Observatory (MVO) in Montserrat and has six members of staff permanently stationed on the island.

Current Members of Staff

SRC has provision for a staff complement of 26 persons including 13 Academic, Senior Administrative and Professional Staff and 13 Administrative, Technical and Service Staff. The complement of professional staff is split between Trinidad and Montserrat and includes the following persons:

Dr. Erouscilla Joseph	B.Sc. (UWI), M.Phil. (UWI), Ph.D. (UWI) – Director SRC
Prof. Richard Robertson	B.Sc. (UWI), M. Phil (Leeds), Ph.D. (UWI) – Senior Research Fellow (Geologist)
Dr. Ilias Papadoupolos	MSc (A.U.Th), PhD (A.U.Th) -Research Fellow (Geophysics)
Dr. Graham Ryan	MPhys (Manchester), PhD (Lancaster) – Director MVO
Dr. Adam Stinton	B.Sc. (Plymouth), M.S. (Buffalo), Ph.D (Buffalo) – Research Fellow (MVO Volcanologist)
Dr. Thomas Christopher	B.Sc. (UWI), Ph.D. (Cambridge) – Research Fellow (MVO Volcanologist)

Dr. Karen Pascal	B.Sc. (Blaise-Pascal), M.Sc. (Leeds), Ph.D. (Leeds) – Research Fellow (MVO Volcanologist)
Mrs. Stacey Edwards	B.A. (Howard), Ed.M (Harvard) – Education Officer
Mr. Chandradath Ramsingh	B.Sc. (UWI) - IT Officer II
Mr. Kisira Odero	B.Sc. (Jomo Kenyatta University) - IT Officer II
Dr. Racine Basant	B.Sc. (UWI), M.Phil. (UWI), Ph.D. (UWI) Junior Research Fellow (Ground Deformation)

Tenure of Appointment

Appointment as Research Fellow (Volcano Seismologist) will normally be for three (3) years in the first instance, with the eligibility for consideration for renewal.

Subsequent to the first appointment, a member of staff who has served in an equivalent position in this or some other University for a period of six (6) years will be eligible for consideration for indefinite tenure.

Appointment to this post is subject to the Charter of the University and to its Statutes, Ordinances, Rules and Regulations, including Statute 36 – Retirement of Members of Staff.

Further details may be obtained from the Campus Registrar,
The University of the West Indies, St.
Augustine, Republic of
Trinidad and Tobago.

Research

The University of the West Indies supports the research activities of permanent members of staff by providing study leave, special leave for scholarly purposes, and sabbatical leave, as well as offering funding for research trips, fieldwork, institutional visits, conference participation and organization, and research assistants.

For more information on research funding, see http://sta.uwi.edu/research/funding.asp

Research Fellow (Volcano Seismologist)

The Volcano Seismologist will be expected to work with scientists, technicians and engineers to provide effective real-time volcanic surveillance in Montserrat. He/She will provide oversight to the technical seismology staff as well as coordinate and contribute to their ongoing training and development. He/She will be expected to interpret seismic data and report to the MVO Director regularly, preparing reports on seismic monitoring and seismic activity as necessary. He/She will be expected to complement the MVO's research agenda in collaboration with other staff members and external researchers. He/She will play a leading role in the operation and further development of seismological data acquisition and processing tools. He/She will also be expected to assist with the day-to-day operations of the MVO.

Qualifications and Experience

The successful candidate must possess at minimum, a PhD from a recognized university, which should be in a relevant aspect of Seismology, Geophysics or a closely related field.

Candidates should also possess:

- At least two (2 years' observatory-type experience in the operation of modern digital seismological networks for the detection and assessment of volcanic earthquakes
- Competence in programming and software development, with expertise in at least two of the following areas:
 - Unix systems
 - Python
 - MATLAB
 - Earthworm
 - Seisan
 - Seiscomp

Candidates with the following would have an advantage:

- Postgraduate degree (e.g. MPhil/MSc) or equivalent in Seismology, Geophysics or a closely related field
- At least five (5) years' experience in the application of seismic and other techniques for monitoring active volcanoes
- Track record of technical reporting on seismicity or volcanic activity

The following would be considered assets:

- BSc in Earth Science, Geophysics or a closely related field
- Demonstrated experience in leadership and mentoring, including the supervision of postgraduate students in related fields
- A good record of research and publications in reputable, peer-reviewed journals

- Knowledge of computer programming and software development
- Competence in interpreting and manipulating earthquake data, in all its forms

Key Responsibilities

- Working with a team of seismic analysts, earth scientists and engineers to provide to provide effective real-time volcanic surveillance in Montserrat and in the wider Eastern Caribbean as needed
- Overseeing the operational and technical aspects of the seismological monitoring network in Montserrat
- Playing a lead role in the operations, maintenance and further development of seismological data acquisition and processing tools
- Maintaining the MVO's instrumental, earthquake catalogue ensuring its completeness going forward and backward in time
- Conducting original research and be able to complement the MVO's research agenda, in collaboration with other staff members and external researchers, to improve the understanding volcanic processes in Montserrat
- Interpreting seismic data and report to the MVO Director regularly, particularly in relation to precursory volcanic activity
- Collaborating with staff at SRC on activity at other volcanoes in the Eastern Caribbean when required
- Assisting with the day-to-day running of the MVO, as needed
- Working with other national risk reduction stakeholders to strengthen capacity building for the production and application of earthquake and volcanic hazard or risk assessment tools in a more consistent manner

 Conducting other activities as assigned from time to time by the Director, MVO

Personal Attributes

The Campus places high priority on individuals of integrity who can work well in a team and student friendly environment. Candidates should also possess good communication and interpersonal skills. A good command of both oral and written English is essential. Candidates should also:

- Have demonstrable presentation and communication skills, particularly conveying complex ideas to a range of audiences
- Be flexible with the ability to adapt to a changing environment
- Be able to relate well with colleagues and support staff
- Be able to complement the MVO's research agenda
- Be willing to forge working relationships and meaningful engagement with stakeholders
- Be in possession of valid driver's permit, or willing to acquire one rapidly

Remuneration Package

Annual Salary Range:

Level III:

Minimum: TT\$ 299,916.00 per annum Maximum: TT\$ 333,456.00 per annum

Level II:

Minimum: TT\$ 239,544.00 per annum Maximum: TT\$ 279,792.00 per annum

Benefits:

- Special allowance of 6% of basic salary;
- Transportation Allowance of TT\$3,250.00 per month;
- Up to five economy class passages plus baggage allowance of US\$3,000.00 (TT\$ equivalent) on appointment and normal termination (persons recruited from outside of T&T);
- Housing allowance of 20% of basic salary;
- UWI contribution of equivalent of 10% of basic salary to Superannuation Scheme;
- Annual Study and Travel Grant (available after first year of service) -TT\$24,548.00 per annum;
- Institutional Visit Allowance (available after first year of service) – TT\$7,200.00 per annum;
- Book Grant TT\$6,000.00 per annum
- Contributory Health Insurance 50%
- Group Life Insurance Scheme
- Special MVO Hazard Allowance

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