

Job Title	Research Support Assistant(s) (full-time) & MRes Scholarship(s)
Department/Institute	MCAST Energy Research Group (MCAST Energy)
Reporting to	Principal Investigator and Projects Manager (Research)
Main Objective	To support research area(s) related to JUMP2Excel, 3DMgrid and EDGEWISE projects within the MCAST Energy specifically on photovoltaics integration.

Job Summary: This role develops and supports specific research areas associated with MCAST Energy research studies in photovoltaic integration, systems and technology considered very complex challenges and inclusion of several collaborators. The Research Support Assistant(s) ensure completion of research projects and oversees related day-to-day operations and developments. The role involves the co-author and leading of scientific papers for presentation and publication as well as supporting writing, submission and administration of specific related grants. Ensures that all study activities are completed by strictly following all current local laws, regulations, guidance, policy and procedures.

DUTIES AND RESPONSIBILITIES

Technical

- Gains and provides specific research skills to support the on-going development of the research team and to contribute to the transfer of knowledge in the specific research area.
- Undertake research both structured as part of MRes and unstructured under the direction of a Principal Investigator (PI) and supervision team.
- Develop algorithms using C/C++, python, MATLAB and other software and IT applications.
- Provides support in a specific area of expertise, including the use, maintenance and management of research, including equipment.
- Performs a variety of technical duties supporting the research project or programme, as required.
- Draws up detailed technical specifications as required.
- Supports research project(s) activities.
- Oversees installation of equipment, where required.
- Assists in setting up and maintenance of equipment, where required.
- Assists PI's and researchers in performing lab work, where required.
- Coordinates lab activity to support the research area/project where required.

Administrative

- Develops contacts to acquire knowledge and understanding of the research project(s).
- Facilitates collaboration by liaising with other research groups at MCAST and externally including industry projects.
- Develops and maintains a good working relationship with cross-campus departments at MCAST.
- Co-ordinate day-to-day work to support the research project.
- Liaise with the Projects Manager (Research) and colleagues on matters relating to the research.
- Develops knowledge and understanding of the research project and research related work.
- Ensures compliance with Health and Safety procedures.
- Acts as a mentor to junior researchers and other lower MQF level students.
- Creates data for use in grant submission for research including obtaining financial support.
- Perform other duties as assigned.

Job Description

Vacancy Information

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Candidate are required to enroll and succeed in further development at Masters level and must satisfy the entry criteria within MRes programme. The MRes programme is hosted by the MCAST Energy Research Group. The Research Support Assistant will benefit from substantial mobility travel activities and training at partner institutions.

Candidates are to indicate their preference of the following topics:

1. Focused PV integration technical solutions: Smart-grid structures and tools including micro-grids
2. Future Electricity Markets with PVs: Smart grids and ancillary services, and PV markets, forecasts and trends
3. Energy-Water Nexus, focus on PVs: Water to balance energy
4. Fusion of emerging PV technology development: Upscaling of emerging technology and On-site testing of devices

These positions are being funded by the European Commission H2020 TWINNING JUMP2Excel (Joint Universal activities for Mediterranean PV integration Excellence) project under grant 810809, and the Malta Council for Science and Technology (MCST) 3DMgrid (Design, Development and Demonstration of a Smart Micro-Grid) project under grant ENM-2016-002a and EDGEWISE (Energy and Water Systems Integration and Management) project under grant ENM-2016-001 through the ERANETMED initiative of Member States, Associated Countries and Mediterranean Partner Countries.

Vacancy Qualifications & Experience Requirements

- A strong MQF Level 6 in the subject area of Engineering preferably with a specialisation in Electrical and Control Engineering.
- Entry criteria for Master by Research (MRes) programme.

Related academic/research experience and/or work experience would be considered an asset.

Hardware and software development preferably in relation to electrical engineering and proficiency in C/C++, python and MATLAB would be considered an asset.

Preference will be given to candidates showing research-based initiatives within their career profile.

Research Support Assistant Gross Salary: starting €18,000 annually

Type of Contract: 1 year definite.

Job Description

Additional Information and Application Process

Vacancies will be filled if, and when openings become available. Successful candidates will be called to fill existing vacancies in accordance with the order of merit.

Interested candidates are invited to apply at <http://jobs.mcast.edu.mt> and submit in English:

- a covering letter selecting the preferred research theme,
- a 400 words research proposal on the preferred research theme with Maltese or Regional attributes (no application within MRes programme is required at this stage),
- an updated Curriculum Vitae on the Europass CV Template <https://europass.cedefop.europa.eu/>,
- copies of all academic and professional certificates,
- recognition statement/receipt of an application by Malta Qualifications Recognition Information Centre (MQRIC) for all certificates by applying to <https://ncfhe.gov.mt/en/services/Pages/All%20Services/mqric.aspx> (applicable to all qualifications awarded by foreign or local institutions excluding the University of Malta and the Malta College of Arts, Science and Technology (MCAST))
- two referee contacts,
- copies of English language certification in either one of the following: (i) IELTS score of 6.5 overall with at least three sub-tests at 6.0 or above and no sub-test less than 5.5, (ii) TOEFL iBT score of 90 overall with no sub-test of less than 22, (iii) Pearson PTE score of 59 overall with no sub-test of less than 51, (iv) Cambridge CPE grade C (applicable for non-English mother tongue nationals), and
- a copy of full-passport (applicable to non-EU candidates).

Additional submission fields are available in the certificates section. Incomplete applications will not be considered.

Applications are to be received by the closing date on this advert. Please refer any enquiries to energy@mcast.edu.mt



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The Malta Council for Science & Technology