

The MCAST Energy is looking for highly motivated and creative Research Support Assistant(s) and MRes¹ Candidate(s) in the fields of Electrical and Control Engineering, Electrical Power and Energy Systems, Integration of Photovoltaics (PVs) and Energy and Environmental Economics, who aspire to jointly and multidisciplinary address one of themes below with Mediterranean or Maltese attributes:

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

We offer a One year-term gross annual salary full-time package of € 18,000 and MRes fees per candidate.

Research Support Assistant(s) and MRes Candidate(s) will work in a truly international and with the world-leading group of researchers which will provide them with an excellent basis and a strong network for a future career in the field of Electrical Power and Energy Systems and Energy and Environmental Economics, in academia, the industry as well as governance. The MRes programme is offered at MCAST hosted by MCAST Energy Research Group.

Research Support Assistant(s) and MRes Candidate(s) will also enjoy some of the best mobility, training activities and resources within The University of Manchester in UK, The French Alternative Energies and Atomic Energy Commission (CEA) in France, and National Renewable Energy Centre (CENER) in Spain, as well as other partner institutions in exchange visits, internships, mentoring, schools, courses, lectures, conferences and meetings.

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.

The Malta College of Arts, Science and Technology (MCAST), established in 2001, is the country's leading vocational education and training institution. Through the three Colleges, namely Foundation, Technical and University Colleges and six Institutes in Malta and the Gozo Campus, MCAST offers 180 full-time and over 300 part-time vocational courses ranging from certificates to Master degrees (MQF Level 1 to Level 7).

The six MCAST Institutes namely the Institute of Applied Sciences, the Institute for the Creative Arts, the Institute of Engineering and Transport, the Institute of Business Management and Commerce, the Institute of Community Services, the Institute of Information and Communication Technology and the Gozo Campus provide all the technical and professional expertise towards the delivery of the programmes at MCAST and maintain the aim of driving forward all the areas of study under their respective responsibility. This corporate structure enables each College to create focused strategies that address the specific needs of students at each level while maintaining a healthy dialogue with all interested stakeholders to provide the best programmes for the needs of the local economy and society.

¹ MRes is Master by Research Programme awarded by MCAST in this case in Engineering field.

Advert

MCAST's relationship with industry stimulates the College's success – its programmes are flexible, relevant and responsive to the aspirations of the students and to the needs of industries which are constantly evolving to meet the challenges of a changing global economy. The College supports small and medium-sized enterprises through a multidisciplinary approach that encompasses work-based learning through the Apprenticeships Programme, the various entrepreneurship initiatives and through MG2i (MCAST commercial arm) services whereby it provides training courses tailor-made to their needs. The College is focusing on increasing the portfolio of MG2i by developing new programmes in Life Long Learning, accrediting new programmes at different levels including Masters and introducing more professional development programmes. It is working on the internationalization of MG2i through the Training and Professional Development Programmes and joint-venture opportunities in different vocational areas.

www.mcast.edu.mt

The MCAST Energy Research Group (MCAST Energy) specialises in global and regional solutions by innovative devices in emerging technologies, systems-level integration to policy engagement for a better community and social benefit. The breath of energy research at MCAST Energy includes Device Fabrication and on-site Testing, Energy Economics and Policy, Efficient Buildings, Power Systems, Renewables and Transportation. The group specialises in applied research techniques including but not limited to optimisation, decision making and life cycle analysis.

Research Postgraduate programmes are available at level 7 Masters by Research (MRes) and at level 8 through a split-site Doctor of Philosophy (PhD) programme with The University of Manchester. Applications are open all year round. <http://www.mcast.edu.mt/229>

The Maltese Islands are positively mythic Megaliths, medieval dungeons and Calypso's Cave. The narrow meandering streets of their towns and villages lead to the main square, which is invariably dominated by the huge baroque church. As the countryside is dotted with medieval towers, wayside chapels and the oldest known human structures in the world, the Islands have rightly been described as an open-air museum.

The Maltese archipelago lies virtually at the centre of the Mediterranean, 93 km south of Sicily and 288 km north of Africa. The archipelago consists of three islands: Malta, Gozo and Comino with a total population of over 400,000 inhabitants occupying an area of 316 square kilometres.

Malta is the largest island and the cultural, commercial and administrative centre. Gozo is the second largest island and is more rural, characterised by fishing, tourism, crafts and agriculture. Comino, the smallest of the trio, has one hotel and is largely uninhabited.

With superbly sunny weather, attractive beaches, a thriving nightlife and 7,000 years of intriguing history, there is a great deal to see and do. www.visitmalta.com

HOW TO APPLY

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

Advert

<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

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.



Funded by the Horizon 2020 Framework Programme of the European Union



The Malta Council for Science & Technology