

Call for Applications Part-Time Post/s of Research Support Officer I

Mathematical and Molecular Structures Graph Spectra and Fullerenes

Department of Mathematics

- The Department of Mathematics within the Faculty of Science in collaboration with the Department of Chemistry, Sheffield University, UK, will conduct research on Mathematical and Molecular Structures. Research techniques involve research in basic Linear Algebra and Spectral Graph Theory and their applications particularly to Chemical Structure. The post is till the end of December and may be renewed if funds are available.
- 2. Applicants must be creative and motivated, capable of working on their own initiative.
- 3. Applicants should have a good first degree in Mathematics.
- 4. The post carries an hourly rate of €10. The appointee is expected to dedicate eighteen hours a week.
- Candidates should submit their letter of application, six copies of their *curriculum vitae*, and one set of copies of their certificates. Applications may be sent by e-mail to <u>projects.hrmd@um.edu.mt</u> or

Director for Human Resources Management and Development Room 215, Administration Building University of Malta Msida, MSD 2080

Applications should be received by not later than noon of Friday, 6th September 2013.

Late applications will not be considered

5. Further information may be obtained from the Office for Human Resources Management and Development, Room 215, Administration Building or on the website: http://www.um.edu.mt/hrmd/vacancies.

Office of the University, Msida, 31st August 2013

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Further Information

The selected candidates will be expected to:

- 1. show flexibility, original thinking and an ability to work reliably;
 - have high-level communication and organizational skills;
 - have problem solving skills and capability of working independently, but also in a team;
 - have analytical skills with a rigorous approach.
- 2. to work at such places and during such hours as may be determined by the University Authorities.
- 3. have knowledge, competence and technical skills in one or more of the following:
 - Computer software;
 - Programming in Mathematica or Matlab;
 - Typesetting in Latex.
- 4. conduct supervised and independent research on
 - Linear Algebra and Spectral Graph Theory
 - and their applications to
 - Chemical Structure;
 - Molecular Conductivity;
 - Prevailing Networks;
 - Dynamical Systems;
 - Quantum Mechanical Theory.
- 5. be flexible in his/her work and show willingness to collaborate with the project partners;
 - maintain electronic and physical data base of publications in the area of research;
 - use of related software to produce interactive demonstrations;
 - organize the work in progress;
 - manage the day to day running of the research project as required;
 - organize the work in progress;
 - o follow through the work schedules;
 - keep detailed reports of progress;
 - o report and present the findings on a regular basis;
 - o participate in the dissemination of the research discoveries both locally and internationally.

The selection procedure will involve:

- a. Scrutiny of qualifications and experience claimed, supported by testimonials and/or certificates (copies to be included with application); and
- b. An interview.

The part-time post will, subject to a probationary period and to the provisions of the Statutes, Regulations and Bye-Laws of the University of Malta which are now or which may hereafter be in force.

Office of the University, Msida, 31st August 2013.