Job Related Information

This document includes information about the role for which you are applying and the information you will need to provide with your application.

1. Role Details

<table>
<thead>
<tr>
<th>Vacancy reference</th>
<th>15889</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job title:</td>
<td>Space Project Manager</td>
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<tr>
<td>Reports to:</td>
<td>Director, Centre for Electronic Imaging</td>
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<tr>
<td>Salary:</td>
<td>£40,792 - £48,677</td>
</tr>
<tr>
<td>Terms and conditions:</td>
<td>Academic Related</td>
</tr>
<tr>
<td>Grade</td>
<td>Grade 8</td>
</tr>
<tr>
<td>Duration of post:</td>
<td>3 years</td>
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<tr>
<td>Working hours:</td>
<td>Full Time</td>
</tr>
<tr>
<td>Location:</td>
<td>Milton Keynes</td>
</tr>
<tr>
<td>Closing date:</td>
<td>01/05/2019</td>
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<tr>
<td>Type of application form accepted:</td>
<td>Short</td>
</tr>
<tr>
<td>Number of referees required:</td>
<td>Three</td>
</tr>
<tr>
<td>Unit recruitment contact:</td>
<td><a href="mailto:Resourcing-Hub@open.ac.uk">Resourcing-Hub@open.ac.uk</a></td>
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</tbody>
</table>
Summary of duties

The overall purpose of this role is:

• To provide leadership and coordination of both existing and new space research projects being conducted within the Faculty and to ensure the strategic alignment and financial sustainability of these activities
• To provide effective professional project management for planning and delivery of space projects on behalf of the local PI and Co-Is and the project sponsors and customers, to specification, on time and within budget.

The Centre for Electronic Imaging (CEI – [www.open.ac.uk/cei](http://www.open.ac.uk/cei)) is a Research Centre which conducts R&D into imaging technologies for space science, and which has a large number of projects requiring delivery of both hardware and expertise into space projects (e.g. for the UKSA, ESA and NASA). Existing flagship projects include contributions to ESAs JUICE, Euclid, Athena, Theseus and SMILE projects, and to NASAs WFIRST project. The role holder will be responsible for management and delivery of this Space Project activity within the Faculty. In addition, the role holder will be responsible for developing and implementing new space projects and other research and enterprise major contracts as they arise; managing the submission of bids and proposals as appropriate; supporting such bids through representing the organisation during peer review and other such processes; negotiating any resulting contracts with project sponsors, and implementing and delivering arising projects in a timely manner.

Key tasks

Space Project Management
• Take responsibility for the planning, execution, reporting and delivery of projects to project sponsor
• To create, and assist in creation, of relevant project reports and presentations for dissemination of relevant information to collaborators and funding agencies
• Apply appropriate tools for effective project management e.g. Gantt charts, Work Breakdown Structures, Risk Analyses, Critical Path Analyses, etc., taking into account project nature, scope and any particular contractual requirements
• Plan work to be undertaken, prepare and maintain project schedules, allocate resources (staff, sub-contractors, consultants, equipment) to ensure project milestones are achieved on schedule and within budget and take appropriate corrective action as necessary
• Chair regular internal project technical and progress meetings

Financial Management
• Develop comprehensive financial models and costings for project proposals and bids, on scales from a few £10k’s to several £M
• Devise appropriate pricing strategy for project proposals and bids
• Negotiate with project sponsors the project price in relation to the service to be delivered
• Allocate resources to meet project objectives; monitor progress and take corrective action as necessary
• Negotiate and specify the placement of contracts with external suppliers and contractors
• Monitor progress and performance on contracts, and take corrective action as necessary to ensure that OU obtains value for money
• Oversee the preparation of financial reports for internal management purposes and as required by the external project sponsors

New Project Development
• Identify opportunities for new Research and Enterprise projects and business and bring these opportunities to potential principal investigators and co-investigators within the university
• Identify and liaise and negotiate with potential project collaborators (internal and external) to form appropriate bid consortia, which may have both national and international participation
• Develop project plans, schedules and costings to form the basis of funding bids and proposals
• Manage production of funding bids and proposals either led by OU or as sub-contractors/Co-Investigators
• To develop the effectiveness of existing industrial partnerships, identifying and facilitating long term strategic research collaboration.
• To identify and exploit cross-disciplinary knowledge exchange and technology transfer opportunities and non-RCUK, ESA and UKSA focused industrial sectors.
Communications
- Be a primary point of contact for internal and external customers and stakeholders
- Represent the project team, University and consortium by participating in and presenting at national and international meetings, workshops, reviews and conferences
- Promote and raise awareness internally and externally of the Faculty’s projects, capabilities, achievements and impact
- Proactively engage with Communications/Research school to develop evidence through Case Studies, Press Releases, etc. of Impact of OU’s research and enterprise activities
- To promote knowledge exchange within the OU and it’s key stakeholders and to enhance the OU’s contribution in these areas.

Other Responsibilities
a. To undertake a programme of appropriate personal professional development
b. To comply with the University’s Health and Safety and Equal Opportunities policies in the performance of their duties.
c. To co-operate with the Open University in ensuring as far as necessary, that Statutory Requirements, Codes of Practice, University Policies, and School Health and Safety arrangements are complied with.

2. Person specification

Requirements  (E = Essential/ D = Desirable)

Education, qualifications and training
A first degree or equivalent in science or engineering (E)
A PhD in a related subject (D)
A management or relevant professional qualification (D)

Knowledge, work and other relevant experience

Essential:
- Evidence of effective project management
- Experience of business planning
- Significant experience of developing or managing contracts
- Understanding of pricing / commercial licensing / IP issues

Desirable:
- Experience in commercial exploitation of technologies
- Experience in technology translation from academic research to industry and other sector
- Experience of managing university/business interaction and activities
- Experience of working in space related technologies and institutes
Personal abilities and qualities

Essential:
- Excellent communication, negotiating, ambassadorial and influencing skills, including excellent presentation skills and the ability to network and communicate effectively with people at all levels in academia, industry and government bodies
- Proven problem solving ability and the ability to think creatively in arriving at solutions
- Evidence of leadership and motivational skills
- Ability to deliver outcomes by taking initiative, managing competing priorities and working with others effectively.
- Ability to adapt to changing needs, including the learning of new skills where required.

Desirable:

3. Role specific requirements e.g. Shift working

5. About the unit/department

Faculty of Science, Technology, Engineering & Mathematics
The newly formed Faculty of Science, Technology, Engineering and Mathematics (STEM) comprises:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 700 staff and 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting more than 20,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £20M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:
We are inclusive:
• We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience
• We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM

We are highly innovative:
• We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation
• Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy

We deliver significant social and economic impact:
• We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential
• We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working
• The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers
• Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK

School of Physical Sciences
The School of Physical Sciences is a lively and innovative community of approximately 85 academic and research staff and 70 PhD students, mostly based in Milton Keynes. Our curriculum is supported by associate lecturer staff based all over the UK and Ireland whilst each year our physics, astronomy and planetary sciences and interdisciplinary science modules are studied by thousands of students all over the world.

Our research covers a wide range of subjects, broadly aligned with the research disciplines of
• Astronomy
• Physics
• Planetary and Space Sciences
• Space Instrumentation
• Physics Education

We have an extensive suite of world class facilities and laboratories, including advanced analytical instrumentation, experimental and simulation chambers and instrument development laboratories, complemented by regular use of large-scale facilities such as synchrotrons (e.g. Diamond) and a wide array of ground based and space-based telescopes (e.g. VLT, Hubble) as well as our own robotic telescopes in Tenerife. We play a major role in many well-known space missions such as Rosetta and ExoMars. We also apply much of our spaceflight and laboratory expertise to a wide array of real world problems including medical and environmental applications.

School members also contribute to the Open University’s teaching on a large range of modules and we have been at the forefront of many innovations in distance education, including the OpenScience Lab and the OpenScience Observatories. We are members of SEPnet, the South East Physics Network. Our commitment to equality and diversity has been recognised by the award of “Juno Champion” status by the Institute of Physics and an Athena SWAN Silver Award.

We currently offer undergraduate qualifications in Natural Sciences (with a physics route and an astronomy and planetary science route), with a strand which carries Institute of Physics accreditation, and in Mathematics and Physics. We also offer an MSc in Space Science and Technology. We are in the process of refreshing the curriculum at Stage 3, and are drawing up plans for adding an integrated MPhys to our portfolio, including topics in physics, astronomy, planetary and space science.
Priority Research Areas in the School of Physical Sciences

Astronomy

• The Compositional Universe: exploiting the spectroscopic discovery space from major facilities and projects including ALMA, JWST, SPICA, SOFIA and IRAM/NOEMA, E-ELT, VLT, SKA, JCMT, SALT, LOFAR, ELIPS, Herschel, SDSS-IV, Euclid etc., to study galactic star formation, evaporating exoplanets, and the physics of galaxies in the distant universe. We will further develop our laboratory/observational astrochemistry research to focus on the development of molecular compositional diagnostics.

• The Time-Domain Universe: exploiting the discovery space of new and future telescopes e.g. Gaia, LIGO, PLATO 2.0, TWINKLE, VLT and LSST, in studies such as galactic and extragalactic stellar populations using leading follow-up facilities such as SALT, or (as part of a wider follow-up network) our robotic telescopes, with a focus on key processes such as stellar binarity.

Physics

• Biomedical physics: to understand physical phenomena involved in conditions such as cancer and cardiovascular diseases and their treatment through experimental and theoretical investigations of a range of approaches such as electron-driven processes in radiation treatment and imaging, use of nanoparticles for cancer therapy and plasma sources for biomedical purposes.

• Quantum correlated systems: theoretical and experimental study of quantum correlations in atomic, molecular and condensed matter systems, and the development of practical applications such as quantum enhanced devices and the functionalisation of materials, as well as the development of multi-purpose software to treat electronic continua.

• Engineering physics: applied plasma research aimed at developing novel functional materials, understanding electron induced processes in nanofabrication and the development of plasma-driven techniques for advanced materials applications.

Planetary and Space Science

• Application of advanced analytical techniques, laboratory simulation, remote observation and modelling to investigate the key processes involved in the formation and evolution of the Solar System and the planetary bodies it contains, including the search for habitable environments and the presence of life.

• Maintain and build high scientific credibility for our analytical expertise by exploiting the performance of existing instruments and updating the analytical infrastructure in order to ensure leading involvement in upcoming sample-return missions, and maintain access to the most important planetary samples. Particular strengths are in the measurement of light-stable isotopes using conventional mass spectrometry and in-situ analysis of samples.

• Development and expansion of our expertise in planetary environments using modelling, remote sensing and the use of field analogues and simulation facilities on Earth, and secure further leading science team involvements in future planetary space missions.

Space Instrumentation

• Development of imaging sensors and instruments for space applications within the Centre for Electronic Imaging (CEI – www.open.ac.uk/cei), with expertise in a range of wavelengths from IR to X-ray and the study of the effects of radiation damage, in order to secure involvement in future space missions.

• Development of miniaturized analytical instrument systems for planetary exploration missions, particularly for the measurement of volatiles, organic materials and their light stable isotope composition, and securing leading involvement in future planetary exploration missions.

• Knowledge exchange between the UK technology industry and academia, utilising the technologies and expertise in detectors and mass spectrometer systems to provide commercial products and solutions.

Physics Education Research

• Remote and virtual experimentation

• Concept inventories

• Interactive online assessment

• Demographic differences in achievement
6. How to obtain more information about the role or application process

If you would like to discuss the particulars of this role before making an application, please contact Prof. Andrew Holland email: andrew.holland@open.ac.uk

If you have any questions regarding the application process, please contact the Resourcing Hub on +44 (0)1908 655544 or email: Resourcing-Hub@open.ac.uk

7. The application process and where to send completed applications

| Your application should contain: | 1. Completed short application form; |
|                                 | 2. CV |
|                                 | 3. Covering letter detailing how you meet the person specification. |

Please ensure that your application reaches the University by: Noon. 01/05/2019

E-mail your application to: Resourcing-Hub@open.ac.uk

8. Selection process and date of interview

The interview panel will be chaired by: Professor Andrew Holland

The other members of the interview panel will be: TBC

Interviews will be held on: TBC
<table>
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<tr>
<th>For shortlisted candidates, the selection process for this post will include</th>
<th>TBC</th>
</tr>
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</table>

We will let you know as soon as possible after the closing date whether you have been shortlisted for interview. Further details on the selection process will also be sent to shortlisted candidates.

Applications received after the closing date will not be accepted.