## JOB DESCRIPTION

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Research Associate in Dark Matter Physics</th>
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<tbody>
<tr>
<td>Department / Unit:</td>
<td>Department of Physics</td>
</tr>
<tr>
<td>Job type</td>
<td>Fixed Term, Full Time</td>
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<td>Grade:</td>
<td>7</td>
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<tr>
<td>Accountable to:</td>
<td>Professor of Physics</td>
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<td>Accountable for:</td>
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### Purpose of the Post

To characterise photosensor performance for the DarkSide-20k experiment. To simulate the QUEST-DMC dark matter search platform.

### Key Tasks

1. To develop software for detector simulation
2. To develop software for detector characterisation
3. To perform calibration measurements for simulation and analysis validation
4. To analyse data and interpret any results obtained
5. To ensure the validity and reliability of data at all times
6. To maintain accurate and complete records of all findings
7. To produce and document the results of such studies
8. To write reports for submission to research sponsors
9. To present findings to colleagues and at conferences
10. To draft and contribute to publications for submission to refereed journals
11. To provide guidance to staff and students
12. To attend relevant workshops and conferences as necessary
13. To take part in the supervision of postgraduate students
14. To take initiatives in the planning of research
15. To promote the reputation of the Group, the Department and the College

### Other Duties

- To undertake appropriate administration tasks
- To attend relevant meetings
- To undertake any necessary training and/or development
- To undertake specific safety responsibilities relevant to individual roles, as set out in the College procedures
- Maintain safe workplace practice and procedures in accordance with the requirements of Health and Safety legislation;
- Maintain an up to date knowledge of relevant statutory Health and Safety legislation and recommendations and attend safety training as required.
- To observe and comply with all College policies and regulations

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by his/her manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.

**Internal and external relationships**

The following list is not exhaustive but the post holder will be required to liaise with:

- Professor Jocelyn Monroe
- Dr Jarek Nowak