PERSON SPECIFICATION
Ref: A3684

<table>
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<tr>
<th>Job Title:</th>
<th>Senior Research Associate</th>
<th>Grade:</th>
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<td>Duration:</td>
<td>30 months</td>
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<td>Department:</td>
<td>Lancaster Environment Centre</td>
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<td>Directly Responsible to:</td>
<td>Dr Ryan Hossaini</td>
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<td>Supervisory responsibility for:</td>
<td>N/A</td>
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Other contacts
- Internal: Other members of the atmospheric science research group in LEC. Staff and Students at the University
- External: Project partners

Job Purpose: The successful candidate will conduct research under the supervision of Dr Ryan Hossaini as part of the NERC-funded project titled ‘why is lower stratospheric ozone not recovering?’. The overarching goal of the project is to improve scientific understanding of the chemical and dynamical influences that affect ozone and ozone trends in the upper troposphere and lower stratosphere now and in the future.

Main Duties:
- Develop the UKCA chemistry-climate model to include an up-to-date representation of multi-phase iodine chemistry and related processes.
- Evaluate the representation of tropospheric halogens in UKCA by utilising measurements from past field campaigns, along with new data from the 2022 ACCLIP project.
- Quantify how much ocean-emitted iodine (organic and inorganic), along with other halogens, reaches the lower stratosphere and how this may have varied in recent decades, with a focus on transport in the Asian Summer Monsoon.
- Quantify the impacts of reactive halogens on lower stratospheric ozone.
- Determine the main dynamical and chemical drivers of observed short-term variations in lower stratospheric ozone and longer-term trends.

Where appropriate:
- Participate in national/international meetings, conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field.
- Lead the writing of research papers and other publications.
- You may be asked to assist with a small amount of undergraduate teaching in atmospheric science.