Technician
Chemistry (Wolfson Atmospheric Chemistry Laboratories)

Closing date: 21 February 2019
Interview date: 14 March 2019
Vacancy reference: 7330
INTRODUCTION

This position has been created to implement and maintain new ways of working which will support the laboratories, field work and office activities of the atmospheric group within the Department of Chemistry. The Wolfson Atmospheric Chemistry Laboratories (WACL) is an experimentally intensive research facility with more than £3M in state of the art equipment in-house and a further £2M deployed overseas. The ongoing expansion of the group and of its facilities necessitates additional support in order for continued development and to maintain the smooth running of WACL. The post-holder will be responsible for contributing to all aspects of WACL operations, but primarily the daily running and organisation of the laboratories in order to support the researchers with their activities. WACL maintains continuous atmospheric monitoring; at York, across the UK and overseas; at fixed sites and using the WACL mobile research vehicle. These activities are supported by central facilities at WACL such as repair and maintenance knowledge, parts and tools, calibration gas generation and quantification. With guidance from WACL researchers, the post-holder will be responsible for the upkeep of these facilities.

The Department of Chemistry is one of the UK’s leading Chemistry departments and we are renowned internationally for our research. This is combined with a commitment to teaching and outstanding student satisfaction, and we have been recognised consistently for our family-friendly policies and are proud of our Athena SWAN Gold Award: https://www.york.ac.uk/chemistry/ed/

As a Department we strive to provide a working environment which allows all staff and students to contribute fully, to flourish, and to excel. We aim to ensure that there is a supportive and egalitarian culture at all levels and across all staff groups. We promote good practice and a strong culture of equality in higher education. Further information can be found within this brief and on our website: www.york.ac.uk/chemistry/
Main purpose of the role

To provide technical and scientific support to the atmospheric chemistry research group based in the Wolfson Atmospheric Chemistry Laboratories (WACL)

Key responsibilities

(Role holders will be required to undertake some or all of the duties below)

- Carry out routine tasks, often working from written/verbal instructions
- For example assisting with management of calibration gases, including creation of new in-house gas mixtures; assisting with organisation and packing for shipping of equipment, from one off shipments to field campaigns
- Under direction, perform experiments in accordance with the aims and objectives of WACL, raising any issues with senior staff
- Maintain accurate records of work undertaken, using appropriate IT software
- Work effectively with others, providing technical advice in relation to WACL and the techniques used in atmospheric chemistry, to staff and students, as required
- Contribute to the housekeeping of WACL, including the routine maintenance, repair and operation of equipment
- This will involve some installation and maintenance of field monitoring equipment on field sites
- Assist with purchasing including ordering and distributing goods
- Liaise with appropriate staff (for example service engineers) to ensure lab and equipment are kept operational
- Understand, promote and apply relevant COSHH/risk assessment and departmental health and safety protocols ensuring procedures are followed at all times
- For example, perform routine and on request portable appliance testing
- Operate basic scientific equipment
- Apply knowledge to solve routine problems and use initiative
- Provide local inductions, training and demonstrations of techniques and equipment skills and best practice to work area
- Assist with general administrative tasks associated with the operation of the work area
- For example, sorting and cataloguing of shared equipment and chemicals
- To contribute and support change in the work area
- To actively demonstrate a commitment to professional development by continuing to advance knowledge, understanding and competencies
# PERSON SPECIFICATION

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<tr>
<th>Qualifications</th>
<th>Essential / Desirable</th>
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<tr>
<td>A Levels or appropriate experience</td>
<td>Essential</td>
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<td>RSciTech / EngTech or willingness to work towards these or equivalent professional qualifications</td>
<td>Essential</td>
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<th>Knowledge</th>
<th>Essential / Desirable</th>
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<td>Relevant theoretical knowledge of general science</td>
<td>Essential</td>
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<td>Knowledge of relevant safety regulations and procedure for example, COSHH and risk assessment</td>
<td>Essential</td>
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<td>Awareness and understanding of the operation of a scientific laboratory</td>
<td>Essential</td>
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<th>Skills, abilities and competencies</th>
<th>Essential / Desirable</th>
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<td>Ability to perform practical tasks to a consistently high standard with attention to detail</td>
<td>Essential</td>
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<td>Ability to operate standard equipment</td>
<td>Essential</td>
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<td>Manage own time, use initiative and work to deadlines and seek advice where necessary</td>
<td>Essential</td>
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<td>IT skills for a wide range of applications, including Google Apps, Microsoft Word and Excel</td>
<td>Essential</td>
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<td>Ability to assess non-routine problems by suggesting solutions</td>
<td>Desirable</td>
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<td>Ability to write standard reports in own work area and keep concise and accurate records</td>
<td>Essential</td>
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<th>Experience</th>
<th>Essential / Desirable</th>
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<td>Experience of carrying out relevant technical activities</td>
<td>Essential</td>
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<td>Ability to work on own initiative and as part of a team</td>
<td>Essential</td>
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<th>Personal attributes</th>
<th>Essential / Desirable</th>
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<td>Actively demonstrate a commitment to professional development by continuing to advance knowledge, understanding and competencies</td>
<td>Essential</td>
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<td>Dependable, reliable and self motivated</td>
<td>Essential</td>
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<td>Good interpersonal skills and the ability to communicate effectively with staff and students</td>
<td>Essential</td>
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<td>Maintain a positive, open attitude toward others, to value and support colleagues, to adapt to change quickly and easily and demonstrate personal resilience</td>
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THE DEPARTMENT

The Wolfson Atmospheric Chemistry Laboratories

The Wolfson Atmospheric Chemistry Laboratories are home to more than 65 researchers with interests in all aspects of atmospheric chemistry, from stratospheric ozone, through to urban pollution, personal exposure and health. The laboratories comprise more than 1200 m³ of new offices and labs, the most recent extension to the building being completed in April 2018. The labs support an exceptional environment for research, have access to state of the art facilities and include a range of different disciplines and researchers. The National Centre for Atmospheric Science is co-located with university staff and NCAS provide long-term support to a range of analytical and model facilities. The labs also host a number of joint academic appointments with Defra and Ricardo plc.

Atmospheric chemistry research at York has generated more than 200 publications in the last 5 years including in journals such as Nature, Science and PNAS, and received more than £14M in external research funding, including more than £4M for equipment and high performance computing infrastructure. The research at York focuses on fundamental atmospheric processes but with emphasis on translation of basic research to policy and practice. For example research on natural emissions from trees was used by the UK Government to inform policy on summertime smog episodes, whilst new understanding of exchange of halogen compounds from the ocean has had a major impact on the UN stratospheric ozone assessment and the parties to the Montreal protocol. The atmospheric research at York also connects with industrial and commercial organisations in areas such as measurement technology, emissions characterization and security partnering with global organisations such as BP, Unilever, Givaudan, and DuPont, as well as a range of UK small and medium size companies.

Further information about the Wolfson Atmospheric Chemistry Laboratories is available at: https://www.york.ac.uk/chemistry/research/wacl/

The Department of Chemistry

The Department of Chemistry: http://www.york.ac.uk/chemistry is one of the largest and most successful academic departments at York. The Department was placed in the top ten UK universities for Research Power by the 2014 Research Excellence Framework exercise (REF). Amongst our academic staff we have five Fellows of the Royal Society and many national and international prize winners, contributing to a dynamic and thriving department. The excellence of Chemistry at York was recognised by the outstanding 3rd place in both the 2019 Guardian and Times University League Table guides and 6th place in the 2019 Complete University Guide.

The Department has nearly 60 academic staff (including
THE DEPARTMENT

teaching-only staff), more than 600 undergraduate students, approximately 160 graduate students (mainly studying for PhDs) and over 80 research associates and fellows. The Department has a group of coherent laboratories, recently extended and modernised, which provide an excellent environment for both teaching and research; £35M has been spent on new buildings and equipment in the last seven years.

Staff in the Department of Chemistry undertake research in a wide range of fields and there are particular strengths in analytical and archaeological science, atmospheric chemistry, chemical and structural biology, green chemistry, materials chemistry, metalloproteins, organometallic and catalytic chemistry, synthetic organic chemistry and time-resolved spectroscopy.

We have nearly 30 administrative staff (including those funded externally), as well as over 50 technical staff who provide assistance in the teaching and research laboratories and maintain the workshops (mechanical, glass and electronics) supporting these activities.

The undergraduate programmes, which typically attract over 1200 applications for the ca 180 places, have a flexible, modular structure with opportunities for specialisation in environmental, industrial and medicinal chemistry. There are three-year (BSc) and four-year (MChem) courses with opportunities for students to spend a year at one of a number of overseas universities or in industry. Students rated the Department with an overall satisfaction rating of 97% in the National Student Survey 2018.

The Gold Award from Athena SWAN: https://www.york.ac.uk/chemistry/ed/ for promoting women in science was won by the Department of Chemistry in 2007 and renewed in 2010 and 2015. This was the first Gold award made in this scheme. The Athena SWAN Charter recognises and celebrates good employment practice for women working in science, engineering and technology (SET) in higher education and research.

The case studies on our Equality and Diversity website: https://www.york.ac.uk/chemistry/ed/fam-friendly-work/ illustrate the variety of working arrangements of staff which are supported by the Department.

The Department of Chemistry operates a set of family-friendly practices. Staff working patterns are flexible and a formal Flexitime system is also in operation. The Department has developed a maternity and paternity leave procedure to help provide support for staff and the University has a nursery http://www.york.ac.uk/univ/nrsy/
Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2018 it is the home of more than 17,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world's leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and are ranked 16th in the Times & Sunday Times league table (2017). The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding 12 awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we’ve worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.
The City of York

Internationally acclaimed for its rich heritage and historic architecture, York’s bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford’s Tower and the Shambles – just a few of the many attractions.

But York isn’t just a great place to visit - it’s also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit www.visityork.org for more information on the city of York

Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

Great location

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online

- Go to [https://jobs.york.ac.uk](https://jobs.york.ac.uk)
- Find this job using reference 7330
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 21 February 2019

What will I need?

We will ask you for details of:
- your employment history
- relevant qualifications
- two referees

You need to be ready to show us how you meet the requirements of the job, either in a written statement and/or by answering questions.

Help and assistance

Direct any informal queries to Dr Martyn Ward
martyn.ward@york.ac.uk

If you have any questions about your application, contact the HR Services team:
recruitment@york.ac.uk
+44 (0)1904 324835