

St Mary's School, Calne

Headmistress: Dr Felicia Kirk, BA (University of Maryland),
MA and PhD (Brown University)



Science Technician (Biology)

36 hours a week, term time only

October 2019

St Mary's is an independent boarding and day school of approximately 350 girls aged 11-18, with a very strong academic reputation. Almost all of the girls go on to university, several each year to Oxbridge, to read a wide variety of subjects, and results in public examinations are consistently excellent. Extra-curricular activities and opportunities beyond the classroom are a vital and integral part of life for girls at St Mary's, who are encouraged to strive for excellence in a wide range of spheres. We pride ourselves on the superb quality of our pastoral care and our focus on individual needs.

There is an opportunity for an experienced Science Technician to join our award-winning team (Platinum Science Mark 2018-2021) at an exciting time when the Head of Science responsibility is being passed to a new incoming Head of Department. Our new Technician will organise and prepare Biology practical activities, provide specialist technical support for Biology (including classroom support) and will also support the other services of the Science Department resulting in a full, varied and satisfying role within the team.

St Mary's is committed to safeguarding and promoting the welfare of pupils. Due to the nature of the work involved, the successful applicant will be required to undertake an Enhanced DBS check

The School: its Ethos and Aims

St Mary's believes in excellence in all respects. As a school community, we thrive amidst a culture of high expectation and the education which we seek to provide nurtures and develops the concept of high performance.

The principal aim is to develop well-rounded pupils who are equipped to excel as adults. Whilst the achievement of top quality examination results is a central tenet, since these will be a key passport for the girls in the path to their future careers in the modern world, we seek to encourage everyone to strive for excellence in a wide range of spheres.

We aim to inculcate habits for life, enabling the girls: to relish the prospect of hard work; to develop and deploy the necessary qualities of perseverance and determination; to learn how to do well; to acquire the belief and self-confidence that they are capable of high performance and success – both in the short term and in the future; to instil a sense of desire and an appreciation that the future, indeed their future, lies within the grasp of their own efforts.

Extra-curricular activities and opportunities beyond the classroom are a vital and integral part of life for girls at St Mary's. They are woven into the timetable during the day, in the evenings and at weekends. We believe that both boarders and day girls benefit from all aspects of the strong boarding ethos of the school.

The Science Department

The Science Department currently consists of four Biologists, two Chemists and three Physicists. There are three full-time technicians. It is forward-thinking and values teaching which is both engaging and enthuses the girls, with the aim of inspiring them to think of continuing with Science as a career.

In both LIV and MIV (Years 7 and 8) the girls follow a bespoke curriculum which is specifically designed to ensure that a love of scientific inquiry is engendered from day one. The year is divided into three 7 week blocks and the girls are taught each of the three sciences in rotation by a subject specialist for 2 lessons a week.

From UIV (Year 9) upwards the Department teaches the Edexcel IGCSE specifications in all three sciences. Attainment across Science at IGCSE has shown consistent improvement each year, with the 2018 cohort achieving an average of 69% A* in each of the sciences. The results for 2019 will represent the first cohort to complete the new specification Edexcel IGCSE specification with a 9-1 grading system.

A high proportion of girls go on to take Sciences in the Sixth Form. Girls do very well at A Level, achieving an average of above 30% A* grades across the three sciences in the last two years. Over the same period, the average of grades A* - B has been over 90%.

Physics follows the AQA specification at A Level.

Currently there are many former pupils who are reading a scientific subject at university. Some examples include Biology and Chemistry at Oxford, Engineering, Natural Sciences at Cambridge, Veterinary Science and Medicine.

Within the department we try to provide as many extra-curricular activities as possible across the whole field of Science. We have termly enrichment weeks, a week of science events and activities for British Science Week as well as other trips to GCSE Science Live, the Bristol museums, Science festivals, and lecture events. All Physics VI formers participate in the BPhO annually, and the L6 Physics students take part in the Engineering Education Scheme with great success. This year we are competing in the 'Bloodhound Race for the Line' and we have started a lego robotics club.

The school has five well-equipped laboratories, which are housed in a separate science block, along with a science classroom located close to the laboratories. There are two prep rooms as well as a separate chemical store. Within the Science building there is a workroom with dedicated desk space for each member of staff as well as a photocopier and printing facilities.



Science Technician (Biology)

Line Manager: Head Science Technician

1. Job Purpose

- To organise and prepare the biology practical activities requested by teachers
- To provide specialist technical support (Biology) to teaching staff in the Science Faculty, including in-class support with pupil activities.
- To support the other services of the science department.

2. Main Duties & Responsibilities

- a) To provide specialist assistance and support the teaching staff in the preparation and assembly of teaching resources: paper-based, apparatus and equipment across all sciences (with a speciality in Biology).
- b) To take a lead role in the design, development and maintenance of any specialist equipment or other resources to support teaching and learning

activities, under the general direction of the Head(s) of Department and Head Science Technician.

- c) To prepare, equip and maintain classrooms, laboratories and workshops for use by staff and pupils ensuring that an orderly, safe and healthy environment is provided for teaching activities.
- d) To contribute to teaching sessions, as appropriate, by demonstrating or advising on the proper use of materials for practical activities, including teacher directed support for individuals or assisting with practical project work (e.g. as part of post-16 studies).
- e) To maintain and undertake reasonable repairs to equipment where practical to do so or to arrange alternative servicing by approved contractors.
- f) To be responsible for the safe storage of equipment and materials and the disposal of waste products in accordance with the relevant regulations, guidelines and school procedures.
- g) To maintain appropriate records for the control and allocation of relevant equipment and resources, including service schedules and inventories.
- h) To undertake ordering and stock allocation activities and maintain appropriate records.
- i) To support the Teaching Staff with the organisation and preparation of displays of subject materials or students' work, when appropriate.
- j) To be responsible (alongside the Head Science Technician and the Head of Science) for Health and Safety within the department and to ensure that Health and Safety requirements and other relevant regulations (e.g. COSHH) are adhered to and observed. This will involve undertaking regular checking procedures and risk assessments, as appropriate to the work area and may involve additional training.
- k) To play a proactive role in developing the skills and expertise of teaching and technical staff and in promoting 'best practice' in all aspects of the work requirements.
- l) To assist with ensuring all laboratories and science classrooms are correctly stocked at all times.
- m) To support, and at times to lead, extracurricular activities run by the department, subject to standard health and safety and safeguarding guidelines.

3. Job Context

The post holder will play an important role in providing specialist technical support to teaching staff within the designated work area and in ensuring the safe and proper use and maintenance of resources and equipment. The specialist technical knowledge and skills will support a variety of teaching activities, including more advanced work with post-16 examination courses.

4. Supervision and Work Planning

General supervision will be provided by the Head Science Technician as appropriate. There will be a need for day-to-day liaison with relevant teaching staff. Most activities will be undertaken without direct supervision.

5. Problem Solving and Decision Making

Applying technical or specialist skills and knowledge to resolve any problems with the setting up or maintenance of equipment. This may include:

- identifying health and safety considerations
- diagnosing faults in equipment and determining appropriate remedial action
- designing and constructing equipment to meet identified requirements
- trialling experiments and activities to establish suitability for classroom application including practical skills tests for GCSE and A level.

6. Communication

The post involves working closely with all school staff, particularly teaching staff, teaching assistants and other administrative staff.

7. Physical Effort

Lifting and movement of resources and equipment to teaching laboratories will be required, using trolleys where appropriate in line with current Health and Safety legislation.

8. Compliance

Compliance with the Data Protection Act and all school policies with special regard to those relating to Health and Safety, smoking and acceptable use of the internet.

9. Equipment

Competent use of ICT when appropriate to produce resources and support teaching. Competent use and application of specialist equipment for the relevant subject area/department.

10. Entitlements / Staff Development and Training

To undertake any activities which will support the post, including an annual professional development review.

11. Special Notes / Conditions

The post holder will be expected to act as an adult role model and support school policies.

Protective clothing will be provided and should be worn as appropriate

12. Working hours/ holiday time

This role is term time only + 1 week over the summer holidays (36 weeks)

The post will be 36 working hours a week Monday – Friday (ie. 90% of the standard 40 hours term time only). Lunch breaks are unpaid but lunch is provided in the school dining room.

Person Specification

Essential

- An understanding of Word, Excel and an ability to learn to use the internal computer systems
- An ability to prioritise work
- An ability to work methodically and systematically.
- An ability to work with an attention to detail.
- To be numerate
- To be punctual and efficient
- An ability to work both individually without supervision and in a team
- Science A levels or equivalent
- A commitment to professional development

Desirable

- Previous experience as a science technician
- A Science qualification post-A level
- An interest in the education of young people
- A knowledge of Physics and Chemistry in addition to Biology

This job description sets out the main duties of the post and does not describe in detail all tasks required to carry them out.



Further details

Further information about the school may be viewed on the website:

www.stmaryscalne.org.

An application form may be downloaded from the website or can be sent on request. Please contact the following:

Mrs Clare Oatley
St Mary's Calne
Curzon Street
Calne
Wiltshire
SN11 0DF

Email: recruitment@stmaryscalne.org

Telephone: 01249 857 300

A fully completed application form, together with a covering letter, should be sent by email to recruitment@stmaryscalne.org

Email is very much our preferred method of receiving applications. If this is problematic, please contact us by telephone on the above number. Receipt of an application will be acknowledged as soon as possible.

Closing date for applications: Midday, Friday 20th September 2019

All members of staff are expected to have proper regard for the school's safeguarding policy and procedures, including up-to-date training. The school's Child Protection Policy is available on our website and we would expect applicants to have read this if they are called for interview.

Extract from ST MARY'S CHILD PROTECTION POLICY

St Mary's Calne fully recognises its responsibilities for Child Protection.

We are dedicated to safeguarding and promoting the welfare of our boarders and day girls, regardless of age, ability, race, culture, religion, sexuality or background. We follow the child protection procedures set out by the Wiltshire Safeguarding Children Board (currently transitioning to Local Safeguarding Partners) and have regard to statutory guidance issued by the Department for Education *Keeping Children Safe in Education, 2019*. Our policy takes full regard to *Working Together to Safeguard Children 2018 (WT)*, *What to do if you are Worried a Child is Being Abused (2015)* and the *National Minimum Boarding Standards (2015)*.

At St Mary's we have a 'Nominated Governor' to take leadership responsibility for the school's safeguarding arrangements.

What is safeguarding?

Safeguarding can be defined as promoting the health, safety and welfare of all pupils.

Safeguarding is the responsibility of all adults, especially those working or volunteering with children. The school aims to help protect the children in its care by working consistently and appropriately with all relevant agencies to reduce risk and promote the welfare of children.

Staff:

- are advised to maintain an attitude of 'it could happen here' as far as safeguarding is concerned;
- should always act in the best interest of the child.

What is child protection?

Child protection is a part of safeguarding and promoting welfare. This refers to the activity which is undertaken to protect specific children who are suffering, or at risk of suffering, significant harm.