



The Tiffin Girls' School

Junior Science Technician (Key Stage 3)

Information Pack for candidates
June 2018



The Tiffin Girls' School

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Headteacher: Ian Keary

Dear Applicant

Junior Science Technician post at The Tiffin Girls' School – from September 2018

Thank you for your interest in the post of Junior Science Technician at The Tiffin Girls' School. This is an important appointment for this high achieving school. We are looking for someone who is reliable, extremely well organised and has excellent communication skills and ideally with sound experience in a laboratory.

The school is one of the top state schools in the country and in 2017 achieved some wonderful results:

- GCSE: 69% A* and 92% A* & A, Progress 8 1.21
- A Level: 32% A* and 93% A*-B

I was drawn to the Headteacher post here two years ago because of the wonderful culture and ethos that permeates this remarkable school. Whilst academic excellence is highly valued, so is the all-round development of the student, and I believe that, the performing and creative arts, sport, student leadership, debating, Young Enterprise, Duke of Edinburgh and other extra and co-curricular opportunities all play a significant role in supporting our students to hone different skills, experience new challenges and develop social and cultural capital.

When I joined the school in January 2016, I asked the staff to share with me what they thought was special about The Tiffin Girls' School, and below are some quotes that for me continue to capture the spirit of the school:

- *The attitude and behaviour of the girls - their willingness to throw themselves into everything with enthusiasm*
- *The students' eagerness to learn, their curiosity, how they embrace challenge*
- *The students (friendly, eager to learn). The staff (supportive, friendly, professional)*
- *The students are driven and love learning. The staff are exactly the same.*
- *The girls' enthusiasm for giving anything a go - being open to new ideas, being open to love something that is hard or not obviously lovable*

The girls take centre stage, and rightly so, as they prove themselves to be bright, articulate, friendly, assertive, caring and highly motivated young women who leave us in Year 13 to go on to a hugely impressive range of destinations.

The school's motto is *sapere aude*; 'Dare to be wise', and we promote that with the students, challenging them to be the very best version of themselves by:

- demonstrating intellectual curiosity
- taking responsibility for their learning - being self-motivated
- thinking creatively and critically
- going beyond the norm - trying something new

- having the courage to take risks and fail
- reflecting and learning from mistakes
- articulating and expressing their own thoughts and idea

The appointment of a Junior Science Technician is key to the continued success of the science departments and the school. My approach to leadership can be summed up by 'getting better never stops', and I look forward to seeing the successful candidate supporting learning and continuous improvement in our hard working school.

Every member of this community is committed to safeguarding and promoting the welfare of all our students. We demonstrate our commitment through:

- maintaining an attitude of 'it could happen here';
- when concerned about the welfare of a child, always acting in the interests of the child;
- establishing and maintaining an ethos where students feel secure and are encouraged to talk and are always listened to;
- ensuring that all students know there is an adult in the school whom they can approach if they are worried or in difficulty; and
- including in the curriculum opportunities which will equip students with the skills and knowledge they need to stay safe from harm, to make informed decisions and to know to whom they should turn for help.

I hope that you are excited by what you read and see on the school's website, and that the opportunity to contribute in such a direct way to the success of the school is an appealing one. I look forward to receiving your application.



Ian Keary
Headteacher



Our School

The Tiffin Girls' School, a selective state school and stand-alone Academy, is a vibrant and happy community where the girls take centre stage. The school is currently home to 1,113 girls, aged between 11 and 18, and for over 138 years has been providing an education where girls can live up to the school's motto *sapere aude*; 'Dare to be wise'. The school prides itself on encouraging girls to aspire to excellence in everything they do, whether that be: academic excellence, a passion and enthusiasm for the creative and performing arts, sporting prowess, or student leadership. A broad and challenging curriculum sits alongside a stimulating and rewarding range of extracurricular activities, many of which are student-led, and these elements of school life combine to develop inquisitive, confident, dynamic and successful young women ready for their future lives as global citizens.

The girls achieve highly because they are incredibly motivated, hardworking and focused. It is, however, the caring and strong pastoral system, complemented by the development of strong friendship groups, which makes them feel happy and safe, allowing them to flourish in their time here. The school also benefits greatly from a very positive relationship with parents, working together in our common aim which is to encourage and support the girls.

The school is a six form entry selective school, having expanded from five forms of entry in September 2016. As of September 2017, we have 180 students in Years 7 and 8, and 150 each in Years 9, 10 and 11, with over 300 in the Sixth Form.

There are spacious yet functional premises, which provide extensive facilities in all areas of the curriculum. Specialist teaching areas include thirteen science laboratories, three art rooms, one of which is a fully equipped ceramics room, a drama studio, Learning Resource Centre (with additional computers), music suite and a computer suite of two computer rooms, with bookable laptops and clusters of machines in design technology, music and science. There is a large assembly hall, a separate dining hall and two gymnasias. Sports facilities include an astro turf, resurfaced netball and tennis courts.

The school's proximity to London makes it possible for students of all ages to attend concerts, plays, theatre workshops, lectures, exhibitions, one-day conferences and international matches. The school makes good use of this facility as trips and activities outside of school form an essential part of the students' educational experience.

Parental contributions and fundraising have greatly enhanced the accommodation in the school. In the recent past, two new classrooms, a learning resources centre and two science laboratories, have been added thanks to our parents.

Staff

The strong team of highly qualified staff has extensive and varied experience. Both teaching and non-teaching staff share a commitment to high standards of learning, discipline and care for the personal wellbeing of each student. Good liaison is cultivated with local feeder schools, community services, employers and with universities.

Opportunities for professional development are essential and care is taken to ensure all staff have access to training and new experiences through a comprehensive and personalised programme of CPD. There is an active staff association, which arranges social activities throughout the year.

Curriculum

The school provides a wide range of subjects that meet the learning and destination choices of our highly able students. Lessons are taught in one hour periods over a 25 period week.

Our Key Stage 3 curriculum develops students' knowledge, skills and understanding, and lays the foundations for the courses students will then follow at Key Stage 4. All subject areas are enriched with a wide range of creative and stretch and challenge opportunities that are designed to enable students to reach their full potential.

In Years 10 and 11, subjects are taught across two periods per week. The exceptions to this are Maths (three periods per week) and English (four periods per week). The core curriculum includes English, Maths, Biology, Chemistry, Physics and a language with students then choosing four further options. All students receive PE as part of their broader curriculum.

In Years 12 and 13, subjects follow A Level specifications with the exception of Music, which currently follows the Pre-U course. Students choose four subjects to begin their studies, with most then choosing to continue three to full A Level in Year 13. Following their AS exams in Year 12, students are given the opportunity to study the Extended Project Qualification (EPQ). Further details on options at GCSE and A level are available on our website.

In Year 12, we combine with Tiffin School for a joint programme of activities designed to broaden their education. The girls enjoy this social link with the boys' school.

Staff care passionately about the students, and we are acutely aware of the pressures that many high achieving girls face. We have therefore developed a comprehensive evidence based PSHE curriculum, one period a week, which has been specifically written for our context.

Sixth Form

Sixth Form students have many opportunities to enrich their educational and social experience over the two years and many participate in charity and not for profit enterprises. They compete at national level in the Young Enterprise Company Programme (UK winners 2013), enrol on the Duke of Edinburgh Award Scheme Silver and Gold awards, and take part in debating, university challenge, Model United Nations and a wide range of other clubs and societies. Alongside this, the girls are encouraged to conduct work experience to support their personal development and UCAS applications.

Student leadership is actively encouraged and many Sixth Form students are school officers, prefects, subject associates and mentors for younger students in the school. Sixth Form students, for example, mentor and coach a large number of students in debating clubs covering all three key stages; all year groups compete in local and national competitions such as ESU and University Schools events.

While many of our students go on to Oxbridge and other Russell Group universities, a small number are choosing to study abroad gaining places at Harvard, New York and Washington State universities.

Location

The school is located in spacious and attractive grounds in a pleasant residential area which is bordered by the River Thames and Richmond Park. It is situated on the northernmost edge of the Royal Borough of Kingston upon Thames with easy access to road and rail networks. The nearest railway stations are at Kingston upon Thames (Zone 6), a fifteen minute walk away, or Richmond upon Thames.

Safeguarding at The Tiffin Girls' School

In support of our safeguarding commitment, we undertake rigorous employment and Disclosure and Barring service checks on appointment. We provide regular safeguarding training and expect staff to be aware of, understand and act in accordance with school policies. On appointment, staff will be asked to sign up to our E-Safety, Health and Safety and Safeguarding policies and manual. In addition, on appointment, all staff are required to sign their agreement to complying with the school's Code of Conduct. If any of the above raises any queries when you are considering your application, please do not hesitate to contact Kirstin Stansfeld, HR Director on recruitment@tiffingirls.org.



Science Departments

Science at Tiffin Girls' School is run through the separate Chemistry, Physics and Biology departments. In total there are 15 full and part-time teaching staff and four technicians.

Courses

- In Years 7 and 8, students follow separate Biology, Chemistry and Physics courses. They have 1 one hour lesson per week in each and are taught in Form groups.
- At GCSE, which starts in Year 9, the AQA specifications for separate sciences are followed. Each class has 2 one hour lessons for each science per week.
- At A Level, the sciences are very popular. This year in Year 12 there are 94 students studying Chemistry, 87 studying AS Biology, and 40 studying Physics. In Year 13 there are 69 students doing Chemistry, 81 Biology, and 27 students doing Physics. Sixth Form chemistry students follow the OCR Chemistry A (H432) specification.

Results

In 2017, 72.5% of students achieved an A*/A at A level, and 97% achieved an A*/A at GCSE

Resources

- There are eleven well equipped laboratories, four of which have been built since 2013.
- Each lab has ICT provision including interactive whiteboards, a wide range of data logging equipment, and the ability to pre book laptops for lessons.
- We believe in the importance of practical work and so make a deliberate effort to include as much of it as possible within our lessons.

Enrichment activities

- Each year a variety of activities such as a Science Fair, liquid nitrogen demonstrations and visiting lecturers are offered to all year groups during our Science week.
- Science teachers run a weekly Science Club for KS3 students.
- Chemistry students at all key stages enjoy participating in competitions including Salters Chemistry competitions, RSC Top of the Bench, Schools' Analyst competition, the Cambridge Chemistry Challenge and the Chemistry Olympiad.
- There are a variety of STEM activities offered including the Engineering Education Scheme (EES) project.
- The three separate departments within the science faculty aim to offer each year group in KS3, KS4 and KS5 one trip/activity each year and there are a variety of lectures organised for KS4 and 5. For example, Year 13 chemistry students benefitted from using the 'Spectroscopy in a Suitcase' resource provided by Kingston University.
- We take advantage of being close to London by offering girls the opportunity to attend lectures, exhibitions and museums. For example, sixth formers attend lectures at the Royal Institution and the various colleges of London University, and many of them also attend the Summer Science Exhibition at The Royal Society.
- All three of the sciences run clinics for AS and A2 girls as well as talks/seminars for those interested in taking the subject further
- Science teachers play an active role in providing intervention to girls outside lessons both in scheduled group sessions and on a one-to-one basis.
- Regular mentoring sessions are arranged on a one-to-one basis for any younger girl who needs extra help in science. These sessions are run by our sixth form science students.



Job Description:

POST TITLE	Junior Science Technician
GRADE	D
RELATIONSHIPS	<p>Reporting to: Nominated technician and Key Stage 3 Science Co-ordinator</p> <p>Key relationships:</p> <ul style="list-style-type: none"> • Heads of Biology, Chemistry and Physics • Science teachers
MAIN PURPOSE OF JOB	Responsible for supporting all Biology and Chemistry lessons taught in Year 7, Year 8 and Year 9, and occasionally supporting Physics lessons
MAIN RESPONSIBILITIES	<p>Lesson support</p> <ol style="list-style-type: none"> 1. To prepare chemicals, materials and apparatus for class use 2. To deliver chemicals, materials, apparatus and equipment to the appropriate laboratory, in good time for the lesson, and to assemble apparatus and equipment where requested. 3. To clear chemicals, materials and equipment from laboratories at end of each lesson. 4. To assist in lessons, as requested, ensuring that teaching staff are provided with appropriate support. <i>Note that this usually only happens in 'practical-heavy' lessons such as dissection.</i> 5. To wash apparatus (when students are unable to do so due to the nature of equipment) and ensure that laboratory is re-stocked with apparatus and "bench" chemicals. 6. To provide paper based resources as requested and to ensure paper based resources are filed in central departmental store, such that resources are easily identifiable and obtainable. 7. To provide assistance to pupils doing extracurricular investigative work, and to ensure that appropriate apparatus is available at the required time. 8. To assist other technicians during busy times as needed. <p>Stock control and ordering</p> <ol style="list-style-type: none"> 9. To ensure that adequate stocks of chemicals, apparatus, materials and equipment are available. To undertake an annual stock-check, to order materials and equipment via the designated member of the administrative staff, to check deliveries and to keep appropriate records. 10. To make regular checks on stocks of stationery and to order, receive deliveries of and store stationery as required. 11. To carry out shopping for science experiments or events as required. 12. To complete online orders under direction of KS3 Co-ordinator as required

	<p>Covering absence of other technicians</p> <p>13. In the event of short term absence of colleagues in the technician team, to cover their daily responsibilities so that there is minimal disruption to lessons. In the case of extended staff absence appropriate arrangements will be made.</p> <p>Indexing and cataloguing</p> <p>14. To index/catalogue chemicals, apparatus, materials and equipment as necessary. In particular to ensure that all resources stored in both laboratories and prep rooms are arranged safely, logically and are clearly catalogued.</p> <p>15. To index and catalogue microscope slides so that they are arranged logically and clearly catalogued and can be obtained by any teacher at any time.</p> <p>Health and safety</p> <p>16. To ensure that the Health and Safety Policy is read and is adhered to, and all updates from CLEAPPS are read and actioned, when required.</p> <p>17. To ensure that all work is undertaken in accordance with Health and Safety legislation currently prevailing. If there is any doubt in regard to the safety of working procedures, these must be urgently referred to the KS3 Co-ordinator.</p> <p>18. To maintain and repair equipment, and to report and keep records of faults where necessary. Also to identify maintenance requirements, and to monitor any work done outside the faculty.</p> <p>19. To be responsible for the general security of equipment in laboratories, preparation rooms, stores etc.</p> <p>Meetings</p> <p>20. Science technicians are also expected to attend department (or other) meetings, as appropriate to their responsibilities, when there are agenda items relating directly to technicians.</p> <p>21. Science technicians will be expected to attend training sessions which are relevant to their duties. This may occasionally involve attending courses outside the school.</p> <p>22. Technicians will not normally be expected to attend meetings scheduled outside their normal hours of work.</p> <p>General</p> <p>23. Any other duties commensurate with the grade of this post.</p>
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Person Specification:

Essential	Desirable	Evidence
Qualifications and experience:		
<ul style="list-style-type: none"> Studied to a minimum standard of GCSE (grade A*–C) or equivalent, in English, mathematics and Chemistry. 	<ul style="list-style-type: none"> Further/higher education / NVQ or equivalent qualification in Chemistry or Biology. Experience of working in a school or similar establishment. Experience of working with young people. Experience of working in a relevant discipline within a laboratory or similar environment. 	<ul style="list-style-type: none"> Application form Letter of application References Interviews
Knowledge and skills:		
<ul style="list-style-type: none"> Ability to build and form good relationships with students and colleagues. Ability to work constructively as part of a team, understanding school roles and responsibilities including own. Verbal and written communication skills appropriate to the need to communicate effectively with colleagues, students and other professionals. Good standard of numeracy and literacy skills. Ability to absorb and understand a wide range of information. Ability to operate a range of ICT equipment and other specialist resources. Ability to proficiently use computer software including word-processing, spreadsheet, database and internet systems. 	<ul style="list-style-type: none"> Working knowledge of relevant policies, procedures, regulations/legislation eg health and safety and COSHH. 	<ul style="list-style-type: none"> Application form Letter of application References Interviews
Personal qualities:		
<ul style="list-style-type: none"> Initiative and ability to prioritise one's own work and make informed decisions. Able to follow direction and work in collaboration with line manager. Able to work flexibly to meet deadlines and respond to unplanned situations. Efficient and meticulous in organisation. Desire to enhance and develop skills and knowledge through CPD. 		<ul style="list-style-type: none"> Application form Letter of application References Interviews

Essential	Desirable	Evidence
<ul style="list-style-type: none"> • Commitment to the highest standards of child protection and safeguarding. • Recognition of the importance of personal responsibility for health and safety. • Commitment to the school's ethos, aims and its whole community 		



Benefits of working at The Tiffin Girls' School

All of our employees enjoy a range of benefits:

- Pleasant working environment on the outskirts of the busy town of Kingston upon Thames with easy access to London and the surrounding Surrey countryside
- Free on-site parking
- Cycle to Work Scheme
- Childcare Voucher Scheme
- Enhanced maternity benefits and consideration given to flexible working where possible
- Free at the point of use counselling
- Free tea and coffee in the staffroom with regular 'treat days' eg Fruit Friday
- Membership of the Local Government Pension Scheme
- Generous annual leave entitlement – 26 days' paid annual leave (to be taken during the 13 weeks of school holidays)