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KTP Associate Post Details – PROJECT 1			
Position	Bio-derived Polymer Systems Developer (KTP Associate, Vistafolia Ltd)		
Company partner / Departments	Vistafolia Ltd / Departments of Chemistry, Mechanical Engineering Sciences, Chemical Process Engineering, and Centre for Environment & Sustainability		
Based	Vistafolia Ltd, Unit 6, Trade City, Lyon Way, Frimley, Camberley GU16 7AL		
Salary	£30500 to £32500 per annum depending on qualification and experience, plus a generous training budget		

### Introduction

The Knowledge Transfer Partnership (KTP) Programme is a graduate recruitment scheme, partfunded by Innovate UK, that helps a RECENT graduate (the KTP Associate) transition from university life in to a career in industry with the aim of making them a technical authority in the subject area, as well as a successful project manager.

A KTP is a collaborative project between a university (knowledge base) and a company (company partner), the aim of which is to transfer knowledge between academia and industry. The post-holder will be employed by the University of Surrey but based at Vistafolia in Frimley, Surrey.

The University academics are a key part of the knowledge transfer. As such, contact with the academics will be maintained through regular team meetings at the company and occasional visits to the University of Surrey by the KTP Associate.

We are looking for a recent postgraduate who has the drive to take responsibility for leading and delivering this strategic and innovative project with support from both leading academics and key company personnel. The post-holder will be expected to apply and enhance their existing knowledge, expertise and skills, both technical and non-technical, and to take advantage of the generous training budget which is provided specifically for their further development and career advancement.

If you are ready to take on the responsibility to lead and deliver this innovative KTP project and want to kick-start your career in industry, while applying your technical know-how gained through academic study in a real-world context, then we would like to hear from you.

Further information about the KTP Programme is available at: <u>https://www.ktp-uk.org/</u>.

### Job Purpose Statement

This KTP project is co-funded by Innovate UK and Vistafolia, and the contract of employment is offered for a fixed-term, 25-month period. Vistafolia are a relatively young company which designs and manufactures leading artificial green wall systems.

As a recently-qualified MSc/MChem Chemistry (or similar) graduate, you will be responsible for developing a bio-derived polymer system with measurable ultraviolet stability and fire-retardant qualities while still allowing for injection moulding to create artificial foliage and to further develop in-house technology capabilities. You will apply sound academic knowledge and principles in a real-world environment and perform scientific assessments of what is realistically deliverable within a production environment. The key challenges will be to develop innovative solutions, identify and resolve technical issues, and provide technical solutions, drawing on formulation and material characterisation Skills.





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The successful candidate will be responsible for managing and driving this innovative KTP project and embedding new knowledge within both the organisation and the University of Surrey.

PLEASE NOTE: This KTP project involves two Associates: i) **Associate 1**, (this role) the Chemist with Material Science Specialism; and ii) Associate 2, the Engineer with Material Science Specialism. Associate 1 will lead on product development i.e. the science of the composition and the optimisation of the product and <u>Associate 2</u> will lead on the engineering system design for scale-up, sustainability and establishing the new R&D facilities/capabilities and related processes. Using the facilities set-up by Associate 2, Associate 1 will develop the new formulation for new products with enhanced properties.

Key Responsibilities This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities (5 to 8 maximum)

- 1. Lead and deliver an innovative KTP project, bringing together the University and Vistafolia staff as one team, to collaborate effectively.
- 2. Develop technical solutions for a Bioplastic, drawing upon the expertise of Vistafolia and the University of Surrey academics
- 3. Work with a KTP Associate 2 (see the note above) to identify critical factors that affect product longevity and allow for injection moulding.
- 4. Work with a KTP Associate 2 to help grow Vistafolia's technical capability.
- 5. Apply scientific knowledge in method development for specific bio-polymers.
- 6. Transition solutions developed into production.
- 7. Produce high-quality outcomes with game-changing, real world impact.
- 8. Embed new knowledge in both Vistafolia and the University of Surrey.

## N.B. - The above list is not exhaustive.

#### The KTP Associate is expected to:

- Work safely during coronavirus (COVID-19) pandemic following Government Guidelines
- Follow the company partner's policies and working practices at all times to ensure that no disclosure of confidential information results from their actions.
- Follow University/departmental policies and working practices at all times to ensure that no disclosure of confidential information results from their actions.
- Ensure they are aware of and abide by all relevant University / Company / KTP regulations and policies relevant to their role.
- Undertake such other duties within the scope of the KTP as may be requested by their Supervisors or Line Manager.
- Help maintain a safe working environment by:
  - Attending training in Health and Safety requirements, as necessary, both on appointment and as changes in duties and techniques demand.
  - Following local codes of safe working practices and the University of Surrey Health and Safety Policy.
- To be a team-player, supportive of colleagues and operating in a collegiate manner at all times.
- Positively support equality of opportunity and equity of treatment to colleagues and/or students in accordance with University of Surrey policy.
- Adhere to any Environmental Policies and to promote awareness of environmental impact to colleagues and students.

### **Elements of the Role**

This section outlines some of the key elements of the role, which allow this role to be evaluated within the University's structure. It provides an overview of what is expected from the post holder in the day-to-day operation of the role.

#### **Planning and Organising**

- The KTP project has been identified and designed by the Company and the University of Surrey.
- A workplan has been created and will form the basis of this 25-month KTP project. The Associate will need to review and refine this plan.
- The Associate will play a key role in steering and shaping the project strategy.
- The Associate will work alongside KTP Associate 2, so will need to plan and organise their work in parallel. Both Associates will need to fast establish an optimal way of working together.





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• The Associate will be responsible for scheduling, planning and chairing monthly technical meetings.

# Problem-Solving and Decision-Making

- The Associate will need to be able to work independently, as well as collaboratively with the company, the University, and the 2<sup>nd</sup> Associate, ensuring that all parties remain engaged with the KTP project.
- Both company and University teams will collaborate to support the KTP Associate, resolve issues, review progress and the strategy of the KTP. The Associate will be expected to be the catalyst to make this process effective.
- There are several topic areas and tools that will be required for the problem-solving and decisionmaking elements of the project:
  - Formulation of multiple additives that must be dispersed
  - Understanding the characterisation of each additive using techniques such as FTIR, SEM, XPS
  - Sustainable bio-derived polymer development
  - Rapid assessment of UV degradation on the new product
- Key challenges:
  - Research, define, test and prove a commercially viable product, that in collaboration with Associate 2, will ensure scalability for manufacturing
  - o Product Marketing
  - o Embed knowledge advancement directly into practice
  - Communication embedding knowledge to enable company employees to follow and understand the science of the project in layman's terms
  - Draw on scientific knowledge and practical capability from materials science, chemistry, and process engineering

# **Continuous Improvement**

- Whilst a workplan has been identified, the Associate is expected and encouraged to look for improvements and secure other opportunities to add value to the collaboration.
- In an agile working environment, all staff are expected to review, analyse and adapt all practices, whether in testing, process and/or communications.

# **Accountability**

- There will be regular opportunities for the Associate to present the progress of their KTP and achievements.
- A KTP is a collaborative project, and the Associate is expected to work with their team to manage and exceed the outcomes of the KTP project.
- The Associate will report to both company and university staff. The Associate will be working as part of a small team so there will always be support at hand.
- The Associate will essentially take control of the project and report back to the University and company and guidance will be given if the project is getting off track. Weekly progress meetings will ensure budgets are planned and adhered to.

# Dimensions of the role

- As part of the KTP, the Associate will:
  - Plan, organise and record regular technical reviews.
  - Manage the project (to include expenditure forecasting and management of the project budget).
  - Plan and organise quarterly progress meetings.
  - Schedule regular one-to-one meetings with stakeholders.
  - $\circ$   $\;$  Take responsibility for their own personal development and training.





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#### Supplementary Information

#### The Associate:

- Will drive innovation that will provide solutions that help transform the company.
- Will have a dedicated and generous budget for personal development training to enhance their technical and non-technical skills.
- Will have free access to the University of Surrey's comprehensive learning and development programmes.
- May have the opportunity to co-author and publish research papers with the Academics.

**Person Specification** This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role.

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Qualifications and Professional Memberships	Essential/ Desirable	
MSc/MChem degree in Chemistry, or similar area		E
<b>Technical Competencies (Experience and Knowledge)</b> This section contains the level of competency required to carry out the role ('1' being low – '3' being high).	Essential/ Desirable	Level 1-3
Experience in mechanical characterisation and synthesis of biopolymers	E	2
Materials Science background	D	2
English Language at minimum IELTS 7.0 (or a degree qualification studied in an English-speaking country, e.g. USA or UK) or native English speaker.	E	3
Experience in laboratory set up, instrumentation and engineering design approach	E	2
Significant postgraduate work undertaken in materials science	D	2
Experience of other materials characterisation techniques (e.g. FTIR, SEM, XPS)	D	2
Ability to drive and project manage a strategic KTP	D	2
Previous industrial work experience including placement	D	1
An interest in and experience of working in an environment that is responsive to customers' short lead time demands	D	1
Special Requirements:	Essential/ Desirable	
Good understanding of Vistafolia, including their key ain case of value proposition; role/position in the internatio	E	
Ability to absorb knowledge and develop skills during the	E	
Competence in MS Office and report-writing	E	
<b>Core Competencies</b> This section contains the level of correquired to carry out this role. (Please refer to the com framework for clarification where needed). n/a (not approximation).	Level 1-3	





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should be placed, where the competency is not a requirement of the grade.	
Communication	3
Creative and Analytical Thinking	3
Adaptability / Flexibility	2
Continuous Improvement	2
Customer/Client service and support	2
Influencing, Persuasion and Negotiation Skills	2
Managing and Developing Performance	2
Planning and Organising	2
Problem-Solving and Decision-Making Skills	2
Strategic Thinking and Leadership	2

This Job Purpose reflects the core activities of the KTP post. As the partnership and the post-holder develop, there will inevitably be some changes to the duties for which the post-holder is responsible, and possibly to the emphasis of the post itself. The University expects that the post-holder will recognise this and will adopt a flexible approach to their work. This could include undertaking relevant training where necessary.

Should significant changes to the Job Purpose become necessary, the post-holder will be consulted, and the changes reflected in a revised Job Purpose.

**Organisational / Departmental Information & Key Relationships** 

### **Background Information**

The working hours, annual leave and holiday entitlement are those of Vistafolia Limited.

The standard working hours of Vistafolia are 37 hours per week – 09:00-17:00 Monday to Friday. At least 60 minutes daily must be taken as a lunch break.

Annual leave entitlement is 20 working days per year plus public holidays. The holiday year runs from the first day of employment.

# Please also see \_ https://vistafolia.com/ and https://www.ktp-uk.org/

**<u>Relationships</u>** This is not an exhaustive list of every relationship the post holder has but is a brief description of those that play an important part in the post holder successfully carrying out the role.

The Associate will work closely with both the Company Supervisor and Knowledge Base Academics and liaise with the University of Surrey's KTP Office. This is one of two KTP Associate roles at Vistafolia, both Associates are expected to work closely with each other. The post-holder will also have the opportunity to network with other KTP Associates and will be expected to meet regularly with professionals from Vistafolia and their client base, who will provide feedback on the scope and progress of the project.

### **Internal Relationships**

- University KTP Office (Business Enterprise Team)
- Company KTP team
- Academic KTP team
- University of Surrey Students/Staff
- Other Company Staff
- 2nd KTP Associate

### **External Relationships**

• Innovate UK - KT Adviser





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- Other KTP Associates
- Vistafolia clients & suppliers
- Manufacturing Services Company in China

#### **Special Requirements**

The post-holder must be prepared to work outside normal working hours, if and when required, and must be willing to undertake further learning and development, as approximately 10% of their working hours should be dedicated to training and development.

The Associate will be required to travel to the University of Surrey as part of the project, and occasionally more widely.