Post Details	Last Updated: 22/11/2022		
Faculty/Administrative/Service Department	Faculty of Engineering and Physical Sciences Centre for Environment and Sustainability		
Job Title	Experimental Officer: Glasshouse Facilities Manager		
Job Family	Technical and Experimental	Job Level	4
Responsible to	Project Lead		
Responsible for (Staff)	n/a		

Job Purpose Statement

The post holder will play a fundamental role in the successful delivery of the project investigating aeroponic growth and performance of SRC willow. You will work closely with a research fellow and another experimental officer to complement the delivery of the project.

This role will lead in managing the glasshouse and polytunnel facilities, and will provide significant support for the technical running of trials.

The Experimental Officer will be responsible for managing the newly constructed experimental facilities, including standard working procedures, H&S, ongoing cleanliness, fault finding and resolution.

The Experimental officer will lead on staff and student engagement in the working facilities and in supporting the trials.

The experimental officer will be responsible for the environmental monitoring data, ensuring sensors are in good working order, collecting and organising data.

Additionally the Experimental Officer will support the (SRC willow) trials, analysing trials data and will be presenting findings alongside recommendations to the project team in order to ensure successful delivery of the project within the agreed timeline and budget. The post holder is responsible for ensuring adequate supplies are available and equipment is in safe working order; and ensure that the team complies with all relevant Health and Safety regulations.

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. Responsible for overall management of research facilities. To establish and enforce best working practice for new research facilities including SOPs, H&S, risk assessments. To create, implement, assess and address procedures, SOPs and Risk Assessments for the technical activities. To attend faculty level H&S meetings and ensure compliance.
2. To monitor experiments, perform regular physiological measurements and analyse the growth & performance of SRC willow trials. Responsible for pest management and plant health of the trials. To perform spraying/treatment of pests when necessary.
3. To proactively interpret and report information in written form (technical and non-technical) to project members for internal and external audiences. To lead on the preparation of environmental and system performance data for quarterly reports
4. To perform (daily) monitoring of the system and record functionality and performance, and to laisse with the development team in making recommendations that will support the continuous improvement of the novel aeroponic system.
5. To coordinate other staff and the harvesting team and to manage samples to ensure efficient data collection and accurate results. To perform regular checks and quality assurance of data collected
6. To independently ensure equipment is in working order and maintained, and to monitor and ensure the stock of consumables is adequate so that experiments and experimental deliverables run smoothly, according to project timeline.
7. To liaise with suppliers and source cost effective quotations for consumables and outsources analyses. Where measurements and analyses are outsources, the post holder will liaise with the supplier to ensure adequate quality of standardised practices to maintain accuracy and reliability of data.
8. To maintain open and timely communications with the work package research fellow, Experimental Officer , line manager (project lead) and project manager in order to inform of progress and critical changes in the running and performance of the trials.

N.B. The above list is not exhaustive.

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities Policy.
- Work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.
- Follow University/departmental policies and working practices in ensuring that no breaches of information security result from their actions.
- Ensure they are aware of and abide by all relevant University Regulations and Policies relevant to the role.
- Undertake such other duties within the scope of the post as may be requested by your Manager.
- Work supportively with colleagues, operating in a collegiate manner at all times.

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.

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 post holder will require excellent time management skills to manage multiple tasks of varying priorities. Including undertaking daily checks – ensuring the environment is appropriate, that plant material is growing well with no signs of stress and growing areas are in good order.
- The post holder will further develop and implement planned trials and provide feedback and strategic adjustments over the course of the project. Including collecting data on aeroponic system performance and substantiating impacts of this (and the environment) on plant growth with data.
- The post holder will manage and monitor pest and disease control including keeping data records, putting in place preventative clean protocols and responding to any pest/disease (deploying traps, spraying etc.)
- They will contribute to organising short and medium- term developments and processes, including process change within the project.
- The post holder will develop and determine appropriate individual and team workflow in order to meet objectives, targets and deadlines.
- They will prioritise and manage the workload of other members of the teams and should address any identified training requirements.
- The post holder will provide technical support to staff and students based at the sister-site at Rothamsted Research to share knowledge, experience and coordinate data sharing and analysis.

Problem Solving and Decision Making

- The post holder, working with their line manager, will be expected to implement a dynamic approach to problem solving and to achieve a cost-effective solution and will have freedom to work in a proactive manner and will decide how to achieve the end result, generally based on their judgment, technical expertise and prior experience.
- The post holder will lead on providing advice and solutions for day-to-day problems in their specialist technical area. The appropriate course of action will usually be a matter of choice influenced by the application of established procedures and precedents and previous experience to similar problems.
- As an expert in their specialist area the post holder is expected to resolve the majority of the issues they face; however, when responding to complex and novel situations, guidance may be sought from their line manager and additional experts (e.g. project delivery team).
- Errors in judgement and failure to carry out a particular task could result in compromised equipment, samples and/or trials, and jeopardise the delivery and integrity of the project.

Continuous Improvement

- The post holder is expected to maintain knowledge of new developments in their field and seek gaining additional knowledge in fields relevant to the project (e.g. aeroponics, SRC willow, bioenergy).

- The post holder is expected to suggest improvements on work processed and, upon approval, implement those changes, with continuous monitoring.
- The post holder must ensure H&S legislation of operating facilities are adhered to and attend relevant regular H&S meetings at the University.
- Ensure all facilities are consistently clean and tidy.

Accountability

- Ensure their own wellbeing, as well as that of staff in the team, through compliance with standard procedures, including those governing Health and Safety.
- The post holder is expected to respond confidently and in a timely manner to problems/issues such as equipment malfunctions and breakdowns. They are expected to apply well established processes and procedure along with technical knowledge to assist research and academic staff in the preparation of research activities.
- Latitude exists for the post holder to set their own agenda within set parameters and to organise and prioritise their own work to ensure that key deadlines and objectives are met, without continuous supervisory approval.

Dimensions of the role

- Further developing and detailing planned trials – over 20 experiments are planned to be conducted over the three year project
- Creating and implementing processes and protocols – the postholder will be able to proactively streamline and improve data collection, analysis and play a key role in successful delivery of the trials
- Maintaining stocks of equipment and consumables with pre-set levels of expenditure
- Ensure safe handling, storage and disposal of hazardous substances and protocols are adhered to.

Supplementary Information

- Lab, desk and field work will be required
- Attending events, internal and external, to support project team in exchanging knowledge and information dissemination
- The project offers opportunities for publications
- Experience or an interest in sustainability are desirable

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.

Qualifications and Professional Memberships		
Horticultural degree or equivalent professional qualification in a relevant academic/research area, or number of years of professional experience in glasshouse facilities management		E
Technical Competencies (Experience and Knowledge) This section contains the level of competency required to carry out the role (please refer to the Competency Framework for clarification where needed and the Job Matching Guidance).	Essential/ Desirable	Level 1-3
Experience in managing glasshouse/research facilities - Has the ability to set-up the climate control and trouble-shoot and solve problems which arise including the systems software issues.	E	2
Experience in plant science and/or plant physiology and crop health trials, including technical experience in irrigation, nutrition, and pest/disease control	E	2
Practical experience of dealing with horticultural, technical and infrastructure problems e.g., setting up and subsequent management of plant growth trials, fabrication and maintenance of equipment, deployment, and maintenance of irrigation systems.	E	2
Experience in working with environmental sensors	E	1
Comprehensive understanding of Health & Safety Legislation and best practice	E	2
Solid relevant technical knowledge & experience in research setting	E	2

Excellent observational skills, accuracy and attention to detail	E	3
Confident user of Microsoft office packages (word, excel. etc)	E	3
Confident in data analysis and use of associated used of statistical platforms (SPSS, Analytica, R etc.)	E	2
Pesticide application qualifications PA1 and PA6	D	n/a
Experience in soilless cultivation systems such as hydroponics or aeroponics	D	n/a

Special Requirements:	Essential/ Desirable
Willingness to respond to out of hours calls if required in case of alarms or an emergency	E
Willingness to undertake specific Health & Safety training	E
Ability to work outside of regular office hours including weekends, public/bank holidays and during site closure (usually Christmas period)	E
Physically active and able to move and lift heavy objects	E
Holder of a full Driving License	E
Ability to work between two sites on occasion (Rothamsted Research & University of Surrey)	E

Core Competencies This section contains the level of competency required to carry out this role. (Please refer to the competency framework for clarification where needed). n/a (not applicable) should be placed, where the competency is not a requirement of the grade.	Level 1-3
Communication	3
Adaptability / Flexibility	3
Customer/Client service and support	2
Planning and Organising	3
Continuous Improvement	3
Problem Solving and Decision Making Skills	3
Managing and Developing Performance	2
Creative and Analytical Thinking	3
Influencing, Persuasion and Negotiation Skills	1
Strategic Thinking & Leadership	3

This Job Purpose reflects the core activities of the post. As the Department/Faculty and the post holder develop, there will inevitably be some changes to the duties for which the post 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 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.

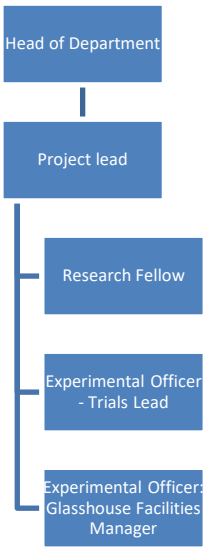
Organisational/Departmental Information & Key Relationships

Background Information

The Centre of Environment and Sustainability (CES) is an internationally-acclaimed centre of excellence on sustainable development. Later this year, the Institute for Sustainability will be launched at the University of Surrey. There has never been a more exciting time to be involved in sustainability-centred research at the University of Surrey.

The project aims to demonstrate viability of short rotation coppice willow in a novel aeroponic system with the immediate application of producing multiplication material (willow cuttings) to support an increase in biomass production. The project is lead by Dr Zoe M Harris from the Centre for Environment and Sustainability at the University of Surrey and is partnering with a number of high-profile partners including UKUAT (UK Urban Agri-Tech), Rothamsted Research and Forest Research.

Department Structure Chart



Relationships

Internal

- Laboratory Technicians
- Harvesting Staff
- Project Staff including those at Surrey, Rothamsted and externally
- University research, teaching and PGR staff
- Close liaison with University Health & safety department to ensure best practice is adhered to

External

- External bodies & organisations in connection with Health & Safety, equipment purchases and repairs
- Specialist entities, including those in the field of aeroponics, SRC willow and biomass for bioenergy