

Job title	Technician - robotics	Job family and level	Technical Services Level 3	
School/ Department	Life Sciences	Location	Synthetic Biology Research Centre (SBRC)	

Purpose of role

The purpose of this role is to support the Synthetic Biology Research Centre (SBRC) at the University of Nottingham in exploiting its robotics capability. The SBRC was founded following a £14.3m investment from UKRI (BBSRC/EPSRC) in 2014 and has a wealth of advanced facilities for research in microbial engineering biology.

The SBRC has two bespoke advanced liquid-handling robotics systems (Beckman Coulter) designed to automate generation and assembly of various DNA parts, conduct transformations and subsequently support bacterial growth and colony selection. Use of the robots accelerates research progress towards the SBRC's goals of developing sustainable bioproduction systems for chemicals and fuels.

The post holder will be expected to work as part of a team. Training on the robot systems will be provided. The work will include using approaches or methodologies and techniques towards the goal of synthesising chemicals sustainably without generation of greenhouse gases in a collaborative I_UK project with industry entitled: "Development of a biocatalyst to recycle industrial CO2 emissions into carbon neutral ethanol". The post-holder will be responsible for writing up their work in order to contribute to published outcomes.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Support SBRC researchers and the lead robotics technician in the use of the SBRC's suite of automated liquid handling robots in the execution of experiments particularly for the I_UK project: "Development of a biocatalyst to recycle industrial CO2 emissions into carbon neutral ethanol"	75%
2	Offer support in using the above facilities to users from all levels of staff and to external collaborators.	5%
3	Make significant contribution to the design and implementation of research in the SBRC using the above resources. This includes system set-up, contributing to programming and development, hardware maintenance and providing some training to users.	5%
4	Liaise at a technical level with collaborators and commercial partners. Allocate and manage user time.	5%
5	Generate and analyse data for research publications and make significant contribution to writing research reports.	5%

6

5%

Person specification

	Essential	Desirable	
Skills	 Ability to work accurately and methodically in order to maintain high standards, with the ability to work effectively under pressure to achieve work deadlines. Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. Effective note-taking and record keeping. Competent in Microsoft Office user. Good customer relation skills. Ability to build relationships and collaborate with others internally and externally. Preparation and stock management of buffers and media. 	 Skilled in use of liquid handling robots Basic Molecular cloning skills: PCR, restriction digests, ligations, transformations, plasmid preparation. Proven report writing skills. Aptitude and enthusiasm to work with researchers and postgraduate students. 	
Knowledge and experience	 Proven technical and/or experimental expertise in a scientific or technical specialism. A sound understanding of Health and Safety regulations and the implications of noncompliance. 	 Experience of varied Biochemical techniques, including analytical assays, enzyme assays and protein purification. Experience in use of liquid handling robots Experience of working as part of a multidisciplinary team 	
Qualifications, certification and training (relevant to role)	Minimum of HNC in relevant subject, or equivalent qualifications plus substantial work experience in relevant role or Bachelor of Science in Microbiology or related relevant area (2.2)	Qualification in liquid handling robots	





The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people Is friendly, engaging and receptive, putting others at ease. Actively listens

to others and goes out of way to ensure people feel valued, developed

and supported.

Taking ownership Is clear on what needs to be done encouraging others to take ownership.

Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.

Forward thinking Drives the development, sharing and implementation of new ideas and

improvements to support strategic objectives. Engages others in the

improvement process.

Professional pride Is professional in approach and style, setting an example to others;

strives to demonstrate excellence through development of self, others

and effective working practices.

Always inclusive Builds effective working relationships, recognising and including the

contribution of others; promotes inclusion and inclusive practices within

own work area.

Key relationships with others

