University of Nottingham
UK | CHINA | MALAYSIA

Role profile

Job title	Research Fellow (or Associate) in Raman Spectroscopy	Job family and level	Research and Teaching Level 4
School/ Department	Physics & Astronomy	Location	University Park Campus

Purpose of role

The project's purpose is to carry out work on developing a technique based on autofluorescence imaging and Raman spectroscopy for assessment of lymph node biopsies during breast cancer surgery. The key responsibilities of the role are to carry out research to design and develop a Raman spectrometer optimised for scanning lymph node tissue. This includes designing or optimising instrumentation (hardware and software), design and carry out experiments with collaborators, analyse data and write up research paper based on the results. The candidates are expected to take an active role in dissemination of research (peer-reviewed papers, conferences).

This job description may be subject to revision following discussion with the person appointed and forms part of the contract of employment.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	To take a leading role in the research activities described above under the supervision of academic staff in the School of Physics and Astronomy.	70%
2	To write up this research work for publication and contribute to dissemination at national/international conferences, resulting in successful research outputs.	15%
3	To build relationships with both internal and external collaborators in order to exchange information, develop collaborative projects and identify potential opportunities for future collaboration.	15%

Person specification

	Essential	Desirable
Skills	▪ Skills in Raman spectroscopy, multivariate statistical analysis of data. ▪ Knowledge of Raman Spectroscopy instrumentation ▪ Excellent communication, presentation, and publishing skills to aid effective interaction with multidisciplinary, academic, clinical and industrial partners ▪ Very good inter-personal skills ▪ Ability to work independently and in team	▪ Experience with working in interdisciplinary teams, collaborations with medical and industrial partners.
Knowledge and experience	▪ Strong research track record in optical microscopy, spectroscopy, including using custom instruments ▪ Strong evidence of multivariate analysis of Raman spectra. ▪ Expertise in developing customised instrumentation for Raman spectroscopy.	▪ Track record in Raman spectroscopy and imaging for biomedical applications.
Qualifications, certification and training (relevant to role)	▪ BSc/MPhys degree in a physics related subject. ▪ Ph.D. in Physics, Chemistry or Engineering, preferably in an area involving Raman spectroscopy. Applicants in the process of Ph.D. submission will be considered.	

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.

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