Candidate Information

Position:	Research Fellow
School/Department:	School of Psychology
Reference:	25/112587
Closing Date:	Monday 23 June 2025
Salary:	£39,922 per annum (£41,519 from 1 August 2025)
Anticipated Interview Date:	Thursday 3 July 2025
Duration:	Fixed Term - Full Time; available for 12 months or until 31 August 2026, whichever is soonest

JOB PURPOSE:

To be an active member of the Pharmaceutical Engineering Group to develop new, and support ongoing, research activities.

MAJOR DUTIES:

1. Grant writing & funding support – Identify funding opportunities from national and international funding sources; contribute to the development of research grant proposals, including writing sections, preparing budgets, and gathering supporting documents; supporting reporting requirements for ongoing grants, including progress reports.
2. Research development & execution – Stay current with literature to identify emerging trends and inform research directions; collaborate with team members to brainstorm and refine research questions; design and conduct experiments aligned with the agreed research aims and objectives; develop new or enhance existing methodologies.
3. Scientific writing & dissemination – Draft and contribute to scientific publications; prepare presentations for conferences, seminars and internal meetings; assist in the preparation of review articles and literature surveys.
4. Collaboration & supervision – Work collaboratively with internal and external researchers, institutions, and stakeholders; mentor junior researchers including PhD, Master and UG project students; participate in, and contribute to the planning of, team-building activities including regular team meetings and themed team workshops.
5. Project management & administration – Manage own day-to-day research activities, including timelines, deliverables, and resource allocation; maintain accurate and timely records of research activities and data; ensure compliance with ethical standards, data protection regulations, and institutional policies.

ESSENTIAL CRITERIA:

1. Applicants must have a degree in Pharmacy, Pharmaceutics, Pharmaceutical Science, Pharmaceutical Engineering, Chemistry, Chemical Engineering, Mechanical Engineering or a closely related discipline (Minimum standard 2.1).
2. Have, or be about to obtain* a PhD in Pharmaceutics, Pharmaceutical Science, Pharmaceutical Engineering, Mechanical Engineering, Chemical Engineering (*must be obtained within 3 months of commencement of employment).
3. Substantial recent experience of solid-state analytical techniques including thermal analyses (DSC, TGA), PXRD, spectroscopic structural analyses (FTIR, Raman), in-vitro drug release methods, quantification assay development (UV-vis, HPLC).
4. Experience of preparing materials for publication in international scientific journals.
5. Experience of preparing materials for dissemination at national and/or international conferences.
6. Ability to contribute to administrative tasks relevant to the research team.
7. Coordination with other members of the research group to facilitate progress of work.
8. Liaison with external collaborators and sponsors.
9. Practical problem-solving skills, independence of thought and initiative are required.
10. Ability to present scientific arguments and data in a clear, concise and confident manner in both written and oral formats.
11. Able to work in a disciplined manner within a team environment.

DESIRABLE CRITERIA:

1. PhD research has a specific emphasis on one or more of the following areas: hot melt extrusion, reactive extrusion, polymer processing, enabling technologies, continuous manufacturing, artificial intelligence, innovative pharmaceutical manufacturing.
2. Experience of hot melt extrusion.
3. Experience of the design, formulation and analysis of drug formulations that offer enabled/enhanced drug properties via innovative processing/preparation.
4. Experience of additional thermal analysis characterisation tools including DETA, DMTA.
5. Experience of antimicrobial assays.
6. Knowledge or experience of using in-line PAT tools and multivariate analysis.
7. Experience of using artificial intelligence or machine learning in own research/studies.
8. Experience in preparation of funding proposals and applications to external bodies.
9. Experience of research resource allocation, laboratory management and/or workshop coordination where appropriate.
10. Experience of UG or PG student supervision.
11. Knowledge or experience of commercial development, customer discovery programmes, and cross-sector knowledge exchange.

ADDITIONAL INFORMATION:
Informal enquiries may be directed to Professor David S Jones (d.jones@qub.ac.uk).