Role Profile

**Job Title**
Research Associate/Fellow in Asymmetric Catalytic Organic Synthesis

**School/Department**
GSK Carbon Neutral Laboratories, School of Chemistry

**Job Family and Level**
Research & Teaching Level 4 Training Grade/Level 4

**Contract Status**
Fixed-term for a period of 30 months

**Hours of Work**
Full-time (36.25 hours per week)

**Location**
GSK Carbon Neutral Laboratories for Sustainable Chemistry, Jubilee Campus, University of Nottingham, Nottingham, NG7 2TU

**Reporting to**
Profs Hon Lam and Simon Woodward

**Purpose of the New Role**
To aid Profs Hon Lam (HL) and Simon Woodward (SW) work on within a unique GlaxoSmithKline-University of Nottingham-University of Strathclyde partnership aimed at providing a new, industry-focused, catalytic C-C bond forming reactions. Our programme will be carried out in close cooperation with the methodological groups of GSK and focuses primarily on asymmetric catalytic transformations and sustainable chemistry.

**Main Responsibilities**

1. The development of new, highly dependable, scalable catalytic asymmetric C-C coupling reactions applicable in methodology aimed at providing functionalised building blocks of use in pharmaceutical development.

2. Preparation of accurate, high quality, experimental supporting information suitable for high quality international chemistry journals (e.g. with IF ≥10).

3. To work effectively and productively with small team on catalytic methodology that needs to move forward rapidly.

4. Provide reaction, sustainability metric data and (pure) samples to the industrial collaborators interacting with HL and SW on this project.

5. Provide support, guidance and co-supervision to undergraduate and/or postgraduate co-workers in the HL/SW groups.

6. To provide intellectual input into the scientific papers and other outputs of the programme.

**Knowledge, Skills, Qualifications & Experience**

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<th>Essential</th>
<th>Desirable</th>
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<td><strong>Qualifications/Education</strong></td>
<td>PhD (or projected PhD awarded by mid-2019) in synthetic organic or catalytic chemistry.</td>
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<td><strong>Skills/Training</strong></td>
<td>Excellent skills in contemporary organic synthesis including: the synthesis and purification of organic compounds on mg to multi-gram scales, an ability to use air and moisture sensitive reagents and catalysts effectively, an ability to characterise and deduce the structures of complicated molecular architectures through modern spectroscopic</td>
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techniques (primarily 1 and 2D NMR and MS). Skill in bringing samples to analytical purity.

- Experience in the preparation of detailed high quality experimental and spectroscopic data ‘write ups’ forming the backbone supporting information to research (journal) publications.
- Ability to build effective interactions and collaborations with others, both internally and externally.

**Experience**

- Demonstrated excellence of productivity and quality in synthetic organic chemistry in tight timeframes.
- Proven ability to conduct high quality research in synthetic organic chemistry.
- A publication record in international peer-reviewed journals commensurate with stage of career.
- Well organized and self-motivated with the ability to manage and complete projects on time.

- Experience in asymmetric catalytic methodology.
- Experience in co-supervision of other research co-workers.

**Personal Attributes**

- Flexibility.
- Ability to work independently and as part of a multicultural team.

**Statutory/Legal**

- To take reasonable care for the health and safety of yourself and of other persons who may be affected by your acts or omissions at work in accordance with the Health and Safety at Work Act 1974, EC directives and the University’s Safety, Health and Environment Policies and procedures and to cooperate with the University on any legal duties placed on it as the employer.

**Additional Information**

Details of the involved research groups can be seen at:
- [https://www.nottingham.ac.uk/~pczhl/](https://www.nottingham.ac.uk/~pczhl/)
- [https://www.nottingham.ac.uk/~pczsw/SWGroup/](https://www.nottingham.ac.uk/~pczsw/SWGroup/)

Informal enquiries may be addressed to Prof Simon Woodward ([simon.woodward@nottingham.ac.uk](mailto:simon.woodward@nottingham.ac.uk)). Please note that applications sent directly to this email address will not be accepted.

*The University of Nottingham strongly endorses Athena SWAN principles, with commitment from all levels of the organisation in furthering women’s careers. It is our mission to ensure equal opportunity, best working practices and fair policies for all.*