



University of
St Andrews

Chemistry

**Research Fellow in organometallic
catalytic polymerisation and
depolymerisation**





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Introduction



“Our remarkable students and staff are the lifeblood of St Andrews. It is their energy, vision and momentum [we] aim to support, to free them to use knowledge, ideas, and potential for the benefit of all.” The Principal, Professor Sally Mapstone

Founded in 1413, the University of St Andrews is Scotland’s first university and one of the oldest in the English-speaking world. With more than 600 years of academic excellence, we are proud of our reputation as a world-class centre for learning, teaching, and research.

St Andrews is a close-knit, international community set in a beautiful historic town on Scotland’s east coast. Our students and staff come from over 140 countries, creating a diverse and globally minded environment. We strive to create an inclusive culture in which all can flourish, and the University have attained several diversity awards, including those related to race and gender equality, and support for carers, which demonstrate our commitment to this ambition. The University is consistently ranked among the UK’s top institutions for student satisfaction, research quality, and teaching excellence.

We are a research-intensive university where creativity, collaboration, and critical inquiry are at the heart of everything we do. Whether you are joining us in an academic, professional, or support role, you will be part of a team committed to delivering outstanding education and making a meaningful contribution to society.

For those looking to be part of a university with deep-rooted heritage, a global outlook, and a forward-thinking approach, we invite you to consider joining our community at the University of St Andrews.

Chemistry

The University of St Andrews is one of the premier universities in the UK, with the School of Chemistry (<http://www.st-andrews.ac.uk/chemistry/>) widely recognised as having world-leading strengths in several different areas of chemical science research.

We are highly focused on five research themes that reflect the relevance of modern chemistry in solving important global challenges and improving lives.

Our five research themes are: Catalysis and Synthesis; Functional Materials; Energy, Environment and Sustainability; Chemistry Biology Interface; Structural Chemistry and Chemical Dynamics. These research themes align extremely well with the University Strategy of being World-leading, Global and Entrepreneurial.





Job Description

Reporting to:	Dr Amit Kumar
Location:	St Andrews
Job Family:	Academic Research
Working Hours:	36.25 hours per week
Grade/Salary Range:	Grade 6 £38,784 - £46,049 per annum
Reference Number:	AR3275LS
Start Date:	01 August 2026 or as soon as possible thereafter
Interview Date:	Mid June 2026
Duration of post:	2 Years

Main Purpose of the Role

Applications are invited for a 2-year Post-Doctoral Research Associate position to work with Dr. Amit Kumar at the School of Chemistry, University of St. Andrews on the topics of organometallic chemistry, homogeneous catalysis, and polymer chemistry. The project aims to develop new organometallic catalysts for the synthesis and recycling of plastics in particular using the approach of catalytic dehydrogenation and hydrogenation reactions.

The principal duty of the post-holder will be to carry out research in the research group of Dr. Amit Kumar. The candidate will also be expected to provide day-to-day technical assistance and guidance to undergraduate and PhD students within the group and to take an active role in leadership within the group.



Key Responsibilities

1. Plan and conduct own research activities within the project to meet deadlines and deliverables.
2. Understand and convey material of a specialist or highly technical nature to the team and, where applicable, the funding body/sponsor through presentations, discussions and progress reports.
3. Write up research work for publication in peer-reviewed journals (as principal or co-author).
4. Write and present research papers (and, where applicable, posters) at conferences, seminars and workshops.
5. Engage in networking activities to make internal and external contacts, to develop knowledge and to form relationships for future research collaboration.
6. Participation in outreach via press releases, social media, blogs and talks at public events.
7. Develop specialist knowledge in the research area to deal with problems affecting the achievement of research objectives and deadlines, as well as devising solutions to unexpected challenges.
8. Plan and manage own administrative activities.
9. Contribute to the organisation of seminars, workshops, and conferences.
10. Proactively engage with other members of the research group and engage with the research environment within the School.
11. Supervise and provide support and guidance to research team members and assigned project student(s) as appropriate.
12. Use initiative and creativity to identify areas for research, develop new research methods and extend the research portfolio.
13. Identify potential sources of funding and write or contribute to research proposals and grant applications to external bodies if allowable by the funder.
14. Ensure compliance with all legal and regulatory requirements including equality and diversity, data protection, copyright and licensing, security, financial, health and safety and other University policies, procedures and codes as appropriate.

This position may involve some travel to attend meetings/work with collaborators (Oxford, Cambridge). Some evening or weekend work may be required in order to run/monitor time sensitive experiments.

Please note that this job description is not exhaustive, and the role holder may be required to undertake other relevant duties commensurate with the grading of the post. Activities may be subject to amendment over time as the role develops and/or priorities and requirements evolve.

Person Specification

Attributes	Essential	Desirable	Means of Assessment (i.e. application form, interview, test, presentation etc.)
<p>Education & Qualifications</p> <p><i>(technical, professional, academic qualifications and training required)</i></p>	<p>Good first degree in relevant subject</p> <p>Hold or be close to submission of PhD in relevant subject</p>	<p>Previous post-doctoral experience or relevant experience to the research area. Knowledge/expertise of polymer science.</p>	<p>Degree Certificate, application form and presentation</p>
<p>Experience & Knowledge</p> <p><i>(examples of specific experience and knowledge sought)</i></p>	<p>Proven track record in homogeneous catalysis, organic and organometallic chemistry.</p>	<p>Experience of working in polymer chemistry. Knowledge/Experience of one or more of:</p> <ul style="list-style-type: none"> Experience of applying for external funding Demonstrate clear potential for high quality research publications Credible plans for the active pursuit of external research funding 	<p>Publication records, presentation, interview.</p>



Person Specification

Attributes	Essential	Desirable	Means of Assessment (i.e. application form, interview, test, presentation etc.)
<p>Experience & Knowledge</p> <p><i>(examples of specific experience and knowledge sought)</i></p>		<p>Experience of supervising others (academically or in a management capacity)</p> <p>Project management experience.</p> <p>Experience of organising activities for scholarly or public audiences.</p>	<p>Publication records, presentation, interview.</p>
<p>Competencies & Skills</p> <p><i>(e.g. effective communication skills, initiative, flexibility, leadership etc)</i></p>	<p>Effective written and verbal communication skills, good time-management and the ability to work independently, yet within a collaborative environment.</p>	<p>Leadership or supervision experience. Impact and engagement evidence of disseminating research to constituencies beyond the academic community.</p>	<p>Interview, presentation, reference letters.</p>



Person Specification

Attributes	Essential	Desirable	Means of Assessment (i.e. application form, interview, test, presentation etc.)
Other Attributes/Abilities (if applicable)	Evidence of keeping up to date with new developments in relevant knowledge and techniques.	Evidence of participation in relevant academic and professional associations/bodies and external research networks. Some knowledge of issues and challenges facing universities in attaining research funding.	Application/Interview

Essential Criteria – requirements without which a candidate would not be able to undertake the full remit of the role. Applicants who have not clearly demonstrated in their application that they possess the essential requirements will normally be rejected at the shortlisting stage.

Desirable Criteria – requirements which would be useful for the candidate to hold. When short listing, these criteria will be considered when more than one applicant meets the essential requirements.

Benefits

St Andrews offers more than just a place to work—it is a place to belong. We value collegiality, inclusion, and wellbeing, and we are committed to creating a workplace where staff can thrive and perform at their best.

In addition to the salary on offer for this position, there are a wide range of benefits for staff working at the University of St Andrews. The package for the Research Fellow in organometallic catalytic polymerisation and depolymerisation includes:

- Financial contribution to relocation (subject to eligibility)
- Membership of the USS Pension Scheme with a generous employer contribution of 14.5%
- A hybrid working environment, including partial homeworking where appropriate and a range of family friendly policies, supporting work-life balance
- Staff discount scheme for local and national goods and services
- Free staff parking, employee Carshare and Cycle to Work Schemes and subsidised local bus travel
- Subsidised sports membership, reduced tuition fees on degree programmes for staff, access to training and development opportunities including LinkedIn Learning, access to library facilities, salary sacrifice scheme
- 34 Days Annual Leave plus 5 Public Holidays.



How to Apply



We are committed to creating an accessible, fair and inclusive recruitment process for all candidates. If you require reasonable adjustments or accommodations during the application or interview process then please let us know and we will be happy to discuss support with you.

We encourage applicants to apply online at www.vacancies.st-andrews.ac.uk/welcome.aspx

If you have difficulties in completing the online application form, then please call +44 (0)1334 461990 or contact vacancies@st-andrews.ac.uk to discuss available support.

Applications should consist of:

- Letter of application
- CV
- Names and contacts of three referees

For all applications, please quote ref: AR3275LS

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Equality, Diversity & Inclusion

At St Andrews, we see diversity as a strength and value the rich variety of backgrounds, identities and experiences of our staff, students and alumni. We are committed to making the University a beacon of inclusivity and creating an environment in where everyone can flourish and realise their potential.

We will achieve this through an approach that empowers our whole community and involves a determined shift in culture. Inclusivity will inform all of our policies and practices. The Principal, Professor Sally Mapstone

Diverse is a core theme of the University Strategy, and alongside our People Strategy, outlines a number of actions we are taking to create an inclusive culture. Our objectives include raising awareness of diversity events, initiatives and support, strengthening support for staff networks, creating more opportunities for employees to engage in consultations and discussions, offering a diverse range of rewarding career pathways and ensuring a working environment which supports positive working practices and behaviours.

We commit to providing a high-quality staff experience which enables all our staff to contribute, thrive, and perform at their best. By joining us at the University of St Andrews, you are joining a community which values difference, being your authentic self, and where you can play an active role in ensuring an inclusive environment for all.





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St Andrews

A modern location surrounded with ancient history, St Andrews is a dynamic and friendly town found on the east coast of Scotland. Situated in the Kingdom of Fife, St Andrews has easy links to nearby commuter towns and transport links (including airports) to the nearby cities of Dundee (13 miles) and Edinburgh (c. 1 hour by train).

Beyond the lecture halls and labs, St Andrews is home to stunning, unspoilt beaches and fresh sea air. Take a peaceful stroll or an energising walk with friends along the iconic two-mile stretch of the West Sands. If you prefer the water, ride the waves at the East Sands or try sailing, sea kayaking and windsurfing. For breathtaking views, a walk to the end of the stone pier is an experience not to be missed.

St Andrews and the surrounding area is home to a wide range of restaurants and shops, while boasting an array of beautiful beaches. St Andrews is also the home of golf and there are seven local courses including the famous Old Course.

Fife is an area filled history and culture. There are nearly 5,000 listed buildings and 50 conservation areas across the Kingdom, with some historic structures dating all the way back to the 12th century. St Andrews enjoys a microclimate and is typically much drier than western parts of the country.





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Further Information

The University encourages all interested candidates to apply, and all applications received are assessed against the essential and desirable criteria listed in the further particulars. The successful candidate will have to demonstrate their right to work in the UK prior to commencing employment and where required, the University can support with visa sponsorship.

You are expected to uphold a duty of care towards colleagues, students, and communities, and to actively contribute to a safe, respectful, and inclusive environment. This includes responding appropriately to disclosures or reports of sexual misconduct, gender-based violence, bullying, harassment, or other concerns, in line with organisational policies, and signposting individuals to the appropriate departments





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