

Newsletter 2 April '23 Issue



Dr Cathy Dwyer has recently joined Drochaid Research Services as Managing Director, after almost 23 years in a multinational energy company.



Cathy has a PhD in Organic Synthesis and Catalysis from the Rand Afrikaans University under Prof Cedric Holzapfel. After a year's postdoctoral studies in the United Kingdom under Prof RJK Taylor, she returned to South Africa in 2000 to join Sasol

Technology Research & Development.

In her early industrial research career she worked and published in the areas of hydroformylation, metathesis and dimerization, with a specific focus on fundamental understanding of catalysis using in situ spectroscopy techniques of HP-NMR and HP-IR. She continued building expertise in various areas of homogeneous and heterogeneous catalysis for chemicals and fuels production, has been involved in several successful scale-ups of technology from lab to commercial deployment, and led various strategic technology initiatives including biobased chemicals, syngas to products and chemicals differentiation.



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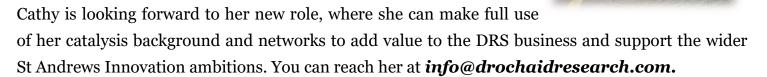
Dr Cathy Dwyer

New Managing Director continued

Her most recent position at Sasol was Vice President: Science Research, heading up a team of scientists covering all of Sasol's technology platforms, including Fischer-Tropsch catalysis, advanced Analytics and Environmental Science (Water, Waste and Air research). In recent years, she spearheaded an industry-government collaboration driving focussed research in energy transition and sus-

tainability to enable South Africa's Just Energy Transition. She has also served on various boards and committees including the International Advisory Board for the International Symposium on Homogeneous Catalysis, panels advising on government research funding and strategy, as well as reviews of various academic institutes and departments.

Cathy moved to St Andrews from South Africa at the end of March with her two Irish Setters Molly and Conall, pictured here soon after arrival and vet checks at Edinburgh Airport.



The Kate Kennedy Procession

A St Andrews Tradition of 700 years history



The first-ever female organiser of the annual student-run Kate Kennedy procession which took place in St Andrews on Sunday April 2nd 2023 and celebrated 700 years of history in the university town.

Marshall of the Procession, Tatiana Apostol.

The Kate Kennedy Procession A St Andrews Tradition of 700 years history



Led by a barefoot Saint Andrew and the also parading behind him the City of St Andrews Pipe Band, the annual procession sees characters from 700-years of St Andrews history parade through the town.

Characters depicting cardinals, queens and kings to golfers, bishops fill the cobbled streets in the special event which brings town and gown together.



Nothing surpasses the appearance of the most awaited character: the mystical Lady Katherine Kennedy, the adored niece of St Salvator's College founder Bishop Kennedy.

Legend has it that 'Kate' would come visit her uncle and was idolised by students.

How is Kate chosen?

Tradition dictates that Lady Kate is played by the "most promising first-year member" of the Kate Kennedy Club.

She is drawn through the town in a daffodil-decorated horse and carriage, cheered on amid an atmosphere of spring festival.

Traditionally 'Kate' was played by a male student.

This was because that the club only had male members until 2012.

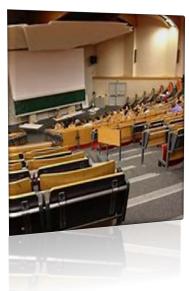


Unique to the University of St Andrews The red gown worn on the Kate Kennedy Procession





PREPA₁₃ - Home page



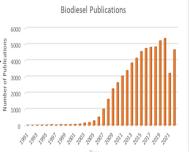


It has become a tradition that every four years, the Université catholique de Louvain (UCLouvain) and the Katholieke Universiteit Leuven (KULeuven) jointly organize a symposium devoted to the scientific bases for the preparation of heterogeneous catalysts. These meetings bring together researchers from academia and industry and offer a forum for discussions on the chemistry involved in the preparation of industrial heterogeneous catalysts.

The history of this series of events stretches back to 1975 and was initiated B Delmon and then repeated 3 years later with subsequent symposiums being held every 4 years, until of course recent events which has necessitated a five year gap between PREPA12 and PREPA13, however it is great to see this symposium back again. There have been a long list of hard working people who have made these symposia successful and it includes G. Poncelet who was responsible for the organisation until PREPA9 when Eric Gaigneaux took over with the strong support and help of a real team, involving P. Grange, P. Ruiz, M. Devillers, S. Hermans, D. Debecker, to cite those of UCLouvain only. KULeuven has always been associated since the beginning: P. Jacobs and J. Martens being the senior participants, with assistance of D. Devos, K. Kirschock, and now M. Dusselier.

I attended my first PREPA symposium, the 9th in the series in 2006, and was impressed not only by the standards of the presentations, both oral and posters but also by the mix of both academics and industrialists and the discussions and interactions among the attendees and the organisation of the conference. Looking back at the conference proceedings, another fantastic asset of these meetings, the foreword gave an overviews by the editors and Eric Gaigneaux, who I have subsequently learned was his first as organiser. The main topics of the proceedings are as relevant today as they were in 2006 and were Key aspects in catalysts preparation, micro- and mesoporous supports, supported metal catalysts, structured catalysts, tailored zeolites, catalysis by bases, and catalysts for fuel production. I was interested to note one of the presentations described the preparation, characterization and catalytic performance for biodiesel production, the graph below this shows this is exactly the start in the vast in-

crease in interest and therefore publications in this field. This highlights the work of the scientific committee which consists of the conference organisers and a mixture of academic and industrial members, which aids in the great relevance of areas and focus of the conference.



As has been mentioned the scientific committee are made up of academics and industry and looking at the 2006 committee the list of academic institutions and companies is very impressive and highlights the high regard this series has in both these circles.

Another factor contributing to the popularity of PREPA symposium is the social events that highlight the best of what Belgium has to offer in terms of location, beer and food which all contributes to further scientific discussion in a more social environment with a wide range of participants.

I returned in 2010 for the 10th symposium in the "Scientific Bases for the Preparation of Heterogenous Catalysts" series which was held 35 years after the foundation meeting and once again the presentations and posters were of a very high standard and relevance to an industrial chemist. I had particular interest this year and unfortunately it was work I had been pursuing which was the main focus of a presentation, and although disappointing it was also enlightening to hear about another group's perspective on the same subject.

This symposium focus areas were in scaling up, shaping and macrostructured catalysts, basic understanding and innovations in unit operations, nanostructured catalysts, hierarchical porous structures and hybrid catalysts and in situ spectroscopic follow-up of catalysts preparation. Once again showing the combination of topics that are relevant to both academia and industrial partners alike, which is also reflected in the Scientific committee in terms of representative of industrial companies, academic institutions, and the organisers of the conference. In this edition of the symposium there were 40 oral presentations and 193 poster presentations which are included in the Scientific Bases for the preparation of heterogeneous catalysts as full papers which to this day I still reference.

The next edition of the symposium I was invited to take part in the scientific committee and very much enjoyed the role of assessing the many abstracts that were submitted for PREPA11 and the discussion with the committee members of the merit of papers and areas. This only added to the enjoyment of this conference. Looking through my book of abstracts it is interesting to see the notes I had taken and also which talks and posters I had highlighted as being most relevant to my role at the time. The topics of the 11th symposium were; control of porosity and hierarchical materials, electrocatalytic and photocatalytic processes, advanced preparation of catalysts and supports, alternative synthetic methods, key concepts and tools in catalyst preparation, metallic nanoparticles.



While looking back I came across this photo and realised that PREPA11 took place during the world cup and this is an image of my colleagues and friends watching a game after one of the conference days with the flag of Belgium in the background but I believe involved Germany as three of the group were (and still are from) Sasol Germany, and I have been informed that the game was Germany vs Brazil which

was famously won 7-1 by Germany, but unfortunately Scotland was not involved in this tournament.

Unfortunately for the 12th edition I was unable to partake however speaking to colleagues and friends who did attend it was as successful and enlightening as previous years.

The series returns after a longer than usual period, 5 years instead of 4 due to the worldwide situation that put a halt to so many events and impacted on the sharing of ideas, results and discussions that does so much towards the advancement of everyone's work. Once again I was able to assist by partaking in the scientific committee and reviewing the many abstracts that were submitted and I am very much looking forward to the 13th proceedings in July. I hope to catch up with many friends/collaborators and scientists that I admire. This conference series does allow for many interactions and I always find the atmosphere and size of the event ideal for catching up and discussions with a varied and wide range of participants. It also allows me to catch up with Sophie Hermans as we carried out our PhD together who is also on the organisation committee.

One other person who contributes significantly to the success of the events and my enjoyment of these symposium is Francoise Summer whose hard work, effort and support given to the participants and has always been incredibly helpful and welcoming and it is always a pleasure to meet Francoise at these events, she is also instrumental in the organisation of the scientific committee and the meetings.

I would like to take this opportunity to thank the organising committee and everyone else that contributes to the organisation of these symposium, for their hard work and effort are much appreciated, looking forward to seeing everyone in July.

Dr David Brown Technical Director



Mr Joe Richards (Finance Director) and family in fundraising challenge

Louise and Joe Richards, both 35, are organising a family Scottish Coast2Coast bicycle ride to raise money for Ronald McDonald House Charities UK, the independent Charity which provides free 'home away from home' accommodation to families with sick children in hospitals across the UK.

Joe, along with family members, will take part in a 170-mile bicycle ride from Annan to St Andrews, via the new Ronald Macdonald House at the Royal Hospital for Sick Children and Young People in Edinburgh. The 3-day event is taking place from 21st – 23rd April 2023 and they are hoping to raise £5000 for Ronald McDonald House Charities UK.

There are 12 Ronald McDonald Houses across the UK situated in or near hospital grounds that enable seriously ill children to have their families close by when they are undergoing treatment, and to maintain a degree of normal family life. More than 6,000 families stay in a Ronald McDonald House each year.



Louise says "Ronald Macdonald House Charities provided vital support and accommodation for me and my husband, Joe, in 2019 when our daughter, Eilidh, was very sick and needed to be transferred urgently to Kings hospital in London at the age of 2 weeks old. We were extremely anxious about where we would be able to stay to remain close to our very sick baby as we were 400 miles from home. This is when we first heard about Ronald Macdonald House Charities and were offered a room in a house with beautiful, homely facilities just a 5 minute walk from the hospital. This was invaluable during this

traumatic time as it provided a refuge and some sense of normality in an otherwise chaotic and fraught situation. It also allowed us to share a space with other families going through similar ordeals, and the wonderful caring staff in the house provided much needed support, conversation, and laughter.

"Sadly, Eilidh passed away at only 6 weeks old, but Joe and I cannot think of a better way to honour her memory than by raising money for this incredible charity and the amazing work they do across the UK.



Our families have been a huge support to us both and my cousin, Will, suggested the idea of a family cycle ride to raise funds. The team is multigenerational and includes my father who will turn 72 a week after the ride."

Donations are still coming in via a JustGiving page at https://www.justgiving.com/fundraising/rayoflightride

- Ronald McDonald House Charities UK was founded 31 years ago and in this time has supported over 50,000 families.
- The Charity's 12 Houses across the UK provide free 'home away from home' accommodation for families so they can be moments away from their child in hospital.
- Ronald McDonald House Charities UK relies on the generosity of supporters and fundraisers, including McDonald's customers, without whom it would be unable to continue its work.
- In 2020, families lived an average of 73 miles away from the hospital, so staying in a Ronald McDonald House saved them travel and expenses at a stressful time.

When I read the stories on the website for this charity, I was stunned how courageous the parents and families were. Some of these families were able to reflect with loving memory of their child whilst others were so grateful their child survived. There are others too who's child may survive but with a disability they and the child must learn to adjust and come to terms with.

What struck me was all of them had the worry of how were they going to cope with the travel to hospitals their child had been rushed to, find the money for petrol, train fare and what were they going to do with a sibling of the sick child?

In the short term a friend or Grandparent may be able to help but what if the illness goes on for longer? What if other members of the family and friends want to be with the sick child too?

There are so many everyday practicalities in our lives that do not stop for anything. The bills keep coming, you need to eat, you need to rest, and you need stability for yourself, your family and be able to be with your sick child. But then as a parent you are having to find somewhere to stay and even hotels that are reasonable in price can add up to a huge amount. The family then must find the funds as an extra expense they may not be able to afford. All of this and the dreadful pain of knowing your child is ill and no idea of how long this process maybe or if your child will fully recover.

This is what the charity Ronald McDonalds is about, it provides somewhere for a parent to stay with their partners and other children.

I and all of us at Drochaid wish our Financial Director Mr. Joe Richards and his family every success in their fundraising for this great charity.

Johanna Jordan Administrator

Dr Asif Iqbal Celebrates Ramadan

A mention about our dear friend and colleague Dr Asif Igbal



We were all glad for the end of Lent at Drochaid and the lovely Easter lunch and egg hunts with our families.

Our colleague Asif had a different weekend of being hungry and missing out on the chocolate eggs. However, he was still out with his children at Clayton Park, St Andrews. They also had some other treats.



So what is Ramadan?

During the month of Ramadan, Muslims won't eat or drink during the hours of daylight. This is called fasting.

Ramadan remembers the month the Qur'an (the Muslim holy book) was first revealed to the Prophet Muhammad. The actual night that the Qur'an was revealed is a night known as Lailut ul-Qadr ('The Night of Power').

So our dear colleague Asif will have to go to 21 April '23

But we have saved him some eggs and also we plan a small surprise to celebrate the end of Ramadan with him.



We all at Drochaid hope our customers and friends had a very Happy Easter

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