



Chemistry Update

Newsletter 299, 27 July 2018

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Calendar of Events

Green Chemistry Seminar

Speaker: Dr Cher Hon (Sam) Lau,

University of Edinburgh Date: Tuesday 31 July Time: 11am—12pm Location: C/F106

Pre-Application Visit Days

Date: 8 & 29 August

Organic Chemistry Seminar

Speaker: Prof Rylan Lundgren,

University of Alberta

Date: Wednesday 22 August

Time: 1pm—2pm Location: C/B101

18-21

Date of Next Issue: 31 August 2018

Understanding the Absorbing World of Gels



The notion of placing a brick next to a rock and watching the two absorb into each other may seem like science-fiction, but it's how Professor David Smith, of the University's Department of Chemistry, describes his current research.

Gels - mixtures of solid and liquid - are commonplace in everyday life, with a wide range of applications in personal care products, mechanical lubrication, drug delivery systems and biomaterials. And Professor Smith believes that by increasing our understanding of these seemingly mystical materials there may be yet more they can do for us.

Fascinated

"We've been fascinated with the characteristics and applications of gel-type materials for some time," says Professor Smith, who admits his fascination is partly child-like. "Who hasn't played with jelly - like my five-year-old - and wondered about why it behaves the way it does?

"This is what we are doing in this paper, but by carefully controlling the structures of our gels, and studying what happens on a molecular level, we can gain a more detailed understanding and can observe new forms of behaviour."

Professor Smith says his gels contain a "solid-like network assembled within a liquid-like phase holding the whole material together." Prior to this research it had been assumed the solid-like network was fixed and unable to move, but now Professor Smith and PhD student Jorge Ruiz-Olles have shown this is not always the case.

Surprising

"Our gels exchange their 'solid-like' components with one another", he said. "Putting two gels next to each other, and finding that all of the solid parts could slowly diffuse into one another was very surprising to us." So surprising, in fact, that he describes it as like seeing a brick move into a rock.

"We suspect this kind of behaviour may actually be quite rare in gels", he says. "In the paper we suggest how other authors may be able to identify whether their gels behave in the same way, so that we can work out just how general this new kind of mobility in gels actually is."

Applications

This behaviour has serious real-world applications: "If the solid-like networks of gels can move this opens up ways in which gels can easily heal or adapt themselves. This opens the longer-term possibilities of developing smart soft materials for use in components that can heal their solid-like networks if they suffer damage.

"Alternatively this general principle could help further develop gels as biomaterials that can effectively adapt and interact their network structures when brought into contact with biological tissue."

York Chemists Test Air Quality from Moorland Fires

Scientists from the Department of Chemistry are flying their 'lab-on-an-aeroplane' through the smoke from wildfires in the North of England to understand the air pollution impact.



Professor James Lee on board the 'lab-on-an-aeroplane'

In a recent feature on <u>BBC News</u>, Professor James Lee from the <u>Wolfson Atmospheric Chemistry Laboratory (WACL)</u>, which is part of the Department of Chemistry at the University of York, explained how his team is analysing air pollution generated by moorland fires in the North West of England. The team are using their flying laboratory which is a converted passenger plane and is run by the Natural Environment Research Council (<u>NERC</u>) for atmospheric analysis.

Fires like the one on Saddleworth Moor, which has been burning for over 3 weeks, are predicted to be more common than usual across the UK and Europe this summer, raising concerns about pollution. By gaining insight into the chemical constituents of the smoke generated by these wildfires, and their concentration, the researchers gain a deeper understanding of the pollution burden. In a changing climate, where these events may become increasingly common, it is vital to gain a good understanding of the atmospheric effects of moorland wildfires.

The BBC News feature also interviewed first year PhD student Shona Wilde who was on the flight taking measurements. This was also the first science flight of MChem(Industry) student Dominika Pasternak, who is carrying out her final year research project at the Facility for Airborne Atmospheric Management (FAAM).

The Wolfson Atmospheric Chemistry Laboratories (WACL) was established in 2013 and was the first of its kind in the UK. Supported by a large award from the Wolfson Foundation and a private donor, the Laboratories enable experimental and theoretical studies relating to the science of local and global air pollution. WACL is as a collaborative venture between the University of York and the National Centre for Atmospheric Science (NCAS).

Professor James Clark Gives Invited Lectures in Hong Kong



In July, Professor James Clark gave invited lectures on "From Waste to Wealth Using Green Chemistry" at the two Hong Kong universities - CityU and PolyU. Both universities have strong activities in waste valorisation, an important topic in Hong Kong which has the highest rate of consumption per capita in food and fabrics and the fullest landfill sites! One of the PolyU researchers hopes to join the GCCE later in the year to learn about our technologies especially the hydrothermal microwave processing of food waste (our Microwave Technology Platform is led by Dr Alice Fan) and the Sustainable Solvent Selection Service S4 (led by Dr James Sherwood).

Department of Chemistry Featured in Official Album for Vote 100

The Department of Chemistry has been featured in the official History of Parliament Trust Vote 100 commemorative album, "Voice and Vote".



The album, which was produced as part of the official celebrations for the 100th anniversary of the Representation of the People Act 1918, narrates the story of women's fight to get the vote and also looks at how the struggle for equality still continues today. It also provides a showcase for a number of organisations from educational, cultural, social, technological and business sectors with relevant stories to tell, and it is in these pages that Dr Caroline Dessent, chair of the Equality and Diversity Group, presents the Department of Chemistry.

"We want this department to be somewhere that's fair to everyone," says Dr Dessent in the interview. "That's why we have equal and transparent policies. If you don't, it is known to affect women more than men. But when you adopt good practice, it's there for all."

Dr Dessent also talks about how the Department of Chemistry is the longest-term holder of the <u>Athena SWAN Gold award</u>, how the percentage of female senior academic staff has risen from 7 to 22 per cent in the past ten years, and how there are male staff in the Department who work part-time to share child care responsibilities. "It shows that our male staff recognise that our female staff are able to be highly successful scientists while working part-time. And men are doing it as well now."

The book launch took place at Westminster Abbey on 27 June, and was attended by Dr Caroline Dessent and Dr Leonie Jones, the Department's Employability and Diversity Officer.

See the **Department of Chemistry's chapter**.

New Starters

Professor Neil Hunt, Professor of Physical Chemistry Room: C/A048; Ext: 1295; Email: neil.hunt@york.ac.uk

Dr Fraser Hill-Casey, Research Associate (in situ Hyperpolarisation)

Room: C/A057; Ext: 4525; Email: fraser.hill-casey@york.ac.uk

Dr Pamela Dominutti, PDRA

Room: C/G116; Ext: 4756; Email: pamela.dominutti@york.ac.uk



York Student Wins Salters' Award

Alice McEllin, one of our 2018 MChem graduates, has received a prestigious Salters' Graduate Award.



The Salters' Awards are based on an assessment of the potential of candidates to occupy leading positions in public life; either by employment in the chemical or related industries, or more generally in employment that supports the industrial life of the UK. Candidates are expected to demonstrate knowledge of the chemical industry's current situation and the need for changing technology in the future. Each year, up to ten Salters' Graduate Awards of £1,000 each are made.

In Summer 2017, Alice gained vital insight into the chemical industry through a placement at Astra Zeneca where she studied the solubility of a range of pharmaceutical products in simulated intestinal fluid.

Alice also demonstrated her industrial awareness by participating in a major project as part of the Boeing/Royal Aeronautical Society "Build a Plane" challenge. This included extensive hands-on safety critical engineering construction experience and public outreach activities, including many Air Shows. Alice was the first student worldwide to actually fly in a "Build-A-Plane" aircraft (an event recorded by local TV). The aircraft she helped design also took part in the flying display at Farnborough, where it was the first kit-built aircraft to fly.

During the final year of her degree, Alice carried out her project work in the research group of Dr Isabel Saez working on liquid crystalline properties of cyanobiphenyl phenylacetylene derivatives and graduated with a first class degree. Next year, she will be continuing her research into this important class of applied materials by studying for a PhD on multifunctional metal-containing liquid crystals in the research group of Professor Duncan Bruce here in York.

The <u>Salters' Institute</u> plays a major role in the support of chemistry teaching, the encouragement of young people to pursue careers in the UK chemical industries and the promotion of chemical education including the whole area of curriculum development.

Dr Glenn Hurst Elected Chair of the Learning and Teaching Forum



Following the tenure of Dr Phil Lightfoot (Physics) as Chair of the Learning and Teaching Forum, Dr Glenn Hurst has been elected as his successor from a pool of four candidates. Through this role, Glenn will liaise with Professor John Robinson regarding institutional teaching and learning matters together with having overall coordination responsibilities of the Annual Teaching and Learning Conference and the portfolio of Forum activities (blog, magazine and workshops).

Green Impact Award Success

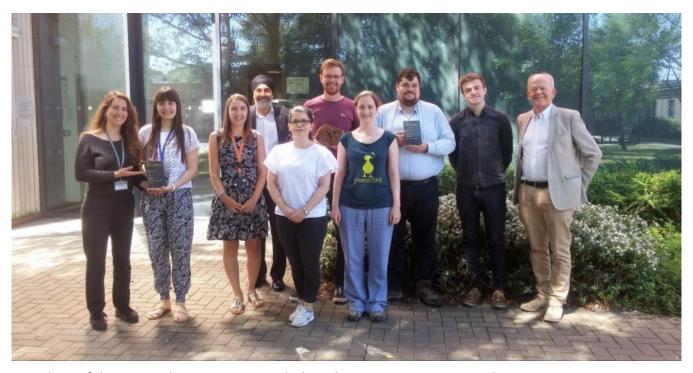


Teams from the Department of Chemistry won five Green Impact Awards at the recent ceremony, celebrating the achievements of teams from across the university.

The Green Impact initiative, devised by NUS, is designed to promote sustainable practices both at work and at home. Teams of volunteers work towards set objectives aimed at improving sustainability, and this work is recognised by a series of awards based on the impact of their actions.

Following on from the Department of Chemistry's Gold Award in 2017, a number of individual teams within the Department have gone on to further success in 2018.

The Green Chemistry team had a very successful year and received Gold and Bronze awards for the lab and office spaces respectively. They also received the prestigious award for 'Most Improved Team', which is testament to their hard work and dedication over the past year. Members of the team said: 'Over the past few years, the framework provided by Green Impact has really helped us implement more sustainable practices into our work and everyday lives, complementing the commitment of our centre to environmentally-friendly science and education.'



Members of the Green Chemistry Team with their three Green Impact Awards.

Chemistry Teaching Labs received a Gold Award. A notable achievement was working with all of the Chemistry Green Impact Teams to put on an event for One Planet Week in February. In addition, Chemistry undergraduates Emily Wheeldon and Joe Miskell acted as Green Impact project assistants, producing and updating posters for the lab highlighting safe and green working practices.

The Wolfson Atmospheric Chemistry Laboratory (WACL) won a Gold Award for the second year running. Three chemistry undergraduates, Alisa Roper, Dominika Pasternak and Elliot Smyth, were this year's

Green Impact Project Assistants, and were an integral part of the WACL 'Waste Warriors' team.

It is important for chemistry departments to be as sustainable as possible, and we look forward to building on the success of these teams in the coming years.



Members of the Chemistry Teaching Labs team receiving their Gold Award



Members of the WACL 'Waste Warriors' receiving their Gold Award

Lunchtime Forum on Fatherhood and Flexible Working

The Equality and Diversity Group (EDG) held a Lunchtime Forum on the subject of Fatherhood and flexible working,: *Is it possible to balance being a father with a successful career*? The group has held discussion forums on a number of subjects throughout the year and we thought it would be interesting to have one focusing on issues specific to fathers. Professor Paul Walton kindly agreed to chair the session and it was great hear the experiences of staff from across the Department, both academic and support staff.





There was a productive discussion covering a number of topics including:

- The difficulty of balancing family commitments with workload
- Financial implications of working part-time
- Exploring use of annualised hours, compressed, term-time only working and job-share
- A perceived lack of institutional support for parents once kids leave the nursery
- Difficulty of the mismatch between university and school term—times
- Core hours are 10-4 but many schools finish at 3pm

There is lots of information about family friendly and flexible working on both the Department's external and intranet webpages, for example <u>Family Friendly Working</u> including case studies can be found on the E&D webpages.

There is also information for staff in the HR section of the Chemistry intranet, for example the Department's <u>Flexible working information</u>. The section on <u>Leave</u> also contains the recently updated <u>Chemistry Adoption, Maternity, Paternity and Shared parental leave Guidelines</u> (PDF) which outlines the support that individual members of staff can expect. The guidelines include details of Shared Parental Leave which came into effect in 2015 but many people are still unaware of.

-Leonie Jones

2018 Graduate Research Seminar

The 2018 Graduate Research Seminar took place on Wednesday 4 July.

PhD students Aiden Heeley-Hill, Kirsten Hawkins, Tom Stephens and Eduardo Melo shared their research with other members of the Department. Introduced as an opportunity to share and discuss ideas beyond the confines of one research group, the graduate research seminars are predominantly for PhD students to present their work to their peers and for the audience to ask questions. In keeping with this, the sessions are also chaired by a PhD student.

The event was very well attended by our research students.

The titles of the talks were:

Aiden Heeley-Hill - Take a Breath: An Assessment of Indoor Air Quality

Kirsten Hawkins – Catalytic Supramolecular Gels with a Prebiotic Nature

Tom Stephens - Iterative Synthesis of Macrocycles via a Successive Ring Expansion Strategy

Eduardo Melo - Microfibrillated Cellulose from Citrus Peel Waste: A Sustainable Biorefinery Approach

Many thanks to our speakers, and also to Rachel Steen for chairing the event.

Feedback from 2nd year PhD student Tom Stephens:

"I am really happy to have the opportunity to talk to a wider scientific audience during my PhD and answer questions from an interdisciplinary perspective. I would advise future students to get involved, because I found the student led event to be very friendly and useful. I will definitely be returning to learn about the research conducted in the Department."



If you would be interested in presenting or chairing at a future Graduate Research Seminar, please email the Graduate Office - chemgrad@york.ac.uk.

LTR: Eduardo Melo, Tom Stephens, Kirsten Hawkins, Rachel Steen, Aiden Heeley-Hill

The Great CHyM Bake Off

On 26 June, we held the 2nd Annual Great CHyM Bake Off at the Centre of Hyperpolarisation in MR. The participating cakes were baked by Liz, Milena, Fadi, Marianna and Olga. The cakes included strawberry Pavlova, chocolate biscuit cake, summer fruit tart, strawberry torte and carrot cake.



We had a great jury (Jenny, Ben and Marie) who not knowing which cakes was baked by whom, chose the best cake. They cut the cakes, tasted them and went away to deliberate.

The jury said: "It was a very high standard and we had difficulty in choosing a winner."

The star baker in CHyM is Olga with the strawberry Pavlova. Congratulations!







All of us had a great and very sweet time! All the cakes have gone!

New Arrival



Depika Lakhaney (Chemistry Management Accountant) and husband James are delighted to announce the arrival of their baby boy, born on 11 July, weighing 7lbs 12oz. All three are doing well.

They are yet to decide on a name but are calling him 'Junior' in the meantime!

Online Department Suggestion Box



The online Equality and Diversity suggestion box has been extended to be a suggestion box for the whole Department. You can submit your thoughts /suggestions / ideas for general Departmental matters as well as matters relating to Equality and Diversity. You can find the Google form on the intranet homepage or at this <u>link</u>.

Setting up a Google Group

This is a quick reference guide for creating a **Google Group**. If you would like more detailed instructions please visit: https://www.york.ac.uk/it-services/services/groups/

A Google Group can be created by anyone at the University of York. A Group has its own email address and so it can be used like a mailing list. Members of the Group may be granted permission to email the other Group members so that they may quickly disseminate information and notices without asking a Group manager. Other Google Apps may be shared with a Group e.g. Google Drive and Google Docs.

Create a Google Group

Step by step instructions for creating a group and choosing group settings

The group email address will have the suffix -group@york.ac.uk and will also appear in the University's global address book. Therefore, when choosing a group name, it is important that the name is descriptive of who the recipients will be and it is useful to keep it as short as possible. This will help users to see the whole group name on the auto-complete list and also help to prevent information being accidentally sent to the wrong group.

Helpful Hint

Existing generic email addresses and groups may be found on the <u>email lists</u> pages on the Chemistry intranet and there is group <u>naming guidance</u> on the IT services webpages. It is useful to carefully consider the group name and check that it is not too similar to other existing addresses in order to prevent possible data breaches from sending information to the wrong address.

Adding or deleting a member from a Google Group

- 1. Go to the Google Apps icon and select **Groups**
- 2. Click on My groups
- 3. Go to the group you wish to add/delete a member and select manage
- 4. In the members options on the left hand side it is possible to **Invite members** which will send an invitation by email to a new member which they can then accept or decline. Alternatively, you can **Direct add members** and send an email to them to say that they have been added to a group. The new member will still have the option to unsubscribe from the group if they want to.
- 5. To delete a member click on their name and click on **Remove** at the top of the screen

Helpful Hint

It is useful to amend the **Basic permissions** of the group to choose who can join the Group e.g. 'Only invited users'. It is also useful to check the **Access Permissions** and to consider amending the permissions so that only owners/managers of the group can view the full Group membership list and view the email addresses of its members. This can be a useful data protection measure when sharing files in Google Drive and further information about this may be found in How do I...Share files in Google Drive.

Setting Up a Google Hangout Meet

Google Hangouts Meet offers a simple way of conducting video meetings with up to 25 participants, as well as screen sharing (for presentations etc.).

This is a quick reference guide for creating a <u>Google Hangout Meet</u>. You can find out more about getting started with Google / Hangouts Meet and how to collaborate in video meetings <u>via the G Suite website</u>.

Who can Create and Join a Hangout Meet?

A Google Hangout Meet can be created by anyone at the University of York. You need a Google account to **start** a meeting but the other participants don't need an account to join a meeting. This makes it easy to conduct video meetings with people outside the University. Participants can join using the Google Chrome web browser or the Android and iOS mobile apps. Meetings can also be scheduled in advance through Google Calendar.

Schedule a Video Meeting in Calendar

- 1. Go to Google Calendar and create an event.
- 2. Under Event Details tab click the Add conferencing drop-down menu and select Hangouts Meet
- 3. Under the **Guests** tab, go to **Add guests** to invite guests from inside or outside your organization.
- Click SAVE
- Click **Send** to notify guests.
 Guests receive an email with the event information and a link to the video call.

Helpful Hint

Guests can forward the meeting link to other people. If someone tries to join who was not invited to the Calendar event, a meeting participant from your organization must accept their request.

Scheduling Video Meetings from Web Browsers and Mobile Devices

If you need a quick answer from a team member, you can also start an **instant meeting in a web browser**.

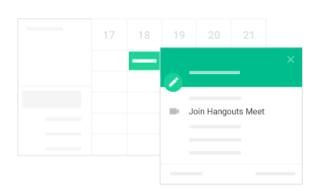
If you're away from your desk, you can start and join video meetings on your mobile device using the **Hangouts Meet mobile app**.

You can find out more about starting instant video meetings on your web browser and using the app via the <u>G Suite website</u>.

Join a Video Meeting

You can Join a Hangouts Meet in the following ways:

- Join from a Calendar event
- Join from Meet
- Join with a meeting link URL
- Join with a meeting code
- Dial in from a phone



Anna Zhenova and Dr Glenn Hurst attend Green Chemistry & Engineering Conference, Portland, Oregon USA



Green Chemistry Centre of Excellence (GCCE) students Anna Zhenova PhD and Alisa Doroshenko won the Yale-UNIDO 'Tell a Story About Green Chemistry' video competition by creating a video showcasing the diverse work conducted in the Green Chemistry Centre of Excellence (GCCE). The award, presented by Paul Anastas, partially funded Anna to attend the 22nd Chemistry & Engineering Annual Green Conference (GC&E) in June in Portland, Oregon, USA. Dr Glenn Hurst was also invited and funded to attend the event by conference organisers based on his work in green chemistry education.

Ahead of the conference, Glenn met up with Dr Jack Barbera at the University of Portland to discuss statistical tools for evaluating learning gains together with multiple choice assessments

in chemistry. The Sunday student kick-off session to the conference gave students and post-doctoral attendees an opportunity to improve their networking skills and learn about aspects of green chemistry that were new to them. It was closely followed by a networking 'TweetUp' event, which was a fantastic opportunity to meet like-minded colleagues while enjoying the local beer offering.

The keynote speakers set the tone for the conference, questioning how green chemistry can impact industry—via scalable approaches to 3D printing that could drastically transform manufacturing, simple battery technologies that could affordably store solar energy, and asking questions about what academic impact really means. The conference then offered a range of sessions from educational initiatives to advice on founding a start-up, enabling exchange of ideas in every field of green chemistry.

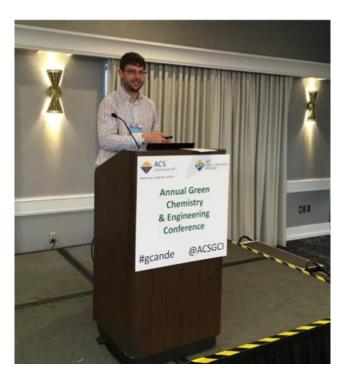
Anna delivered her invited presentation on 'Cyrene and Derivatives: Applications of Novel Dipolar Aprotic Solvents' in the Innovation for Bio-based and Renewable Chemicals session, sparking discussion on advantages of oxygenated molecules over traditional petro-derived solvents.

Later that day, in a session on 'Educational Initiatives in Sustainable Polymers and Materials' led by Jane Wissinger and Michael Wentzel, Glenn delivered his first invited talk on 'GRASPing polymers and materials for green chemistry education' The day was followed by a superb evening CPD session from Nancy Houfek, previous Head of Voice and Speech at Harvard University (1997-2014), where she trained participants on the art of communicating chemistry effectively. There was so much to learned from Nancy in what proved to be a truly transformative session in communication.

Glenn presented a second piece of work on 'Developing written communication skills in green chemistry through children's books' based on collaborative work between the GCCE and Dr Clementine Beauvais,

published children's book author, in the Department of Education. The conference was rounded-off with a traditional 'Green Chemistry on Tap'; a fabulous opportunity to network with all those interested in green chemistry!

Portland was an outstanding venue for the conference and both Anna and Glenn were thrilled at the opportunity to participate in this prestigious meeting. Further to funding from the Yale Green Chemistry video competition, Anna would like to acknowledge financial support from the RSC Environment, Sustainability and Energy Division as well as Circa. Glenn brought in three external grants in 2018 to support attendance at this event and others. Glenn also wishes to gratefully thank the Department of Chemistry for supplementary financial support.





No carts/buses were operated during this event

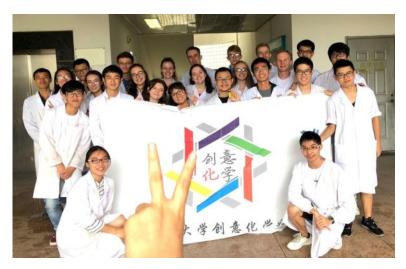


The world-famous Powell's Books



View of Mount St Helens and Portland

GCCE's Collaboration with Sichuan University



Sichuan University is one of China's top universities. The Green Chemistry Centre of Excellence (GCCE) started collaborating with Sichuan's Key Laboratory of Green Chemistry and Technology in 2015 and a number of their very good students and researchers have visited the GCCE, resulting in seven joint publications as well as another two in the pipeline. The Key Laboratory of Green Chemistry and Technology is the Chinese equivalent to the GCCE and has multiple research areas

including biomass conversion, green catalysis and modelling, making them the ideal research partner for our Anglo Chinese Green Chemistry research efforts. Sichuan University is situated in Chengdu, Sichuan province and is ideal for accessing Sichuan spicy food of which hotpot is the most famous. The region is also famous for its pandas, with the Panda Research Centre leading the way in captive breeding of these iconic creatures.

Professor James Clark has given a Green and Sustainable Chemistry course there each year for the last four years as part of their Summer Immersion Program, which has tied into the Green movement that the Chinese are driving across the country.

Students' Experience of China





For the third year running, undergraduate students from the Department of Chemistry have attended Sichuan University's University Immersion Programme (UIP) in China. Organised by Dr Alice Fan of the GCCE and supported by Dr Martin Cockett, there was an opportunity for eight students to attend this year's trip.

This unique two week programme was centred on a specially designed course that brought together

faculties from all over the world to give a short lecture series to both domestic and international students. The course offered a number of chemistry-related activities, such as water sample analysis and creative chemistry experiments. However, it was by no means all work and no play. Throughout the course significant opportunity was given to interact with Chinese students, academic staff, attend field trips and sports activities; giving students profound access to China's beautiful culture, scenery and of course, food. Throughout the programme the students were immersed in a vibrant campus environment that ensured that their study experience was truly unforgettable.

One of this year's attendees, Becky Peel, said "I have had an amazing time on the University Immersion Programme in the College of Chemistry at Sichuan University. It has been fascinating to see how different the university experience is in China, alongside the general cultural variations. Having the opportunity to live as a student gives an amazing insight into what life is like, which would not otherwise be available. The programme contained a good mix of chemistry and activities and I was very sad to leave. The Chinese students there were invaluable, showing us the ropes and taking us out for meals and to explore the city. It was great to get to know them for two weeks, along with my fellow international students from the University of York and Mississippi State University. Thank you very much for this opportunity - it truly was once-in-a-lifetime!"

With the continued success of this course it has become a permanent fixture in the Department's calendar. Dr Fan says "This offers a once in a lifetime opportunity to our undergraduate students to experience China in one of its most beautiful and culturally rich regions whilst expanding their working knowledge of chemistry".

CHEM21 Solvent Selection Guide



The CHEM21 Solvent Selection Guide*, developed by the GCCE, GlaxoSmithKline, Pfizer, Sanofi and CTC Ltd, has recently been adopted by the American Chemical Society Green Chemistry Institute as their recommended method of selecting more environmentally friendly solvents.

The CHEM21 solvent guide differs from other available guides in that it incorporates the assessment of bio-derived as well as classical solvents on a

level playing field. The methodology is based upon a combination of Safety, Health & Environment criteria and physical properties, in alignment with Global Harmonised System (GHS) of chemical classification and European regulations. Full details of the guide can be found in the open-access-publication.

The team at York also developed an <u>interactive online tool</u> that allows the user to readily rank solvents using this methodology.

*The solvent selection guide was created as part of the IMI funded CHEM21 project (Chemical Manufacturing Methods for the 21st Century Pharmaceutical Industries). CHEM21 has received funding from the Innovative Medicines Initiative Joint Undertaking under grant agreement n°115360, resources of which are composed of financial contribution from the European Union's Seventh Framework Programme (FP7/2007-2013) and EFPIA companies' in kind contribution.

Annual Staff Family Picnic and Rounders Match

After what had been a long few weeks of wall-to-wall sunshine and scorching temperatures, it was touch and go for a little while on the day itself as to whether or not this year's Staff & Family Picnic on Friday 13 July would actually turn into being an 'inside' event!

Luckily, the rain held off and the clouds dispersed and a great time was had by all who attended. It was lovely to see everybody enjoying themselves and, in particular, the children whom we have seen grow over the years (not only in height but also in numbers) as families within the Department have expanded.

A big thank you to everybody who was involved and helped to make the occasion such a success and we look forward to doing it all over again next year! The picnic is for all staff in the Department and their families with free food and drink for all so please come along next year if you can.









Continued on Page 20...

At 2pm, a select group of 12 members of staff met on the church field for the annual staff rounders match. After a brief discussion of what the rules should be, which varied slightly during play anyway, two sides were drawn up using the tried and tested method of "let's just split into two at the gaps in the circle". There followed three energetic games of rounders, particularly for the fielding side as there's a lot of ground to cover when there are only six in a team. Early on, a refreshing, if brief, light shower of rain certainly didn't stop play and probably keep it going for longer. It did make the grass slightly slippery though but, despite a few slides, thankfully no-one came a cropper. Christina took plenty of photos and adopted some interesting stances whilst doing so - the fielders needed to make sure they didn't run her over when she was lying down to get those all-important ground shots. Play finished at 3.30pm as we were too hot to continue and some staff needed to collect children. The rounders match is great fun, certainly not taken seriously and we'd love more staff to join in.





















