



Bulletin

May 2023, Issue 89

News, views, and announcements from MACRO group UK

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The Pure and Applied Macromolecular Chemistry Group (Macro Group UK) is a joint group of the Royal Society of Chemistry and the Society of Chemical Industry.



Cover image: Early career researchers in polymer science at the 2022 Young Researcher's meeting hosted at the University of Nottingham

Editorial

Welcome to the April 2023 edition of the Macro Group UK Bulletin.

We are delighted to relaunch this bulletin following a hiatus since the 88th edition issued in September 2017. We will aim to publish two issues a year which will be posted on our website in spring and autumn. The newsletter will contain updates from the community, including announcements of the Macro Group UK awards, DH Richards Memorial Travel Bursaries, and upcoming conferences.

This issue features interviews with award winners and a special guest from industry, as well as the latest thoughts from our chairs and updates from Recent Appointees in Polymer Science (RAPS). A schedule of upcoming events relevant to polymer scientists in the UK is also included.

Macro Group UK has new chairs!

Prof. Remzi Becer (Warwick) and **Dr. Helen Willcock** (Loughborough) have jointly taken over the Macro Group Chair from **Prof. Theoni Georgiou** in October 2022. We would like to thank Theoni for her leadership and contribution to the interest group over the past few years.

Jon Weaver PhD prize 2023 has been awarded to **Dr Csilla György** who completed her PhD work at the University of Sheffield, under the supervision of Professor Steve Armes. Congratulations to Csilla on the impressive performance and output during your PhD! **Dr Panos Georgiou** (University of Warwick) and **Dr Peiyao Yan** (University of Liverpool) were also highly commended by the panel.

Macro Group Young Researcher's Medal 2023 has been awarded to **Dr. Nick Warren** from the University of Leeds. Congratulations to Nick on the recognition of his research, teaching and outstanding contributions in the area of polymer science.

Macro Group UK Medal 2023 has been awarded to **Prof. Sergey Piletsky** from University of Leicester. Congratulations to Sergey on the recognition of his work on molecularly imprinted molecules.

All Macro Group award winners will present their award talks as part of our reinvigorated **Annual Macro Group UK Symposium**. This year the symposium will take place at the University of Loughborough on 11th and 12th of September 2023. There will be other talks from speakers that the winners and the Macro Group committee nominate, some sports related social activities and posters in this symposium. More information will be announced soon on our website www.macrogroup.org.uk

Macro Group UK Young Researcher's Meeting (YRM), will be held at University of Warwick on 14th-15th of June 2023. For those unfamiliar with the meeting, this event is aimed at PhD students and early career researchers in polymer science. This year the meeting is led by Dr Rachel Hand and Dr Dan Lester, who have raised sufficient funds from sponsors to make this event free!! You can find the information for free registration in our newsletter. They have also organized an additional bonus day 16th of June to offer all PhD students free training on most commonly used analytical techniques such as NMR, XPS, GPC, SAXS, GC, DSC, and TGA. You can stay for the third day and have access to training on all these instruments.

Macro Group UK RAPS meeting will be held at the University of Birmingham on 6th-8th September. RAPS is a great opportunity to meet recently appointed lecturers, industrial researchers, and research fellows in polymer science. More information on this event and registration details can be found in the following pages of our newsletter and on their website www.raps.org.uk

We have updated our website with a brand-new template and keep improving the content. Dr. Sam Jones (University of Manchester) oversees our website. Please feel free to contact him to add more content related to Macro Group activities (samuel.jones-4@manchester.ac.uk).

We are currently taking nominations for:

Macro Group UK Medal for Outstanding Achievement

Awarded to a scientist, from any country, who is recognised internationally for their continued, outstanding achievements in the field of polymer science. The recipient will be awarded a gold medal and will be expected to deliver a medal award lecture at an appropriate Macro Group UK meeting. Nominations for this award are invited biennially. The current nomination deadline is **31st October 2023**.

Macro Group UK Medal

Awarded to a UK-based scientist who has made a significant and substantial contribution to the development of polymer science through their scientific achievements and/or services to the UK polymer science community. The recipient will be awarded a silver medal and will be expected to deliver a medal award lecture at an appropriate Macro Group UK meeting. Nominations for this award are invited annually. The current nomination deadline is **31st October 2023**.

If you have any suggested content for future issues please get in touch. Contact Michael Cook (UCL) using the e-mail: Michael.T.Cook@ucl.ac.uk.

We particularly welcome suggestions for future cover images of the Bulletin.

Foreword and committee membership



From the Chairs of MGUK

Remzi Becer (University of Warwick) and
Helen Willcock (Loughborough University)

Hi everyone! We are the new chairs of the MGUK and we have taken on this role from Theoni Georgiou in October 2022. There are lots of activities we would like to restart and we

thought having two co-chairs would be more effective than one. Macro Group UK has always been active in organizing events, providing travel bursaries to researchers and engaging with students and academics working in polymer science. We will need everyone's help and contribution to rebuild our vibrant polymer community after an unprecedented break due to the pandemic.

The Covid pandemic has caused a lot of disruption to our lives, many people are still suffering health problems or grieving after losing loved ones. This was undoubtedly a terrible period for many in the World, and we are acutely aware how this has unfairly impacted those with caring responsibilities in particular. However, this has created many scientific breakthroughs and opportunities for chemical and biological sciences. Awareness has increased significantly and now the public are aware of spike proteins of viruses, gold nanoparticles on test strips and massive differences in everyone's immune system responses. Lipid nanoparticles loaded with nucleic acid therapeutics have been used in some vaccines and this combination is likely to become one of the most common methods of delivery for personalized treatments. We have also seen many polymer scientists have also developed components of these delivery systems or Covid-19 tests.

Besides the contributions of MGUK members to health related challenges, the last 5 years have also been an incredible time to increase the awareness on plastics and their environmental effects. The accumulated waste in oceans has been highlighted by Sir David Attenborough in the Blue Planet documentary and in parallel many new legislations were introduced in western countries on managing plastic waste. We have entered into a period of rethinking about the environmental stability of polymers, macromolecular design for purpose, life cycle analysis, reduce/recycle/reuse, and creating new polymeric structures that can hopefully be recycled more effectively than the existing commodity plastics. Many companies and UKRI are supporting research activities on this massive issue and we see that Macro Group members are and will be offering solutions.

In our new term as co-chairs, we would like to support all on-going activities such as the Young Researchers Meeting (YRM), Recent Appointees in Polymer Science (RAPS), MGUK newsletter, DH Richards Travel Bursaries, and MGUK Medals but also create new opportunities such as free scientific training days for PhD students, open source information for our members on the MGUK website and a regularly organized annual MGUK Symposium. The first example of free scientific training days will take place after the YRM meeting at Warwick. We will provide a training day on a variety of analytical instruments that many PhD students use during their studies. The first annual MGUK Symposium will take place at Loughborough University on 11-12th of September. We will be looking forward to see you all at these events and please feel free to reach us out for ideas or joining our committee.

Helen and Remzi, Co-chairs of MGUK

Other members of the Macro Group Committee

Honorary Secretary

Prof Dr Nick Turner
(University of Sheffield,
2017-2023)

Honorary Treasurer

Dr Tara Schiller (Warwick,
2017-2023)

Ordinary Members

Dr Michael Cook (UCL,
2021-2024)

Dr Gary Tustin
(Synthomer, 2017 – 2023)

Dr Jennifer Garden
(Edinburgh, 2021-2024)

Dr Peter Wright (Infineum
UK Ltd, 2017 – 2023)

Dr Emma Chapman (2018
– 2024)

Professor Vitaliy
Khutoryanskiy (Reading,
2019 – 2022)

Dr Samuel Jones
(Manchester, 2020 –
2023)

Dr Daniel Keddie
(Nottingham, 2021 –
2024)

Recent Appointees in Polymer Science (RAPS)



Recent Appointees in Polymer Science (RAPS) is a network for young academic and industrial scientists working in any area of polymer science. RAPS membership is free and open to all those in the early stage of their career, typically those within six years of starting their first permanent academic or industrial post, as well as research fellows and postdoctoral researchers who are keen to progress on a scientific track. The RAPS annual meeting offers polymer scientists opportunities to present their latest work, develop new networks, and receive practical guidance from a range of experienced researchers.

The 22nd RAPS meeting was held at Northumbria University on 7th-9th September. Organised by Dr Matthew Unthank, the meeting was a huge success, with record attendance and a good time had by all! Plenary speakers Dr Caroline Kelly (CPI), Prof. Steve Howdle (Nottingham University), and Dr Gareth Crapper (GDC Consulting) shared their career experiences and provided insights into life in academia, industry and beyond. Highlights included a lively industry-academia panel discussion, a fantastic programme of contributed talks and posters, and a wide range of abilities on display at ten-pin bowling!



RSC Polymer Chemistry Prize: Buffering cathode volume changes in solid-state batteries with CO₂-derived block poly(carbonate-ethers) Dr Georgina Gregory, University of Oxford



MDPI Polymers Prize: Autonomous polymer synthesis delivered by multi-objective closed-loop optimisation Dr Stephen Knox, University of Leeds

Poster prizes:

Experimental optimisation of biocomposites for food packaging

Katarzyna Majerczak, University of Strathclyde

Polymeric frustrated Lewis pairs as building blocks for functional materials

Meng Wang, University of Manchester

Best talk title:

"I never thought I'd be a professor!"

Prof. Steve Howdle, University of Nottingham

Ten-pin bowling sensation:
Dr Vincenzo Tarresco, University of Nottingham

Organisational mastermind:

Dr Matthew Unthank, Northumbria University

Next RAPS meeting:

The 23rd RAPS meeting will be held at the University of Birmingham on 6th-8th September 2023.

Confirmed speakers include:

- Prof. Rachel O'Reilly, University of Birmingham
- Prof. Paul Topham, Aston University
- Dr David Ring, Synthomer

Further information can be found at:

<https://www.raps.org.uk>

RAPS Committee

Chair: Dr Clare Mahon, Durham University

Secretary: Dr Tom Swift, University of Bradford

Treasurer: Dr Paul Wilson, Warwick University

Full committee:

<https://www.raps.org.uk/committee>

Contact: rapsgroupuk@gmail.com

Macro Group UK meeting September 11th-12th 2023, Loughborough University

The Macro Group committee are pleased to announce that this year for the first time we will hold a 2-day Macro Group UK meeting at Loughborough University on Monday 11th and Tuesday 12th September 2023, featuring this year's medal winners and nominated speakers from around the UK. The speakers include:

Prof Sergey Piletsky (University of Leicester) - Macro Group medal winner 2023

Dr Nick Warren (University of Leeds) - Macro Group Young Researchers medal winner 2023

Dr Csilla György - Jon Weaver PhD award winner 2023

Prof Theoni Georgiou (Imperial College London)

Dr Claire Mahon (Durham University)

Dr. Panos Georgiou (University of Warwick)

Dr Fiona Hatton (Loughborough University)

Dr Matt Derry (Aston University)

Dr Antonios Kelarakis (University of Central Lancashire)

Dr Irina Savina (University of Brighton)

Dr Chris Serpell (University of Kent)

Dr Lee Fielding (University of Manchester)

Dr Vincenzo Taresco (University of Nottingham)

Prof Aline Miller (University of Manchester)

The costs will be kept to a minimum to encourage attendance, there will be sports/social events and lunches included and a meal on the evening of the first day.

For more details please see the website <https://www.macrogroup.org.uk/mguk-annual-polymer-conference>

We hope to see you there!

Helen Willcock and Ryan Larder (Loughborough organising committee)



MACRO GROUP UK MEDAL 2022

Professor Sergey Piletsky

The Macro Group UK Medal is awarded annually to a UK based scientist who has made a significant and substantial contribution to the development of polymer science through their scientific achievements and/or services to the UK polymer science community. The latest recipient of the award is Professor Sergey Piletsky (University of Leicester).

A leading specialist on Molecularly Imprinted Polymers (MIPs) and biosensors, Professor Sergey Piletsky has published more than 380 papers and patent applications (H-index-84) and is currently the Head of Leicester Biotechnology Group (LBG). Sergey started his scientific career at Kiev University, where he graduated with a MSc in Bioorganic Chemistry in 1985. This was followed by his PhD from the Institute of Bioorganic Chemistry in 1991. In the proceeding years, Sergey worked with leading experts in biosensors; this includes Professor Turner in Cranfield University, Professor Karube in Tokyo University and Professor Wolfbeis in Regensburg University. Piletsky became the Professor of Polymer Chemistry and the Head of Cranfield Biotechnology Centre in 2002, and eventually moved to the University of Leicester in 2013 where he is now leading the LBG. His work in LBG predominately centres on the development of MIPs as they are immensely advantageous; they are versatile, scalable, and cost-efficient in the production of synthetic molecular receptors.



Molecularly Imprinted
Polymers

Nanotechnology

Computational design
+ Molecular Modelling

Diagnostics

MACRO GROUP UK YOUNG RESEARCHERS MEDAL 2022

Associate Professor Nicholas Warren

The Macro Group UK Young Researchers Medal is awarded annually to a UK-based scientist with up to 12 years of experience since completion of PhD on December 31st of the preceding year (exclusive of career breaks) and whose contributions to polymer science show outstanding promise for the future. The latest recipient of the award is Associate Professor Nick Warren (University of Leeds).



Macro Group had the pleasure of interviewing Nick Warren and this is summarised below. Read on to learn about his research and get some top tips for an academic career!

Summarise your research and tell us why you chose this career path?

"I've always been interested in polymers and fascinated by what they do. That led me to a PhD with Steve Armes' research Group, where we developed a lot of different types of block copolymers for various applications, such as drug delivery. Throughout, we were using chemistry that enables precision in the macromolecule design and synthesis. Then, as I got to the end of my post-doc, I started getting interested in, not only chemistry, but also in the way you do the reactions can give further control over precision, and that's what introduced me to flow chemistry! And so, I started doing a bit

Continued onto next page



of flow chemistry in the context of polymers. When I started my independent group, I took something I knew, which is polymer synthesis and then tried to apply something I didn't know, which was flow chemistry. I was in a fortunate environment, where there were experts in the field, and so that led to some reasonably quick outputs. I was also introduced to the more digital side of things because in flow chemistry, you can control from computers and that adds further precision and removes human error. We started playing with computer control reaction reactors and that then sort of snowballed into using computer algorithms. It's all striving to get unprecedented control over polymer materials and bringing new design space for polymers.”

Bristol
MSc (2001-2005)

Sheffield
PhD (2007-2011)
PDRA (2011-2016)

Leeds
Academic fellow (2016-2021)
Associate Professor (2021-Present)

What is your favourite part of the job?

“My favourite part is working with students to develop their projects, including planning the project to going into the lab with them. Helping them or guiding them with physical experimentation and getting them to teach me what they're doing, because most of the time now, it's a case of them doing things like coding or flow chemistry applications, which I've never done before, and they're teaching me. So, learning these new technologies in the lab and how they can be applied to polymer synthesis and seeing them in action.”

What is the biggest struggle you have faced in your career?

“I think I continually struggle with impostor syndrome and it is quite common in academia, probably more common than people think. I like to think it's partly because I am out of my comfort zone and the only way to sort of cure it, is to become familiar with lots of different areas but appreciate the fact that you are never going to be an expert in everything. I don't think you reach a level where your impostor syndrome is gone, just have the confidence and trust yourself.”

What advice would you give young researchers?

“It would be beneficial, if possible, to work somewhere else in the world. It's very beneficial to broaden the network and if people can't, then go to conferences and meet new people. Go to conferences on your own because it forces you to meet new people. A PhD is the prime time to do this and have a broader perspective on their field. Getting out of your comfort zone is probably the most important thing and an easy way is travelling away from home.”

What advice would you give postdocs trying to progress in their academic career?

“Perseverance! Rather than just applying to lots of jobs and hoping to get one, always expand your network. Try and network with people both in your field and just outside your field- that is really important! The key is to find people who can do things you can't do. For me, it was chemical engineers and people who can code.”

How do you manage work-life balance?

“Making the most and working smart at work, getting jobs done, knowing when to say no when something is impossible. Everyone should be able to have a life outside work where they can just stop and set limits.”

Best conference you've attended?

- World Polymer Congress Macro 2018 - Cairns, Australia
- 13th Advanced Polymers via Macromolecular Engineering (APME 2019) - Stellenbosch, South Africa
- RAPS conferences - most fun and useful to meet people!

Piece of publication you are most proud of?

- [Development and Experimental Validation of a Diversity Model for In Silico RAFT Polymerization \(2023\)](#)
- [Autonomous polymer synthesis delivered by multi-objective closed-loop optimisation \(2022\)](#)

Agilent Technologies

GPC Product Specialist: Dr Raj Bhardwaj

Agilent technologies is an American company established in 1999 and provides analytical laboratories with a range of technology platforms. With over 500 employees spread across four primary locations in UK, Agilent supports the UK's world leading pharmaceutical, chemical, food and technology industries. In addition, they support and invest in R&D to advance the state of knowledge in science. To gain an insight into their services, operations and career opportunities, Macro Gorup had the pleasure of interviewing Dr Raj Bhardwaj, a GPC Product Specialist.

Macro Group had the pleasure of interviewing Dr Raj Bhardwaj, a senior GPC specialist at Agilent, and this is summarised below. Read on to learn about his work and how Agilent can help you!

1. Tell us about yourself, your academic background and current role.

"My name is Raj Bhardwaj and my first university was UEA in Norwich where I did my BSc honours and Masters in organic chemistry. After which, I moved over to City University in London, where I did my PhD – [background in photochemistry.] I've been now working for Agilent for the last 12 years. My role within the organization is Senior GPC Product Specialist for EMEA; so that is Europe, Middle East, Africa and India. I get involved with technical discussions and attend various specialized meetings. I do also talk to customers directly if they have an issue like how to do a certain thing on the software and give tips. At our Craven Arms site, our dedicated team of specialist software engineers are responsible for writing the GPC software. In addition, advanced detector e.g. light scattering & viscometers together with dedicated GPC system are also manufactured here at this purpose -built site."



2. Tell us about Agilent and what services are provided by them?

"Agilent was historically part of HP [Hewlett-Packard] many years ago and HP split Agilent, which was a pharmaceutical part of the business separately. Agilent has been trading on its own for close to 20 years now and we have different divisions like Spectroscopy and Dissolution. Dissolution is an area where people are looking to study drugs, finding out how they dissolve and how effective they are when given to the human body. Dissolution Division is set up here in Craven Arms and there is also a centre of excellence for GPC. So, we have satellite of companies globally with over 18,000 people across the globe. So it's a very diverse company [with] people all across the globe. Also there is a good ratio of female workers to male. There is no differentiation or discrimination, people are employed based on their qualification [and] ability. It is a very ethical company. I'm very proud to work for a company that shares my values personally as well."

3. How has Agilent progressed in polymer analysis and GPC systems?

"GPC has been around for a long time. We were initially making the packing materials for the columns together with GPC standards. Originally, the choice of columns was limited, the choice of detectors was limited, mainly RI and possible UV, but over the years, with the increase in advances in technology of the column packing

materials, standards and instrumentation, we now have a whole range of different column types i.e. columns that are used for organic polymer characterisation, ranging from low to high molecular weights. Furthermore, patents on advanced detectors had expired, so we were then able to develop our own and offer these at competitive prices to our customers.”

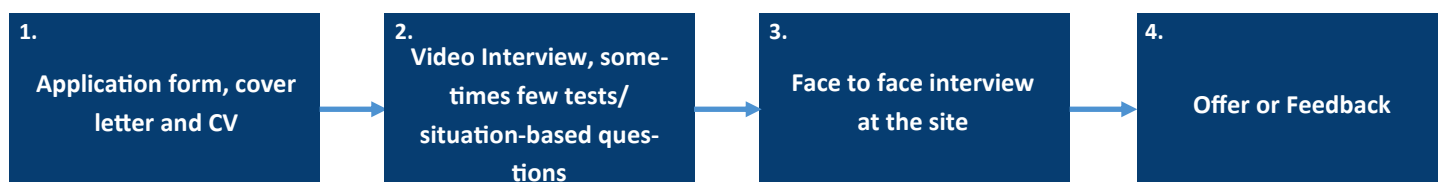
4. How do you help universities, academics and students?

“Primarily the business I'm responsible for is the GPC, so we supply columns, standards [and] instrumentation. When you are making the decision, the technical discussions will be with me. We'll find out exactly the type of polymers you're working with, what solvents you'll be using, what information you need. Then, once you've bought the system, any questions you have on the software interpretation of the data and things like that is where I get involved. Also, if our customer's are looking for bespoke GPC training I would get involved in delivering this myself or via my internal team. That's what we do in a nutshell but virtually I wear different hats in the organization depending on our customers' requirements. We publish a lot of support materials as well in terms of if you are making polymer A or polymer B, what type of column would be appropriate, what type of solvent would be appropriate- there's a lot of information that's available which you can easily Google.”

5. What job opportunities are available in Agilent for researchers?

“We have a HR department and if anybody is looking to find out if there are any vacancies, I would normally advise that they contact our HR department. They will be able to then give them the information [of] what positions are available, which part of the organization, and they'll have the information to write directly to the people that will interviewing; that's the quickest and the shortest way to do it. Just have a look at LinkedIn, Agilent is there, you can follow and see if there is a position there. And I would say if it's a position in GPC, just drop me an email. I can give all the information to that individual in terms of what we are looking for, the background and so on. They can take that information and when they apply, they can then write a very focused letter with the CV to be sent to the individual.”

6. What is the application process like?



7. Best conference you've attended?

- RAPS conferences
- World Polymer Congress - Macro

8. Any advice for PhD students?

- Read as much as you can!
- Try to publish 1-2 papers during the PhD; this makes the thesis write-up a lot easier



Forthcoming meetings and conferences

Prepared by Alex Magiakos (University of Warwick)

- 12th International Colloids Conference, 11 - 14 June 2023; Palau de Congressos de Palma, Palma, Mallorca, Spain; Organised by: Elsevier <https://www.elsevier.com/events/conferences/international-colloids-conference>
- Macro Group UK Young Researcher's Meeting (YRM), 14 - 15 June, 2023; University of Warwick, Coventry, UK; Organized by: UK Macro Group <https://www.macrogroupp.org.uk/ymr-annual-meeting>
- Annual UK Porous Materials Conference, 19 - 20 June, 2023; University of Sheffield, Richard Roberts Building, Sheffield, UK; Organised by: RSC's Porous Materials Interest Group <https://www.ukpormat.com/>
- Bratislava Young Polymer Scientists conference (BYRoS 2023), 26 - 30 June, 2023; Hotel Grand Matej, Štiavnica, Slovakia; Under the auspices of EPF <https://polymer.sav.sk/bypos/>
- Polymers Gordon Research Conference (GRC) 'Synthesis, Structure, Sustainability and Function', 4 - 9 June, 2023; Mount Holyoke College, South Hadley, MA, United States; Organized by: GRC <https://www.grc.org/polymers-conference/2023/>
- 16th International conference on materials chemistry (MC16), 3 - 6 July 2023; University College Dublin, Ireland; Organiser: RSC <https://www.rsc.org/events/detail/72840/16th-international-conference-on-materials-chemistry-mc16>
- ACS Fall 2023 Harnessing the Power of Data, 13 - 17 August, 2023; San Francisco, CA, USA. Organiser: ACS, Division of Polymer Chemistry (POLY) <https://www.acs.org/meetings/acs-meetings/fall-2023.html>
- IUPAC World Chemistry Congress 2023, 20 - 27 August 2023; World Forum The Hague, The Netherlands; Organized by: IUPAC <https://iupac2023.org/>
- Polymer Meeting 15 (PM15), 4 - 7 September, 2023; Slovak University of Technology, Bratislava; Under the auspices of EPF <https://pm15.sav.sk/meeting/>
- Recent Appointees in Polymer Science (RAPS), 6 - 8 September, 2023; University of Birmingham, Birmingham, UK; Organized by: UK Macro Group <https://www.macrogroupp.org.uk/raps-annual-meeting>
- 31st International Symposium On The Chemistry Of Natural Products And 11th International Congress On Biodiversity, 15 - 19 October, 2023; Royal Continental Hotel, Napoli, Italy; Organized by: IUPAC, Società Chimica Italiana <https://www.iscnp31-icob11.org/>
- International Elastomer Conference, Rubber Division ACS, October 16-19, 2023; Huntington Convention Centre, Cleveland, OH USA; Organized by: Rubber Division ACS <https://www.rubber.org/upcoming-international-elastomer-conference>
- 4th International Conference on Materials Science and Nanotechnology (Future Materials 2023), 23 - 27 October, 2023; Barcelo Valencia Hotel, Valencia, Spain; Organized by: Yuktan Technologies Pte Ltd <https://materialsconference.yuktan.com/>
- 2nd International Conference on Polymer Science and Engineering (Polymers-2023), 01-03 November, 2023; San Francisco, CA, USA; Organised by: United Scientific Group (USG) <https://polymers.unitedscientificgroup.org/>



Warwick Analytical Sciences Centre (WASC) Polymer Characterisation Research Technology Platform (Polymer RTP)



Warwick Analytical Sciences Centre (WASC) was established in 2021 to support the research and learning of analytical PhD students nationally. As part of this a “Seedcorn” scheme was initiated to provide access to the analytical facilities at Warwick for UK based PhD students, including the Research Technology Platform (RTP) Core Facilities.

Since launching in 2021 we have now provided >200 days of free access to the analytical science facilities at Warwick and are pleased to announce that we are continuing the scheme this year.

Successful applicants will be able to carry out short-term analytical investigations of up to three days per facility, whilst also benefiting from the expertise of our technical staff who will help with theory, basic instrument training, experimental planning, and analysis of data.

Application is simple: get in contact with the facility manager to scope the project and determine a research plan, then write a short proposal stating the nature of your research project and what technique you would like to access at Warwick and how it will benefit your project. We really recommend adding some figures to the application!

If successful samples can either be shipped to us to analyse or we welcome applicants in-person at Warwick and can assist with travel and accommodation costs where appropriate.

A full detailed list of the techniques and facilities available can be found here (<https://warwick.ac.uk/fac/sci/wasc/facilities>), and includes The Polymer Characterisation Research Technology Platform. This facility will be especially useful to Macro Group members as it contains, amongst other instruments, a state-of-the-art SEC (Size Exclusion Chromatography) suite, a thermal analysis suite, and particle sizing. For a full list and a virtual tour of the Polymer RTP, please visit this link (<https://warwick.ac.uk/services/ris/impactinnovation/impact/warwick-scientific-services/polymercharacterisation/>).

To date the Polymer RTP has been used for ~80 days of access from all 4 of the Home Nations and we are happy to accept more applications.



We were very fortunate to work with Caty Marsden in the group on Helen Wilcock, at Loughborough University, where access to the SEC suite led to a publication.

Here's what Caty had to say about the application process:

“I found it quite simple really. At first I was a bit worried that the application would be difficult, but then I read that you need to get in touch with the relevant person first. So in my case Dan Lester. (*Polymer Characterisation RTP Manager*)

And once I got in touch with him, he just talked through what things could be useful, what details are needed on the form - I found it quite simple. I wouldn't say it took longer than an hour or two to get it all together.”

If you think this scheme would be beneficial to you, please contact Dan (d.lester@warwick.ac.uk) or Chris (christopher.waldron@warwick.ac.uk) or visit <https://warwick.ac.uk/fac/sci/wasc/seedcorn/> for more information!

Moreover, WASC and the Polymer RTP are proud hosts of the 2023 edition of the Macro Group UK Young Researchers Meeting (YRM) being held at Warwick 14-15th June 2023 with an optional training course on 16th June. For more information see the advert below.



14TH – 15TH JUNE 2023 MACRO GROUP UK YRM 2023 WARWICK



@YRM_2023
Young Researchers Meeting



Coming soon summer 2023!

We are pleased to announce that this year's Macro Group UK Young Researchers Meeting will be held at the University of Warwick. YRM 2023 will be a fantastic opportunity to explore and share research conducted within polymer and macromolecular chemistry by your fellow ECRs. Where better to do this than at Warwick! The conference will be hosted in The Oculus, right in the center of the main campus. On 16th June there will be an optional analytical training day that will be free for YRM attendees. Expect seminars from analytical experts on a number of techniques related to polymer and materials analysis, including SEC, GC, Mass Spec and NMR. Register your interest with the QR code provided and stay tuned for more announcements to come. Hope to see you all there!

4 invited speakers

**23 graduate
student talks and a
poster symposium**

**Lunches and
dinner included**

**3 pub crawl routes
to choose from in
the evening**

**Optional analytical
training course on
16th June**

REGISTER YOUR INTEREST



Twitter: @YRM_2023

Macro Group UK are deeply thankful for the following parties who sponsored this year's Young Researcher's meeting:



Agilent Technologies



AMERICAN CHEMICAL SOCIETY



**POLYMER
RTP**



WASC

