Welcome to the February 2012 bulletin. This issue welcomes Nathalie Lavignac from the University of Kent as the MGUK Bulletin Editor, replacing Andrew Dove. We thank Andrew for his hard work over the past years to co-edit the bulletin.

As well as the usual content announcing and reporting from recent conferences, we are delighted to be able to announce the award of the MGUK Medal for Outstanding Achievement to Prof. Mitsuo Sawamoto (Department of Polymer Chemistry, Graduate School of Engineering, Kyoto University), the award of the MGUK Medal to Prof. Andrew Cooper (Centre for Materials Discovery, University of Liverpool) and the MGUK Young Researchers Medal to Dr Ian Kinloch (School of Materials, The University of Manchester).

We also have a two-page report on the special 25th Biennial Meeting of the Polymer Physics Group. The award of the PPG Founders’ Prize to Prof. Tom McLeish (University of Durham) is covered, along with other highlights. The longevity of this meeting is testament to the success of the polymer physics community in the UK. Long may it continue!

We hope that you enjoy reading this issue of the bulletin. As ever, if you would like to contribute any articles please get in contact with either of us.

Nathalie Lavignac
Steve Eichhorn
Bulletin Officers
Views from the Top

From the Chairman of Macro Group

It’s Olympic Year – and I’m sure we are all very excited about the upcoming event in London! The only science stories I have seen so far were connected with the very large GlaxoSmithKline backed testing facilities that have been put in place to ensure that athletes are not cheating. I’m pretty certain there ought to be a good number of positive stories relating to exciting polymer science behind the materials and composites used in the buildings, running tracks and pitches, outfits and shoes, and also perhaps more importantly to the sustainability angle that has been clearly publicised for the London games. If you’ve got any insights – do let us know – we are constantly challenged to provide stories on “impact” and the everyday applications of our science, and I’d like to think that in the run-up to the Olympics we could highlight a few exciting news stories that would help people to see the importance of polymer science to our everyday lives!

Another very important event in July is the MacroGroup UK International Conference in Warwick which has a truly stellar line-up of speakers all on our doorstep (http://www2.warwick.ac.uk/fac/sci/chemistry/events/warwick2012/). We are very keen that we encourage the largest possible number of the UK’s young polymer researchers to attend this meeting. To ensure that does happen you will find the information about bursaries in this bulletin to ensure your participation. The conference provides a tremendous opportunity, not only to see world-leading science being presented by the very best scientists, but also for you to make the contacts and links that could lead to exciting collaborations or even a future postdoc or industrial position and might shape your career. You will also get the chance to hear from the three MacroGroup UK medal winners for this year at Warwick. We also promote several other conferences and I should mention that bursaries will also be available for another MacroGroup meeting focused on polymeric and self-assembling hydrogels, to be held in London on 4-5th September 2012 (http://www.constableandsmith.com/hydrogels/) and for the 2012 Young Researchers Meeting (YRM) to be held at the University of Cambridge on 10th – 11th September.

I’m also delighted to be able to announce MacroGroup UK PhD Prize sponsored by Synthomer – a new award to recognise excellence in our young researchers in the field of UK Polymer Science. The sponsorship of this award from a major polymer company like Synthomer recognises the importance of developing and rewarding the best new scientific talent in the UK. More details are provided elsewhere, but if your thesis was examined in 2011 in the UK, there is a chance that you might be presenting your work at the Warwick meeting, but only if you apply!

I should point out also that the AGM for MacroGroup UK will also be held on the final day of the meeting, and I do hope that those of you who attend the meeting will come along and listen to our plans and also feed back to us on our achievements so far.

I wish you all an exciting year!

With all best wishes

Steve Howdle

Thoughts from the PPG Chair

The 25th meeting of the Polymer Physics Group, held in Sept 2011, provided us with an opportunity to reflect upon the proud history of our Group. We are indebted to the foresight and wisdom of the Group’s founders: Ian Ward, Andrew Keller, Arthur Charlesby, Geoff Allen and David Whiffen. Their vision led to the first meeting of the Group on April 1-3, 1964 at the Royal Military College of Science in Shrivenham. This tradition of meetings has continued biennially ever since 1965.

In a letter to Dr. Leslie Treloar in July 1963, Prof. Andrew Keller (pictured below) described the situation for polymer physicists at conferences in the UK in the early 1960s like this: “Polymer papers are normally fringe subjects at other meetings where they do not interest the audience. To get a stimulating reaction most of us are going to visits abroad.” He made a point that still rings true today.

Prof. Keller also laid out the purpose of the Group when he wrote: “Obviously we are in need of some kind of a forum where research workers can present and discuss the different stages of their research as it progresses. Giant international meetings, or exclusive gatherings by invitation, however valuable, do not serve the purpose.” Since the 1960s, international meetings of scientific societies have grown in size, and there continue to be meetings held by invitation only. We are fortunate now to have a well-established and supportive community of polymer physicists held together by our Group.

It is daunting - to say the least - for me to follow the tenure of previous Chairs of the Group, including the distinguished scientists Sir Charles Frank (1963–67), Leslie R.G. Treloar (1967–71), Ian M. Ward (1971–75) and Andrew Keller (1975–81), along with several more recent and equally-distinguished post-holders.

The Group has built up some fine traditions, such as the award of the Founders’ Prize and the sponsorship of the APS-DPOLY/PPG Lecturer Exchange. Its presence has largely met the needs that the founders foresaw. Since the 1960s, the field of polymer science has moved on to cover nanotechnology, optoelectronics, and aspects of biological physics. The Institute of Physics is currently reviewing the structure of its Divisions, and so now is a particularly appropriate time for us as a community to ponder how polymer physics in the 21st century relates to the wider soft matter community. If you have thoughts about what Division organisation would best suit us, I and the other members of the Committee would very much like to hear them.

Moreover, if you have any particular ideas and suggestions for the Group, please pass them on. We look forward to 25 more exciting and enriching Biennial Meetings, including the 26th in Sheffield in September 2013.

Best wishes

Joseph Keddie
Macroph Group UK & Polymer Physics Group Bulletin No 77  February 2012

PPG & Macro Group Committees

Polymer Physics Group Committee

Chair:
Professor Joe Keddie (Surrey)

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Professor Nigel Clarke (Sheffield)

Ordinary members:
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Dr. Johann de Silva (Trinity College Dublin)
Dr. Tom Waigh (University of Manchester)
John Gearing (Gearing Scientific)

Macro Group Committee

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Secretary: Dr Rachel O'Reilly (University of Warwick) 2008 - 2013
Treasurer: Dr Lian Hutchings (University of Durham) 2011 - 2014

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Dr Raj Bhardwaj (Polymer Laboratories) 2007 - 2014
Dr Andrew Dove (University of Warwick) 2007 - 2014
Dr Christopher Sammon (Sheffield Hallam University), Web Site Officer 2007 - 2014
Prof. Ian Hamley (University of Reading), EPF Representative 2008 - 2014
Dr Jon Weaver (Imperial College), SCI Representative 2009 - 2012
Prof. Peter Budd (University of Manchester) 2009 - 2012
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Dr Oren Scherman (University of Cambridge) 2010 - 2013
Dr Dave Adams (University of Liverpool) 2010 - 2013
Dr Andrew Naylor (Critical Pharmaceuticals Ltd.), Web Site Officer 2010 - 2013
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Dr Nathalie Lavignac (University of Kent), Bulletin Officer 2011 - 2014

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Representing Polymer Physics Group, IoP: Dr Cecile Dreiss (Kings College London)
Representing Biomaterials Chemistry Group, RSC: Dr Aline Miller (University of Manchester)
Representing Applied Polymer Science Group, Institute of Materials, Minerals and Mining: Dr John Gearing (Gearing Scientific Ltd.)
Representing Polymer Degradation Discussion Group: Dr Mogon Patel (AWE)
Representing Polymer Colloids Forum: Prof. Peter Lovell (University of Manchester)
Representing RAPS Network: Dr Steve Edmondson (University of Loughborough)

Career Break Grants
The Institute’s Career Break Grants help members to stay in touch with the wider physics community. Contributions towards attendance and associated costs are available.
Members can apply by going to http://www.iop.org/activity/academia/Career_Break_Grants/page_5466.html or by emailing cbg@iop.org

Career Break Rates for Conferences
Members can attend all Institute of Physics conferences at a reduced rate.

Reduced Membership Subscription Rates
Members on a career break are entitled to a reduced membership subscription rate, which is currently just £10.
Email membership.iop.org, including your membership ID number in the text, to qualify for this rate.
MACRO Group Medal Awards Announced

**Macro Group UK Medal for Outstanding Achievement**

The *Macro Group UK Medal for Outstanding Achievement* is awarded to a scientist based anywhere in the world that has made outstanding contributions to the field of polymer science.

This year award has been made to **Prof. Mitsuo Sawamoto** (Department of Polymer Chemistry, Graduate School of Engineering, Kyoto University).

Professor Mitsuo Sawamoto received is Ph. D in 1979 from Kyoto University and he is best known for his seminal work on the development of metal catalysed living radical polymerisation – his first paper on the subject published in Macromolecules in 1995 having been cited over 1700 times. However he has also made significant advances in the field of living cationic polymerisation and the synthesis of designed functional polymers. In total he has published more than 350 papers which have received nearly 8,000 citations. He has won numerous awards including the Award of the Society of Polymer Science, Japan (1992), Divisional Research Award of the Chemical Society of Japan (1999), and Arthur K. Doolittle Award of PMSE Division, the American Chemical Society (2002). He is currently Executive Member of the Science Council of Japan, Associate Member of the Polymer Division of International Union of Pure and Applied Chemistry (IUPAC), a member of the Committee of International Projects of the Japan Society for Promotion of Science (JSPS), and one of the Editors of Journal of Polymer Science, Part A, Polymer Chemistry (Wiley-VCH).

**Macro Group UK Medal**

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 his/her scientific achievements and/or services to the UK polymer science community.

This year award has been made to **Prof. Andrew Cooper** (Centre for Materials Discovery, University of Liverpool).

Prof. Andrew Cooper received is Ph. D in 1994 from the University of Nottingham. He is an acknowledged world-expert in the use of SCFs in polymer synthesis and processing. His research interest includes macroporous templated materials and metal, metal oxide, and polymer nanoparticles. In recent years his largest research interest has become the synthesis and applications of microporous materials, in particular microporous polymers and in September 2007, he reported the first conjugated microporous polymer via Sonagashira-Hagihara cross-coupling chemistry. Prof Cooper's most recent research theme has been the synthesis of porous organic cages and this development promises a new class of microporous materials with properties (such as 'on/off' porosity) which simply cannot be obtained with porous networks such as polymers or MOFs. He has published more than 130 research papers, is a coinventor on more than 25 patent applications, and in 2005 cofounded a spin-out company, IOTA NanoSolutions. In 2003, he became the youngest ever appointment to a Personal Chair in the Science Faculty at Liverpool at age 33. He founded the Centre for Materials Discovery (CMD) in 2007 where there have been, so far, more than 27 person-years of collocated industrial research activity.
The **Macro Group UK Young Researchers Medal** is awarded annually to a UK-based scientist, normally under the age of 36 on December 31st of the preceding year, whose contributions to polymer science show outstanding promise for the future.

This year award has been made to **Dr Ian Kinloch** (School of Materials, The University of Manchester).

Dr Ian Kinloch received his Ph.D. in 2001 from the University of Cambridge and is currently an EPSRC Challenging Engineering Research Fellow and lecturer at the University of Manchester. His work inhabits the interdisciplinary world of nanoscience with a focus on polymeric and carbon nanomaterials. His group follows the science from the controlled growth of these nanomaterials through to their processing and applications. Applications of this research concentrate on polymer composites, electrochemistry and the bio-nano interface. He has published over 60 papers and patented aspects of his work, with some of these patents being used by industry.

The 2011 Macro group medals will be awarded at the **MacroGroup Warwick 2012** meeting.

http://www2.warwick.ac.uk/fac/sci/chemistry/events/warwick2012

Contact Rachel O'Reilly for further details (r.k.o-reilly@warwick.ac.uk).

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### Macro Group UK Awards

#### Macro Group UK Medal for Outstanding Achievement *

- 2012 M. Sawamoto
- 2010 C. J. Hawker
- 2008 M. Antoinetti
- 2006 J.M.J. Fréchet
- 2005 K. Matyjaszewski
- 2004 P. Hodge
- 2003 A.B. Holmes
- 2002 D.C. Sherrington
- 2001 J.M.G. Cowie
- 2000 J.C. Bevington
- 1999 E.W. Meijer
- 1998 W.J. Feast
- 1997 G. Wegner

#### Macro Group UK Medal

- 2011 A. Cooper
- 2010 I. A. Manners
- 2009 A. J. Ryan
- 2008 S.M. Howdle
- 2007 S.P. Armes
- 2006 D.M Haddleton

#### Macro Group UK Young Researchers Medal

- 2011 I. Kinloch
- 2010 J.V.M. Weaver
- 2009 O.A. Scherman
- 2008 A.P. Dove
- 2007 A.F. Miller
- 2006 R.K O’Reilly
- 2005 R.V. Ulijn
- 2004 S. Pérrier
- 2003 W.C. Hayes
- 2002 N.R. Cameron
- 2001 A.I. Cooper
- 2000 W. Huck
- 1999 A. Slark
- 1997 S. Rannard

* previously known as the Macro Group UK Lectureship and Medal (1997-2005)
25th Biennial Meeting of the Polymer Physics Group, September 12-14th 2011

81 delegates representing eight countries attended the 25th meeting of the Polymer Physics Group, which was held on September 12 - 14, 2011 at the University of Surrey. An excellent time was had by all and the meeting was attended by delegates representing eight countries including the UK. The programme consisted of 27 lectures in total across the three days. This number includes four invited lectures, the Founders’ Prize Lecture, the Student Prize Lecture, and the PPG/DPOLY Exchange Lecture.

The meeting was sponsored by NT-MDT, Stable MicroSystems, Gearing Scientific, Linkam, The Journal of Polymer Science Part B: Polymer Physics, and TA Instruments.

Winners of the poster prizes were announced by the retiring Chair, Prof. Richard Jones, at the conference banquet held at Wotton House, near Dorking.

The First Prize was awarded to Dr. Mike Smith, University of Nottingham for his poster entitled “Controlling Droplet Impact with Polymer Additives.” Bart Vorselaars, University of Reading was awarded the Second Prize for his poster entitled, “Self-Consistent Field Theory for Diblock Copolymers Grafted to a Sphere.” Third place to Ross Maspero, Clausthal University of Technology, Germany for his poster entitled, “Confocal Dynamic Light Scattering – Feasibility, Limitations, Potential, and Application to the Dynamics of Colloidal Dispersions.”

The dinner was preceded by a drinks reception in the garden accompanied by music from the brass quartet, “Stag Hill Brass.” Since this was a special occasion for the 25th meeting we were joined by a founding member, Professor Ian Ward. He gave an excellent after dinner speech, reminiscing about how the Group had developed over the years and also giving some sound advice for the future.

The Founders’ Prize Lecture was given by Professor Tom McLeish (pictured—left) who gave a very entertaining and informative talk entitled “Topology, tangles and trees: The physics and processing of long chain branched polymers.” His talk covered highlights of his research, from reptating star polymers to getting commodity polymers such as polyethylene published in Science! The award was presented to Tom by Professor Richard Jones (pictured—bottom left).

The event was thoroughly enjoyable and the facilities at University of Surrey were excellent. Some selected images from the event are shown on page 7.

The next meeting will be held in 2013 at the University of Sheffield. We look forward to seeing you there!
PPG Student Prize winner, Dr. Katherine Thomas, formerly at the University of Cambridge, presenting her lecture entitled, “Nonequilibrium behaviour of thin polymer films.”

Professor Richard Jones, PPG Chair, presents the Best Student Paper Prize to Dr. Katherine Thomas, formerly at the University of Cambridge, for her paper entitled, “Nonequilibrium behavior of thin polymer films,” which appeared in Physical Review E (83, 021804 (2011)).

Dr. Bradley Olsen, from MIT in the USA, delivered the APS/DPOLY Exchange Lecture, which was entitled “Self-assembly of globular proteins into nanostructured plastics using diblock copolymers.” He is shown here with the PPG Chair, Prof. Richard Jones (at left), and the newly-elected Chair, Prof. Joe Keddie (at right).

Dr. Simon Hanna (former PPG Vice-Chair) from the University of Bristol (on the left) and Dr. David Cheung, University of Warwick, discuss a poster at the PPG 25th Biennial Meeting.

Group photo of all delegates at the University of Surrey, 2011.
Forthcoming Meetings & Conferences

Electrospinning, Principles, Possibilities and Practice 2012

21–22 March 2012, Institute of Physics, London, UK

Organised by the IOP Dielectrics Group

Electrospinning is a platform technology for producing novel nanofibrous materials with a high surface to volume ratio, significant fibre interconnectivity and microscale interstitial spaces. Electrospun fibres are of high interest in a diverse range of applications ranging from regenerative medicine and drug delivery, through filtration and nanocomposites and to energy storage and stimuli responsive devices.

This two-day meeting follows on from the highly successful one day meeting held in London in November 2010 and it will reflect the multidisciplinary nature of the science involved with and supported by electrospinning. There will be a mix of keynote lectures and contributed papers. The meeting will be of interest to scientists from the life and physical sciences, engineering and application technologists. An important part of the conference will be a substantial poster session to stimulate discussion and exchange of ideas.

The meeting is organised as part of the IOP Dielectrics Group but with strong interest and support from

- RSC Macro Group
- IOP Electrostatics Group
- IOP Polymer Physics Group
- Luso-British Biomanufacturing Network

Abstract submissions are now closed but please go to http://electrospinning2012.iopconf.org for more information or contact conferences@iop.org.

Physics meets Biology 2012

3–5 September 2012, University of Oxford, UK

Organised by the IOP Biological Physics Group

Physics meets Biology 2012 will provide a broad view of the most recent and exciting research across a broad range of topics and scales: its scope includes physical probes and imaging, bionanotechnology, molecular machinery, cytoskeletal mechanics, signalling, control, neural systems, development, evolution and ecology. There will be a special session devoted to teaching Biological Physics. The conference is organized around an international programme of invited speakers from a wide range of disciplines and will include contributed talks and poster sessions. Its state-of-the-art research coverage is designed to inform experts of the latest developments; it will also provide a valuable introduction to biophysical research for junior researchers, including graduate students. The conference is designed to be wide-ranging: we encourage the participation of scientists from all backgrounds, from both physical and biological sciences.

For more information go to pmb2012.iopconf.org or contact Lisa Cornwell lisa.cornwell@iop.org
Forthcoming Meetings & Conferences

Polymeric and Self-Assembled Hydrogels
From fundamental understanding to applications

4-5 September 2012, London

This 2-day conference aims to bring together academics as well as industrialists with interest in hydrogels research, including their structure, properties and applications, either from polymeric networks - of synthetic or biological origin - or self-assembled surfactants or peptides.

Confirmed speakers:
- Mitsuhiro Shibayama (University of Tokyo, Japan)
- Molly Shoichet (University of Toronto, Canada)
- Madeleine Djabourov (ESPCI, France)
- John Mitchell (University of Nottingham UKi)
- Rein Uljijn (University of Strathclyde, UK)

Organising committee
- Cécile Dreiss, King’s College London
- Oren Scherman, University of Cambridge
- Dave Adams, University of Liverpool
- Vitaliy Khutoryanskiy, University of Reading

Venue: King’s College London, Waterloo Campus

www.constableandsmith.com/hydrogels
Recent Appointees in Polymer Science

13th Annual Meeting

12th – 14th September 2012
Aston University

Generously sponsored by:

RAPS brings together academic and industrial researchers in polymer science at the beginning of their careers (with at least one year postdoctoral or industrial experience).

Our conferences offer ideal and informal opportunities for knowledge transfer, discussion, networking, collaboration, sharing experiences and career development.

For more information, visit our website or contact:
Dr Paul D Topham, Chemical Engineering & Applied Chemistry, Aston University, B4 7ET
p.d.topham@aston.ac.uk  Tel: 0121 204 3413

http://www.raps.org.uk
## Forthcoming Meetings & Conferences

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<tr>
<th>Date(s)</th>
<th>Title and Location</th>
<th>Organiser</th>
</tr>
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<tr>
<td>04/04/12 - 06/04/12</td>
<td>12th European Symposium on Controlled Drug Delivery, Egmond aan Zee, The Netherlands (<a href="http://www.escdd.eu">www.escdd.eu</a>)</td>
<td>Dr Johan Engbersen</td>
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<tr>
<td>28/05/12 - 30/05/12</td>
<td>9th International Symposium on Polymer Therapeutics: From Laboratory to Clinical Practice, Valencia, Spain (<a href="mailto:mjvicent@cipf.es">mjvicent@cipf.es</a>)</td>
<td>Dr María J. Vicent</td>
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<tr>
<td>24/06/12 - 29/06/12</td>
<td>IUPAC World Polymer Congress, Blacksburg VA, U.S.A. (<a href="http://www.cpe.vt.edu/macro2012">www.cpe.vt.edu/macro2012</a>)</td>
<td>Prof. Tim Long</td>
</tr>
<tr>
<td>01/07/12 - 05/07/12</td>
<td>Polymers in Medicine 2012, Prague, Czech Republic (<a href="http://www.imc.cas.cz/sympo/pmm2012">www.imc.cas.cz/sympo/pmm2012</a>)</td>
<td>Dr. Tomáš Etrych, Dr. Vladimír Šubr</td>
</tr>
<tr>
<td>09/07/12 - 12/07/12</td>
<td>MacroGroup UK, International conference on Polymer Synthesis &amp; UKPCF International Conference on Polymer Colloids, Warwick, U.K (<a href="http://www2.warwick.ac.uk/fac/sci/chemistry/events/warwick2012">www2.warwick.ac.uk/fac/sci/chemistry/events/warwick2012</a>)</td>
<td>Prof. David Haddleton, Dr. Andrew Dove</td>
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<tr>
<td>04/09/12 - 05/09/12</td>
<td>MacroGroup UK, Polymeric and Self-Assembled Hydrogels, London (<a href="http://www.constableandsmith.com/hydrogels">www.constableandsmith.com/hydrogels</a>)</td>
<td>Dr. Cecile Dreiss</td>
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<tr>
<td>10/09/12 - 11/09/12</td>
<td>MacroGroup UK, Young Researchers Meeting, Cambridge</td>
<td>Dr Oren Scherman</td>
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<tr>
<td>12/09/12 - 14/09/12</td>
<td>Recent Appointees in Polymer Science, Aston (<a href="http://www.raps.org.uk">www.raps.org.uk</a>)</td>
<td>Dr Paul D. Topham</td>
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**WARWICK 2012**

**Polymers**  
**July 9th - 12th**

MacroGroup UK International Conference on Polymer Synthesis &  
UKPCF International Conference on Polymer Colloids

[Web: http://go.warwick.ac.uk/polymers2012](http://go.warwick.ac.uk/polymers2012)
D H Richards Memorial Bursaries (Macro Group UK)

Are you:
- a student member of Macro Group UK?
- desperate to go to an important conference?
- short of all the funding needed?

then the D H Richards Memorial Bursaries scheme can help you!

About the bursaries

Macro Group set up the bursaries as a memorial to D H Richards, who was one of the founding officers of Macro Group and worked hard to establish it as a major group in the UK. Under this scheme, Macro Group sets aside funds each year to support its student members that wish to attend a scientifically-important conference, but are short of funds to make this happen. Only one student from a particular department/school will be granted a bursary for a particular conference. The applicant must be a current Macro Group member, have their supervisor’s support, and be planning to make an oral or poster contribution at the conference. It is expected that part of the funds needed to attend the conference will be obtained from other sources. A particular student can only receive one bursary award during their period of study and the maximum amount awarded will be £300. A condition of receiving a bursary award, is that the student will be required to write a short conference report for publication in the Bulletin.

How to apply

Application forms can be obtained from the Macro Group Secretary, Rachel O’Reilly, by sending an email request to: r.k.o-reilly@warwick.ac.uk or by downloading the form at http://www.macrogroup.org.uk/awards/bursaries.php The completed application form must be sent by the applicant’s supervisor (to confirm their support of the application) via email to Rachel O’Reilly in accord with the following deadlines - 1 May, 1 Nov. Decisions will normally be announced less than 4 weeks after the deadline.

The IOP Research Student Conference Fund

If you a PhD student and a member of the IOP, you are entitled to apply for up to £250 conference support. You may apply more than once, so you may either request the full amount or decide to request a smaller amount and then apply for funding again for another conference at a later stage.

Grants will normally cover only part of the expenses incurred in attending a conference and are intended to supplement grants from other sources. Applications are now made direct to the IOP, rather than through groups, as has been the case in the past. Applications will be considered on a quarterly basis and should reach the Institute by: 1st March, 1st June, 1st September or 1st December of each calendar year.

A decision will be made within eight weeks of the closing date, so the deadline chosen should be at least three months before the event that you wish to attend. In return for the financial support you will be asked to write a short conference report, which will appear in this newsletter.

The only other condition is that if you wish to apply for support for a polymer physics related conference you must also be a member of the Polymer Physics Group!

Further details and an application form can be found at,
APS meeting March 21-25th, 2011 Dallas, Texas

I had the pleasure and honor to be the recipient of the 2011 PPG/DPOLY Polymer Exchange Lecture: awarded by American Physical Society – Division of Polymer Physics (DPOLY) and the Institute of Physics-Polymer Physics Group (PPG). This award gave me the opportunity to showcase some of the research we are doing on block copolymer vesicles (also polymersomes). For few years now we have been exploiting concepts such as self-assembly in water and polymer/polymer phase separation borrowed from Polymer Physics to engineer new nanoparticles for facilitating cellular uptake. This is the very first step to design more complex systems that one day can be used for enhancing the delivery of drugs and/or biological probes across several biological barriers. No need to say that this can have a tremendous impact on the treatment of several diseases such as cancer, infections, and several neurological disorders to cite a few.

The award gave me the opportunity to attend a conference whose contents and audience I have missed in the last years as I’ve been forced by my research to attend other conferences more clinical and biological oriented. I had the opportunity to catch up with many friends and the new frontiers of Polymer Physics as well as having a peek at some of the Biological Physics symposiums. I enjoyed very much the interface between the two and particularly the symposium on macromolecular crowding where biological physicists are discovering how Polymer Physics can be extremely useful to understand the complexity of life.

I was particularly happy to notice that the gap between UK and US Polymer Physics is not based on quality, but on quantity. There are so many of them!

Giuseppe Battaglia, University of Sheffield

The 12th Pacific Polymer Conference
13 - 17 November 2011, Jeju Island, Korea

The 12th Pacific Polymer conference was held on the beautiful Jeju Island in the Republic of Korea, recently awarded the seven wonders of nature. The conference began with a plenary lecture from Professor Won Ho Jo on the importance of solar cells and the incredible advances that have been made in recent years. This was followed by Sadayuki Sakakibara who gave a very interesting lecture from an industrial viewpoint which explained Toray’s innovation strategy on development of advanced materials. The plenary lectures for the first day were brought to a close by a fascinating lecture on block copolymers in Ionic liquids from Professor Timothy Lodge who I was fortunate enough to meet later on in the conference.

After the plenary lectures the following lectures were separated into seven different categories, and with over 350 lectures and 460 poster presentations there were many fascinating lectures to choose from, which incorporated a vast range of topics including drug delivery and stimuli responsive polymers. Of particular relevance to me was a lecture by Professor Akira Hirao who gave a thought-provoking lecture entitled ‘Precise Synthesis of Sequentially Different Block Polymers by Living Anionic Polymerization in Conjugation with Specially Designed Linking Reactions’. I was honoured to be given the chance to present a 15 minute lecture ‘Controlling Monomer sequences in Living Anionic Polymerization’ which seemed to be well received.

The second day treated us to four more plenary lectures, the first was about Superamphiphiles (amphiphiles constructed from noncovalent interactions or dynamic covalent bonds) by Professor Xi Zhang, Professor Kazunori Kataoka then gave a remarkable lecture on how Supramolecular Structures of block copolymers which had very promising results for drug delivery and after a short break we enjoyed lectures on ‘Self-organized Materials for Optoelectronics’ by Professor Rudolf Zentel and ‘Molecular Design Concepts on Conjugated Polymers for Electroluminescence with High Efficiency’ by Professor Show-An Chen. These were again followed by a choice of many enticing lectures and a poster session after lunch. The third day also brought many more prestigious speakers, such as the lecture by Professor Thomas Epps, ‘Controlling Block Copolymer Interactions using Tapering to Stabilize Networks’. In the evening we were then treated to a banquet which was a perfect opportunity for networking and discussing the many fascinating topics we had heard throughout. The conference was brought to a close by a half-day of lectures (still with plenty of choice and many enticing topics). I thoroughly enjoyed the experience and I would like to thank my supervisor, Lian Hutchings, my industrial supervisors Peter Shaw and Paul Ross-Gardner (Synthomer Ltd.) for providing me the chance to attend such a superb conference. Furthermore I would also like to thank the MacroGroup UK for awarding me the DH Richards Bursary that helped make it possible.

Paul Brooks, University of Durham
Conference Reports

10th International Conference on Materials Chemistry (MC10)
4 - 7 July 2011, Manchester, UK

I would like to thank the Macro group UK for awarding me the D.H. Richards bursary for the MC10 Conference at Manchester in July 2011 and therefore a fantastic opportunity to present at the “Soft Matter” division. Many academics came to me after the talk for further discussion about their interested topics found in my presentation. I have also listened to the talks delivered by many distinguished experts in the polymer field. Their work were very inspirational and this experience was very helpful for my future research.

Feng Tian, University of Cambridge

Competitions Announcement

MacroGroup UK PhD Prize

MacroGroup UK are delighted to announce a new prize – the MacroGroup UK PhD Prize sponsored by Synthomer – directed at rewarding the best PhD students in the field of Polymer Science in the UK. The prize will be awarded to a PhD student who has displayed an outstanding ability across a range of criteria throughout their PhD. The recipient will receive a certificate and will be invited to deliver a prize lecture at the Warwick 2012 Polymer Conference – the registration, transport and accommodation costs of which will be covered by the award.

Nominations

The Macro Group UK PhD Prize is open to scientists who have received their PhD from a UK-based institution. Self-nomination is acceptable, however nominations should consist of:

1) A covering letter from the nominee (1 page maximum) describing how the nominee fits the selection criterion;
2) A letter from the PhD supervisor on headed paper (1 page maximum)
3) A letter from the external examiner of the thesis (examiners report is NOT submissable)
4) Copy of the letter of award from the University (stating the date of award)
5) Thesis abstract
6) A brief (1-4 page) CV of the nominee including publications list.

The prize will be judged by a sub-committee considering the following criteria:

- Award of PhD between 1st January and 31st December 2011
- Evidence of transition to independence
- Fit to MacroGroup UK remit
- Quality and quantity of publications/outputs
- Novelty of Work
- Communication of Science
- The student MUST be a member of MacroGroup to be eligible

Applications must be sent electronically to Dr Jon Weaver: j.weaver@imperial.ac.uk prior to the deadline. Late submissions will not be accepted.

Feng Tian
Macro Group Committee Nominations

Nominations are required for Ordinary Members of the committee to serve for a three-year period from August 2012. The Group constitution requires that the persons elected as Ordinary Members must be Macro Group members and include at least one member from each of the parent societies (RSC or SCI). Nominations signed by the proposer and seconder (both of whom must be members of Macro Group) and also by the nominee and should be made using the form below to the Group Secretary, Rachel O’Reilly, no later than 1st July 2012. Nominations should be signed by the proposer and seconder (both of whom must be members of Macro Group) and also by the nominee to indicate his/her agreement to serve. A short biographical outline of the experience, knowledge and skills that the nominee would bring to the committee also is required and should be attached to the nomination. Additionally, the post of Bulletin Officer will be vacated during this year, nominations are especially welcomed for this post.

Nomination for Macro Group UK Committee

To be returned to Dr Rachel O’Reilly, Macro Group Secretary, Department of Chemistry, University of Warwick, Coventry, CV4 7AL.

DEADLINE FOR RECEIPT: 1st JULY 2012

We hereby nominate: ____________________________ (print name) for the post of Ordinary Member on Macro Group UK Committee

Proposer: ___________________ (print name) ________________________ (signature)

Seconder: ______________________ (print name) ________________________ (signature)

Nominee:

I ___________________________ (print name) confirm that I am a member of Macro Group through the RSC / SCI (delete as appropriate) and agree to serve on Macro Group Committee if elected.

__________________________ (signature)