

ACIS Newsletter – Issue 4, December 2014

Welcome

Dear members,

Welcome to our fourth issue of ACIS News, a quarterly newsletter, produced in March, June, September, and December, to keep ACIS members informed of our initiatives and for members to directly communicate with their Society. Please send your suggestions and items for the next newsletter to Chiara.Neto@sydney.edu.au.

Important Events

ACIS Annual General Meeting

Our Annual General Meeting will be held on February 4th 2015 at 14:45 at the Hotel Grand Chancellor, in Hobart, during the 7th [Australian Colloid and Interface Symposium \(ACIS2015, see below\)](#). We hope that most of the attendees of the ACIS conference will convene on this occasion. The activities of the Society over the past year (since the previous AGM held in February 2014) will be reviewed, and we look forward to welcoming more involvement from its members. ACIS needs its members to be actively engaged, so please let us know if you would like to be involved in the work of the committees, especially: *Awards; Communications; Conferences and Events*, or in anything else.

We especially invite students and early-career researchers to become involved in the activities of the Society. Please email your interest to acis@colloid-oz.org.au. To receive the minutes of the past AGM, please email the same address. ACIS members who cannot attend the AGM on this occasion are invited to nominate a proxy using the form on the ACIS website: <https://colloid-oz.org.au/downloads/>

Registration is open for ACIS 2015 – Poster abstract submissions open till December 1st



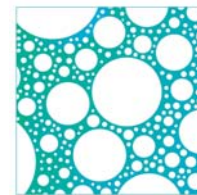
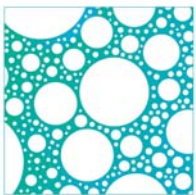
The 7th [Australian Colloid and Interface Symposium \(ACIS\)](#) will be held at the Grand Chancellor, Hobart, 2-5 Feb, 2015. The ACIS organising committee is led by Pat Spicer, and includes Ben Boyd, Vince Craig, Laurence Meagher and Rico Tabor, together with Sarah Robinson from Tulips. The program has been published on the conference website, and features eight exciting themes that cover most facets of our multidisciplinary field. Approximately

170 abstracts have been accepted into the themes – but MORE ABSTRACTS ARE WELCOME UP TO THE 1st DECEMBER deadline. The program will open with a welcome mixer on the Sunday night, and finish Thursday afternoon, after the conference dinner Wednesday night. An array of great speakers have confirmed attendance, including Julian Eastoe, delivering the ACIS Plenary, and Paul Mulvaney as the AE Alexander lecturer. It promises to once again be a great event in an excellent location, look forward to seeing you there.



During the conference, on February 3rd, Catherine Whitby and Pat Spicer have organized a lunchtime careers workshop for PhD students and early career researchers. A panel of representatives will answer questions on jobs in academia, industry and government. All students and ECRs are warmly invited to attend, and prizes will be on offer for attendees.





Western Pacific Colloids Meeting (WCPM)



The Western Pacific Colloids Meeting (WCPM) – formerly the Japan-Australia Colloids meeting - will be held from Sunday November 15th to Thursday November 19th at the spectacular 5 star Angkor Borei Hotel (<http://boreiangkor.com/>) in Siem Reap Cambodia. With the agreement of our Japanese partners we have decided to expand the meeting to include Japan, Australia, China, NZ, Taiwan and the countries of S.E. Asia. If you have collaborators in these countries please let them know of the meeting. The conference will be hosted by ACIS and organised by Vince Craig and Catherine Whitby. The first announcement will be sent out shortly. The conference will include the opportunity to tour the spectacular Angkor Wat, UNESCO world heritage site <http://whc.unesco.org/en/list/668>

For the culturally uncluttered this is where Tomb Raiders was filmed
<http://www.theguardian.com/film/2000/dec/08/culture.features2>

Awards

Frank Caruso awarded 2014 Victoria Prize



Frank Caruso (UniMelb) was awarded the 2014 Victoria Prize for Science and Innovation in physical sciences. His research has led to the development of a new generation of capsules based on particle-templated assembly of materials. His work on engineered capsules has transformed particle technologies and inspired researchers in related fields. In 2006, he collaborated with iCeutica Inc. to produce early drug formulations of the SoluMatrix Fine Particle Technology™. This led to the development of ZORVOLEX™, a capsule that moderates acute pain in adults. The Victoria Prize is funded by the Victorian Government.

Nicky Eshtiaghi awarded 2014 ThyssenKrupp Medal



Dr Nicky Eshtiaghi (RMIT) was awarded the ThyssenKrupp Industrial Solutions Medal of Excellence in Chemical Engineering. This medal and prize recognizes her practical services to the profession and to the practice of chemical engineering in Australia. Nicky is Chair of the Victorian Chemical Engineers committee and a council member of Australian Society of Rheology. Her research focuses on the impact of sludge rheology on wastewater flow processes.

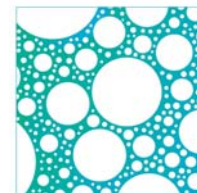
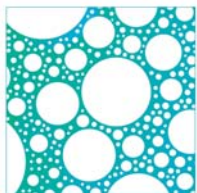
Barry Ninham awarded 2014 Overbeek Gold Medal



Barry Ninham (ANU) was awarded the Overbeek Gold Medal for his lifelong fundamental contributions to the development of colloid and interface Science. He pioneered the direct measurement of surface forces in liquids using the Surface Forces Apparatus while working with Jacob Israelchvili. Barry mentored over 80 students and research fellows who have become professors in Australia and other countries. He has published over 450 papers and several books. He is now professor emeritus at ANU and also works at the University of Florence.



The Overbeek Gold Medal was created by the European Colloid and Interface Society in 2005. It recognizes scientists who have shown leadership and scientific excellence in the field of colloid and



interface science over their entire careers. The first prize for 2005 was awarded over to J.Th.G. (Theo) Overbeek himself. He was one of the four contributors to the theory of the stability of lyophobic colloids, known as the Deryagin-Landau-Verwey-Overbeek theory.

Sébastien Perrier won 2014 IUPAC- Samsung Young Polymer Scientist Award



The IUPAC Polymer Division awarded Sébastien Perrier (Monash Warwick) the 2014 Young Polymer Scientist Award. Sébastien leads a team of researchers that design a wide range of state-of-the-art functional polymeric materials by manipulating their molecular structure. He is a member of the editorial board of Polymer Chemistry and the advisory boards of Soft Matter and European Polymer Journal. Sébastien was Chair of the RACI Polymer Division in 2011. He was a member of the Australian Research Council College of Experts in 2011.

Ezzio Rizzardo awarded Macro Group UK Medal for Outstanding Achievement



Ezio Rizzardo (CSIRO) won the Macro Group UK Medal for Outstanding Achievement for his contributions to the invention of two of the three living radical polymerization methods. The Nitroxide-Mediated Polymerization and the Reversible Addition Fragmentation chain Transfer polymerization revolutionised polymer chemistry over the last 20 years. These techniques are used worldwide to synthesise polymers for healthcare, energy and nanotechnology applications. 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.

Kate McGrath appointed as Victoria University of Wellington's first Vice Provost (Research)



Congratulations to Kate McGrath, who has been appointed as Victoria University of Wellington's first Vice Provost (Research). Kate completed her BSc (Hons) in chemistry at the University of Canterbury and gained her PhD from the Australian National University. After post-doctoral work in France and the United States, she returned to New Zealand to take up a lecturing position in the Department of Chemistry at the University of Otago. She moved to Victoria University in 2004 and, in 2011, was promoted to professor and became Director of the MacDiarmid Institute for Advanced Materials and Nanotechnology. Among the awards Kate has received are the 2003 Easterfield Medal from the New Zealand Institute of Chemistry, the 2007 Research Medal from the New Zealand Association of Scientists and the 2013 Wellington Gold

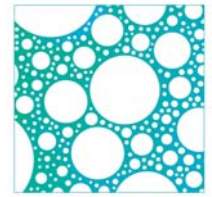
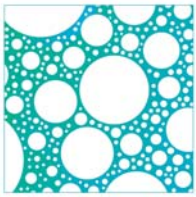
Inspire Wellington Award.

"I am honoured to have been given the opportunity to lead the university's research endeavours and to work with the staff at Victoria University of Wellington to enrich our research environment and deliver high quality research outcomes," says Kate, who will take up her new role on 20 January 2015. The MacDiarmid Institute will be looking for a new Director to take over from Kate in the new year.



Richard Tilley awarded 2014 Research Medal

Richard Tilley (Victoria University Wellington) was awarded the 2014 Research Medal for his research into how nanocrystals can nucleate and grow into unique cubic, hourglass and branched shapes with unique properties for catalysis. Nanoparticles made by his group are also used as MRI contrast agents and in solar cells. During the past 5 years Richard has published over 50 papers and in 2013 he published by



invitation in Nature Nanotechnology. The Research Medal is awarded by the New Zealand Association of Scientists for outstanding research published by a scientist within 15 years of their PhD.

Future Events

International Symposium on Surfaces and Interfaces of Biomaterials (ISSIB2015) – Submissions open for one more week



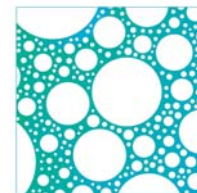
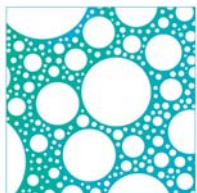
The organization of the 5th International Symposium on Surfaces and Interfaces of Biomaterials, to be held on 7- 10th April, 2015 in Sydney, is well under way. It will be held in conjunction with the 24th Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering. This conference contains numerous themes that should be of direct interest to ACIS members, including:

- Patterned Biomaterials
- Nanofabrication for biomaterial surfaces
- Bioreactors
- Biosensors & Bioelectronics
- Analysis of biomaterial surfaces and interfaces
- Nanoparticles

The abstract deadline formally closed on Monday 24th November but abstract submission will stay open unofficially for an additional week (and session chairs may be flexible, so please enquire if interested). In addition, poster abstract submission will stay open to the end of the year. For further information, please visit www.issib2015.smalltalkevents.com.au.

Australian Angle Scattering 2015 workshop

The Australian Angle Scattering 2015 workshop at Deakin University on 11-13 February 2015 will provide a platform for post-graduate and more experienced senior researchers to enhance their theoretical knowledge and help in designing and analysing measurements at advanced facilities such as the Australian Synchrotron and neutron beam instruments at ANSTO's Opal Research reactor. The primary focus of the workshop will be on the fundamental principles in the utilisation of reciprocal space measurements to obtain real space structural information. Presentations on a number of case studies will be included. The workshop will be invaluable to researchers working in a range of areas, from polymer and materials science, to biophysics, nanotechnology and colloidal science. The workshop will focus on providing the attendees with basics of operation of Angle Scattering science (SAXS/WAXS, XRD, powder diffraction and SANS, fundamentals of Angle Scattering modelling with hands-on sessions on computers (limited places) and technical exercises on data mining and software analysis (including Scatterbrain, Irena, and Fit2D). A number of case studies from experts will be presented on fibres and anisotropic scattering, grazing incidence scattering, crystallography, colloidal and lyotropic liquid crystals phase refinement and more. This workshop is proudly supported by the ACIS. Please contact Dr. Ludovic DUMÉE (ludovic.dumee@deakin.edu.au) for information or registration (deadline 15th of December 2014 COB).



89th ACS Colloid and Surface Science Symposium

The 89th ACS Colloid and Surface Science Symposium will be held on June 15-17, 2015 at Carnegie Mellon University. There is an exciting and diverse set of confirmed speakers for the meeting in Pittsburgh. Abstract submission will open in January 2015. For more information, please visit the website (www.colloids2015.org).

2015 Rideal Meeting: Polymers in colloid science

The theme of this year's Rideal meeting is Polymers in Colloid Science, and honours the career of winner of the 2015 Rideal Medal Prof Paul Luckham of Imperial College. The speakers are all former students of Paul or academics and industrialists he has collaborated with during his career. This one day meeting will include a student poster session and a wine reception prior to Paul giving the Rideal lecture at the end of the conference. Thursday 23 April 2015, SCI, London, UK. For further details please visit www.soci.org/events

Nucleating Colloids – a Column for Students & Early Career Researchers



Dr Stuart Thickett, Vice-Chancellor's Post-Doctoral Research Fellow, UNSW

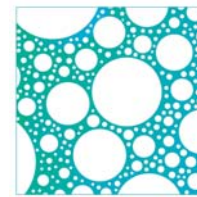
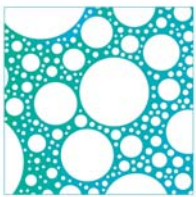
Topic: Graphene-Polymer Nanocomposites via Polymerization in Dispersed Media

Life as an Early Career Researcher: The Ups and Downs

In a few months' time I will be starting a new position as a lecturer in Chemistry at The University of Tasmania. This isn't the first time I have started a new position, so the feeling of starting again is not new – as an early career researcher (ECR) I've had four post-doctoral positions in the seven years since completing my PhD. This time, however, having finally 'cracked it' for a permanent lecturer position, comes with the feeling of satisfaction in addition to the challenges that await.

The process of finding an academic post is one that weighs heavily on many ECRs (including myself). It can be incredibly stressful looking for short-term post-doctoral positions, the possibility of moving institutions both here in Australia or overseas, as well as juggling family commitments, in order to keep a research career going! I should not paint it as all doom and gloom, far from it – every day I, and many others, get to be involved in research I am passionate about as well as teach and mentor students and colleagues. I do wish, however, that someone would have warned me how uncertain the academic life can be when I finished my PhD!

The best advice I could give someone coming to the end of their postgraduate study and considering a career in research would be to diversify their research skills, as well as get involved in teaching and mentoring. I have been fortunate to do something pretty different in every position I have had, including a big departure from nanoparticle synthesis through to thin film dynamics and surface chemistry. The analytical and research skills you bring with you will always find a role in your new research 'home,' wherever that may be and in whatever discipline! The diversity of skills and interests that you can demonstrate certainly makes you more employable. Additionally, I would recommend getting involved in mentoring of younger students, tutoring or demonstrating, or lecturing in some capacity. I am convinced that learning to teach well, and to be able to convey information to others, makes you a better researcher in the long run. It is also a critical part of our vocation! Any activities such as teaching or supervision workshops are invaluable to any ECR starting on the path of academia.



Hannah Askew, PhD Student at Swinburne University of Technology

Topic: Nanoscale Patterning of Lipid membranes
Industrial Research Institute Swinburne
Swinburne University of Technology

Go Home on Time

Recently I stumbled upon a work-life balance seminar at a conference I was attending and I admit the free lunch did entice me. To my surprise I got far more out of it than a tuna salad and crucially it made me think. Some might make jokes like “Do the words ‘academia/PhD’ and ‘life’ even go in the same sentence together?” No doubt I’ve made scathing remarks along the same line after a particularly unsuccessful round of experiments. The truth however is that for many people this issue is far from a joke and it is affecting their quality of life, relationships and family.

It’s all too easy to demonise academia (after all, for some this is all we know) making rash generalisations when comparing various professions. Unfortunately, the grass isn’t necessarily greener on the other side. The issue is widespread and according to research by The Australia Institute, based on the average wage, Australians are working \$110 billion in unpaid overtime every year.

As individuals there are certainly steps we can take to improve our work-life balance and there are plenty of online resources advising us to prioritise and plan. I believe the bigger issue is the culture we create in our workplaces and much of this is defined by the employer. It seems working long hours is often an ‘expectation’ and unfortunately the culture in some workplaces is downright unhealthy. This has spawned initiatives such as ‘Go home on time day’ which helps to raise awareness. Unfortunately, changing workplace culture won’t happen overnight.

Inevitably, longer hours will have an impact on relationships and family. Major challenges still exist for women making the choice to have children. These came to the fore in the media recently when it was revealed big companies such as Facebook were offering to cover the costs of egg freezing services for non-medical reasons. Apart from highlighting separate issues such as gender imbalance, the ensuing discussion made it clear that organisations still have a lot to do to when it comes to flexible work places and they are struggling to get it right.

It is also the case that men can be overlooked in the work-life balance debate. About 30% of Australian men work 50 hours per week. Research has shown that when working hours become unsocial it doesn’t just affect the health of the individual and may lead to health issues in their children.

What I’ve highlighted here isn’t even the tip of the iceberg. The debate is complex but it’s important to raise awareness. I’m still thinking about what work-life balance means to me and tonight I’m going to go home on time.

Links:

<http://www.tai.org.au/content/walking-tightrope-have-australians-achieved-worklife-balance>

<http://www.gohomeontimeday.org.au/>

<http://www.bbc.com/news/business-29626291>

<http://www.abc.net.au/news/2014-11-19/researcher-warns-of-health-impacts-of-long-work-hours/5901092>

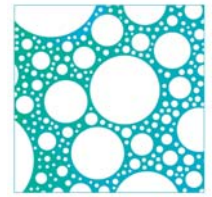
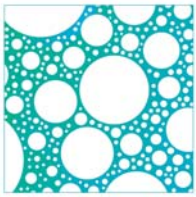
What do you think ACIS can do for student members? We would like to hear from you.

Activities

ACIS goes social



ACIS is now present on LinkedIn and Twitter. Please follow our LinkedIn profile and follow us on Twitter. The LinkedIn group is growing fast, already has around 40 members have joined in the first week. Members can use this group to exchange information, job ads, and discussion items at a more rapid rate and a more interactive mode than what allowed by the Newsletter format.



Sponsorship of Events

ACIS Sponsorship is available for events (symposia, workshops, industry networking events, and short courses) held in Australia or New Zealand and organised by ACIS members for the benefit of the colloids and interface science community. Prospective event organizers, who wish to request ACIS endorsement and sponsorship, should supply the information requested in the form available on the website <http://colloid-oz.org.au/> at least three months in advance.

ACIS Membership

Please encourage your colleagues, students and industrial partners working in the field of colloids and interface to join us. General membership is \$100 per annum. The membership year is from 1st July each year. Memberships paid after this date are valid until 30th June of the following year. More information is available on our website <http://colloid-oz.org.au/>.

Future Events

Advanced Materials & Nanotechnology (8-12 February, 2015, Nelson, New Zealand)

<http://www.amn-7.com/page.php?1>

Arrested Gels: Dynamics, Structure and Applications (23-25 March 2015, Gonville and Caius College, Cambridge)

The call for papers closed 31st October. <http://www.colloidsgroup.org.uk/>

10th Annual European Rheology Conference (14 – 17 April 2015, Nantes, France)

Abstract submissions will close on 30 November, 2014

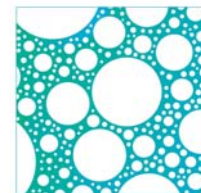
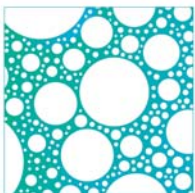
<http://rheology-esr.net/events/aerc-2015-nantes/>

15th Conference of the International Association of Colloid and Interface Scientists (24-29 May 2015, Mainz, Germany)

Abstract submissions opened on 12 August, 2014 and close on 8 January, 2015 (<http://www.iacis2015.org/>)

Particles 2015 Particles in Diagnostics and Delivery (3 – 6 August 2015, Lisbon, Portugal)

<http://nanoparticles.org/Particles2015/>



Job Ads

PhD studentship in colloid chemistry at Massey University

A fully funded PhD studentship in colloid chemistry is available to commence in January 2015 at Massey University in New Zealand. [Dr Catherine Whitby](#) is looking for a talented and motivated PhD student to start a new project investigating the flow and dynamics of complex fluids. The fluids studied will be emulsions and gels that are used in foods and cosmetics. The student will use advanced rheology and microscopy techniques to directly measure particle dynamics in the fluids as they yield and flow. By tuning the surface chemistry of the particles they will explore the origins of the different flow behaviours observed in complex fluids. Our aim is to correlate the microscopic structural changes in emulsions with their bulk flow behaviour. Information about my research can be found at www.surfacechemistrylab.com. Ideal candidates will have a degree in chemistry or chemical engineering and a strong interest in surface chemistry. Interested applicants should email [Catherine Whitby](#) their curriculum vitae and the names of two academic referees.

Postdoc / Postdoctoral Fellowship in the Department for Analytical and Inorganic Chemistry, University of Geneva, Switzerland

We have an opening in the area of surface forces. The principal tool is the colloidal probe technique, which is based atomic force microscope (AFM). We plan to investigate forces between colloidal particles in systems containing multivalent ions, polyelectrolytes, or both. Prerequisites are PhD in chemistry, physics, engineering, or a related area, a strong scientific record, and in depth experience in at least one of the systems or techniques mentioned above. Experience with AFM is welcome, but not prerequisite. Knowledge in computer programming is an advantage. Enthusiasm for top-quality research and teaching is as important as good oral and written communications skills and a flair for teamwork.

The successful candidate will encounter an active research group, well-equipped laboratories, and excellent working conditions. Earliest starting date is June 1, 2015, or as agreed. Review of applications starts on December 31, 2014, and will continue until the position is filled. For general information, see <http://www.colloid.ch/U>. To apply, please, email a notice of interest with your CV and 2-3 professional references including complete contact details to Michal.Borkovec@unige.ch.

Lectureship/Senior Lectureship in Physical/Analytical Chemistry at The University of Queensland

The School of Chemistry and Molecular Biosciences at the University of Queensland is offering a continuing lectureship in Physical or Analytical Chemistry at Level B/C. For more details see <http://jobs.uq.edu.au/caw/en/job/496639/lecturersenior-lecturer>. Applications close on December 19th.

Please email us ads for PhD and postdoc positions in the area of colloids and interfaces.

The Newsletter team is:

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