



# Photochemistry Group Newsletter

## Autumn 2017

### Editorial

Welcome to the autumn 2017 edition of the RSC Photochemistry Group newsletter.

This issue sees some changes in the Photochemistry Group's committee. Prof. Gareth Williams has completed his term as Chairperson and been succeeded by Dr Rachel Evans. Dr Robert Edkins replaces Rachel as Secretary of the committee, while Dr Dave Worrall continues as Treasurer. In addition, Prof. Tony Byrne, a long-standing member of the committee, has stepped down. We would like to thank both Gareth and Tony for their outstanding commitment to the committee. Gareth has served as both Secretary and Chair, and Tony organised an excellent edition of our Early Career Researchers meeting in Belfast. We wish them both all the best and thank them for their continued support of the group.

2017 has been an active year for the Photochemistry Group. In addition to hosting our regular Early Career Researchers' meeting in Birmingham, we also held a symposium in the inaugural RSC Faraday Joint Interest Group Conference in Warwick. Full meeting reports can be found in this newsletter, along with a list of upcoming events in 2018 of relevance to the Photochemistry and Photophysics scientific communities.

The RSC Photochemistry group is looking to expand and diversify its portfolio of activities. Please do get in touch if you have ideas of new initiatives or events that you think we could support.

Finally, membership of the RSC Photochemistry Group is free to all members of the RSC. If you are reading this newsletter, then you are probably already a member, but we would greatly appreciate your help in spreading the word so we can grow our membership. So if you have a colleague, student or friend that you think may be interested in our work, please do ask them to consider signing up to become a member of the group.

Thank you to everyone who has contributed to this issue of the newsletter and to all of our activities throughout the year.

*Rachel Evans and Robert Edkins*

#### Newsletter contributions

If you would like to contribute to forthcoming newsletters (events for the calendar, conference reports, or suggestions for features), please contact the Group's Secretary Bob Edkins

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## Chair's Report

It's a pleasure to write my first column for the RSC Photochemistry Group as Chair. Having been involved with the group for a long time, including participating in Early Career Researcher meetings as a PhD student, it is a privilege to find myself in the position to be able to promote the Photochemistry community in the UK and further afield.

A priority for me as Chair is to expand the remit of the Photochemistry group, diversify our activities and grow our membership. We have already taken several steps to achieving these goals and there are exciting times ahead. In 2016, we announced a call for Expressions of Interest to join the committee and had such an excellent response of high quality, diverse applications that we invited six new committee members to join us! Several of these new members have played a key role in helping to organise the events run by the Group this year. We have recently announced a new call for an Early Career Researcher to join the committee, and I hope by the next issue of this newsletter we will be able to announce who has joined us.

The traditional field of photochemistry is now the basis for diverse modern-day applications in areas such as solar-energy conversion, electronics, sensors, nanotechnology, biology and medicine. The scope of the group's interests reflects this diversity, but it is our feeling that perhaps the group's name is no longer truly representative of our activities. We will shortly be contacting our members to propose a name change for the group, and we hope that we can count on your support for this.

In growing our committee size, our intention is to be able to organise more activities for our members. I welcome any thoughts on how best we can achieve our goals, and particularly any comments and views on what we can do for our industry members.

***Rachel Evans***

Chair, RSC Photochemistry Group



## Conference Report: Faraday Joint Interest Group Conference 2017

The inaugural Faraday Joint Interest Group Conference was held in the University of Warwick on 11<sup>th</sup>-13<sup>th</sup> April 2017. The first meeting of its kind aimed to bring the UK Physical Chemistry community together to highlight excellent research and encourage links with International Researchers as well as Industry. A variety of Interest Groups contributed to the meeting, including the Astrophysical Chemistry Group, Neutron Scattering Group, Biophysical Chemistry Group, Spectroscopy & Dynamics Group, Theoretical Chemistry Group, British Carbon Group, Photochemistry Group and Statistical Mechanics & Thermodynamics Group. The conference Chair was Dr Ann Dixon (Warwick) who has to be commended in putting together such an excellent meeting, with nearly 300 delegates attending.

The Photochemistry Group organised two half day symposia, chaired by Dr Rachel Evans (Cambridge) and Prof. Tony Harriman (Newcastle). There were two excellent plenary talks by Prof. Richard Friend (Cambridge) and Prof. Luisa de Cola (Strasbourg). Prof. Friend delivered an insightful talk entitled "Molecular semiconductors for solar cells – designing around the Coulomb interaction", while Prof. de Cola gave an impressive overview of her research on "Luminescent metal complexes and their assemblies". In addition to a series of contributed talks, there was an excellent poster session shared by all groups.

As an attendee, I found the concept of the Faraday Joint Interest Group Conference very stimulating – it was great to be able to hop between parallel symposia and hear talks about diverse research areas, far from my comfort zone, but introducing the potential for truly interdisciplinary collaborations. I would highly recommend participating in the next meeting if you get the chance.

***Rachel Evans***



## Conference Report: RSC Photochemistry Group Meeting



*This article was originally published on the Photochemical and Photobiological Sciences blog on 19<sup>th</sup> September 2017*

The RSC Photochemistry Group meeting was held from 14<sup>th</sup>-15<sup>th</sup> September 2017 at the University of Birmingham's Chemistry Department, attracting around 70 participants from across the UK and Ireland. The meeting was designed to be a forum for early career researchers (ECRs) in photochemistry to present their work in a relaxed setting and to network with other Group members. 15 ECRs gave oral presentations covering the full range of modern photochemistry in its widest sense. The talks were of outstanding quality and led to excellent discussions. It is clear that the field is alive with many up-and-coming researchers.



*(Top row, L to R) Dario Bassani and Helen Fielding deliver their Keynote Lectures  
(Bottom row, L to R) Rob Neely and Stan Botchway deliver their Tutorial Lectures*

Supplementing the ECR talks were two Keynote Lectures by Helen Fielding (UCL) with her fascinating talk "Shedding new light on photochemistry in nature: biochromophores, protein chromophores and molecular motors" and by Photochemical and Photobiological Sciences Editor-in-Chief Dario Bassani (University of Bordeaux), who gave a stimulating lecture entitled "How to use supramolecular interactions to control excited states." Two further tutorial lectures with a more pedagogical feel from Rob Neely (University of Birmingham) on "The chemistry of super-resolution microscopy" and Stan Botchway (Central Laser Facility) on "Excited-state lifetime imaging in bio-medical applications" completed the very diverse and interesting programme. The poster session with *ca.* 35 posters was well attended and generated lots of dialogue amongst the participants, which continued later on at the conference dinner held in Birmingham city centre. It was especially pleasing to see the engagement of the ECRs at these networking events, which hopefully has stimulated many new collaborations.



*Early career researchers enjoying the poster sessions*

Photochemical and Photobiological Sciences sponsored a prize for the best oral and best poster presentations. It was difficult to pick winners due to the extremely high standard of all of the presentations, but after much deliberation between the committee members, the oral prize was awarded to Dr Robert Godin of Imperial College London for his excellent talk entitled “Understanding Heterogeneous Photocatalysts By Time-Resolved Diffuse Reflectance Spectroscopy.” The poster prize was awarded to Fiona Black of Newcastle University for her very engaging poster “Probing Charge-Transfer Dynamics Using Time-Resolved Spectroscopy.” Congratulations Robert and Fiona!

Two further poster prizes, sponsored by the RSC Photochemistry Group, were awarded to Yisu Wang from Cardiff University for a poster entitled “Novel plasmonic nanoparticles for applications in quantitative biosensing and bioimaging” and Huayun Shi from Warwick University for a poster on “Photoactive platinum anticancer complexes.” Congratulations Yisu and Huayun!



*RSC Photochemistry Meeting prize winners: (L to R) Yisu Wang (RSC Photochemistry Group Poster Prize winner), Huayun Shi (RSC Photochemistry Group Poster Prize Winner), Robert Godin (PPS Oral Prize winner), Fiona Black (PPS Poster Prize winner)*

The organizing committee (Zoe Pikramenou, University of Birmingham, and Robert Edkins, University of Oxford) hope that all attendees of the meeting had an enjoyable and stimulating experience and we thank you all for your participation during the meeting. We also thank PPS for sponsoring the prizes as well as the Faraday Division for a scientific meetings grant, University of Birmingham for hosting the event, and Photonic Solutions for sponsoring the poster session.

**Robert Edkins**

## Events 2018

*Lots of events relevant to the photochemistry and photophysics communities are scheduled to take place in 2018. Here is just a flavour of some of them. Apologies if we have missed your event—why not get in touch and let us know about it so we can feature it next time around?*

Photoinduced Processes in Nucleic Acids and Proteins: Faraday Discussion	Kerala, India	11 <sup>th</sup> -13 <sup>th</sup> January 2018
Central European Conference on Photochemistry	Bad Hofgastein, Austria	4 <sup>th</sup> -8 <sup>th</sup> February 2018
Frontiers in Photochemistry	Cancun, Mexico	18 <sup>th</sup> -21 <sup>st</sup> February 2018
GRC Photosensory Receptors and Signal Transduction	Il Ciocco, Italy	4 <sup>th</sup> -9 <sup>th</sup> March 2018
Faraday Discussion — Artificial Photosynthesis	Cambridge, UK	25 <sup>th</sup> -27 <sup>th</sup> March 2019
Faraday Discussion — Advances in Ion Spectroscopy - From Astrophysics to Biology	York, UK	8 <sup>th</sup> -10 <sup>th</sup> April 2019
American Society for Photobiology Biannual Meeting	Tampa, Florida, USA	12 <sup>th</sup> -15 <sup>th</sup> May 2018
18 <sup>th</sup> International Symposium on Luminescence Spectrometry	Brest, France	19 <sup>th</sup> -22 <sup>nd</sup> June 2018
International Conference on Porphyrins and Phthalocyanines (ICPP)	Munich, Germany	1 <sup>st</sup> -6 <sup>th</sup> July 2018
27 <sup>th</sup> IUPAC International Symposium on Photochemistry	UCD, Dublin, Ireland	8 <sup>th</sup> -13 <sup>th</sup> July 2018
GRC Vibrational Spectroscopy	University of New England, USA	29 <sup>th</sup> July-3 <sup>rd</sup> August 2018
European Congress on Molecular Spectroscopy	Coimbra, Portugal	19 <sup>th</sup> -24 <sup>th</sup> August 2018
Photodynamic Therapy and Photodiagnosis Update	Kochel-am-See, Germany	19 <sup>th</sup> -22 <sup>nd</sup> September 2018

### Featured event

#### Photosensory Receptors and Signal Transduction Gordon Conference

*Il Ciocco Italy, 4<sup>th</sup>-9<sup>th</sup> March 2018*

Chairs: Katrina Forest (University of Wisconsin-Madison) and John Kennis (VU University Amsterdam)

Topics: Photoreceptors (including those using retinal, bilins, flavins, carotenoids, and B-12 as chromophores) and their signal transduction mechanisms.

This is a unique meeting with practitioners from femtosecond spectroscopy through evolutionary biology all interested in the biological and chemical roles of different photoreceptors. It is quite broad and yet everyone engages in all of the sessions, so a lot of learning and cross-disciplinary conversations happen. Next spring, the meeting will again be at the Renaissance Tuscany Il Ciocco, near Lucca, where the food is outstanding and the hillsides inviting. Unlike large national society meetings, the GRC provides a small meeting setting with no overlapping scientific sessions. Gordon Conferences encourage sharing of unpublished work and open discussions. There is a very strict policy of no publications or recordings, making it easier to present exciting new results.

### Benefits of membership of the RSC Photochemistry Group

- Keep up to date with national and international developments in Photochemistry
- Quarterly newsletter
- Periodic e-alerts promoting upcoming events in Photochemistry
- Biennial photochemistry meeting in the UK/Ireland
- Student bursaries to aid attendance at meetings

## How to join the RSC Photochemistry Group

If you are a member of the Royal Society of Chemistry, membership of three interest groups is included as part of the membership fee and we would be delighted if you would consider joining us.

Joining us is easy - simply contact the Membership Administration and provide the following information:

- your name
- membership number
- name of the group you wish to join – the Photochemistry Group!

The contact details for Membership Administration can be found here:

[www.rsc.org/Membership/Networking/InterestGroups/joingroup.asp](http://www.rsc.org/Membership/Networking/InterestGroups/joingroup.asp)

### RSC Photochemistry Group Committee

Dr Rachel Evans (Chair 2017-2020, University of Cambridge)  
Dr Robert Edkins (Secretary 2017-2020, University of Oxford)  
Dr David Worrall (Treasurer, Loughborough University)

Dr James Bruce (Open University)  
Dr Nicolas Cheval (AstraZeneca UK Ltd)  
Prof. Anthony Harriman (Newcastle University)  
Dr Thomas Mathew (University of Southern California)  
Prof. Zoe Pikramenou (University of Birmingham)



**Find out more about the RSC Photochemistry Group at:**

[www.rsc.org/Membership/Networking/InterestGroups/Photochemistry/](http://www.rsc.org/Membership/Networking/InterestGroups/Photochemistry/)



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*If you have any feedback or suggestions for future editions or group activities, please contact us!*