

IOP

Institute of Physics

Women in Physics Group

Newsletter 19

September 2015

News from the Chair

Welcome to our new e-newsletter! I hope you enjoy reading about what the Women in Physics Group have been up to, and are encouraged by the news. My personal highlight was the success of our joint meeting with the [History of Physics Group](#), where I was honoured to join a truly engaging and diverse panel of speakers, including the vivacious Professor H el ene Langevin-Joliot, grand-daughter of Marie Curie. However, close second comes the news that the international conference for female physicists, IUPAP's ICWIP, will be coming to Birmingham in 2017. I'd like to congratulate Dr Nicola Wilkin and the team who worked with her on the bid, for making a convincing case to bring this wonderful gathering to the UK .

The next big event in our calendar is the Very Early Career Award (VECA) for female physicists, which celebrates the research and outreach achievements of women within 5 years of graduating with a Physics degree. All of our previous finalists have been outstanding, remarkable role models who demonstrate what the opportunities available even so early in a career within physics.

The award will be presented on the 5th November 2015 at the IoP in London, at an event which combines the VECA ceremony and our AGM. I hope to see as many of you there as possible.

The Shell and Institute of Physics Award for the Very Early Career Woman Physicist of the Year 2015

The Women in Physics Group invites applications from women at the start of their careers in physics who have made a substantial contribution to the subject and have undertaken activities to support and encourage others in the field. The prize is awarded annually to a woman who is within five years of the award of her first degree in physics (Bachelor's or Master's), allowing for career breaks, and is either working as a physicist or is engaged in postgraduate study in physics.

Visit http://www.iop.org/activity/groups/subject/wip/prize/page_40704.html

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Sponsored by Shell



Report from the UK delegation to the 5th International Conference on Women in Physics held at the Wilfred Laurier University, Canada

5-8 August 2014

Executive Summary

The International Conferences on Women in Physics (ICWIP) are triennial conferences, held under the auspices of the International Union of Pure and Applied Physics (IUPAP), to examine the under-representation of women in physics and to develop strategies to increase their participation. Each conference brings together delegates from around the world to develop resolutions which address gender issues and promote the participation of women in physics.

The UK bid to host the 6th ICWIP has been accepted.

Let's Talk!

To socialise, network and find out more about the Women in Physics Group, please like us on [Facebook](#). Also, the Women in Physics Group has a page on the main [IOP website](#), which has information on the committee and VECA award, the most recent newsletters, useful links and history of the group (including ICWIP reports).

Finally, within the MyIOP section of the IOP website there is the Women in Physics Group's [MemberTalk](#).

This is a forum for adding topics, you believe would be suitable, for discussion with other Women in Physics Group members. It would be great if more members got Involved in MemberTalk!

The UK Team to the 2014 ICWIP conference was brought together by the Women in Physics Group, following recommendations by the IOP Diversity and Inclusion Committee, and delegates played an active role in the conference presenting in workshops and poster sessions as well as promoting the Institute of Physics and UK physics. The UK was seen to have high standing in the field and presentations on JUNO, IOP Girls into Physics work and the Aurora Leadership programme have been followed up with international interest to ensure the good practice is widely disseminated.



The conference is unusual in that women at all levels of seniority are represented and share experiences. Numerous world-wide networks have been strengthened or developed and it has been an honour for the team to contribute. Importantly, it was an outstanding opportunity to learn of new ways forward that have been developed in other countries. The 2014 ICWIP conference resolutions towards achieving gender balance in all physics activities were generated during the conference and presented to the 28th IUPAP General Assembly in Singapore. The recommendations have been put into the UK context for this report, which includes the responses from the Institute of Physics. The conference proceedings will include all the individual country papers which report the progress in each country since the previous ICWIP.

Announcement: IUPAP International Conference on Women in Physics to be hosted by the University of Birmingham, UK

The International Union of Pure and Applied Physics (IUPAP) is delighted to announce that the 6th conference in this series will be hosted by Birmingham, UK.

Universal access to and participation in science, is a principle that runs through the activities of the International Scientific Union (ICSU) and its member unions, including the IUPAP.

IUPAP has recognised a particular need to foster the participation of women in physics.

The IUPAP Conference series on Women in Physics, organised by IUPAP Working Group 5, has a history not only of success and growth but also of making a difference in the physics community.

The conference will be held in July 2017 at the University of Birmingham, organised in partnership with the Institute of Physics (IOP) and the Universities of Nottingham and Warwick. Having all been awarded Juno Champion status by IOP, the three universities' physics departments are strongly committed to promoting diversity and look forward to being fully involved in the conference. The UK has a long track record in the area of gender equality in science, with IOP as



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Coming Soon!

**4 and 5
NOVEMBER 2015
BERLIN,
GERMANY**

4 November 2015: European Platform of Women Scientists General Assembly 2015

The EPWS General Assembly 2015 will take place in Berlin on 4 November 2015. Please watch out for details on the EPWS website.

www.epws.org

5 November 2015: Conference “Ready for Dialogue”

The conference “Ready for Dialogue” in Berlin on 5 November 2015 aims to contribute to the targeted consideration of the innovative potential of the gender dimension in science and research as well as in research policy through the purposeful linking-up of relevant actors in the field at national and European level.

STEM: Not for people like me!

For over 30 years we have put huge amounts of time and effort into encouraging girls to take physics – and we have failed! The percentage has remained stubbornly below 22%. Clearly messages focusing on what scientists ‘do’ are NOT sufficient to persuade the girls.

My new idea, explained in the report ‘Not for People Like Me’ <https://www.wisecampaign.org.uk/resources/2014/11/not-for-people-like-me> shows how we can enable girls to resolve the conflict between their **self-identity** and their perception of the **STEM-identity** that prevents girls choosing physics.

The novel element is based on social science research which says that half the population, mainly male, describe themselves using verbs – what they do, what their hobbies are – while the other half, mainly female, describe themselves using adjectives – talkative, organised, shy, determined...

At the moment STEM careers information is based entirely on verbs – what scientists do – so the STEM-identity is perceived to be based on verbs. People who self-identify by adjectives simply do not see themselves reflected in these descriptions.

To overcome this conflict we need to add in the ‘person spec’, using adjectives, as well as the ‘job spec’, using verbs, for the various careers in STEM.

As we’ve failed for 30+ years adding this new approach into the mix must be worth a try!

WISE will launch a complete careers activity using this approach in September which anyone going into schools can use. I’d be interested in feedback from anyone who tries this approach.

Professor Averil Macdonald OBE,
Hon D.Univ,CPhys,FInstP,FRSA.

Averil’s OBE in the Queen’s recent Birthday honours was to recognise her services to women in science.

Rediscovering Marie Curie and the pioneering women of science

This Sunday [March 8th 2015], as the world celebrates [International Women's Day](#), I'll be thinking of some amazing women who had a huge impact on the world of physics, helping shape the field as we know it today. Indeed, yesterday I was at the [Institute of Physics](#) in London, attending a [day-long conference](#) on "The lives and times of pioneering women in physics" hosted by the Institute's [Women in Physics group](#) along with its [History of Physics group](#). While there were a host of interesting speakers at the event, undoubtedly the star of the day was French nuclear physicist H el ene Langevin-Joliot, granddaughter of one of the 20th-century's most famous female physicists – Marie Curie.

Langevin-Joliot spoke to us about her grandmother's life, talking about Curie's early days in Warsaw, describing her first meeting with husband Pierre as a "decisive encounter", saying that he was so taken with Curie's intelligence that "one conversation was enough for Pierre to change his mind about [all] women!" Langevin-Joliot described her parents' and grandparents' scientific endeavours, mentioning just how much all of them loved physics and how that was always their main motivation.

I had the wonderful opportunity to sit down and talk with Langevin-Joliot after the conference, as she told me all about how she herself rediscovered the legacy of her grandmother – "Mae" as she and her mother called her – among other things.

Historian [Allan Chapman](#) also gave us a highly entertaining talk on the brilliant and intriguing polymath that was Mary Somerville, telling us about how she died (aged 91) at her desk correcting proofs. [Heather Williams](#), chair of the Institute's Women in Physics group, medical physicist and [director of ScienceGrrl](#) – an organization that supports women in science – gave the concluding talk of the evening, outlining the bias that still exists against women in science, and how to help remove it. All in all, it was a day of celebrating the many and vast contributions of women in science that are often relegated to the footnotes of history.

Adapted from the blog by **Tushna Commissariat** first posted at <http://blog.physicsworld.com/2015/03/05/rediscovering-marie-curie-and-the-pioneering-women-of-science/>

On 5th March 2015.

WIPG Needs You!

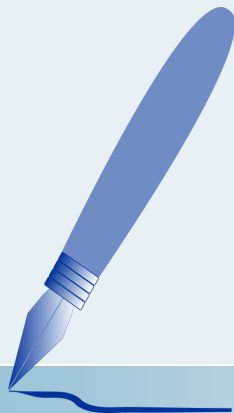
We would like your input for our next newsletter.

Do you have a project or event that you would like to share; if so we want to hear from you.

Please email Amy (amyreece@ymail.com) with your draft details or articles by January 31st 2016.

You will receive an acknowledgement to say that your email has been received; if you do not—please try again!

We look forward to hearing from you; although we may not be able to use all the articles we receive we will aim to include as many as possible.



Trinity College Dublin Physics Focus on Women in Light: UNESCO International Year of Light 2015 Event

Prof. Julieta Fierro, Institute for Astronomy at UNAM, Mexico's National University, lived up to her reputation as a force of nature, when she gave a seminar and a Masterclass in TCD School of Physics. She gave a public lecture on Astronomy in Mesoamerica showering her audience with flying gifts and a glimpse of astronomy from 600BC to the 16th century.



Julieta is credited with encouraging swathes of aspiring scientists to study Science in Mexico and elsewhere. In her Masterclass focusing on Tools for Success in a career in Light, Julieta suggested that women do less rather than more, that perfection in every single area of life is not a realistic goal for most humans. She made a great connection with her audience - the Mexican ambassador proved an excellent demonstration volunteer!

This event was supported by the School of Physics Women in Physics and Solar Physics groups with sponsorship and support from the Dean of FEMS, The Dublin Mexican Embassy, Women in Technology and Science (WITS), WiSER, IOP Women in Physics Group committee and the national committee for the International Year of Light 2015.

Professor Eithne McCabe, School of Physics,
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