

11th TPW UK
Technological
Plasma Work-
shop, 16-17
Dec, York, UK

Contact Erik Wagenaars
(erik.wagenaars@york.ac.uk)

41st IOP
Plasma Physics
Conference,
14-17 Apr,
London UK.

Contact Stuart Mangles
(stuart.mangles@imperial.ac.uk).

IOP Plasma Physics Group Committee Members

Chair:
Philippa Browning
(p.browning@manchester.ac.uk)

Secretary:
Christopher Ham
(Christopher.Ham@cce.ac.uk)

Treasurer:
Alexander Robinson
(alex.robinson@stfc.ac.uk)

Ordinary Members:
Ruth Bamford
Mark Bowden
Adrian Cross
Stuart Mangles
John Simmons
Roddy Vann

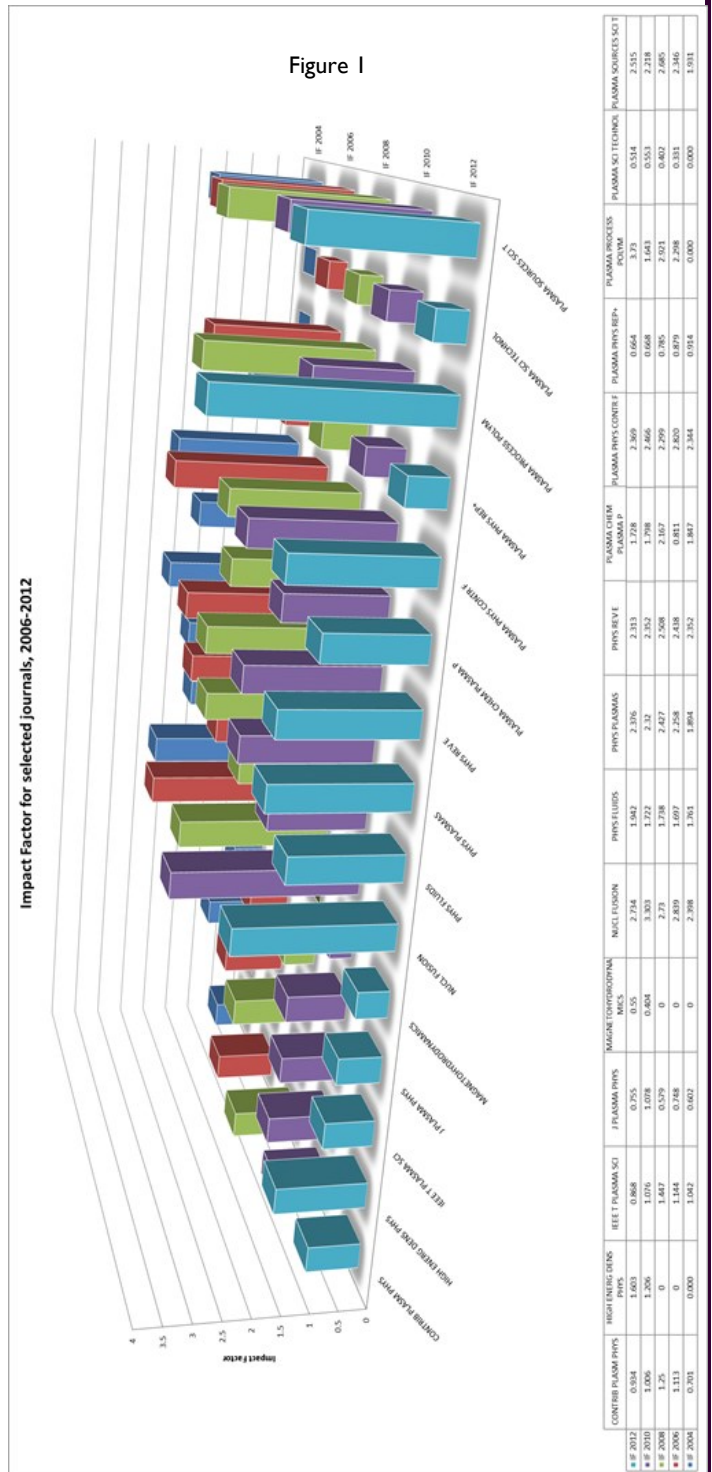
Plasmas and Journal Publishing

REF—the Research Excellence Framework—has made us all aware of the significance attached to the measurable outcomes of research, particularly in terms of how well regarded are our journal publications.

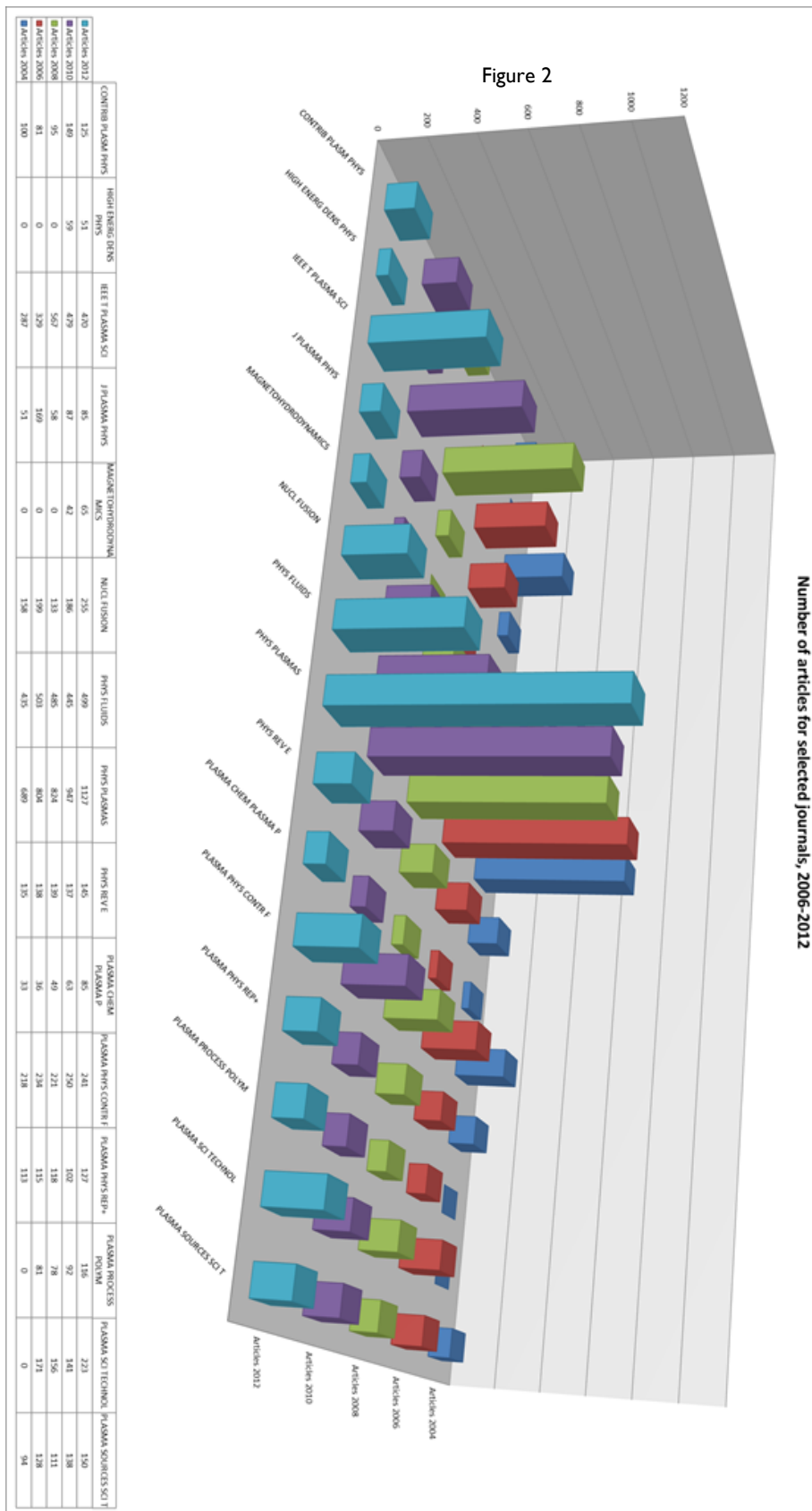
Amongst the many indices associated with identifying the quality of journals are the *Impact Factor* and the total number of articles published.

Whilst the significance of the latter is self-evident in terms of journal activity, the definition of Impact Factor (IF) is not immediately obvious. In fact, in a given year, the IF of a journal is the average number of citations received per paper published in that journal during the preceding two years. According to the compilers of the index, Thomson Reuters¹, IF is one of a number of analysis tools that can be used to judge a journal's research influence and impact, allowing objective comparison within subject disciplines. However, not all observers² agree on the underlying significance of IF, suggesting that a single judgement criterion doesn't adequately reflect the multiple goals intrinsic to research. Figure 1 shows the evolution over the last 6 years of IF for selected jour-

Figure 1



Plasmas and Journal Publishing



nals associated with Plasma Physics (selected from the category 'Physics, Fluids & Plasmas in ISI Web of Knowledge Journal Citation Reports³). The statistics show an order of magnitude spread in the IF from 2006-12 (0.33-3.73), but essentially an even split between those journals with IF around unity, and the remainder in the 2.5-3.7 range. Other relevant journals such as PRL and Nature have not been included in this survey (there are more comprehensive details about relevant journals in the Plasma Visions Report⁴). Of equal interest is the number of published articles by these journals over the same period: note that the output of PRE is scaled (using 2009 data) to reflect plasma articles only. Presenting historical data in this way allows the community to see how our journals reflect our research output to the world.

¹ Journal Citation Reports, Thomson Reuters <http://wokinfo.com/media/pdf/jcrwebfs.pdf>

² International Mathematical Union Joint Committee on Quantitative Assessment of Research (2008) <http://www.mathunion.org/fileadmin/IMU/Report/CitationStatistics.pdf>

³ <http://admin-apps.webofknowledge.com/JCR>

⁴ UK Plasma Visions Report http://www.iop.org/activity/groups/subject/pla/reports/page_55008.html

Number of articles for selected journals, 2006-2012

IOP Plasma Physics Group

Research Student Conference Fund

Research students: don't forget that you can apply for financial support to attend international conferences and major national meetings pertinent to the group. The PPGC administers grants of up to £250 per student for such events. The funding is managed centrally by IOP, rather than by allocation of a fixed sum to groups. RSCF applications are considered on a quarterly basis, and should reach the IOP by 1st of March, June, Sept & December, with a decision time of 8 weeks.

Student Prizes

The IOP PPG administers two prizes on behalf of sponsors. **Culham Thesis Prize** is awarded annually to the candidate who has displayed the highest degree of excellence in a PhD in plasma science. **Rutherford Prize for the Public Understanding of Plasma Physics** is a PhD student prize awarded to the student who is judged to be responsible for the best example of communicating Plasma Physics to the wider community. Contact alex.robinson@stfc.ac.uk

Plasma News Nov 2013

EVENTS

The following plasma-related events are coming up. If you are organising an event and would like it to appear here, please contact the committee.

Nov

- Fusion Research in the UK: the next 25 years 25 Nov IOP HQ, London. <http://www.iop.org/activity/groups/calendar/index.html#/?i=4>

Dec

- 11th TPW UK Technological Plasma Workshop, 16-17 Dec, York Plasma Institute. Contact Erik Wagenaars (erik.wagenaars@york.ac.uk) <http://www.tpw-uk.org/>

Jan

- Winter Conference on Plasma Spectrochemistry, 6-11 Jan, Amelia Island, Florida USA, http://icpinformation.org/2010_Winter_Conference.html
- First Cost Rican Summer School on Plasma Physics, 20-24 Jan, San Carlos, Alajuela, Costa Rica. <http://lawpp2014.org/school-of-plasma/>

Feb

- 8th International Conference on Reactive Plasmas / 31st Symposium on Plasma Processing 4-7 Feb Fukuoka, Japan <http://plasma.ed.kyushu-u.ac.jp/~icrp-8/>
- Solar-Tokamak Plasma Physics Workshop 5 Feb PPG/CCFE at University of Warwick

Mar

- 6th Intl Symposium on Advanced Plasma Science & Applications / 7th Intl Conf on Plasma Nano-Technology & Science 2-6 March, Nagoya, Japan <http://www.isplasma.jp/>

Apr

- 41st IOP Plasma Physics Conference, 14-17 Apr, London UK. Contact Stuart Mangles (stuart.mangles@imperial.ac.uk). <http://plasma14.iopconfs.org/>

May

- 10th International Conference on High Energy Density Laboratory Astrophysics (HEDLA2014), 12-16 May, Bordeaux, France. <http://hedla2014.sciencesconf.org/>
- 41st IEEE International Conference on Plasma Science (ICOPS2014) 25-29 May, Washington DC, USA. <http://www.ece.unm.edu/icops-beams2014/>

Jun

- 12th Kudowa Summer School "Towards Fusion Energy", 9-13 June, Kudowa Zdrój, Poland. <http://www.kudowaschool.ipplm.pl/>
- 26th Symposium on Plasma Physics and Technology, 16-19 June, Prague, Czech Republic. <http://www.plasmaconference.cz/>
- 9th International Conference on Plasma Assisted Technologies (ICPAT-9), 23-26 June, St Petersburg, Russia. <http://www.plasmacombustion.com/iwepac.html>
- 41st European Conference on Plasma Physics 23-27 June, Berlin Germany <http://eps2014-berlin.de/>

Jul

- 20th International Conference on Gas Discharges and their Applications (GD 2014) 6-11 July, Orleans, France <http://gd2014.sciencesconf.org/>
- 22nd Europhysics Conference on Atomic & Molecular Physics of Ionized Gases (ESCAMPIG XXIII) 15-19 July, Greifswald, Germany <http://www.escampig2014.org/>
- 51st Culham Summer School July 14-25, CCFE, Oxford. Contact Andrew Wise (Andrew.wise@ccfe.ac.uk) <http://www.culhamsummerschool.org.uk/>

Aug

- 40th COSPAR Scientific Assembly 2-10 Aug, Moscow, Russia <http://cospar2014moscow.com/>
- 9th International Conference on Z-Pinches (DZP 2014) 3-7 August, Napa, California USA <http://www.dzp2014.com/>

Sep

- 14th International Conference on Plasma Surface Engineering 15-19 Sept, Garmisch-Partenkirchen, Germany <http://www.pse-conferences.net/pse2014.html>

Oct

- 56th Annual Meeting APS Division of Plasma Physics, 27-31 Oct, New Orleans, USA <http://www.aps.org/meetings/meeting.cfm?name=DPP14>

Additional solar physics meetings information can be found at <http://www.uksolphys.org/information/conferences/>

Plasma Physics and Outreach

The IOP Plasma Physics Group Committee are keen to help raise the profile of plasma physics in outreach events throughout the country. We have begun by incorporating an outreach event into our main conference programme.

Ideally, we would like to help create a set of presentation tools or exhibition components that could be used by prospective outreach speakers. *If you have great ideas for demonstration apparatus, please contact us—we might be able to help you raise the funds to build the equipment, or put you in touch with people who can assist.*

If you are engaged in public talks about plasmas, perhaps there is something we can do for you?

Our first task is to build a picture of suitable resources that are currently available, and to gauge the interest in developing additional tools.

If you have anything to contribute, please get in touch: our contact details are on the front page.

Funding Rates

EPSRC now offer summarised success rates on an annual basis¹. For the period April 1 2012-March 31 2013, EPSRC success rate is 34% by number of applications, 37% by value. For **Physical Sciences** only, the total success rate by number is 35% by number, and 34% by value.

STFC funding data² is only available for financial year 2011-12 shows a success rate of 70.3% by number, but 51.2% by value.

¹ <http://www.epsrc.ac.uk/SiteCollectionDocuments/funding/FundingRates1213.pdf>

² http://www.stfc.ac.uk/webStatistics.aspx?m=Success_Rates

Feedback...

We welcome feedback on any aspect of this group newsletter. If you would like to see material included, or changes made to the existing material, please contact any of the committee. In future issues we would like to feature news items from groups across the country, including **staffing** news, **scholarships**, **fellowships**, **prizes**, **sponsors**, **industrial developments**, **astrophysics input**, short **research articles**, **financial updates**—in fact, any newsworthy item that you think suitable.

Plasma Prizes

Charlotte Palmer is the winner of the 2013 **Culham Thesis Prize** for her thesis entitled "Approaching the radiation pressure regime of proton acceleration with high intensity lasers."



Steve White and **Kate Humphrey** won the **Plasma Physics Group Poster prizes** at this year's IOP Spring Plasma conference.



A team from the University of York is this year's winner of the **Rutherford Prize for the Public Understanding of Plasma Physics**. The team of **Rachel McAdams**, **Ben Moody**, **Lee Morgan**, **Mohammed Shahzad** and **Tom Williams** produced a short film aimed at children aged 9-11 which explains why scientists are trying to build a 'mini-sun' on earth. The film previously won the first prize at Durham Energy Futures Film



Photos: Top Culham summer school directors past and present Roy McAdams, Geoff Cottrell, Chris Ham and Richard Gill with CEO Steve Cowley and Andrew Wise (summer school administrator). Below: the 2013 Culham Summer School cohort.



News Update ...

PPG meetings

The PPG supports various smaller meetings as well as its flagship Spring Conference and the TPW. We supported the international Spherical Tokamak Workshop in York in September 2013. We are especially keen to organise or co-sponsor interdisciplinary events, which bring together different parts of plasma physics or which link plasmas with other disciplines. On November 25th, we are co-sponsoring a meeting on the future of fusion energy with the IOP Energy group. On February 5th 2014, PPG have initiated a Workshop (together with CCFE and University of Warwick) to generate discussions - with limited numbers - between physicists working on the solar corona and tokamaks, identifying common research themes. We also offer some support to the Quantum, Atomic, Molecular and Plasma Physics (QuAMP) Summer School (to be held in Durham/Newcastle September 2014), which may be very useful for some plasma students.

Culham Plasma Physics summer school marks 50th anniversary

In 1964, twenty years before JET began operating, Culham held its first plasma physics school, and the intensive two week course is still going strong with over sixty students attending this year. The aim of the annual summer school is to provide an introduction to the fundamental principles of plasma physics together with a broad understanding of its fields of application. To celebrate the 50th anniversary, two special lectures 'The Future of Fusion' and 'UK Plasma Visions: the state of the matter' by Head of CCFE Professor Steve Cowley and Dr Declan Diver from the University of Glasgow were added and open to all staff. These were followed by a slice of cake, and a toast to the success of the summer school over the last five decades.

Industry meeting

PPG are planning to support a small meeting to establish links with industrial plasma users. The meeting is tentatively scheduled for December, in Portland Place. Numbers will be restricted, but if you would like to take part, or know of a company that would, please contact the PPG Chair.