



*Advancing  
Astronomy and  
Geophysics*

## ROYAL ASTRONOMICAL SOCIETY

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### MINUTES OF THE COUNCIL MEETING 11 DECEMBER 2009 AT 1100 IN THE COUNCIL ROOM

**1. PRESENT:** Professor A.C. Fabian (President), Professor A.M. Cruise, Professor J.E. Drew, Professor M.A. Hapgood, Professor J.C. Zarnecki (Vice-Presidents), Professor P.G. Murdin (Treasurer), Dr H.J. Walker, Professor M.A. Barstow and Dr I.A. Crawford (Secretaries), Dr R.J. Barber, Professor K. Blundell, Dr E. Bunce, Professor P.K. Browning, Dr I.F. Corbett, Professor M.G. Edmunds, Professor B.K. Gibson, Dr J. Greaves, Professor A.W. Hood and Dr J.A. Wild.

**APOLOGIES:** Professor R Ivison; Professor O Lahav

**IN ATTENDANCE:** Dr R Massey (Policy Officer); D Elliott (Executive Secretary)

### 2. MINUTES

The minutes of the meeting of 9 October 2009 were approved and signed.

### 3. MATTERS ARISING

**3.1** In connection with the UK Ground Based Astronomy booklet, the Policy Officer reported that he had some 80 replies to his request for career profiles of astronomy graduates working in non-related fields, which would be used to illustrate the discipline's training of transferable skills. Together with examples of spin-off companies and applications, as well as, of course, of examples of leading research, the booklet, for which STFC has agreed to provide £5K and the facilities of its in-house design team people, would make the case for continued investment in a branch of astronomy that is less often in the public gaze than space based observations. The President suggested that the editor of *A&G* might consider a regular feature to showcase former astronomers who had gone on to forge successful careers outside academe.

**3.2** The Executive Secretary confirmed that the trustees of the Daphne Jackson Fellowship had accepted the proposal of the Society to establish the Royal Astronomical Society Daphne Jackson Fellowship (RASDJF) on the basis that the Society would meet the salary and associated costs, and up to £1,000 per annum of extraordinary expenses, for a period of 2 years from the commencement of the fellowship. While the Trust would have responsibility for the selection of candidates the Society retained the right to accept or reject any candidate

proposed to it and would be provided with a complete set of documentation as well given the opportunity to appoint an observer on relevant interview panels. The successful candidate, by mutual agreement with the Society would be invited to present appropriate scientific work to one of its meetings and to submit appropriate papers to its journals. Finally, the Society would have the opportunity to appoint a mentor for the Fellow for the duration of the fellowship. At, or if appropriate, before the end of the appointment term of the first RASDJF, the Council would be asked to extend, or otherwise, the sponsorship arrangement with the Daphne Jackson Fellowship Trust.

**3.3** Professor Hapgood reported that the Science Board of the Institute of Physics had recommended that the results produced by *Oxford Economics* on the impact on the UK economy of British-based fundamental physics research was insufficiently robust to warrant publication. In retrospect, it was clear that any attempt to differentiate the impact of British from non-British based research was chimerical. Professor Hapgood agreed to write a report for A&G on the lessons to be learned from this nugatory exercise which had cost the Society some £3K.

**3.4** Professor Hapgood informed Council on the transfer from STFC of responsibility for 'Earth orientated STP' to NERC. A formal statement about the terms of the transfer had been circulated to the community via the MIST and other mailing lists, and NERC officers had attended the recent Autumn MIST meeting at Burlington House. This had been well received by the community. NERC, he added, was in discussion with EISCAT over the transfer of STFC's membership of EISCAT to NERC. While the community was generally content with the new arrangement there was concern that the transfer of this research, which is highly relevant to the study of global warming, would make STFC's task of demonstrating the impact of the sciences it funds more difficult. Comparing it to the working relationship with STFC, Council asked Professor Hapgood to investigate how the Society could best relate to NERC in the future.

#### **4. PRESIDENT'S BUSINESS**

**4.1** The President reported on the Cambridge debate on science policy attended by the Minister for Science, Lord Drayson and his opposition counterparts, Adam Afriye MP and Evan Harris MP. He had followed this up with a letter to the Minister which was subsequently posted on the Society's web site viz

*Dear Minister*

*I am writing to express my growing concern about the situation within STFC and the storm that will likely occur when the results of its current prioritization exercise are released in mid-December. Astronomers, space scientists, particle physicists and nuclear physicists are all anxious and frustrated by the manner in which decisions on our research funding are being handled. There are several strands to the problem, which I want to briefly outline. First though, let me say that I'm pleased and impressed by your participation in the two recent debates; one in Cambridge last week, and the Wellcome Trust this Monday, both of which I attended. I do not disagree with your stance on most issues, although I remain confused by your interpretation of the impact agenda. Your willingness to debate the issues behind science funding and blue-skies research gives me hope that you will listen and respond to what I have to say.*

*A major issue concerns how your requests, which appear reasonable, are interpreted by scientists, academics and especially by the research councils. Examples are your statements last week that science should help pull us through the recession, and at the same time you will also ring-fence the science budget. Both are very positive. Yet they can be interpreted to mean a priority on short-term research goals funded from a fixed pot which would otherwise also provide for longer-term, less certain, curiosity-driven research. RCUK and research councils might well squeeze the latter to provide the former. That is certainly what it feels like. As you know well, STFC was formed by merging two other councils and in its first year found an 80 million pound deficit after the CSR. This is widely attributed to a mistake and has never been clearly explained in simple terms despite being the target of a Select Committee. It was handled and reduced somewhat with help from DIUS then BIS, but the bulk of the deficit has never gone away. The nature of the STFC with its many large facilities and subscriptions means that the squeeze is on the only flexible parts of its programme, which are the research grants and smaller facilities. The last set of grant awards (which mainly involved particle physics) were for just one year, rather than three or more, which seriously restricts the research which could be done. Key postdoctoral staff are likely to be lost to Europe and the United States, where funding has been increased.*

*We are told that the STFC budget deficit will be handled by deep cut made at Council in mid-December, following a prioritization to which scientists have provided advice. We are fearful that this will cause serious damage to our work, both through a loss of people, expertise and instruments. Whilst STFC have improved in their consultation with the community, decisions are increasingly taken at arm's length from us. From a user point of view, STFC has serious structural problems. We risk reopening the open dissention between the community and STFC/BIS which followed the 2007 Delivery Plan (and which in the meantime the RAS has been trying to contain).*

*Astronomers and Space Scientists do feel that we make an impact, from inspiring young people to take up the hard sciences and stimulating the general public, to the development of highly sophisticated imaging, robotic and radio devices. The nature of the work is that serendipity plays a strong role so reliable prediction of future products is difficult. Most of what we do is necessarily long term. The grave situation is remediable by plugging some of the funding gap. We appreciate that some cuts are inevitable, but some sciences, such as medical research, are more easily able to attract non-governmental funds than we can. We hope all round that when the outlook improves the overall science budget can be increased.*

**4.2** The President went on to report on another public meeting chaired by Professor Brian Cox at which Lord Drayson, to his mind, insufficiently differentiated between measuring impact from past research and predicting the potential impact from future research (as is a requirement of the proposed Research Excellence Framework (REF)).

**4.3** Professor Fabian speculated that the announcement on December 15 of the outcome of the STFC 'Prioritisation Exercise' could be extremely damaging to the research community given the need to find an immediate £40m by making programmatic cuts as well as for a contingency to deal with the expected >10% reduction to its budget following the General Election. He and the Executive Secretary, with their counterparts at the IoP, had been invited to a meeting with the Chair and Chief Executive of STFC, followed by a meeting with the Government Chief Scientist, Professor Beddington, before the media briefing at which the details from the Prioritisation Exercise would be released. It was, said the President, important to make a balanced response which expressed the feelings of the community

without giving the impression, especially to early career scientists, that UK astronomy was in terminal decline.

**4.4** Turning to the announcement the previous day that the UK was to establish a Space Agency, as the Society had argued it should, the President expressed satisfaction but added that the Government needed to work closely with the scientific community in its detailed planning. For example, it was important to have the correct relationship between Space- and Ground-based astronomy and, above all, that any additional funding for space activities should not be at the expense of the science research budget.

**4.5** Professor Fabian noted the claim of CaSE (Campaign for Science and Engineering) that in real terms net government expenditure on Science, Engineering and Technology, had not increased in the past 20 years (£9,371 million in 1986/87 and £9,258 in 2007/08) though there had been a huge shift in funding from departmental R&D spending to the research base (universities and institutes) and from defense to civil research.

**4.6** Finally, the President announced that the following members, who would be retiring from Council at the next AGM, had agreed to act as the Presidential Election Committee charged with recommending a candidate as the Council's nominee to appear on the balloting list viz Professors Cruise, Edmunds, Hapgood and Drs Greaves and Wild.

In discussion it was stressed that the Society would need to think carefully about safeguarding astronomy research in the new funding environment, in coordination with particle and nuclear physicists, including Professor Cox, who were likely to be similarly affected.

## **5. POLICY & PUBLIC ENGAGEMENT**

**5.1** The Policy Officer outlined the proposed Society submission to the HEFCE consultation on the Research Excellence Framework (REF). While welcoming some changes from earlier iterations, particularly the reduced weighting given to bibliometric measures, there was great concern at the proposal to attribute 25% of the overall assessment of research excellence to 'impact'. This is on the grounds that, by its nature, the outcomes of astronomy research are unpredictable and the causal chain between fundamental research and market application almost impossible to measure with any degree of accuracy. In addition, leaving aside that it is problematic to calculate the cultural and educational impact emanating from astronomical research, to base funding decisions on past achievements would necessarily adversely prejudice younger researchers. That said since it seemed clear HEFCE was determined 'impact' *would* be rewarded the Society would argue that this component should count for no more than 5% of the final assessment result.

**5.2** The Policy Officer spoke to a paper summarising applications and acceptances in 2009 for first degrees courses that included the keywords astrophysics, space science, astronomy and cosmology in their title. Comparing the statistics with the position in 2003 generally there had been a marked decline (unlike 'straight' physics courses) which perhaps suggested that physics programmes, though they might include astro-options, were seen as offering a wider spectrum of career options.

**5.3** 'Ten things you ought to know about Astronomy' – **Item postponed**

## **6. ORGANISATION AND STRUCTURE**

### **6.1 2009 NAM/JENAM Report - Item postponed**

**6.2** Dr Browning spoke to the Library Committee report. First she asked for, and obtained, Council's approval of revised terms of reference for the committee viz

- To supervise the operation of the Library and the management of its contents, furnishings, resources and archives, to ensure that the annual library budget approved by Council represents value for money and delivers valuable services to members.
- To recommend to Council changes in regulations, as necessary.
- To approve the acquisitions policy for books and journals.

Next, she reported on their discussions which questioned the utility of subscribing to research journals, whether in hard copy or electronic version, when records showed that in recent times they had rarely, if ever, been consulted by the membership. In addition to their purchase cost, running at around £45K pa, had to be added the associated costs (and librarian time) of cataloguing, binding and storing such journals. It was clear that the research community had other, and more convenient, means, including open access electronic repositories, of accessing papers submitted to the main astronomical and geophysical journals. This was not necessarily true of some obscure journals nor of some of the more magazine-type publications like 'Nature'. With the provisos that the committee would examine each journal individually before taking a decision to cancel any and that any inconvenience caused to fellows would be alleviated wherever possible and reasonable (e.g. by the librarian purchasing an article download on their behalf) Council agreed that the library committee should be free to redeploy its budget on other, more useful, services (about which it looked forward to receiving information at a future meeting).

**6.3** Dr Mitton, Membership Committee Chair, spoke to the Committee's report. After noting the Committee's support for the purchase of the membership management data base (see item 6.4) and drawing attention to its hope of revitalising 'Points of Contact' by appointing regional coordinators, she summarised the analysis of the membership contributions system. Dr Mitton noted that there were a number of features which might be militating against the recruitment of younger members (and retaining existing fellows). In particular, due to the complexity of the calculations entailed, the lack of clarity about the contribution new members might be required to pay (there being 15 possibilities); the way in which information about the contribution rates was set out in documents, letters and on the web site; the unattractiveness of having to pay the annual contribution in a single instalment just after Christmas and, finally, the perception that some of the concessions and discounts available were seen as unfair or discriminatory. After exhaustive discussion the Membership Committee had concluded that:

1. The practicalities of a monthly (or quarterly) payment scheme for contributions should be thoroughly investigated. This should extend to considering the concept of 'rolling starts' to membership on a monthly or quarterly basis.
2. Payment by direct debit or continuous payment authority on a credit card should be made the norm for new members, with appropriate flexibility where there was genuine difficulty (e.g. for overseas Fellows).

3. In conjunction with the Membership Committee, the documents and web pages that gave information about contribution rates should be completely overhauled to make them clear, consistent, and 'user-friendly'. The term used in them and by the Society for 'contributions' should be standardized.
4. The discount for Fellows under 30 should be withdrawn.
5. The issues raised in this report should be reviewed soon after the anticipated contracting out of membership services has taken place (see item 6.4).

Council, while initially expressing concern at proposal 4 and speculating whether membership should be linked to the academic rather than calendar year (and asking that the International Committee should look into the desirability of creating a new category of 'International Affiliate'), approved all of these recommendations and requested the Membership Committee, in liaison with the Treasurer, to progress them noting that this might necessitate a revision of the bye-laws.

**6.4** The Treasurer explained the limitations of the present, generic Microsoft Office software based, membership management arrangements. Principally, the collection of annual contributions was unduly labour intensive and inflexible (making it impossible to offer monthly or quarterly payments) and there was no automatic connection from the membership records to the associated financial information stored on the *Sage Line 50* accounting system used by the Society. In addition some other activities e.g. the management of meetings and grant applications, were *ad hoc* which lead to systems being regularly reinvented. Following market testing the Society had identified a Customer Relationship Management system developed for use by charities called *Donor Strategy*. This would allow the Society to provide cost effective administration of a number of its activities such as events, including the NAM (listing registrants and collecting fees); grants (recording applications and payments) and membership services (not only the collection of contributions, which would be integrated with the accounts via a file transfer system but also pro-active services using information entered by fellows about e.g. their connection with specialist subject groups like the Astrochemistry Group or the British Geophysical Association). *IRIS Not for Profit Solutions*, which owned *Donor Strategies*, would operate the system on their own servers, taking responsibility for data protection compliance and back-up. The Treasurer concluded by asking Council to approve the purchase of this system at an estimated total initial cost of up to £25,000, with an annual cost of up to circa £6, offset by savings in bank charges (c.£3K pa) and staffing (c.£15k pa). Allowing a minimum of 3 months for installation it would be in place to process contributions from 2011. Council approved this proposal and instructed the Treasurer to enter into a contract with *IRIS Not for Profit Solutions*.

**6.5** The Executive Secretary passed on the recommendation of the Chair of the Higher Education Committee that it should be disbanded on the grounds that responsibility for its most important function, to draft submissions to national consultations, had passed to the Vice-Presidents, supported by the Policy Officer. He advised that the residual task of judging the annual thesis competition also should revert to the Vice-Presidents, supported by colleagues who would not need to be members of Council. This was agreed.

**6.6** The Executive Secretary asked Council to approve the appointment of Dr Jim Wild, who will take up appointment as a STFC Science in Society Fellow in 2010, to the Education Committee. This was agreed.

## 7. AWARDS

**7.1** Professor Cruise, Chair of the ‘A’ Awards Committee, reported that the committee had consisted of the following Fellows of the Society: Bernard Carr, Andrew Collier Cameron, Janet Drew, Rob Kennicutt, Helen Walker, Ant Whitworth and Diana Worrall

The committee met on November 25<sup>th</sup> following a significant exchange of ideas by e-mail. Members indicated any conflicts of interest they had in the discussions of particular candidates and their input was appropriately reduced in those cases. Professor Cameron Collier resigned from the committee immediately it was suggested by another member that the WASP consortium might be a candidate for the RAS Group Achievement Award and took no further part in the discussion. The Committee noted the continuing poor gender balance in nominations for senior awards, and the generally low level of input from the Fellowship in providing nominations for senior awards (which was certainly not to say that the names put forward did not achieve the required standards of excellence). Finally, given the amount of text that needed to be compiled from various sources, it was felt that the office might seek nominations only by electronic means in the future so as to lighten their workload and that of the committee. The committee reached a consensus in its recommendations to Council for all the awards which were as follows:

Gold Medal (A)	-	Professor Douglas Gough
Herschel Medal	-	Professor James Hough
Jackson-Gwilt Medal	-	Dr Craig MacKay
Fowler Award (A)	-	Dr Barbara Ercolano
Winton Capital Award (A)	-	Dr Elizabeth Stanway
Service Award (A)	-	Professor Sanchez
Group Achievement Award (A)	-	Super WASP team
Darwin Lecturer	-	Professor Carlos Frenk (with a suggested topic of “Cosmological Simulations”).
Honorary Fellowship:		Prof. Lin (PRC); Prof. Larson (US); Prof. Aerts (Belgium)

Council approved all of these recommendations noting that the information was embargoed until January 8, when the results would be announced at the RAS ‘Ordinary’ Meeting

**7.2** Professor Hapgood, Chair of the ‘G’ Awards Committee reported that the Committee had comprised Ian Crawford, Philippa Browning, Jim Wild, Richard Holme, Andreas Rietbrock, Andrew Ball and Caroline Smith. It had met on 14 October 2009 and had agreed that they must put aside all personal or partisan interests aside in discussing the nominations and should decline to make a recommendation if there were no candidates of suitable merit. The Chair also noted the recent decision of Council to make public the membership of the Awards Committee to dispel any suspicions that the process was unfair. In making its decisions the committee drew on the nominations and letters of support for each candidate, supplemented by bibliographic data drawn from *Web of Science*, as well as the expertise of the committee members. Its recommendations were as follows:

Gold Medal (G)	-	Professor John Woodhouse
Chapman Medal	-	Professor Bernard Roberts
Fowler Award (G)	-	Dr Ineke de Moortel
Winton Capital Award (G)	-	Dr David Robinson
Service Award (G)	-	Dr Frank Lowes
Group Achievement Award (G)	-	CHIANTI consortium
Harold Jeffreys Lectureship	-	Professor Steve Miller (with a suggested topic of planetary aeronomy and its application to exo-planets)
Honorary Fellowships:	-	Dr Wlodek Kofman (France); Professor Domenico Giardini (Switzerland)

Council approved all of these recommendations noting that the information was embargoed until January 8, when the results would be announced at the RAS ‘Ordinary’ Meeting

## 8. FINANCE (Treasurer)

**8.1** The report of the Finance Committee Report was noted. Commenting on the Operations Plan the Treasurer observed that 2009 was likely to end with a balanced budget but that, at this stage, in 2010 a surplus was projected of some £160K

**8.2** The Treasurer outlined the main points of a paper which, following professional advice from *Baker Tilley*, defined and placed on the record the Society’s position regarding its entitlement to claim tax relief via Gift Aid on annual subscriptions. Currently this amounted to some £7K pa. HM Revenue and Customs (HMRC) allow up to 25% of the value of the donation to a charity to be returned to the donor in the form of personal benefits without affecting the taxable status of the whole donation under the Gift Aid scheme. According to Baker Tilley’s advice on what should count as a benefit under the Gift Aid regulations, and their assessment on accounting principles of the value of the benefits, the Society was within the 25% limit for the value of such benefits. The Treasurer added that the Society might wish to return to this assessment at a future date since he believed there was a case for claiming that all, or virtually all, of the benefits provided were in pursuance of the Society’s charitable aims and should therefore be excluded from the calculation.

**8.3** The Treasurer informed Council of the request from the organisers of the 2010 NAM for a grant of £12.5K to meet the overall cost of some £120K. This would enable admission fees to be maintained at affordable levels while delivering a first class event with invited overseas speakers. Council approved the request.

## 9. OTHER

**9.1** Council approved the following candidates for Election to Fellowship listed in the Officers’ Reports for October and November 2009 and posted on the RAS web site.

Allcock	Nathan
Banerji	Manda
Barnard	Luke
Barron	Louise
Birchall	Chris
Bonsor	Amy
Brown	David

Burnett	Benedict
Chibueze	James
Churcher	Laura
Chuter	John
Clemson	Timothy
Clifton	Gloria
Craggs	Alan
Eden	David
Fendyke	Stephen
Goodyear	Michael
Gorman	Robin
Hambleton	Kelly
Hammonds	Mark
Hlozek	Renee
Holdsworth	Daniel
Kelly	Gemma
Kidd	Robert
King	Geoffrey
Lamy	Laurent
Langoussis	Alexander
Light	Robert
Lindfield	George
McCoustra	Martin
Milhoux	Renaud
Miller	Grant
Miller	James
Momoh	John
Mustill	Alexander
Perry	Sam
Pettinari	Guido
Piattella	Oliver
Ridley	Victoria
Robinson	David
Shore	Robert
Stuart	Colin
Stuebler	Johannes
Trenovszki	Zoltan
Tsapras	Yiannis
Watkins	Robert
Whitmarsh	Paul
Woodhams	Dayle
Young	Steven
Yuan	Ding

**9.2** The Minutes of the A&G Ordinary Meetings of 9 October 2009 and 13 November 2009 were approved and signed

**10. AOB**

**10.1** Professor Edmunds proposed that the Society should investigate the possibility of coordinating a national bid to host the IAU's Office for Astronomy Development. It was agreed to attempt this bearing in mind the deadline for expressions of interest was 31 December 2009

**10.2** In connection with the proposed celebration of the 50<sup>th</sup> anniversary of the first manned orbit, Council approved the request for the Society to host the web site 'Gagarin 2011' on condition its position on human space flight was not compromised.

**10.3** Council approved a request to co-sponsor, by contributing the costs of 2 speakers and local costs, an out-of-London specialist meeting on the *Astrophysics of Transient Phenomena - from Exoplanets to Hypernovae*, to be held at the Royal Irish Academy, Dublin on September 16 – 17, 2010. The other sponsors would be the Astronomical Science Group of Ireland and the Royal Irish Academy

Council rose at 1530

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A.C. Fabian  
President

12<sup>th</sup> February 2010