

Minutes of the Meeting of the Institute of Physics Council

held at 9.30 a.m. on 12 July 2022 in 37 Caledonian Road and by videoconference

Trustees Present:

Sheila Rowan	President and Chair of the Meeting
Keith Burnett (by video)	President-elect
David Delpy (until Item 4.4)	Honorary Treasurer
Alison McMillan (until Item 4.3)	Honorary Secretary
John Bagshaw	Vice-President for Business
Martin Freer	Vice-President for Science & Innovation
Lisa Jardine-Wright	Vice-President for Education and Skills
Philip Burrows	Member
Gayle Calverley-Miles (until Item 4.4)	Member
Tamara Cleford	Member
John Dainton	Member
Claudia Eberlein	Member
Alix Pryde (by video)	Member
David Riley	Co-opted Member
Jane Weir	Member

Apologies

Tariq Ali	Member (representing IOP at IUPAP in Trieste)
Rosalie Benjamin	Member
Elizabeth Cunningham	Vice-President for Membership
Martin Hendry	Member

IOP/ IOP Publishing Attendees

Tom Grinyer	Group Chief Executive Officer
Rachel Youngman	Deputy Chief Executive, IOP
Sukhraj Dhadwar	Group Chief Financial Officer
Louis Barson (by video)	Director of Science, Innovation & Skills, IOP
Tony McBride (by video)	Director of Policy and Public Affairs, IOP
Antonia Seymour	Chief Executive, IOP Publishing
David Howitt	Head of Governance & Compliance, IOP

Attendees for Specific Matters

Andrea Barber (by video)	Head of People & Organisational Development, IOP (Gender and Ethnic Pay papers)
Anne Crean	Head of Science & Innovation, IOP (Awards paper)
James Searle (by video)	IT Manager, IOP (Cyber Security paper)
Bridget Pairaudeau (by video)	Technology Director, IOP Publishing (Cyber Security paper)
Sam Brimble (by video)	Head of Digital Services, IOP Publishing (Cyber Security paper)

1 Standing Items

1.1 Welcome, Apologies and General Updates

- 1.1.1 Following a closed session of trustees and then with the CEO, the Chair welcomed everyone to the meeting. The meeting was quorate.
- 1.1.2 Apologies had been received from Tariq Ali, Rosalie Benjamin, Elizabeth Cunningham and Martin Hendry. It was noted that Tariq Ali was representing the IOP at the IUPAP Centenary Event in Trieste.
- 1.1.3 It was noted that some members were joining the meeting by video (details above).
- 1.1.4 It was noted that both Tamara Cleford and Tariq Ali would be standing down from Council on 30 September, and both were thanked for their contributions to Council during their terms of office.

1.2 Declarations of Conflict of Interest

Previous declarations of interest were noted. No trustees identified any other conflicts pertinent to the matters to be discussed in this Meeting.

1.3 Minutes

The minutes of the meeting held on 19 May 2022 were approved, subject to some corrections.

1.4 Action Status Report

The Actions Status Report was reviewed, and it was noted that all actions were complete, were being progressed, or were on the agenda for discussion at this meeting.

1.5 Other Matters for Discussion

- 1.5.1 It was noted that the Council elections were due to close on 18 July and that the winners would normally be announced at the AGM, with the actual voting numbers published in November as part of the Record of AGM (approved at the Council meeting in November). It was further noted that there had been feedback in 2021 about the length of time between the election closing and the publication of the voting numbers. Given the length of time between the election closing and the AGM and between the election and the Council meeting at which the Record of AGM would be approved, it was agreed that:
 - (a) successful / unsuccessful candidates should, following confirmation of the ballot results and subject to satisfactory scrutineering, be notified by email shortly after the close of the ballot; and
 - (b) the full results of the ballot (including voting numbers) should be published on the IOP website within a reasonably short period of the ballot closing (and not waiting until either the AGM or for the Minutes of the AGM to be approved by Council).

It was noted that, in the event that there was a tie between the second and third placed candidates, any decision and announcement of the election results would have to wait until the AGM in accordance with the terms of the Bylaws.

2 CEO Introduction

- 2.1 Tom Grinyer, as Group Chief Executive Officer, set out his thoughts following his first month in the role. He thanked all trustees, the Executive Team and staff for their warm welcome. He briefly set out his career history and how he saw the role of the Group CEO, including setting direction and delivering the strategy, delivering the objects of the IOP and upholding its Charter and Bylaws, and being a member of the IOPP Board. He outlined the financial challenges the IOP faced, including reductions in future gift aid contributions from IOPP, the £7.4 million pensions provision in relation to Normal Retirement Age Equalisation, and the unknown impacts of high inflation on costs and salaries.
- 2.2 He then outlined four key areas of focus:
- 2.2.1 Member Engagement, with a focus both on meeting the needs of existing members and looking at the requirements of potential members, with it being noted that there were around 60,000 – 80,000+ people in the physics community in the UK and Ireland;
 - 2.2.2 Influencing and shaping the physics/science debate, with a five-nation approach and the better use of partnerships and making new partnerships;
 - 2.2.3 Governance and Process, with a focus on improving existing governance and processes underpinned by strong induction for all trustees and staff, regular training and clear business planning.
 - 2.2.4 IOP and IOPP, with a focus on working together through the move to greater Open Access, addressing joint working opportunities and economies of scale, improving member engagement, and addressing opportunities for greater member focus.
- 2.3 There was a discussion about ensuring the right balance between mobilising the physics community to undertake activities and managing activities centrally, and how the IOP could use its resources to best effect.
- 2.4 It was noted that there were also potential opportunities for the IOP to work with Nations and Branches to help in the sharing of best practice.

3 Matters for Discussion

3.1 Executive Priorities Update

An update was provided by the Executive Team on key priorities for the Executive Team and the IOP Group. After an introduction by Tom Grinyer as Group CEO, key elements reported were as follows:

- 3.1.1 Influencing
 - (a) The IOP was reconvening its broad coalition of stakeholders, established for the Subjects Matter Report, to agree a shared narrative and to co-ordinate influencing work ahead of the UK Government's Autumn Statement.
 - (b) The IOP had also engaged with the Office of Science and Technology Strategy and ensured that education and skills was included in its 10 Point priority plan.
 - (c) Louis Barson and Lisa Jardine-Wright had attended a dinner at the House of Lords hosted by the Chair of the House of Lords Science and Technology Select Committee and by the President of the Royal Society. At this event the discussion was around strategic issues for education and skills, including a focus on community proposals for action on STEM and physics teachers, which had been well received.

Productive discussions had been held with the Department for Education Permanent Secretary, HM Treasury, some departmental Chief Scientific Advisors, and the Government Office for Science.

- (d) The R&D Blueprint had launched at the end of March and had led to good engagement. Three roundtable meetings had been run to engage stakeholders and influencers in the development of the Blueprint.
- (e) John Bagshaw had made a successful two-day visit to Northern Ireland. That had included a meeting with Northern Ireland's Commissioner for Children and Young People, who had committed to discussing with her Youth Panel their experiences of teaching and careers advice. If successful, the IOP would seek to make connections with the Commissioners in other nations, which could be a useful complement to the IOP's work to engage lawmakers and government officials.
- (f) The inception phase of the UK-Africa Research Collaboration Project had completed in April and the IOP was planning for the expected UK autumn statement. The Team had also recently visited Rwanda and Uganda and had plans to visit Tanzania and Kenya to build support for the proposal.

3.1.2 Physics Community

- (a) A research brief was in development with the Early Career Group to understand young physicists' career plans and aspirations, with the research expected to be published in early 2023.
- (b) Work was being undertaken to develop a more inclusive physics community, drawing on the R&D Blueprint, people and skills evidence, to inform support for transferrable skills.
- (c) The progression and competencies of professional registrations, including CPhys, was being reviewed and aligned with the work to develop a more inclusive physics community and revisions to degree accreditation.
- (d) A formal relationship had been established with the Blackett Lab Family through a signed Memorandum of Association. That reflected the strong EDI work undertaken by the IOP in recent years.

3.1.3 Physics: Shaping the Debate

- (a) The IOP would be increasing its activity to provide the membership and broader physics community with more opportunities to influence and shape the debate on issues that mattered to them. This meant building on strategic areas from data analysis work undertaken, to better engage with research and business communities.
- (b) There would be two key areas of engagement – innovation and technology, and sectoral, with much cross-over between the two. This would run as part of the IOP's productivity programme, with three to six impactful projects being run each year.
- (c) A pilot project to support BEIS in developing a National Quantum Technologies Strategy had progressed well and had improved the IOP's credibility and influence with BEIS.
- (d) There would also be work undertaken to continue the engagement started at COP26, with further opportunities for work with BEIS including around renewable energy strategies.

- (e) There was a pipeline of future opportunities building, which included medical physics, space, metamaterials and spintronics. Further work would be undertaken towards the end of 2022 to gather opportunities and to refine focus areas for 2023.

3.1.4 Publishing

- (a) As at the end of May 2022, IOP Publishing's revenues and net profit were in line with its Budget although the Russia/Ukraine conflict would have an impact on the full year net profit. It was noted that a new detailed financial plan was being developed and would be reviewed at the IOP Publishing Board Strategy Day in August, with a plan to take a full report to the Council meeting in November.
- (b) At the end of May, 40% of articles published were Open Access, an increase from 26% at the end of 2021, with the likelihood of an increase to 50% in 2023.
- (c) Colleague retention was a key focus. The labour market was thriving, inflation was driving up salary expectations and there was a continuing move to more remote-based global working. That was seen as both an opportunity and a threat.
- (d) The move to the new office in Bristol was running to time and budget, with the move expected to be completed in September 2022.

3.2 Annual Report and Accounts and Annual Returns

- 3.2.1 Sukhraj Dhadwar presented the Annual Report and Accounts and Trustee Letter of Representation for approval. Council noted that an earlier draft of these had previously been circulated to all trustees in May, with trustees invited to submit comments and that both documents had been reviewed by the Finance & Investment Committee and Audit and Risk Committee on 28 June. It was noted that an amendments log had been submitted to trustees and included in the meeting pack, outlining changes from the version Trustees saw in May, with such log detailing the amendments for the additional liability recognised for the accounting treatment for the Normal Retirement Age equalisation.
- 3.2.2 Council also noted the Executive Statement signed by the Group Chief Executive Officer who had also received assurances from key officers, with such Executive Statement recommending to Council that the Letter of Representation is signed and giving trustees assurance over the declarations therein.
- 3.2.3 It was noted that the Annual Report and Accounts and Letter of Representation were both recommended by the Audit & Risk Committee and Finance & Investment Committee.
- 3.2.4 After due discussion and careful consideration, and with the correction of one typographical error, Council approved and authorised:
 - (a) the Annual Report and Accounts to be signed by the President, Honorary Secretary and Honorary Treasurer and issued; and
 - (b) the Letter of Representation to be signed by the President and issued.
- 3.2.5 It was noted that the Annual Report and Accounts would in due course be published to members and would be submitted to the Charity Commission and Office of the Scottish Charity Regulator.

- 3.2.6 It was further noted that both documents would be circulated by DocuSign for signature.
- 3.2.7 Sukhraj Dhadwar then presented the proposed Annual Returns. He reported that an Annual Return was required to be submitted to the respective Charity regulators, together with the Annual Report and Accounts, by 30 September (Scotland) and 31 October (England and Wales). He reported that the Annual Returns were completed in large part from information from the Annual Report and Accounts.
- 3.2.8 After due discussion and careful consideration, Council:
- (a) approved the submission to the Charity Commission for England and Wales and to the Office of the Scottish Charity Regulator of the respective Annual Returns based on the data in the paper presented to them;
 - (b) authorised each of the President, Honorary Secretary and Honorary Treasurer to approve any final amendments made prior to filing such Annual Returns; and
 - (c) authorised each of the Chief Executive Officer, Chief Financial Officer and Head of Governance and Compliance to duly file each of such Annual Returns (with the Annual Report and Accounts) with each of the Charity Commission for England and Wales and the Office of the Scottish Charity Regulator.

3.3 Cyber Security Update

- 3.3.1 Bridget Pairaudeau, Technology Director, IOP Publishing, and Sam Brimble, Head of Digital Services, IOP Publishing, joined the meeting to give an overview of cyber security in IOP Publishing.
- 3.3.2 They outlined the key aspects of the IOPP cyber strategy, and the historical activity undertaken including a major cyber security review by PricewaterhouseCoopers in 2018, annual external penetration and disaster recovery tests, a Cyber Essentials review in 2021 and a Microsoft M365 security review in 2022.
- 3.3.3 They then outlined plans for 2022-23, including the completion of the adoption of a Central Endpoint Management Solution, further penetration testing, achievement of Cyber Essentials accreditation and the decommissioning of the existing finance system.
- 3.3.4 James Searle, IT Manager, IOP, then gave a presentation on cyber security in IOP. He set out the IOP cyber approach of risk assessment, remediation (through business continuity, cloud security and Endpoint) and monitoring (through tools, evaluation, alerts and training).
- 3.3.5 He reported that, in improving its cyber security strength, the IOP had moved from physical to cloud services, a fully automated updating regime and the adoption of tools to reduce exposure to malicious emails and websites and to increase staff awareness of the risks.
- 3.3.6 He further reported that the IOP would be undertaking an external cyber security review shortly and would also be looking to renew its Cyber Essentials accreditation.
- 3.3.7 There was a discussion about the risks of an international cyber-attack. It was reported that the IOPP had recently adopted additional security policies for the access of content by external parties. The IOP had also implemented geo-fencing so that staff could only log-on from known country locations.

3.3.8 It was reported that the main threat was still considered to be from 'social engineering', with staff for example being tricked into opening a phishing email or accessing a malicious site. The IOP and IOPP did however have lower levels of failure than industry averages in such areas. Whilst the IOP did not have formal training in this area, regular reminders were published, and formal training was being considered. The IOP ran phishing simulation exercises and any staff who failed were required to undertake additional training.

3.3.9 It was noted that the IOP also now had cyber insurance in place.

3.4 Council Meeting Planning

3.4.1 Tony McBride updated Council on plans for the Council meeting in February 2023, and the proposed programme of activity, which Council duly noted. He reported that the proposal was for a two-day programme at the Advanced Manufacturing Research Centre in Rotherham. It was noted that a more detailed proposal would be taken to the Council meeting in November, but the following requests and suggestions were made by trustees:

- (a) avoid all half term weeks in February if possible;
- (b) consider the involvement of the Yorkshire Branch in the programme as well as local physics related businesses;
- (c) consider having elements of the programme for teachers and for those who train on apprenticeship programmes; and
- (d) consider involving Barnsley Technical College which had a close relationship with the AMRC.

3.5 Gender Pay and Ethnicity Pay Gap Reports

3.5.1 Andrea Barber presented to Council the IOP Gender Pay Gap Report, which Council duly noted. She reported that this was the fourth year that the IOP had made a voluntary declaration of its gender pay gap. She reported that the IOP mean gender pay gap was 18.1%, an increase of 6.6% from 2021, and that the median gender pay gap was 9%, an increase of 7.6% from 2021. There were two primary reasons for the increased pay gap. The first of these was that, when staff were TUPE transferred on three education projects during the year, a higher proportion of female staff at more senior levels left the IOP. The second main reason was the balance of the gender split at the lowest pay grades, which saw a higher female percentage.

3.5.2 There was a discussion about flexible working, and any impact that could have on the data.

3.5.3 It was noted that, as the data was calculated after removing salary sacrifice calculations, female salaries could look artificially lower if there was a higher female uptake of salary sacrifice benefits.

3.5.4 It was noted that, because the data sets were so small, the number of employees was low, and there were set parameters by which all companies reported, it was difficult to make any detailed statistical analysis of the data.

3.5.5 Andrea Barber also presented the IOP Ethnicity Pay Gap Report which had been produced for the first time and which Council duly noted. She reported that there was no legislation on how to calculate or present the data and so CIPD guidance had been utilised. 98% of staff had declared their ethnicity which was seen as very positive and an indicator of trust. There was a discussion about the presentation of the data and about whether, given the small sample sizes noted in the presentation, meaningful conclusions could

be drawn from it. It was agreed that, before the data was published, Andrea Barber would liaise with Lisa Jardine-Wright and Dave Delpy to seek their further advice on the presentation.

3.6 Awards

- 3.6.1 Anne Crean joined the meeting and provided an overview of the 2022 awards process and of the recommended award winners. She thanked all the awards committees and panels for their time and dedication in reviewing all nominations.
- 3.6.2 Council noted key data and information on the awards process including the number of nominations received, the percentage of awards made, key EDI data and areas of review for future years. Council further noted that, across the board, panels and committees had commented on the fact that the quality of nominations and applications was of an excellent standard.
- 3.6.3 Council noted that, whilst the governance cycle had not enabled a full meeting of the Nominations Committee to discuss the award winners, all recommended award winners had been sent to the Committee for review and comment.
- 3.6.4 After due discussion, Council noted the highlights from the 2022 IOP Awards and areas to address, and approved the 2022 IOP Award winners, but made such approval conditional on majority written approval also from the Nominations Committee.
- 3.6.5 Council also noted the presentation given on proposed changes to the awards process and cycle from 2023 and, after due discussion:
- (a) noted and supported the proposed changes to the administration process for IOP Awards to be operated by 'community facing' teams rather than a central awards team, but noting that there would remain a central co-ordination function to ensure that a consistent approach and messaging was taken;
 - (b) noted and supported the plan to celebrate the IOP Award winners at an annual IOP Community Gathering in the summer in 2023;
 - (c) noted the proposed IOP Awards cycle going forward; and
 - (d) approved that the Business Awards Judging Panel select winners of the Medals and Prizes for research excellence by individuals in a business and commercial context, instead of the Awards Committee.

3.7 Financial Reports

- 3.7.1 Sukhraj Dhadwar then presented a Financial Report, including a summary of income and expenditure for May 2022, an overview of investment performance, and financial models through to 2030 showing operating cash, capital expenditure and reserves, and changes in cash and investments. It was noted that the £7.4 million provision included in the Annual Report and Accounts was not included in the financial forecasts as that was a worst-case estimate which was still to be determined.
- 3.7.2 He reported that, whilst there were a number of areas of expenditure which were better than the Q1 Forecast, staff costs were higher than forecast. Overall, the year-to-date surplus was higher than forecast, although it was expected that some expenditure would catch up over the remainder of the year. Equity investment values had fallen although that was partly offset by improved property investment values.

- 3.7.3 There followed a detailed discussion about the financial modelling to 2030, the impacts on it of the £7.4 million pension provision, the level of investments which may need to be realised over the period to maintain reserve levels, the impacts on both the IOP and IOPP businesses of making the financial savings required, the reduction in some grant income by moving from a delivery to an influencing model, and the potential impact of prolonged high inflation.
- 3.7.4 It was noted that the future IOP and IOPP strategies were critical in smoothing the financial modelling curves and that more detailed information would be available after the August IOPP Strategy Day.
- 3.7.5 It was agreed that, for the November Council Meeting, as well as further information on the underlying factors behind the financial plan, there should be a presentation of different models/ scenarios and their impact on the plan.
- 3.7.6 After due discussion, and subject to the above, Council:
- (a) noted the May Income and Expenditure results and movement in investment values;
 - (b) noted the Defined Benefit Pension update and the recommendation of the Finance and Investment Committee not to make Additional Contingent Contributions; and
 - (c) noted the updates to the Financial Model to 2030.

4 Matters to Note

- 4.1 Council reviewed and noted the Programme Activity Narrative (noting the updates provided on the Limit Less Campaign, IOP Publishing, the Productivity Programme, the Ecosystem Programme, the Challenge Fund and the Transformation Programme) as well as the Corporate Dashboard which set out progress against the strategy, key risks, key financial metrics and key staff data.
- 4.2 Council also reviewed and noted the Membership Update Dashboard.
- 4.3 Council noted:
- 4.3.1 the reports from the meetings of the Finance & Investment Committee and Audit & Risk Committee, both held on 28 June 2022; and
 - 4.3.2 the report from the meeting of the IOPP Board held on 13 May 2022, noting that it included a reference to the IOP having approved financial parameters. Council noted that, whilst it had approved a direction of travel, the details of future financial operating parameters would be the subject of further scrutiny.
- 4.4 Council also noted the policy updates presented. It was noted that there was currently no UK Science Minister. Council agreed to the proposal for Tom Grinyer as Group CEO to explore with other societies the potential to issue a joint statement on this matter.
- 4.5 Concern was expressed about the lack of progress with Horizon Europe and the resultant loss of talented physicists overseas. It was noted that the IOP had been unable to meet with the previous Science Minister when he was in post, but was continuing dialogue with BEIS and other societies including the Royal Society for Chemistry and the Royal Society for Biology. It was noted that a letter would be sent to the Chancellor and Business Secretary to highlight the importance and urgency of association to Horizon Europe.

5 EDI and Net Zero Considerations from the Meeting

It was noted that there had been a number of discussions on EDI matters during the meeting, including in the presentations on gender and ethnicity pay gaps.

6 Any Other Business

- 6.1 Rachel Youngman reported that it was hoped to have the Dublin building partially open by the end of the year. She also reported that work was due to start on 19 July to improve the external appearance of 33 Caledonian Road.
- 6.2 Congratulations were expressed to Lisa Jardine-Wright for her award of an OBE in the recent Honours List.

7 Dates of Next Meeting

- 7.1 It was noted that the AGM would be held as a physical meeting on 1 September and that other events were being arranged on the same day to encourage more members to attend.
- 7.2 It was noted that the date of the next Council Meeting was 10 November. Discussions were being held to potentially hold this in Bristol.

8 Close of Meeting

There was no further business and so the Chair declared the meeting closed.