IOP | Institute of Physics In Scotland

Putting Learners at the Centre:

Delivering our Ambitions for Post-16 Education

A joint response from Institute of Physics and the Scottish Universities Physics Alliance to a Scottish Government paper

A full list of the Institute's submissions to consultations and inquiries can be viewed at www.iop.org

23 December 2011

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Putting Learners at the Centre
Scottish Government - Colleges and Adult Learning
Funding and Policy Division
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

IOP | Institute of Physics In Scotland

Dear Mr Russell,

The Institute of Physics in Scotland is a scientific membership organisation devoted to increasing the understanding and application of physics. It has nearly 3000 members and is part of the Institute of Physics.

SUPA is a research alliance in Physics formed between 8 major Scottish Universities (Aberdeen, Dundee, Edinburgh, Glasgow, Heriot-watt, St Andrews, Strathclyde and West of Scotland. The aim is to place Scotland at the forefront of research and innovation in physics through an agreed national strategy, an inter-institutional management structure, and co-ordinated promotion and pursuit of excellence.

The Institute of Physics is a scientific charity devoted to increasing the practice, understanding and application of physics. It has a worldwide membership of around 40,000 and is a leading communicator of physics-related science to all audiences, from specialists through to government and the general public. Its publishing company, IOP Publishing, is a world leader in scientific publishing and the electronic dissemination of physics.

IOP and SUPA welcome the opportunity to respond to the Scottish Government's paper on post-16 education. The attached annex details our response to the questions listed in the consultation.

If you need any further information on the points raised, please do not hesitate to contact us.

Yours sincerely,

Mr Stephen McGeoch
Chair IOP Scotland

Professor Jim Hough
Chief Executive Officer, SUPA

James Hough

Professor Peter Main
Director, Education and Science

Peter C. Main

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IOP Response to Putting Learners at the Centre

Summary
The main priority of the Institute of Physics' (IOP) and the Scottish Universities Physics Alliance (SUPA) is that Scotland continues to produce good numbers of well-trained scientists. The outputs from higher education (HE) and further education (FE) include new knowledge and highly educated, skilled people; both are essential for a vibrant economy.

EFFICIENT, FLEXIBLE LEARNER JOURNEYS

How can we ensure delivery of an appropriate place in post-16 learning for all 16-19 year olds? What are the priority actions?

At the highest level we need to ensure that the range of opportunities is linked to the Scottish Government's purpose. The priority actions are to ensure there is a suite of opportunities for all learners and there is a consistent and clear set of pathways that allow individual journeys to appropriate employment and/or more education.

In considering the proposed package of measures for improving the learner journey, where should the focus be to improve pathways for all learners? What actions are required to make progression more coherent for learners?

Although Curriculum for Excellence is a step in the right direction, schools and the curriculum still do not make sufficient provision for the development and recognition of "vocational" skills and opportunities. The IOP and SUPA would like to see a much tighter integration between schools and colleges in offering subjects such as welding, plumbing, mechanics, and other trade-oriented certification for young people. This would involve articulation throughout progression and consistent tiers of qualifications

A measure of success for this would be students leaving education at 18 or 19 with good National 5 or Higher qualifications and portable technical skills in their portfolios.

A potential barrier to a flexible learner journey is the curriculum structure currently being proposed or implemented in S2-S4 in many schools. These are likely to restrict the access of students to these National 4 and 5 courses. It would be a great pity if SQA develop modern and relevant National 4 and 5 courses that both prepare students well for further study at Higher, Advanced Higher and university or for employment in science and technology based industries, but that many students cannot access due to schools offering only a choice of five or six subjects in S4. Modern science and technology is multi-disciplinary in nature. Schools and local authorities must be encouraged to introduce curriculum structures that do not mitigate against doing more than one of the sciences; if Scotland is to have the scientific and technologically literate population it will need in the future, the structure should allow the study of maths and several of the science and technology subjects in S2-S4 (as well as some choice of languages, social subject and creative subjects).

How effective is the SCQF in promoting flexible learner journeys? Are there any barriers and, if so, how could they be overcome? How could the SCQF be used more effectively to deliver our aims?

The SCQF currently is only partially effective as it is not widely used or well known. The barriers include the difficulty and cost of having courses accredited, particularly for smaller courses such as in-house CPD courses. This could be overcome by recognising that employer provided CPD is an important aspect of learning and if these are accredited in an appropriate manner this will encourage employers to contribute to the cost of education within the state system.

IOP and SUPA agree with the aim to develop more flexibility in teaching programmes in order to accommodate the changing demography of learners. In particular, there is likely to be more demand for part-time learning, as mature students and employees return to education. Allowing entrance and exit points at different SCQF levels are welcomed by IOP and SUPA. Degrees with progression routes and emphasis on graduate skills are also welcomed, particularly in terms of increasing participation in HE. We are aware that there is a shortage of qualified technicians in the university sector and industry, and more flexibility could help to increase supply. However, in a sector where most who attend university aspire to become honours graduates, until SCQF levels become better known, the marketing of SCQF levels to attract sufficient numbers of students presents a challenge. Further to this, we note that flexible qualifications will only succeed if there is an employment market.

What more can the Government and its partners do to encourage more articulation between colleges and universities?

The Scottish Government should ensure that both sides of the FE/HE divide are aware of what they have to offer. There are several exemplars worth pointing out such as Arlene McConnell, the 2010 Young Woman Engineer of the Year who went from a college course on automotive engineering to a first class honours degree in electronic engineering. Another example of successful articulation between multiple public and private partners is the “Engineers of the Future” programme. This project combines college and university learning as well as blending work with education and the journey ranging from school leaver to Chartered Engineer after several years in industry.

What scope is there to make the transition from school to university more effective for learners, while reducing unnecessary duplication?

There are still problems with the pre-university preparation of students in physics, particularly in practical work, problem solving and the ability to apply mathematics, which can result in the non-completion of degree courses. That said, most universities offer a good introduction to their courses with new and appropriately revised materials.

We don’t believe there is a case to enforce a rule such as choosing between 6th year and direct entry to 2nd year or leave after 5th year and go into 1st year. These routes may be correct for some learners but not necessarily for all. The 6th Year should focus on developing independent learning skills and project work. We support the Scottish Baccalaureate as an important new qualification in this space and encourage universities to embrace it.

One way of combating this interface problem is to have teacher fellows – schoolteachers seconded for a year or so to university departments – who are able to work with academics on this issue. One successful example of this type of scheme was the IOP Teacher Fellowship Scheme[1], where teachers embarked on a series of

[1] IOP Teacher Fellowship Scheme
http://www.iop.org/education/higher_education/stem/resources/page_43344.html

initiatives aimed at easing the transition between school and university physics. This also forged and fostered stronger links between schools and university physics departments.

In terms of improving university teaching, funds must continue to be provided for the development and delivery of innovative teaching initiatives which will need to take account of the particular characteristics of individual subjects. This would be most efficiently developed at a national level rather than by individual universities. Using physics as an example, methods could be used to deliver laboratory-based skills in a more efficient manner.

Universities already have strong and productive relationships with students: from formal links to EUSA via the university, to the Class rep systems. Some partnership, where roles for and responsibilities of both universities and students are clear would be welcome. The professional bodies could have a role in improving relationships with students. For example, the IOP have a membership especially for 16-19 year olds. A scheme where these members have a chance to visit universities to ease their transition could be set up through the IOP.

WIDENING ACCESS TO POST-16 LEARNING

What do we need to do to ensure the Government's commitment, through Opportunities for All, to post-16 education and training for all 16-19 year olds is delivered to more vulnerable young people? What are the priority actions?

Improving the image of science and technology subjects and careers is the key priority action. It has been shown that the best indicator for determining progression in science is prior attainment at younger ages[2].

It is vital that widening of access does not dilute quality, and that risk is especially worrying in subjects, such as physics, which rely on a high level of mathematical ability and specific knowledge and skills. It does no-one any good to attract weak students only for them to fail in their first year. These skills should be developed in school. It is often too late to intervene by the time students enter university

Priority actions should include taster sessions for potential students, so that they know the demands which will be made of them. Access courses should be carefully articulated with the course of study which will follow.

Research has shown that young people are influenced by a complex range of societal factors when deciding what to study[3]. But our understanding is incomplete on how these factors impact on different groups and there is much to be learnt about putting this research into practice to understand what can be realistically done at the school level to moderate these factors. More research needs to be carried out into what societal factors influence different groups in how they make subject choices, and what practical approaches are proven to work at the school level to build a culture where STEM subjects are seen as for everyone.

For some years, the IOP has worked to identify and overcome the barriers to participation in physics for women, people from ethnic minority groups and people from lower socio-economic groups. The IOP's initiatives include *Girls in Physics*[4] to understand why only around 20% of those taking physics post-16 are female; the

[2] Schools that make a difference to the post compulsory uptake of science http://www.york.ac.uk/media/educationalstudies/documents/research/AZ%20FINAL%20REPORT%2023%20June%202011.pdf

[3] Aspires project http://www.kcl.ac.uk/sspp/departments/education/research/aspires/aims.aspx

[4] Girls in physics, IOP; http://www.iop.org/education/teacher/support/girls_physics/page_41593.html

Ethnic Diversity Pilot[5] project to explore the practical approaches that will encourage students from diverse ethnic background to choose physics; and the *Raising Aspirations in Physics* (RAP) project to work with a school in North East England to investigate how to promote physics to students from lower socio-economic groups.

The IOP is very experienced working with teachers, and its initial efforts to improve diversity have focused on helping teachers deliver lessons that engage the broadest range of students. The IOP is now moving towards a view that changing schoolchildren's perception of physics involves impacting on a range of societal factors that go beyond what can be addressed inside a physics classroom. Some of these could perhaps be addressed by examining the culture of the school as a whole and the messages it gives to pupils and their parents. The IOP has begun to explore how this could be achieved when working in partnership with schools.

What more could the Government and its delivery partners do to improve retention and progression, building on Opportunities for All?
IOP and SUPA note the intention to consider placing a 'statutory duty' on universities to 'seek out those with the greatest potential who would be identified with reference to their grades and their situation'. Many universities already work with schemes such as LEAPS and Reach Scotland to aid those students who have not had the best schooling, but the deficiencies of previous years' schooling take time to rectify. In order to remain internationally competitive, universities must provide students with an appropriate level of physics and mathematical training to fit them for postgraduate research or jobs in industry. This sets a gradient for learning which is steep for under-privileged students and their position would not necessarily be improved by making a statutory duty of this. This point is particularly true for subjects that require specific knowledge and skills on entry.

How can we maximise the contribution of Community Learning & Development to widening access? What examples of good practice can we build on?
No comment.

What do we need to do to help more people from the most deprived backgrounds get a place at university? How can we frame this in legislation?
The main issue here is of aspiration. Research shows that we have to work with the early years in secondary school and even in primary school[6]. Also, it should be made easier for people to enter university and college later in life, when they may have realised the value of an education.

Investment and activity should be focused on low socio-economic groups and ethnic minorities, with funding provided to both local authorities and universities. An extension of the SFC funded REACH programme should be considered. Positive efforts should be made to correct the sectoral segregation between genders by encouraging a more equal take-up by men and women in all subjects. The focus should be on subjects which add value, particularly STEM.

ALIGNING NON-ADVANCED LEARNING AND SKILLS WITH JOBS AND GROWTH
What are the advantages and disadvantages of prioritising investment in learning and skills which support jobs in key and high participation sectors?
IOP and SUPA believe that prioritising investment in key sectors would be highly advantageous. For instance, the benefits to the economy of STEM skills have been

[5] Ethnic diversity (pilot), IOP; http://www.iop.org/policy/diversity/initiatives/ethnic/page_42663.html
[6] Aspires project http://www.kcl.ac.uk/sspp/departments/education/research/aspires/aims.aspx

well documented. Also, the specialist training that makes such graduates very widely employable in a huge range of STEM and non-STEM jobs.

The massive increase of students in HE over the last decade has led to a squeeze on SFC funding being allocated to high-cost scientific subjects such as physics and chemistry, whose undergraduate numbers have decreased in proportion to the total cohort of university undergraduates. These are the subjects that have the greatest contribution to the sustainable economic growth of Scotland. The funding system should be set up to reward universities which recruit students for STEM subjects.

How do we best target our resources in support of jobs, growth and life chances? For example, should we focus on level of qualification, age groups or labour market status?

The place of physics within the education system needs to be strengthened if Scotland is to train successfully a new generation of physicists and engineers who can contribute to every sector of our economy, including key sectors such as energy. The level of qualification, age group or labour market is not as important as the subject studied.

Physics is an essential component of the Scottish economy, with physics-based businesses contributing as large a share as finance or construction[7]. A wide variety of employers are keen to snap up people with a physics qualification, as they know it demonstrates a valuable recruit with many transferable skills[8].

There is an urgent need for an independent study of career prospects from various degree subjects. The studies to date have tended to be based on the Labour Force Survey, which is reliable but does not have a large enough database, or first destination data, which are highly unreliable. The UK and, therefore, the Scottish Government has access to data via the Inland Revenue, the National Census and the Student Loan Company. It could provide a vast, reliable data set. Then decisions could be made based on evidence.

Do we have the right systems and structures in place for articulating employer needs (locally, regionally and nationally) and those of the wider economy? Which of the existing structures are effective and could be applied more widely; which are ineffective and can be improved?

It is imperative that an educated student market is created. A significant problem facing STEM, and particularly physics, is that students are making ill-informed subject choices between the ages of 12–15. Teachers, parents, careers advisors should be in a position to highlight the benefits and the wide variety of career options that are available through STEM. This might be achieved by a combination of approaches, including training of careers advisors (who tend to come from non-scientific backgrounds) and science teachers in careers. IOP and SUPA recognise that the need in schools and colleges is to promote opportunities across the whole spectrum of STEM and therefore careers work must be done in partnership. IOP already works with other professional bodies to produce joint literature and attend events promoting careers from STEM.

An example of collaboration by the different STEM subjects is the website 'Future Morph'[9] which was launched by the Science Council in 2008. It was "set up to show that studying science, technology, engineering or maths beyond the age of 16 isn't

[7] Physics and the Scottish Economy, Institute of Physics, September 2007 http://iopscotland.org/publications/iopscotland-publications/page_51307.html
[8] Physics in Scotland http://iopscotland.org/publications/iopscotland-publications/page_51308.html
[9] www.futuremorph.org.uk

just a one track road to becoming a scientist or engineer – the skills and knowledge you gain are valuable in almost any career and will make you very employable."

Careers advice should not be restricted to schools. Parents play a large part in the subject choices of pupils. There should be a wide-range of careers advice not just for STEM but across all disciplines and available in many locations so that everybody has an opportunity to make informed subject and career choices.

In terms of the needs of employers, there needs to be an expansion of the linkage between undergraduate courses with employers. Currently, there is a lack of quality information available on employers' needs; it is usually related in the form of anecdotes. The lion's share of the challenge here lies with universities that are faced with trying to deliver graduates with both employability skills and subject specialism. A major problem is that universities have no incentive to offer subjects in the national interest and the current funding system (as discussed earlier) encourages subjects that are not, i.e. that are cheaper to run. If the Government wants more people in STEM subjects it should ensure that universities have good financial reasons for recruiting them.

Employers themselves need to be more engaged. There is a need for careers days at schools, sixth form colleges and universities where employers can have the opportunity to explain what skills they need. Students need to know that there are real jobs in STEM subjects which do not close doors to more general careers. Careers offices may need to develop better ties with local high tech industry, and courses may also need to be better planned to allow useful work experience. Students should be able to do this themselves, but if careers services could provide better support for STEM jobs, it could maybe help engage students far better with industry after they graduate.

At the university-level, the main barriers for employers are the perceived costs of involvement in providing careers information and guidance, particularly as they would like to see a return on their time and effort. Many physics-based businesses are of the view that there are fragmented approaches from universities in using careers information. However, there is also a general perception amongst universities that most businesses only engage in providing careers advice when there is an acute shortage of potential employees.

Therefore, confidence needs to be restored within businesses that their efforts will be reflected in the effective and efficient use of materials by skilled university careers staff and teachers, and that such involvement will put them ahead of the competition for recruitment. One option that could be considered is for them to engage more closely with university departments to advertise positions and to take recommendations of potential students.

The Government, in partnership with other organisations, must encourage more interactions between employers, universities and FE colleges, in terms of various types of placement provision, employer involvement in courses, innovation and enterprise, and gaining evidence-based feedback from employers on the employability of students.

Professional bodies could play a key role in creating, maintaining and transferring a meaningful dialogue between Scottish industry, academia and schools and colleges.

How can we maximise the contribution of community learning & development to improving people's job prospects? What examples of good practice can we build on?
No comment.

MAINTAINING SCOTLAND AS A GLOBAL LEADER IN UNIVERSITY RESEARCH
How best can we maximise the impact of our excellent research?
One proven method of achieving excellence in research and innovation is to encourage and finance collaboration and coherence between university research groups, such as the successful SUPA, which should continue to be supported with sufficient funding to carry out its excellent work.

Research alignment with Government priorities is a reasonable aspiration, but this should not prevent curiosity-led research which can have much more significant long-term benefits. Within modern physics one only has to think of quantum mechanics leading to semiconductor devices, or electromagnetism giving rise to telecommunications to understand these effects. Innovation comes from unexpected sources. The priorities set by governments are similar the world over: Scotland is a small country and can little impact in well-trodden areas.

It is important to concentrate funding on research excellence and this does involve strategic decisions. Alignment, however, is not simply an issue of fitting university research to national priorities; it must be obtained through consensus between the research-excellent universities and SFC. Those universities with a track record of world-class research will bring an international dimension which is vital if the national view is not to be myopic. As noted above, strategy and curiosity are both important and we need to encourage novel ideas which are "pre-strategic".

When assessing economic impact it is important to take a long view because it can take decades for a key academic idea to reach its full potential in industry or society. In many STEM areas, none more so than physics, much impact comes through international research communities which combine theory and application. It is unclear what mechanisms will allow for the development of young researchers, in that it can take 5-10 years for promising talent to mature to the level of "excellence" at the national and international level.

How can we help Scottish universities and businesses collaborate more effectively in bidding for European funding?
Scottish Enterprise and Highland and Islands Enterprise could act as a knowledgeable broker. An IOP report on "Supporting Physics in Business found that knowledge of European programmes was low in innovative businesses[10]. The report also recommended that carefully focused support for innovation would be vital for firms in the future. We should adopt a Team Scotland approach to ensure that the economic benefit of European funding flows to the Scottish economy. Too often the university research ends up being exploited by companies outside Scotland.

The proposal for additional support for research pools to apply for EU Framework 7 and Horizon 2020 funding is welcome. However, the IOP and SUPA have concerns that the amount of monetary support is relatively low and that there is no clear plan as to how to gain added value from the fund. Match funding from the Scottish Government may be a solution to this.

[10] Supporting Physics in Business, Institute of Physics, March 2011
http://www.iop.org/publications/iop/2011/page_50369.html

How can the quality and coherence of PhD training be improved?
SUPA's Scottish graduate school in physics is an example of a successful initiative, which runs an intensive postgraduate training programme for Scottish physicists. The programme offers significant benefits in terms of efficiency and breadth of coverage. However it works on the basis of sharing expertise from the contributor universities, not by transferring staff to a single central research school, which would be too bureaucratic and expensive in the current climate. It makes use of video conferencing facilities to share expertise throughout the SUPA universities. Reviews of the SUPA Graduate School have commented on its excellence. This success has led to the award of three EPSRC centres for doctoral training (DTC), which are also examples of good practice in shared training.

Another example of PhD training is the Industrial Doctorate Centre (IDC) in Photonics which allows students and company employees to carry of doctoral level research whilst based in a company. This model should be expanded to other areas particularly reviving the iSLI EngD centre.

Both the CDT and the IDC models offer a mixture of research, education and skills. However, this mixture would be improved if the CDTs covered a wider number of research areas. There is too much concentration on certain areas at the moment.

More structured training should be provided in both the subject and transferable skills. This is already proving a success within the SUPA Graduate School and allied programmes such as the CDT in condensed matter. Universities should relax their four year limit on the PhD to, say, five years, and studentships should be extended to four years.

On the matter of aligning PhDs with industry, most PhDs are curiosity-led. Often this curiosity benefits industry but the leadership comes from academia, where one can take a longer-term view. It would be better for industry to align with the aims of the best academic groups and be prepared to invest wherever the synergy is greatest. A single policy may not suit all universities, and it would be wrong to damage long-term capability in pursuit of short-term, small scale economic impact. CASE studentships already exist and many are successful within physics. It might be useful to review their take-up across the field in Scotland.

What would be the main activities of a single knowledge exchange office? What activities are best left to individual universities?
Knowledge exchange between universities and businesses can be a complex process; however, a strong research base, comprising both pure and more applied science is necessary to create the ecosystem which will result in knowledge being exchanged between academia and industry in a way that is beneficial to both players, and also to Scotland as a whole. A KEO should set broad principles and seek to simplify and speed up the interactions between universities and industry. It should act as a single portal to coordinate the activities of the BDMs in the individual universities. A model where support was continued for Interface, commercialisation offices and knowledge transfer teams should continue to produce good results in this area.

FAIR AND AFFORDABLE STUDENT SUPPORT ARRANGEMENTS
Given the financial constraints, should we prioritise an entitlement-based approach or the level of payment each student receives? What other options are there?
It is essential that there is a system of charging that is not financially disadvantageous to those who study subjects like medicine, engineering and laboratory-based sciences such as physics and chemistry. In addition, for subjects

like physics, chemistry and engineering a significant fraction of the undergraduate cohort is enrolled on five-year courses, so further financial pressures exist.

The Scottish Government should consider correcting the iniquity of its funding of 5 year undergraduate degrees such as MEng or MPhys whilst not funding a four year honours degree e.g. BSc, followed by a one year MSc. Again this is an example of the artificial rigidity of parts of the education system. Such an arrangement would be very attractive to both students and employers as it combines the broad undergraduate education with more focused technical training. An example is the long standing and well regarded MSc run by St Andrews and Heriot Watt in Lasers and Photonics which now only attracts self-funded home students.

How can FE bursaries and EMA be targeted fairly and more effectively?
No comment.

Should delivery of financial support – irrespective of where people learn – be centralised? What are the pros and cons of this approach?
As a general principle, the IOP and SUPA do not favour a funding system, whether centralised or not, that in any way discourages students from families of modest means participating in higher or further education if they have the ability to benefit from it.

Should student support arrangements align with our ambitions for jobs and growth? If so, what might this look like in practice?
IOP and SUPA agree that support arrangements should align with Government priorities. In practice, the teaching of strategically important subjects should be better supported by the SFC.

EFFECTIVE AND SUSTAINABLE DELIVERY
What are the pros and cons of our proposals for the regionalisation of colleges? Are there other criteria we should consider in determining the optimal regional structure?
No comment.

What more could the Government and its delivery partners do to improve collaboration between post-16 learning, including CLD and employment support services?
No comment.

What are the pros and cons of the new leadership and support role envisaged for the SFC? What lessons can we learn from successful change management elsewhere?
One of the roles of the SFC should be to identify key disciplinary areas of excellence in Scotland and ensure that these are strengthened, not damaged, by collaboration/merger arrangements. The pools are fundamental to help us understand what is practical. The alignment of aims and the building of trust, between SFC and key universities are critical.

SIMPLIFICATION OF THE FUNDING SYSTEM AND INCOME GENERATION
What are the pros and cons of the proposed needs-based regional commissioning model for colleges?
No comment.

Is there a market for co-investment with employers? If so, how do we select the employers with whom we might co-invest in order to maximise the leverage of Government funding? On what basis should Government funding be made available?
No comment.

In what circumstances would it be appropriate and fair to expect people to pay for their learning?
No comment.

What are the advantages and disadvantages of pooling funding for pre-employment support? What lessons can we learn from examples of pooled funding elsewhere?
No comment.

PERFORMANCE, GOVERNANCE AND ACCOUNTABILITY
Given the proposed changes to post-16 provision (non-advanced learning and skills) and delivery set out in this document, what are the key considerations for governance?
No comment.

What measures should form the basis of our performance management framework for colleges and training providers in order to improve outcomes for all learners?
No comment.

How do we ensure a strong focus on improving outcomes for those furthest from the labour market? What are stakeholders' experiences of this?
No comment.

What are the advantages and disadvantages of an enhanced role for Education Scotland in supporting continuous improvement in the college and skills sectors?
There would be an advantage in a more integrated approach in dovetailing continuous improvement in colleges with that in schools. However, there is a risk that Education Scotland will not be provided with the resources provided to implement such an enhanced role.

The Institute of Physics is a scientific charity devoted to increasing the practice, understanding and application of physics. It has a worldwide membership of over 40,000 (3,000 in Scotland) and is a leading communicator of physics-related science to all audiences, from specialists through to government and the general public. The Institute of Physics represents its members in Scotland through an active volunteer network and two members of staff based in Scotland.

IOP | Institute of Physics In Scotland

22-26 George Street
Edinburgh
EH2 2PQ

Tel: +44 (0) 7917855940
Email: alison.mclure@iop.org
Website: http://www.iopscotland.org
Registration No SC040092