CONTENTS

President’s Report 3
Report of the Company Secretary 4
Treasurer’s Report 6
Science, Engineering and Technology Committee 7
   Clinical Engineering Special Interest Group 8
   Diagnostic Radiology Special Interest Group 9
   Emerging Technologies Special Interest Group 10
   Informatics and Computing Special Interest Group 10
   Magnetic Resonance Special Interest Group 10
   Nuclear Medicine Special Interest Group 11
   Physiological Measurement Special Interest Group 11
   Radiation Protection Special Interest Group 12
   Radiotherapy Special Interest Group 13
   Rehabilitation Engineering and Biomechanics Special Interest Group 14
   Ultrasound and Non Ionising Radiation Special Interest Group 15
Academic Development Group 15
Publications Committee 16
   Medical Engineering and Physics 17
   Physics in Medicine and Biology 18
   Physiological Measurement 18
   SCOPE 19
   Journal of Medical Engineering and Technology 19
Accreditation and Training Committee 20
   Clinical Scientist Education and Training Panel 21
      Training Centre Accreditation Sub-Panel 21
      Course Accreditation Sub-Panel 22
      Part I Registrar 22
      Part II Registrar 22
      Chief Examiner 23
   Clinical Technologist Education and Training Panel 23
      Training Centre Accreditation Panel 24
      Course Accreditation 25
      Chief Moderator’s Report 25
      Registrar’s Report 25
      Professional Development Panel 26
      Continuing Professional Development 26
      Post Registration Training 26
      Ionising Radiation (Medical Exposure) Regulations 2000 Course Approval Panel 27
      Membership Panel 27
Associate Physicists and Engineers Network (APEN) 28
Associate Technologists’ Network (ATeN) 28
Engineering Group Board 29
Clinical Technologists Committee 30
Other sub-committees of Council 31
   Awards Panel 31
   Professional Conduct Committee 31
External Relationships 32
   Institute of Physics Medical Physics Group 32
   Liaison Group with the Royal College of Physicians 32
   Science Council 33
   Engineering and Technology Board/Engineering Council (UK) 33
   RPA 2000 34
   Royal Academy of Engineering: UK Focus for Biomedical Engineering 34
   Radiology and Oncology Congresses 35
   Association of Clinical Scientists 36
   Federation for Health Care Science 36
   BSI Standards 37
International Relationships 37
   The European Alliance for Medical and Biological Engineering and Science (EAMBES) 37
   International Organisation for Medical Physics (IoMP) 38
   European Federation of Organisations for Medical Physics (EFOMP) 38
   International Federation for Medical and Biological Engineering (IFMBE) 39
   International Union for Physical and Engineering Science in Medicine (IUPESM) 39
   International Radiological Protection Association (IRPA) 40
Membership of IPEM Committees 2007-2008 41-47

IPEM Annual Review 2007
President’s Report

The Institute continues to enjoy an excellent international and national profile. At the World Congress in Seoul, IPEM was one of the few national member organisations to exhibit in order to promote membership and publications. Attending such meetings has tremendous benefit for the Institute in being able appreciate the needs of other organisations in less wealthy countries. Indeed the Institute is almost unique in having a membership that both serves the physics and engineering communities in medicine, and it provides the secretariat for both the International Organisation for Medical Physics (IOMP) and the International Federation for Medical and Biological Engineering (IFMBE), and financial administration for the International Union for Physical and Engineering Sciences in Medicine (IUPESM). At European level, it provides the secretariat for the European Federation of Organisations for Medical Physics (EFOMP).

This year has also been very busy at the national level with members serving on many Department of Health committees and contributing to the development of various initiatives concerning the further expansion of imaging and radiotherapy techniques in the UK, and several committees concerned with workforce and public/patient safety issues. Indeed the contribution of the members of the Institute is very much valued by other organisations and sometimes it is difficult to find representatives who are not already over committed.

There have been many scientific meetings organised by the Institute, and also in conjunction with the partners. The Institute’s Annual Scientific Meeting at Cambridge was very memorable and well organised. The UKRO and UKRC meetings at Edinburgh and Manchester respectively provided excellent opportunity for networking across the professions. The public lectures sponsored by the Institute at these meetings (the Douglas Lea and John Mallard Lectures, - and also the Woolmer Lecture at IPEM’s own Annual Scientific Meeting) are an excellent way of keeping state of the art topics at the forefront of our activities. The Institute wishes to use a similar model to develop a UK Bioengineering Congress: this will enable those in academia, industry and healthcare to have a unique platform upon which to build new ideas of working together. The Institute has also set up an Industrial Liaison Group to improve communication with the commercial sector and to seek greater collaboration in developments.

A source of frustration is still the slow progress on developing the Institute’s website. Members of the Communications Working Group have been very methodical and devoted a huge amount of time in reviewing content and the operation of the site. Further modest investment has been made in hardware to improve the responsive of the website. It is a regret that no significant improvement has been made over the past two years, and lessons must be learned in setting aside sufficient resource to meet our ambitions in whatever the Institute seeks to undertake. The Institute should not rely too heavily upon the goodwill of the membership or staff when major developments are undertaken. It is pleasing to report that the information systems supporting the Institute are robust and secure: this has been achieved by seeking external advice and assistance.
The ‘Spotlight’ series of publications is a valuable means of communicating the importance of new technologies and techniques to policy makers and those without necessarily a background in science, engineering or medicine. During the past year the Institute has worked hard to lobby government on various issues and to make constructive suggestions as to how various issues in medicine might be taken forward. The Institute’s contribution to publishing scientific papers continues to grow and it is especially pleasing that, alongside the Institute’s own journals, *Physics in Medicine and Biology*, *Physiological Measurement* and *Medical Engineering and Physics*, the Institute now has an agreement with Informa Healthcare for its *Journal of Medical Engineering & Technology* also to be an official journal of the Institute.

The Institute aspires to undertake even more activity and much reliance has been placed upon several income streams. These income streams may change over the coming years and hence the need to control costs becomes even more important, as also the ambitions to explore other opportunities. Council has been aware of the need for prudence and has a robust reserves policy. The Institute enjoys an increasing membership which enables the organisation to aspire to do even more. The Institute held a strategy day in June. The outcomes have been reported initially through the Regional Representatives and further reference will be made over the coming months following consideration by Council. The Institute is seeking to ensure that the committee structures and roles support our aspirations and ambitions, whilst ensuring efficient and effective use of members’ time and effort.

The Institute is a professional and academic organisation governed by charitable objects and is highly regarded. This is due to the wholly voluntary efforts of the membership and the unstinting support of the secretariat at York. I encourage all members to seek out opportunity to serve the Institute, and whilst doing so have great fun. I have very much enjoyed my period of service as President and thank Council, the Secretariat and all Fellows and Members for the support I have received: it has been a great encouragement and a great privilege.

Peter C Jackson

Report of the Company Secretary

At July 2007 the membership of the Institute includes:

- Fellows, including Honorary Fellows: 278
- Corporate: 1208
- Incorporated: 613
- Associate (Scientist): 685
- Associate (Technologist): 324
- Student: 120
- Affiliate: 30
- Overseas Affiliate: 51
- Medical Fellow: 1
Institute of Physics and Engineering in Medicine

The total individual membership stands at 3310
In addition there are 33 Member Companies

It is with regret that we record the deaths of the following members notified during the past years:

Mr Alan Roderick Joy, Mr Douglas Harold Follett, Mr Peter St John-Loe, Eur Ing Christopher Fairford Frampton

During the last 12 months the Council of IPEM has met in October 2006, and January, April and July of 2007. Council has continued to forward both the professional and Trustee business of the Institute to the realisation of our core charitable objective ‘to promote for the public benefit the advancement of physics and engineering applied to medicine and biology’. Much of this work is undertaken through the established channels of publication, science, engineering, education and training, and specific reports can be found elsewhere within this Annual Review. However, Council continues to review and debate the overall mechanisms by which this can be brought to focus and effectively and efficiently achieved to maximise potential and enhance accountability.

Building on discussion during 2005 at the Governance Working Party, Council, the Trustees of IPEM, have discussed the restructuring of Committees and are undertaking some important steps for the Institute. The long established ‘Office Working Party’ was disbanded and replaced by a ‘Finance and Business Planning Committee’ in shadow form with a wider remit and representation and reporting directly to Council. Terms of reference have been drafted for other new committees and these, together with more general discussions on structures shaping future development, opportunities and governance, will be discussed as part of a strategy day for Councillors to be held during June. This theme of structure and governance will continue to form a substantial element of the work of Trustees over the coming year.

Various initiatives that were introduced in 2005 are now beginning to provide important contributions to the work of the Institute. For example, the Communications Working Group under the Chairmanship of the Honorary Assistant Secretary has made strides in engaging Regional Representatives and will be bringing new proposals to the 2007 Regional Representatives Meeting. In recognising the importance of modern electronic communication methods with members, potential members, and the public, the Working Group has also progressed further development of the Institute’s web site at a technical and editorial level. There remains much work still to do in the coming year and the initiative remains an important on going development.

Changes to the IPEM Rules were agreed at the last AGM to support the growing work of the Standing Committees and the continuing success they bring to the Institute by the introduction of a new position of Vice Chair within each Committee. A number of Vice Chairs are now in place and benefits are emerging.
On behalf of Council and the membership at large I should like to thank all Members who have contributed to the activities of IPEM over the last year. It is also a pleasure to thank the Institute's staff for their service to the Institute and to Medical Physics and Engineering.

Simon Ryde

Treasurers’ Report

Financial Year 2006

As predicted in last year’s report there has been a significant shift in the Institute’s financial situation. The overall picture shows that income rose by only 0.8% during the year ending 31st December 2006 whilst expenditure rose by 13.5% in the corresponding period. The result, means that for the first time the Institute must report a deficit with expenditure exceeding income by £18,431. Although this was slightly higher than the initially predicted £3,000 deficit, it was not felt to be a cause for concern. However the year on year comparison of 2005 to 2006 shows a gross deterioration of £189,231 and provides a financial wake up call to Trustees, members and staff.

The Institute has seen income fall in several of its income streams including the contribution from IEL, training, and scientific meetings, with an almost inevitable increase in expenditure across the board.

The pressures on income and expenditure are, I would suggest, a reflection of the situation within the NHS where the bulk of those involved in the Institute are employed. PSC sales through IEL have reduced as Trusts have been waiting to gauge the effects of Agenda for Change on over stretched budgets before assessing the need to replace staff. Training income is similarly affected.

Perhaps the most concerning aspect of the budget report is associated with scientific meetings. Income shows a reduction due to the absence in 2006 of a biennial meeting from which a reasonable surplus might be expected and reduced numbers attending the ASM. Expenditure costs, both direct and indirect have significantly increased even with a corresponding saving relating to the items affecting income.

On a more positive note, the journals continued to do well and the Institute is indeed fortunate to have editors that are able to ensure and improve the standing of these publications.

The Institute awarded a greater number of bursaries and awards.

The Report of the Trustees and Directors contains a concise Financial Review, which the auditors examined for consistency with the financial statements. To avoid confusion I will not comment further on the figures for 2006, but refer the interested reader to the audited report.
Current Year – 2007

In accordance with our Financial Regulations, Council approved the budget for 2007 at its January meeting. Council did not do this lightly as it predicts a planned budget deficit of £120,000. Whilst this may appear alarming to the reader there are a number of factors that must be borne in mind. Firstly the Institute's assets are significantly higher than the financial reserve the Trustees' consider to be necessary. Secondly there are a number of significant amounts of one off expenditure proposals. These are to assist in protecting the current assets of the Institute or to enable it to continue / develop the current services provided hence ensuring the Institute meets its charitable aims and objectives. Thirdly, the budget that has been set is understandably rather conservative, due to the difficulty in predicting the risk to the various income streams.

The future holds many financial and other challenges for the Institute, however I am certain that the membership can rise to these and that the Institute can continue to go from strength to strength.

■ Alan Thompson
Honorary Treasurer

Science, Engineering and Technology Committee

The Science, Engineering and Technology Committee (SETCom) is responsible for the scientific work of the Institute, including scientific meetings, expert input to external organisations and consultations, and the development of guidelines to improve service quality. These areas all make important contributions to the Institute’s objective of advancing physics and engineering as applied to medicine and biology.

Over the past year, around 20 one-day meetings have been held on topics ranging from stereotactic radiotherapy to human shape. There has been greater emphasis on meetings designed to deliver advanced training to members involved in clinical service delivery, without losing sight of the need to keep up to date with cutting-edge scientific developments as well.

The Institute’s Special Interest Groups (SIGs) organise the majority of our scientific meetings and serve as the foci for the various scientific areas within IPEM. A wide range of working parties, reporting via the SIGs, are involved in development of practice guidelines to support members in delivering high quality services to the public. Working parties active this year have covered issues as diverse as radiotherapy dosimetry audit and quality assurance in MRI. In most cases, these working parties lead to the publication of reports that become the nationally accepted guidelines in their particular area of clinical science.

Through SETCom and the SIGs, the Institute is represented on a very wide range of external bodies and committees. Radiotherapy has been particularly prominent this year, with Institute members serving on the National Radiotherapy Advisory Group and on a range of Royal College of Radiologists working parties. This is a discipline that never seems far from
Institute of Physics and Engineering in Medicine

the public eye these days. It is important to be able to reassure the public that services are provided to very high clinical, scientific and quality standards, and that serious adverse incidents, while extremely regrettable, are consequently very rare. With the recent development of national boards to coordinate policy on imaging, PET-CT and PACS, the Institute is now represented at a very high level in the development of national strategies in these key areas. In the radiology arena, we are working with the Royal College to develop standards for service accreditation that will establish for the first time the quality that patients should be able to expect from radiology departments, and the important role that medical physics services play in maintaining them.

There will be key developments in three areas over the coming year. First, the structure and role of the SIGs will be reviewed. This is part of a wider review of the Institute’s structures to make sure that they remain as effective as possible at delivering on our charitable objects. Second, substantial changes are planned to the structure and organisation of the Annual Scientific Meeting (ASM). We want this event to be more attractive to our members and also to become more of a public showcase for UK medical physics and engineering. Third, the UK Bioengineering Congress proposal will be further developed, hopefully leading to the first Congress in 2010.

■ Stephen Keevil

Special Interest Groups

Clinical Engineering

The Clinical Engineering SIG used this year to consolidate its work in two important areas. Guidance on the safety and risk of working with medical devices was completed by two working parties and led to the dissemination through scientific meetings on “Electrical Safety Testing” and “Risk Management of Medical Devices”. Manuscripts and CDrom packs are being finalised in agreement with publications committee. A new working party has now been agreed and approved to extend this safe practice theme through the review of the quality management of Clinical Engineering.

As in the previous years, meetings have been designed to take account of scientist and technologist needs on issues. The successful Technologist’s Study programme was again reorganised to meet both the practical equipment servicing needs of our members but also the medical engineering background to the subject areas. A similar event is planned for 2008 dealing with a range of electromedical devices. The group also co-sponsored two other medical device management events with the IET and IMechE on “Incontinence: the engineering challenge”. The challenges facing Clinical Engineers in the research and development of medical technology is also to be considered as well as the practical management issues of using computerised management systems to manage the effective and efficient servicing and safety related issues of medical devices.

The group’s future plans are to raise further awareness and support from Technologists of IPEM’s activities and develop technical material for
members from its successful Technologist’s training day, EST standards review and other equipment management articles. There is potential for these training and development issues to be shared with other SIGs and the CESIG would welcome feedback on how best to promote these activities.

- George Dempsey

The challenges identified by the profession as facing diagnostic radiology physics over the coming years continue to be the focus of the DRSIG.

During 2006 a user group was established to advance the scientific support to digital radiology. The first meeting was held in 2006 and it is expected that this event will continue on an annual basis. A meeting is also planned for October this year focussing on the integrity of digital images.

As part of the launch of IPEM 91 Recommended Standards for the Routine Performance Testing of Diagnostic X-ray Imaging Systems a training meeting targeted at members of the radiography profession was held in Birmingham. Feedback from the attendees demonstrated the benefit of holding this event periodically.

The DRSIG has facilitated a meeting of parties interested in the development of software for the analysis of images for quality assurance purposes. An initial release of software will be followed up by training sessions and possibly the formation of a user group or working party to provide some support to this work.

The SIG has collaborated with the Ionising Radiations Metrology Forum to establish an intercomparison exercise for diagnostic radiology dosemeters. It is hoped the results of this exercise will demonstrate the accuracy of field measurements.

During 2007 the DRSIG working party on computed and digital radiography will publish a document on this subject as part of the IPEM report 32 series. This publication aims to establish performance standards for these devices during commissioning and acceptance.

In order to keep abreast of new developments in medical imaging a meeting will be organised in 2008 on emerging technologies in diagnostic radiology. This meeting aims to bring to the attention of the diagnostic radiology community the cutting edge of imaging technologies and assist their transition into clinical use.

In order to ensure that the quality assurance carried out in diagnostic radiology remains effective it is hoped to establish a working party to look at evidence based quality assurance. An initial round table type meeting will be held to establish the working party and the nature of the review.

- Matthew Dunn
Emerging Technologies

ET SIG is delighted to have extended its membership to include representation from the academic sector and NHS Innovations. Liz Dymond has provided a lead in organising an ASM session for Cardiff focussing on Innovation in Healthcare, and John Thompson is running a workshop on Healthcare Technology Assessment. The group has also provided, and hopes to continue to provide, useful input into the UK Bioengineering Congress.

Chris Monk

Informatics and Computing

HICSIG has become ICSIG, since ‘Health Informatics’ is frequently associated with clinical coding, and ‘Health’ was tautologous within an Institute using Medicine in its name.

Attempts to engage with the NHS ‘Connecting for Health’ (CfH) agenda bore fruit in January when SIG members organised a meeting in Sheffield, on ‘PACS and Radiotherapy’, chaired by Mary Barber, the CfH PACS Programme Lead. This drew wide representation from both communities and all the manufacturers of radiotherapy systems and CfH PACS products. The resulting increase in awareness, within CfH, of technical issues around radiotherapy and of medical physics generally, resulted in CfH asking IPEM for representatives on two important PACS committees. There is also now local representation of radiotherapy interests, and a group of interested staff meeting occasionally, with a discussion list on www.pacsgroup.org.

We have made important contributions to the debates on radiotherapy statistics. Our meeting ‘Using your Radiotherapy Database’, last November, publicised the ‘Radiotherapy Episodes Statistics’ project, which, as the National Radiotherapy Dataset (NRTDS) is likely to emerge as a statutory NHS data collection project, a development to which SIG Members have made significant contributions.

Software development standards provide us with an on-going theme that we will develop with a scientific meeting on Open Source Software in November and an ASM session on Website Innovation. Another important theme concerns the clarification of the place for Computer Science, within the IPEM and ACS training programmes.

Stephen Tozer-Loft

Magnetic Resonance

The MRI SIG has five members and two mentors. Over the past year, it has been involved in MRI safety, and future endeavours include quality assurance (QA) and clinical application of cutting-edge techniques.

In September 2006, the MRSIG organised a teaching session at the IPEM ASM. In June 2007, the SIG hosted a very successful meeting (with 78 attendees), updating current issues in MRI safety. This meeting discussed MR safety issues in general, as well as a more focussed session on the possible implementation of the EC Physical Agents Directive on magnetic field exposure, which may have serious implications on the operation of
clinical MR systems in the UK. The SIG, along with other members of IPEM, are actively involved in lobbying government over the implementation of this directive, asking that MRI should be exempted from it and that a sensible 'risk versus benefit' approach should be applied instead.

The SIG has set up a working party to update Report 80 on QA in MRI. This new report will expand on the original report and include discussions on performing specialist QA for specific applications such as functional MRI, spectroscopy, cardiac imaging etc.

Scott Semple

Nuclear Medicine

The Nuclear Medicine SIG has been active in promoting good scientific and technical practice in Nuclear Medicine Physics in the UK.

The SIG has been active on the educational front by facilitating meetings and sponsoring publications. A successful meeting has been held on current issues in Nuclear Cardiology, providing information on recent developments and areas of concern. A new publication (An Introduction to Radionuclide Dosimetry) is in progress and a revised publication is nearing completion (Mathematical Techniques in Nuclear Medicine). Delays have been experienced in the revision of Radiation Protection in Nuclear Medicine but it is hoped that work will resume on this in the near future.

Other activities include contributing to updated RCP guidelines on the use of radioiodine in the management of benign thyroid disease and BNMS guidelines on the accurate calculation of left ventricular ejection fraction.

Ongoing activities of the SIG include sponsoring working parties e.g. the Nuclear Medicine software working party. This group is currently performing an audit of brain quantitation software and is planning an audit of myocardial perfusion imaging. A technical note has been submitted for publication providing advice on the standardisation of left ventricular ejection fraction (LVEF) measurements between departments. This is of current importance due to the requirement for the LVEF to exceed 55% before Herceptin therapy can be commenced in breast cancer patients.

A current concern for the SIG is the need to maintain quality in PET/CT given the planned imminent expansion of service in this field. SIG representatives have produced training curricula for technologists and clinical scientists and these have been accepted by the Intercollegiate Advisory Board for PET-CT. A publication setting quality standards for routine scanning and multi-centre trials is in production.

Christine Tonge

Physiological Measurement

The PMSIG has been active in the organisation and co-sponsorship of a number of IPEM meetings and other National and International conferences and events throughout the year:
Institute of Physics and Engineering in Medicine

Organising
- Clinical temperature measurement and thermography
- Neurophysiological Intra-Operative Monitoring
- Measurement and Monitoring and Modelling of Autonomic Function

Co-sponsoring
- 3rd Annual Meeting on “Optical Sensors in Physiological Measurements”, Organised on behalf of the Instrument Science and Technology Group and the Optical Group of the Institute of Physics
- 3rd International Conference on Optical and Laser Diagnostics (ICOLAD 2007)
- 3rd International Conference on Computational Intelligence in Medicine (CIMED)
- Intelligent Sensors: can they make electronic assistive technology (EAT) accessible for those with severe movement disorders (Organised by with RBSIG)

In addition to the above scientific meetings the SIG, in response to the ‘Call to SIGs for topics for IPEM briefing notes’ put forward three subjects;
- Patient safety
- Gastro-oesophageal reflux disease- diagnosis and treatment
- Cardiovascular measurements

The SIG is forward looking and there are plans for a range of events, and publications. Such events include scientific meetings on clinical applications of eye movement recording; clinical applications of posture and gait; ‘A grade’ study day – Physiological measurement; assessing the active cardiovascular system; measurement techniques in upper GI physiology; and bone regeneration.

Throughout the year the PMSIG was been actively participating in a variety of activities within the institute, such as the organisation of the ASM and UKBC, the registration of clinical technologists in the area of physiological measurement and the relationship between IPEM and academia. The SIG will continue to provide constructive input into ongoing discussions on these issues.

- Panicos A Kyriacou

Radiation Protection
The RP SIG has been actively involved in numerous workshops and helped provide data to DEFRA for the government's next draft on the UK Strategy for Radioactive Discharges. The SIG has been represented at various stakeholder’s workshops: a SNIFFER project consulting on competencies
required for the Qualified Expert under the RSA and two EA projects; one to review exemption orders for radioactive materials and another on the management of low level radioactive waste. We also continue to be represented on the Small Users Liaison Group which is central to ensuring good communications with the EA.

The SIG made a response to the ICRP on its important draft recommendations (which has now been finalised) and on the draft transport regulations. Views were also expressed on the draft BSS which is currently being reviewed.

In light of recent events, the DH has been reviewing its emergency response policy and we have provided advice and ideas to the DH representative. We have also been involved with a DH working group convened to consider implementation of the IR(ME)R requirements to make reports when patients receive unintended exposures and medical exposures that are much greater than intended.

A working party met to consider, discuss and plan guidance on the installation of medical cyclotrons. It is anticipated that guidance will be in the form of an IPEM book on the subject. Another working party also convened to consider the issues surrounding the cremation of people having been treated with iodine-125 seeds with the intent to provide guidance on this matter.

We continue to organise the annual RPA Update meeting which is central to hospital RPA’s maintaining their certificates. In collaboration with NMSIG a future meeting on “Radiation Protection in Nuclear Medicine” is being discussed and advanced plans are in place for the co-sponsored SRP Medical Sector meeting on ‘Radiation Protection in Hospital Design’.

Stephen Evans

Radiotherapy

The radiotherapy physics special interest group organised a programme of meetings which provided physicists with the opportunity to maintain up to date knowledge, in the areas of quality assurance in radiotherapy, treatment planning systems and Monte Carlo Algorithms, stereotactic radiotherapy and small field dosimetry. The report ‘Commissioning and Quality Assurance of Linear Accelerators’ was published and the report from the working party on intensity modulated radiotherapy should be available shortly. A new working party has been established to provide guidance on commissioning and quality assurance for image guided radiotherapy. The inter-departmental dosimetry audit group has developed a programme which is currently being implemented and should ensure that every department has an independent audit by the end of this year. RTSIG has continued to seek and represent the views of the community on a number of issues this year including an IPEM response to the Scottish Executive Report.
Increasingly radiotherapy is multi-disciplinary and collaboration with the Royal College of Radiologists and Society of Radiographers is ongoing. The major UK multi-disciplinary meeting, UKRO, held over two days in March 2007 had two members of RTSIG on the organising committee and many papers delivered by members of IPEM. A number of joint working parties are also in progress on topics which include patient safety in radiotherapy, IR(ME)R in radiotherapy and imaging and radiotherapy planning. It is vital that communications between radiotherapy physicists and these professional organisations are enhanced and maintained if the current pressures faced within radiotherapy are to be effectively addressed.

Gill Lawrence

The rehabilitation and biomechanics group have had a productive year. We have organised or helped to organise 3 meetings this year. On 18th October 2006, we organised a meeting on Cognition and Assistive Technology (AT). The meeting had two aims: (1) to review developments in AT for those with cognitive impairments and (2) to understand if there is a relationship between level of impairment and use of AT.

The meeting was held in the Railway Museum in York, attracted 35 people, and the feedback was excellent. RAATE (Recent Advances in Assistive Technology & Engineering) is an annual 2 day meeting that was organised by the IPEM in 2006 (November). This meeting brings together professionals from different backgrounds to hear about advances in technology. This year’s meeting in Birmingham attracted over 100 delegates. IPEM are also organising this year’s meeting in Sheffield. Anatomical deformity is a big problem in disability but our current methods of measurement are primitive. SHAPE was a one-day meeting (25th January 2007) to investigate how people our making measurements of posture and deformity presently and to propose new reliable technologies for shape measurement. The meeting in York’s Early Music Centre attracted 60 people and was warmly received.

We also attempted to organise a meeting to look at how improvements in sensor technology may help people with profound disabilities. “Intelligent sensors” attracted a good set of speakers but we only had a small number of participants register and the event was abandoned. We believe there is an audience for this important area and will look at marketing this meeting more strongly next year.

A ‘Spotlight’ publication information publication was launched earlier this year on *Electronic Technology for Independent Living* with contributions from SIG members past and present. Reaction to the article has been excellent and it is hoped that we will be able to contribute to another Spotlight publication in future years.

Adam Shortland
UNIRSIG has continued to organise a great number of workshops and meetings over the last year. Our group is involved in a wide range of topics that covers both Ultrasound use and the non-ionising aspects of healthcare. In addition to the IPEM elected members of the group who help to cover the wide range of subject matter, we are supported by representatives from HPA, HSE, NPL and MHRA.

In Ultrasound, the Biennial Ultrasound meeting was held in Birmingham in February 2007. The popularity of this event kept the attendance up around the 70 mark though a number of senior members of the Ultrasound community could not be present for various reasons. The Working Party has nearly completed two documents for quality assurance. The first will concern the National Standard of Operating Procedures and the second will be an update to the IPEM quality assurance report 71. A repeat of our successful QA workshop looks set to coincide with the conclusion of the current NPL survey.

In the world of lasers and optical radiation, the Group ran a couple of meetings on “Laser and Optical Science” and “Optical Radiation – Towards the Light” and was the driving force behind an IPL (Intense Pulsed Lightsoure) measurement workshop. The Group has also been providing feedback on the new MHRA document on lasers. In addition, we have also been busily persuading and encouraging David Taylor and Graham Hart to rewrite IPEM report 76 on Ultraviolet and Blue-Light Phototherapy. A meeting on UV Dosimetry is also being planned for Autumn 2008.

A working party is nearing the end of producing an 8 chapter IPEM report on ‘Guidance on the measurement and use of electromagnetic fields (EMF) and electromagnetic compatibility (EMC)’ with the aim to be published in 2008 to compliment the arrival of the new Physical Agents directive on EM fields.

Meetings are also being currently tabled for EMI and EMC within the hospital environment and on the use of ultra-bright LEDs.

■ Mark Brewin

The Academic Development Group (ADG) consists of 12 senior members who advise Council on matters relating to university and R&D matters. It has met 3 times over the past year. The group members have been working on a number of areas.

One significant development this year has been to set up a mechanism for the Institute to engage with university departments. This involves the identification of potential ambassadors, i.e. colleagues in academic departments who would be prepared to be a point of contact for IPEM. An “Ambassadors Pack” has been produced which IPEM is sending to the key individuals who have agreed to take on this role. The pack includes a careers poster, specific student membership application forms (a simplified version of the main membership application form) and careers leaflets. The aim is to encourage careers in medical physics and engineering in
healthcare, academe and industry and to increase student membership. Academic ambassadors would be a general point of contact in their institutions and pass on any requests or questions to the IPEM office. This should also facilitate a route for discussions on future educational and R & D issues. Arising from this, the group is considering the possible benefits and consequences for IPEM of a wider involvement in the accreditation of university courses. Hitherto, IPEM has had neither the resources nor systems in place to consider accreditation on a wider scale. However, focusing IPEM’s course accreditation activities solely on courses needed for Clinical Scientists and Clinical Technologist training does not address the demand for accreditation of medical physics and bioengineering course components by Higher Education Institutions (HEIs), and may form a valuable way of developing the Institute’s engagement with academe as it seeks to broaden its membership base and promote high standards of education in its field.

The group has also been considering the implications of the Cooksey Report, which has reviewed the UK’s health research funding arrangements. We will be encouraging senior members actively to participate on the funding committees of peer review bodies wherever possible to reflect the interests of stakeholders in medical physics, engineering and technology.

Members of the group have continued to engage with the Diamond Synchrotron Project team through discussions with Peter Williams (Manchester) and Keith Rogers (Cranfield). Sponsorship has been obtained from a number of sources including the EPSRC and MRC to invite medical staff from overseas who already use such facilities in their own country for a meeting that will take place in London, probably in early 2008, to encourage future biomedical projects.

The ADG also intends to initiate further meetings to encourage and support the academic members of IPEM.

- Alan Perkins

**Publications Committee**

The Publications Committee remit includes the scientific journals *Physics in Medicine and Biology (PMB)*, *Physiological Measurement (PM)*, (both these journals are published by Institute of Physics Publishing for IPEM), *Medical Engineering and Physics (MEP)* (published by Elsevier for IPEM) and *Journal of Medical Engineering Technology (JMET)* (owned and published by Taylor and Francis).

*PMB* (Editor-in-Chief Prof Steve Webb) celebrated its 50th Anniversary in July 2006 and a Special Anniversary issue (Vol 51: No 13) was prepared and distributed, with historical review articles from 26 very distinguished authors covering many of the fields of Medical Physics. PMB has been running at 24 issues per year since 2002. *PM* (Editor-in-Chief Prof Mike Neuman) is issued 12 times per year, which is up considerably from the quarterly publication of just five years ago. MEP, edited by Dr Sally Clift, has had another successful year. It will celebrate its 30th anniversary next year. The
fourth journal (JMET) is in its second year as an official IPEM journal, though it has been published for many years. The current Editor, Professor John Woodwood as well as Publications Committee invite all of IPEM's membership, especially clinical technologists, to subscribe and submit articles to this journal.

Publications Committee also takes responsibility for the in-house publications SCOPE (now in eye-catching new style and format), Newsletter as well as the IPEM Website. In addition its remit includes the working party reports, (IPEM Reports) and another relatively new category Spotlight series, which are aimed primarily at informing key people in the Health Industries about recent developments in a field, especially those which are topical amongst health professionals; this year a Spotlight briefing note is being prepared on Proton and Heavy Ion Radiotherapy.

The published working party reports between July 2006 and June 2007 include the following

- Balancing Costs and Benefits of Checking in Radiotherapy
- Guidance for Commissioning and Quality Assurance of a Networked Radiotherapy Department

■ Alun Beddoe

Medical Engineering and Physics

Medical Engineering and Physics (MEP) has continued to grow in the past year. There were 374 manuscripts submitted in 2005 and this has increased to 448 for 2006. The acceptance rate had remained very steady – in 2005 it was 28% and in 2006 (my first full year as Editor) it was 27%.

Consistent with many publications, our online usage figures have shown strong growth – in 2006, there were over 120,000 full text article downloads. We are a very broad based journal and out top two downloaded articles for 2006 nicely illustrate this; the first was on manual wheelchair design from Lucas van der Woude's group at the Vrije Universiteit in Amsterdam; the second was on the mechanical properties of bone from Peter Zioupos at Cranfield University with co-authors from the United States.

We have an annual journal prize, the Perkins Prize, which is awarded to the best paper published in MEP in a given year. For the 2006 issues of the journal, this paper is awarded to:

Electroactive polymeric sensors in hand prostheses: Bending response of an ionic polymer metal composite, Elaine Biddiss and Tom Chau
Medical Engineering & Physics, Volume 28, Issue 6, July 2006, Pages 568-57

Finally, I wish to thank our Editorial Board, international reviewers and all the Elsevier MEP staff – Ian Salusbury, Jacqui Merrison, Gaynor Jones and Jake Holdridge for their continuing hard work.
This is my second year as the Editor In Chief of PMB. PMB continues to be published twice monthly and published 7,832 pages in 2006 with an estimate of 8,500 pages in 2007. The impact factor for 2005 rose by approximately 0.3 to 2.683. For 2006 the mean receipt-to-first decision time was 56 days, the mean receipt-to-acceptance 124 days and the mean acceptance to publication 39 days. The PMB Board feels that its quality and the performance of the peer review process put it in a leading position as an International Journal. The current rejection rate has risen 7% to 54% and the Board have agreed to push this to 60% (maximum) to maintain quality and a sensible journal size, which should have the added benefit of increasing the impact factor still further.

Following changes to the PMB team in Bristol, Simon Harris now plays the lead role as Publisher. The Editor has represented PMB at IPEM Publications Committee and IPEM/IOP Partner meetings. A new and vibrant Editorial Board is in place, supported by an International Advisory Board; attendance at Board meetings is almost 100%.

During the year the Board has paid attention to establishing an ethics policy, a policy on the publication of material from clinical trials, a plagiarism policy and the availability of journal to developing countries. A pipelined process of topical reviews is in place. Comparisons with the main competing journal, the AAPM Medical Physics have usefully been studies.

The procedure for award of the Roberts Prize has substantially changed to request the 10 short-listed candidates to write a “case for winning”. The 2007 prize has been awarded to M Kraemer and M Scholz for their paper *Rapid calculation of biological effects in ion radiotherapy*. PMB (2006) vol 51 (8) 1959-1970

A new procedure has been put in place to publish lay abstracts to increase the availability of understanding of difficult papers to a wider scientific base. Also closer links have been forged between PMB and the Medical Physics Web initiative of IOPP.

The Journal goes from strength to strength.

The journal is continuing to grow in size and stature. Publication became monthly for Volume 27 with 1952 pages published. It is anticipated that there will be an increased number of pages published in Volume 28. Two hundred sixty-one manuscripts were submitted in 2006, and 104 manuscripts were accepted for publication continuing the trend of a steady increase over the past four years. The mean review time to first decision for a submitted manuscript was 50 days in 2006, and the mean time from receipt to publication on the Web for those papers that were accepted was 147 days. This is one of the fastest review rates for journals in the area of biomedical
Institute of Physics and Engineering in Medicine

engineering and medical physics. The international character of the journal continues to advance with the greatest number of published papers from the U. K., Western Europe, North America and the Far East. The World Wide Web is a growing source of reference material from Physiological Measurement with an increasing number of full-text downloads from the Web site. In summary, Physiological Measurement continues to do well and grow.

The 2007 Martin Black Prize for best paper in Physiological Measurement in 2006 has been awarded to T Olbrich, D O Williams, J C Doig and A Murray for their paper ‘In vivo assessment of coronary artery angioplasty and sten deployment from balloon pressure-volume data’.

On a personal note: this is my final year as Editor of Physiological Measurement. It has been my pleasure to serve IPEM in this way, and I look forward to continuing to participate in Institute activities.

■ Michael Neuman

SCOPE

SCOPE continues to develop strongly and has this year undergone a complete redesign. The format of SCOPE is now much more modern and approachable and fits in more closely with other science periodicals such as New Scientist. We also have a new publication partner in Century One Publishing. They have considerable experience in magazine publication and have a wide-ranging client base. They will enable us to continue to develop professionally. Their efficient publication schedule also offers the potential to increase the frequency of SCOPE as need changes. It is hoped that we will also be able to develop an online searchable SCOPE archive with support from Century One.

The Tutorial feature continues to be a regular in Scope, which is encouraging. In addition to the regular medical statistics tutorial, Dr Gary Liney (Univ. of Hull) has agreed to offer a regular MRI tutorial.

The Book Review section has also been enhanced, with a new ‘Just Published’ section written by Gemma Whitelaw, so increase the exposure of books we are not able to review fully, and direct readers to online reviews.

There has been one change in personnel in the editorial team: due to pressure of routine work, we have recruited an additional Book Review Editor, Gemma Whitelaw (Bart’s) to job-share with Sarah Misson.

SCOPE aims to continue improving its broad appeal and to reflect the issues of the entire profession. It continues to develop in offering a useful facet of the public face of the Institute.

■ Mark McJury

Journal of Medical Engineering and Technology

The publishers of JMET, Taylor and Francis, are now part of Informa Healthcare, which is a subdivision of Informa plc. As far as the editing of the journal is concerned there have been no major changes.
JMET increased its content from 64 to 80 pages per issue from January 2007, having increased from 56 to 64 pages in 2006. A special issue of the journal entitled “Clinical Temperature Measurement”, edited by Dr Diane Crawford, was published in August 2006. The Editorial Board has decided to categorise each paper accepted for publication, as Innovation, Teaching, or Review, so that potential readers scanning the journal will be able to see the type of article at a glance.

The number of submissions to the journal continues to grow, and was approximately 10% in 2006. The rejection rate at present is about 26%. The online edition of the Journal continues to be successful. There are now eight full volumes available electronically (Volumes 23-30) and Volume 31 (issues 1, 2, and 3).

The Editorial Board has been strengthened by the addition of two new Board Members from Canada and India, with a view to broadening the appeal of the journal in North America and India.

John Woodcock

Accreditation and Training Committee

Looking back, the past 12 months have been quite frustrating for ATC and its component panels. The much heralded changes to Clinical Scientist training have not materialised, nor is there any apparent progress towards the implementation of a revised scheme. Discussions with the professions on a future scheme seem to have ground to a halt.

One also wonders how many ATC reports in the past have looked forward to the inclusion of Clinical Technologists on the register of healthcare professions – and how many will do so in the future before it becomes a reality. The decision by the Department of Health (DH) to postpone Clinical Technologist registration until 2009 (at the earliest) was particularly disappointing.

Whilst it has not been possible to make progress in these important areas ATC and supporting panels have contributed in other areas. The main committee provided a response to the Foster report on the ‘Regulation of Non-Medical Professions’, an outcome of the 5th Shipman Report. More recently a response has been prepared, in collaboration with SETCom, on the report from the National Radiotherapy Advisory Group. ATC has also developed a set of proposals for the Higher Specialist (post registration) Training of Clinical Scientists.

The reports of the constituent panels follow this report. Worthy of particular mention is the CPD audit undertaken by Professional Development Panel. This is the first time that the Institute has undertaken such an audit and it will lead to improved guidance for members registered on the scheme.

In concluding this part of the report it is appropriate to record thanks to all those members of the Institute who provide such valuable service to the Committee and Panels. Particular thanks are due to Therese Crawley
Institute of Physics and Engineering in Medicine

(retiring as ATC secretary), Harold Stockdale (retiring as CSETP chair), Paul Robbins (CTETP chair), Claire Hardiman (Professional Development Panel chair) and Malcolm Sperrin (Membership Panel chair).

■ Neil Lewis

Clinical Scientist Education and Training Panel [Harold Stockdale]
Incorporating
Training Centre Accreditation Sub-Panel
Course Accreditation Sub-Panel
Part I Registrar
Part II Registrar
Chief Examiner

A Panel such as CSETP discusses several issues throughout the year and most are finalised within relatively short timescales but one issue has recurred throughout the year. That issue is the proposal to change the training arrangements for pre-Registration clinical scientists within the NHS. As these proposals became more advanced, CSETP debated them and contributed to discussions within ATC. The changes currently proposed would mean the ending of the current IPEM training prior to Registration with the Health Professions’ Council. The Panel, with ATC approval, decided, therefore, not to allow any changes to the structure of existing UK Training Consortia for Part I training. However, because of the delay in implementing the new training arrangements for pre-Registrants, the current Clinical Scientists’ Training Prospectus will be extended to allow new intakes for two more years to September, 2009.

Other work of the Panel included agreeing improved arrangements for the ratification of Part I viva results in conjunction with the Chief Examiner and ATC. Also, the Panel continued to support and encourage the work of its two accrediting Sub-Panels and the work of others involved in the training process.

On a personal note, I am stepping down as Chair of CSETP from September, 2007 but will remain on CSETP to provide continuity to the incoming Chair (Chris Callicott). I have enjoyed my tenure as Chair of CSETP and I extend to Chris my very best wishes for his period as Chair. I would also like to put on record my appreciation of all the “hidden” work carried out by Panel members, particularly the Part I Registrar (Alison Bolster) and the Part II Registrar (Geoff Lawrence).

Training Centre Accreditation Sub-Panel [Andy Rogers]

The Sub-panel has continued its work to ensure trainee clinical scientists and engineers engaged upon Part I training receive quality training. This work includes assessing applications from centres to train, receiving reports from External Training Advisers (ETAs) and Examiners, and conducting our own audits of centres. This year, unfortunately, the standard of applications has been generally poor, with many centres being asked to re-submit their
applications. The weakest area of applications has been the training plan, with very few centres seemingly able to link competencies to local training activities. This, and the late applications made by centres, has proved challenging for the Sub-panel.

The panel has concerns about on-going monitoring of centres, and so has proposed that for the coming year the membership of the sub-panel is strengthened to include representatives of ETAs and Training Co-ordinators. They will develop standardised guidelines for these groups and hopefully ensure a more robust quality assurance of Part I training.

The Sub-panel will also need to develop systems for any new proposal for pre-registration training of clinical scientists and engineers, but, at present, any firm proposal seems as likely as clinical technologist registration!

Course Accreditation Sub-Panel [David Parker]

The Sub-Panel’s role is to accredit MSc programmes in Medical Physics or Medical Engineering in connection with the Clinical Scientists’ Part 1 Training Scheme. The list of currently-accredited programmes appears on the IPEM website. During the past year assessors have visited Manchester and University College London; several other courses are currently under consideration for reaccreditation, and there have also been applications for accreditation from new programmes. Tony Evans has retired from the Sub-Panel after many years service, and has been replaced by Slavik Tabakov from King’s College London, while Deric Jones has stood down as Chair but remains on the Sub-Panel to provide continuity.

Part I Registrar [Alison Bolster]

Very little has changed since I wrote this article for last year’s annual report. The changes that were made to the application form have been beneficial in making absolutely sure that the training for which the candidate is applying is actually accredited. Ongoing issues lie with training centres who assume that everyone knows where the training is going to take place, and not noting down explicitly on the application form the information which would allow the Part I Registrar to confirm that accreditation of this centre has been granted for the subject concerned. These problems notwithstanding, however, the information supplied is in general better than that in previous years.

There are a small number of unusual applications and these can pose a challenge. The vast majority of entrants to the Part I scheme are however straightforward.

Part II Registrar [Geoff Lawrence]

Part II training prepares associate members of IPEM for recognition as competent professionals by attaining registration with the Health Professions Council, corporate membership of IPEM and chartered status as a scientist or engineer. It involves a period of structured, advanced training and
supervised experience in a specialised area of medical physics or clinical engineering. There is a high success rate, thanks to the hard work and commitment of the trainees, guided by their local supervisors and external advisers. This year we have been pleased to recruit a number of new external advisers, who play an important role in maintaining standards of individual training plans as well as conducting formal assessments.

IPEM continues to be actively involved in a review of training arrangements for clinical scientists, which is expected to lead to significant changes under proposals from the Department of Health. It is clearly in the public interest that professional standards should be fit for purpose, and the education and training underpinning them adequately resourced, in any new framework. The current training scheme, including Part II, remains in place pending the outcome of the review.

Chief Examiner [Steve Pye]

IPEM objectives include the promotion of education, and the development and maintenance of training standards. Members of the Board of Examiners play a key role in delivering these objectives through their involvement in the Part I Training Scheme, and particularly by carrying out end-point assessments of Medical Physics and Clinical Engineering trainees. Each trainee undertakes three clinical placements and is assessed by portfolio and viva in each subject. The purpose of the assessments is to test scientific ability and to allow trainees to proceed to Part II Training and subsequently to registration with the Health Professions Council. The majority of trainees take Radiotherapy Physics combined with either Nuclear Medicine, Diagnostic Radiology or Radiation Protection. This is in line with the requirement for skills in these areas, and broadly matches the vacancies advertised for pre-registration posts. This year has seen an increase in the number of trainees taking Magnetic Resonance Imaging, in response to the need for medical physics expertise in this rapidly changing field. The overall number of trainees registered for examination during 2007 is 86 - the highest yet. Additional examiners have been appointed, bringing the total number to 41 covering the 15 specialist subject areas within physics and engineering.

The requirements for Part I assessment continue to be disseminated via presentations at the Trainee Induction Day, Annual Scientific Meeting, regional Trainee meetings, and articles published by APEN in the IPEM newsletter. Revised versions of the training prospectus and guidance notes will soon be accessible on the IPEM website.

Clinical Technologist Education and Training Panel [Paul Robbins]

Incorporating:
Training Centre Accreditation Sub Panel
Course Accreditation Sub Panel

2006/7 proved to be another busy year, in terms of new applicants to the training scheme, successful graduations from the scheme and clarifying issues around the requirements of training scheme. However one pleasing
development has been a marked increase in students from the engineering disciplines at the moment chiefly via the POST route and accordingly the panel has established a specific registrar to handle engineering applications.

There has been some confusion concerning ‘Scope of Practice’ this year with regards to students training and the eventual award of the IPEM Diploma in Clinical Technology with much debate around training and registration. Although the IPEM training scheme can be used to cover sub-specialities such as ‘Mould-Room’ and ‘Radiopharmacy’ only, a certificate of training in these specific areas will be issued rather than the diploma in, for example, Radiotherapy Physics or Nuclear Medicine where the requirement is for the full syllabus to be covered. This has caused some difficulties on the degree course where the students need to pass the diploma to pass the degree. Departments are asked to ensure when registering the trainee onto the scheme, that the whole scope of the training is covered by the student; with the student visiting other centres for training if necessary, if the diploma is required. Where appropriate, work is being done to align, training plans with the current Scope of Practice document issued by the VRCT.

There has been some additional confusion with registration as a number of students who have enrolled on the VRCT via the ‘grand parenting’ clause, have misinterpreted their registration as confirmation of competency; particularly with 3rd and 4th year vocational degree students.

The moderators have again done a terrific job this year with some of them looking after many students. There is a worrying trend though, that because of pressures on individual departments, there is sometimes a reluctance to allow individuals time to carry out IPEM activities, including moderation. Without these individuals the training scheme would not be able operate and would collapse. Departments gain considerably from allowing people to participate, from being able to train students and from the vast experience it gives the moderator. To support the course moderators the panel is endeavouring to provide training days for our supervisors and moderators.

As more departments get used to operating the training scheme and more students complete the scheme, the knowledge gained on both sides enables the scheme to operate more smoothly and efficiently for those to come.

CTETP are currently at the final stages of the re-write of the Training Scheme Prospectus (Green Book), whose delayed review has also been a source of confusion. This new document will contain an updated version of the Guidance Notes and the Scopes of Practice providing more information for our trainees, supervisors and moderators. The document will hopefully be available in electronic format and should enable users to link directly to other relevant documentation e.g. assessment forms.

Training Centre Accreditation Panel [Alan Thompson]

Training centre accreditation continues with the panel encouraging applications that will meet the whole Scope of Practice as outlined in the draft
documents issued by the Voluntary Register of Clinical Technologists. The effect of ensuring that technologists completing the training scheme are eligible to join the current voluntary register is that some departments have had to either make special training arrangements or join training consortia. The accreditation through transitional arrangements has been discouraged and from the end of 2006 only full applications are to be considered.

**Course Accreditation**

Course accreditation continues with the panel working hard to accredit course in the engineering technologist sector, it is hope to have the first of these from the University of Wales on stream shortly.

Additionally CTETP in conjunction with the Clinical Technologist Committee and all the other professional groups within IPEM continues to proactively support extracurricular learning opportunities for the technologist workforce examples being the Nuclear Medicine and Medical Engineering Technologist Study Days.

**Chief Moderators Report [Tina Jones]**

This year has been a difficult one, with much debate around training and registration. Unfortunately, a number of students who have enrolled on the VRCT via the ‘grand parenting’ clause, have misinterpreted their registration as confirmation of competency; particularly with 3rd and 4th year vocational degree students. We hope that this has now been clarified. The second cohort of students has just completed their viva and we hope that the majority will therefore graduate.

We are endeavouring to provide training days for our supervisors and moderators which we know are greatly needed and have unfortunately been delayed this year. Many thanks to all the Supervisors, External Moderators and Supporting Moderators, whose roles are key to the running of the training programme. Many more moderators would be welcomed.

**Registrars Report [Barbara Dawson, Diane Allen and Lindsay Yuile]**

2006/7 has again proved to be a busy year, with the number of students increasing, especially on the engineering side. We expect this trend to continue and the number of engineering students to escalate. To help the CTETP cope with these increased numbers a position was created for an additional registrar to specifically look after the engineering technology trainees.

The numbers on the scheme are:

- 32 students on Education only route
- 21 students on POST
- 124 students on the Vocational Degree
- 7 students awaiting registration.
The past year has seen progress with the IPEM Clinical Technologist Training Scheme with respect to the engineering disciplines. Whilst there has been some progress with Training Schemes associated with Higher Education Institutes, there remains work to be done. The main area of progress has been with POST trainees. There are 9 POST Clinical Engineering Technologists from the Glasgow area registered and they should be ready for final assessment and viva within the next six months. Another POST trainee in Radiation Engineering has had the final assessment and viva and the appropriate award (Merit) will be made in due course.

Steps have been taken to address the issue of another trainee who has not received External Moderator visits.

Other applications to join the training scheme have been made and work is being done to align, where appropriate, training plans with the current Scope of Practice document issued by the VRCT.

Professional Development Panel (PDP) [Claire Hardiman]

Incorporating Continuing Professional Development (CPD)
Post Registration Training
IRMER Accreditation Panel

Continuing Professional Development (CPD)

This year was the first full year for the operation of the Institute’s new CPD Scheme. The Professional Development Panel has devoted much of its time endeavouring to ensure that the processes for CPD returns and audit were fair and operational.

Of the 67 CPD registrants selected for audit 52 completed summaries were returned, all of which were successfully audited by the panel. The audit was deemed to be an exceedingly useful exercise and PDP is preparing a report to be published in the newsletter summarising its findings and recommendations including:

- Suggested format for future summaries
- Importance of a range of CPD activities
- Suggested outcomes of CPD; professional and service benefits

Post Registration Training

This year the panel completed its analysis of the returns from the “Post Registration Training Questionnaire”. Its findings have been disseminated to the relevant bodies within the Institute. One of the outcomes is the ongoing development by the panel of a proposal for a two day management/professional matters/research skills training course for Medical Physics and Engineering professionals.
Ionising Radiation (Medical Exposure) Regulations 2000 Course Approval Panel [Karen Goldstone]

The IRMER Approval panel has had an extremely quiet year having had no new courses to approve or old courses to re-approve. However the Chairman has had some queries relating to the content and provision of courses where staff other than radiographers or radiologists may wish to be “operators”. This seems to be an increasing trend.

There have been many changes in recent years in therapeutic and diagnostic procedures involving radiation and the staff that are involved in carrying them out. The time is right for IPEM to review the role of the panel and its membership. Membership is a particular problem since members are representatives from the relevant SIGs and therefore change from year to year leading to a lack of continuity.

It is hoped that a review, with a small number of interested parties, including representatives of RPSIG and ATC could take place within the next few months.

Membership Panel [Malcolm Sperrin]
Incorporating:
Fellowship, Membership and Incorporated Membership Panels
ARCP (Associate of the Royal College of Physicians) Panel
C Eng, I Eng, Eng Tech and CSci Registrars

The Membership Panel has met only infrequently during its existence and thought is now being extended to review how its stated role can be more effectively achieved. The next meeting will focus on terms of reference, committee composition and relationships with other organisations so as to provide a resource of advice to the IPEM’s membership. Current issues to be considered by the group include:

- Terms of reference
- Extending the guidance given to those who are applying for Fellowship.
- Consideration of mutual recognition arrangements
- Promotion of membership in academe and industry
- Roles of the committee members.
- Frequency of meetings.

Priority will be given to have a meeting in July or August to push forward with the committee activity.

Associate Physicists and Engineers Network (APEN)

2007 is the 10th anniversary of APEN, we have continued to accomplish much and play a valuable role in facilitating communication between IPEM and the associate members. This is reflected in the many relevant newsletter articles that have been produced over the last year, along with a new regular
feature, IPEM’s Member of the Month. The aim of this is to introduce the active members of the institute to the younger members in an informal and friendly way and hopefully to inspire more associate members to become more involved in IPEM. A panel member has been tasked with the upkeep of the APEN web pages which are currently up to date.

APEN organised a very successful Part I training day last December. This year we also organised a social event the evening before. This was the 6th training day and is proving to be very popular, so much so that we have decided to cease presenting similar information at the ASM. This year we plan to take the opportunity to discuss topics relevant to both part I and part II trainees such as final preparations for part I viva’s, PhD’s and HPC registration.

Three Essential Communication Skills workshops were held last year, all 34 attendees found the course useful and relevant. However the panel is currently reviewing the content as the course will be delivered by a different training provider from this year.

Communication between Associate Physicists and Engineers and IPEM is facilitated by APEN members providing representation on three IPEM sub-panels, and having one of its members as an elected member of Council. In addition to this a representative of APEN joined the professional practice working party and APEN is currently working with the ATC to assess the supply and demand for trainee clinical scientists.

Throughout this year APEN have continued to meet concurrently with ATeN for half a day in order to offer support to them. ATeN is now an established panel of IPEM with different issues and so we feel that we can resume separate meetings in the next year.

Nicola Kent

The Associate Technologists’ Network (ATeN) is continuing its work to represent the views and opinions of associate technologist members. ATeN has now been established for approximately eighteen months and (APEN) Associate Physicists and Engineers Network continue to provide us with invaluable assistance whilst we are in our early years of development. We also collaborate with APEN on issues affecting all associate members and have representatives on the IPEM council, the Accreditation and Training Committee (ATC), the Clinical Technologists Education and Training Panel (CTETP) and the Professional Advisory Group (PAG). From next year we aim to have representation on the Professional Development Panel (PDP).

In the last year we have made a few contributions towards the monthly newsletter and hope to expand on this in the future. We also intend to further develop our dedicated pages on the website.

At last year’s ASM, ATeN was given a five minute slot in the main APEN session to introduce our existence. This year we have achieved a dedicated
two hour slot for technologists, which will include presentations on general issues such as training, CPD, VRCT and career progression. This session will also provide a friendly forum for presentations from clinical technologists who have just completed or are currently following the training scheme. We hope this session will be well attended to ensure it becomes a permanent feature.

Sharon Maddison

The Engineering Group Board exists within the IPEM structure for two reasons: it provides an active focus for engineers both within the IPEM membership and externally in the wider engineering community; it deals with the processes for and awarding of engineering registration at Chartered Engineer, Incorporated Engineer and Engineering Technician levels, fulfilling the requirements that IPEM has in this regard as a licensed ECuk engineering institute.

Internally, EGB is asked by Council to provide appropriate engineering members to serve on sub-committees and panels such as ATC, SETCOM, CSETP, CTETP, PDP, Academic Development Group. These members are able to bring an engineering perspective to the work of these groups which is informed by discussion and debate at EGB. EGB also actively promotes debate on engineering issues and makes proposals that can be taken forward either by EGB or by other appropriate groups within the Institute. Externally, EGB members represent the Institute on various ECuk and other engineering committees, thus contributing to maintaining the Institute’s profile as an active engineering institute.

The processes for dealing with applications for CEng and IEng are now well established and the more recent activity for Eng Tech is developing. Numbers applying are not as great as had been expected but are growing. EGB is actively working to increase numbers of applicants in all engineering grades and has been successful in attracting engineering Part I Trainees to apply for Stage 1 registration with ECuk which establishes the acceptability of their educational qualifications for eventual CEng registration. This is straightforward for those who have done accredited engineering degrees but routes are available for many who have done other science degree courses. EGB is also actively working to attract applicants for engineering registration from academic institutions and from industry.

In terms of contributing to the Institute’s obligations to the wider community, EGB has again contributed to the Smallpeice Trust’s Biomedical Engineering summer school in July 2006 in Southampton. This is aimed at year 11 school students and is based around the students working in small project teams, solving practical problems in the area of rehabilitation and disability. IPEM supported this with a grant to the Smallpeice Trust. The course was organised by Kirstyne Kennaugh and Matt Johnson (Salisbury) with assistance from members of EGB and various Part I trainees.

EGB has supported an IPEM presence at the annual National Clinical and
Biomedical Engineering event sponsored by Phillips Medical Systems in Birmingham, the technician training day run by Ultramedic and the IPEM organised one sponsored by Draeger. There have been large and enthusiastic attendance at these meetings by EBME technologists and EGB is actively working on ways of improving our liaison and involvement with the commercial sector and the medical equipment management community.

A number of EGB members and other IPEM engineers attended a very useful Introduction to the Media session organised by the Science Media Centre. This provided an insight into the way the media looks at science and engineering issues and some of the motivation behind how they deal with such issues. The Science Media Centre keeps a data base of experts willing to be ‘put up’ to the media on their own specialist areas and most of the IPEM members present signed up for that. EGB will consider what further action can be taken from this initiative.

Justin McCarthy

As a sub committee of Council CTC exists to promote active technologist participation in the affairs of the institute and to deal with professional issues relating to the Clinical Technologist workforce. To this end CTC are actively encouraging all technologist members to get in touch and let us know about those issues of burning concern to you.

During the year CTC has been liaising with the Voluntary Register of Clinical Technologists to help progress the regulation process and to work with CTETP to progress the updating of the technologist training scheme prospectus a difficult job in a rapidly evolving environment. However this work is drawing to a close and hopefully an up to date training scheme handbook will be available via the IPEM website soon.

CTC continues to help support and mentor the Associate Technologist Network, with both agreeing that the drive for the coming year is to encourage both more associate members and to help those members already holding Associate Membership to progress towards Incorporated Membership. CTC looks forward to a proactive ATeN session at the 2007 ASM; we should bear in mind that this session provides all of us with an insight to a number of important work place issues.

CTC is firmly committed to the idea of CPD for the technologist workforce and to this end CTC is working with a number of other IPEM panels and groups to facilitate good extra curricular meetings of direct practical relevance to the workforce. To this end CTC are calling on technologist members to get in touch with us and let us know what you want to know. Examples of recent meetings supported include the Nuclear Medicine and Medical Engineering Technologist Study days.

Other areas of work include contributing to the website – on this issue again as the website exists to support you we would love to know from you what you would wish in terms of website content – careers leaflets and other.
publications we have just established a prize to be awarded for the best technologist article to be published in SCOPE, details of this award will be made via the newsletter shortly.

If you want to contact any member of CTC, contact in the first instance can be made via the IPEM office.

■ Paul Robbins

Other Sub-Committees of Council

Awards Committee

Over the past year the Awards Committee has received applications for bursaries from a wide range of members and non-members, to assist in attending meetings and conferences in the UK and abroad. A total of £4,071 was awarded to 7 successful applicants.

A limited number of applications is received for prizes each year. A number of prizes could not be awarded last year, as for the year before. Publicity for prizes goes out early in the calendar year, and all members are asked to encourage applications from professional colleagues. A number of prizes are awarded at the Annual Scientific Meeting, and a kind donation has been received this year to set up a further prize (for the best presentation by a Part II trainee).

Following discussion on possible future scenarios, Council agreed to change the rules governing the Research Fellowship Award to allow more than one award to be given if circumstances and funding permitted. The maximum limit was also raised to reflect increases in NHS pay costs. The numbers of those applying for the Fellowship Award has continues to rise steadily, indicating a strong underlying interest in undertaking research. Reports on current projects have indicated both individual benefit and constructive research outcomes from existing Fellowships.

■ Keith Ison

Professional Conduct Committee

The Committee has the responsibility of investigating every complaint received by the Institute that a Member of the Institute has breached any of the rules or standards which should be observed by Members. It does this by appointing an Investigating Panel. If the Panel finds that there is a case to answer then an entirely separate Disciplinary Panel is appointed, chaired by a person who is not a member of the Institute. There is an appeal procedure.

During the period of this Review, one case has been closed and a second case is on-going. Since the formation of the committee in 1999 there have been six cases considered by the Committee.

Council has agreed that the Institute should adopt the Universal Ethical Code for Scientist –‘Rigour, Respect and Responsibility’. This code was developed by the Council of Science and Technology and the Government has asked that the code be widely adopted by professional bodies and scientific
organisations. The Committee is currently considering how the code is best incorporated into the Institute’s Code of Professional Conduct.

Peter Smith

External Relationships

Institute of Physics Medical Physics Group

Members of IPEM are entitled to participate fully in the activities of the Institute of Physics (IoP) Medical Physics Group, and IPEM has three seats on the Group’s committee. This unique arrangement provides us with opportunities to further our charitable objects through educational and public engagement initiatives that reach beyond the scope of our own activities.

During the past year, the Group has worked with the IoP Education Department to produce an information leaflet about medical physics aimed at schools, and has continued to support school students in teachers with the DVD package developed previously.

The Group also offers a bursary scheme to encourage junior scientists to attend meetings in the UK and overseas, although changes to IoP budgetary arrangements mean that in the future this scheme may no longer be in the Group’s control.

On the scientific front, a successful satellite meeting on Nanotechnology and MEMS in Healthcare was held in conjunction with IPEM’s Annual Scientific Meeting in Cambridge, and the Cardiff ASM will feature both a meeting on Modelling and Simulation in Medicine and, for the first time, an IoP plenary lecture.

Links with IoP have been strengthened through a new membership agreement, allowing suitable-qualified individuals to join both IPEM and IoP at significantly reduced cost and with a streamlined application process. We look forward to further collaboration following establishment of IoP’s new Biological Physics Group.

Steve Keevil

Liaison Group with the Royal College of Physicians

The Institute’s links with the Royal College of Physicians (RCP) are of considerable value in advancing physics and engineering in medicine and biology. In particular, the links offer significant potential for enhancing collaboration between clinicians, physicists, engineers, and present the outstanding opportunities the College presents for communicating with the public, policy makers and academia.

During 2006-2007, Dr Stephen Smye represented the Institute on the College’s Standing Committee on Academic Medicine. The principal topics for discussion included the implementation of the new Department of Health Research and Development, Best Research for Best Health, and the Cooksey report on health research. Dr Smye was invited to draft an editorial
on both these issues for the Royal College of Physicians journal, *Clinical Medicine* welcomed the importance attached to clinical research by the Government and emphasised the synergy between basic science and applied clinical research. Dr Wendy Tindale represented the Institute on the College Standing Committee for Nuclear Medicine.

The College also offers Affiliateship to those senior scientists in the Institute who have made a signal contribution to physics and engineering in medicine and biology and the Institute has six senior members who consider applications for Affiliateship. This is an excellent route for enhancing the link with the College, which should play an increasingly central role in advancing physics and engineering in medicine and biology, and senior members of the Institute are encouraged to apply.

Stephen Smye

**Science Council**

The Science Council now has 31 member bodies, 9 of which are also licensed by the Engineering Council to award one or more of CEng, IEng or Eng Tech. So far, 19 Science Council member bodies, including the 9 who are also engineering bodies, have been awarded licences by the Science Council’s Registration Authority to award the Chartered Scientist (CSci) designation and more than 13,000 awards of CSci have now been made. A further 54 awards of CSci were made to IPEM members in 2006 and 24 more in the first six months of 2007, bringing the total number of Chartered Scientists registered by IPEM to 838.

Sir Gareth Roberts completed his term of office as the Science Council’s President in December 2006, having been appointed as Chairman of the Engineering and Technology Board in June 2006, in succession to Sir Peter Williams. Sadly a serious illness was diagnosed in Autumn 2006 and he died in February 2007.

Sir Tom McKillop has been appointed President in succession to Sir Gareth. Sir Tom retired as Chief Executive of AstraZeneca PLC in December 2005 and was appointed Chairman of the Royal Bank of Scotland Group in April 2006, having previously been its Deputy Chairman.

Robert Neilson

**Engineering and Technology Board/Engineering Council (UK)**

In the 2006 report, the hope of fresh opportunities for the relative roles of ETB, ECUK and the Science Council to be clarified and for appropriate bi-partite and tri-partite working relationships to be developed, following the appointment of Sir Gareth Roberts as Chairman of ETB from June 2006, were impeded by his sudden illness in autumn 2006 and untimely death in February 2007.

Sir Gareth was succeeded as Interim Chairman of ETB by Dr Mike Howse, a part-time technical advisor to Rolls Royce and already a member of the ETB Board, who had retired in June 2005 as Rolls Royce’s Board Director for Engineering and Technology, after 37 years in various engineering and
technology roles in the company.

Since the appointment of Dr Howse both ETB and ECUK have been busy moving to new offices at Weston House, 246 High Holborn, London, WC1V 7EX, following the termination of the lease in their former shared premises in Maltravers Street. Weston House came too late the Science Council who had to leave their former premises in Euston Road because of redevelopment. However, a project for a “STEM House”, to provide accommodation for these three organizations and others in the science, technology, engineering and mathematics sector, is proposed for the longer term.

IPEM, as a partner of all three bodies, will continue to work with them, individually and together, to ensure that the interests of science, engineering and technology in IPEM’s industry sector are effectively represented.

Robert Neilson

RPA 2000

During the calendar year 2006, there were 54 successful applications and 1 unsuccessful application for RPA certification. At the end of the year 2006, there were a total of 455 current certificate holders.

There have been 10 successful applications and 1 unsuccessful application for the new LPA Certificate. There are now a total of 33 holders of the LPA certificate.

In addition 1 specialist certificate was issued. There are 42 specialist certificates still current.

After many months of discussions with the HSE RPA2000 has been reaccredited. The process now conforms to the HSE’s revised Statement on Radiation Protection Advisers (September 2006 edition). There have been some changes in the way we operate, including a new set of practical competences. The new documentation is available from the website.

As part of this process we agreed that HSE would review the first year of operation of the scheme and that will take place in April 2008.

Peter Sharp

Royal Academy of Engineering : UK Focus for Biomedical Engineering

The UK focus, established in 1993 by the Royal Academy of Engineering, provides a forum through which the principle organisations concerned with biomedical engineering can communicate, debate and influence high-level decision makers in the department of health, research councils and industry. This therefore contributes highly to the objectives of the IPEM, that is the advancement of physics and engineering in medicine and biology. The committee has moved forward strongly this year to do this, under the chairmanship of Professor Richard I Kitney, OBE, FREng. This is his final year as chairman and the next chairman will be Professor Tony Unsworth, FREng from Durham University. There were four active committee meetings this year but also public events. There was the second high profile international lecture including dinner on ‘the New World of Health Work’ by Neil Jordan (Director of Microsoft Healthcare). It was very well attended by the movers and shakers in the NHS, academia and industry. There have
been two afternoon/early evening public briefing sessions on personalised medicine and functional imaging. There was another young researchers event on Musculoskeletal biomechanics in Durham. There have been external presentations at the committee meetings including: multidisciplinary of work at Imperial college; Brain-machine interfaces, neorobotics past, present and future; Opportunities and challenges of MRI at ultra-high-field; a report on healthcare industries. The committee launched the Systems Biology report in February and published a policy paper on the ageing population –challenges for engineering.

Mark Tooley

The UK Radiological Congress (UKRC) returned to Manchester Central in June 2007. Manchester Central is the new name for the complex that includes the Manchester International Convention Centre (the venue for the scientific and teaching meetings) and the adjacent and linked G-MEX Exhibition Hall (the venue for the technical exhibition and scientific posters).

The number of delegates was up significantly but this was achieved by a substantial reduction in registration fees compared with former years. This may adversely impact on total delegate income, but if this can be offset by a reduction in organisation and operating costs and an increase in other income streams, it will be well worthwhile for more people to be engaged in the scientific and teaching programme. However, people visiting the exhibition did notice that there were fewer exhibitors than in recent years and some of the anchor stands were smaller.

UKRC 2007 featured the third John Mallard Lecture, given by Professor Peter Jarritt, whose title was, Physics, function and fusion – PET imaging developments, applications and opportunities.

Future UKRC events are planned as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Birmingham, ICC, NIA and Austin Court</td>
<td>2nd - 4th June</td>
</tr>
<tr>
<td>2009</td>
<td>Manchester Central</td>
<td>8th - 10th June</td>
</tr>
<tr>
<td>2010</td>
<td>Birmingham, ICC, NIA and Austin Court</td>
<td>7th - 9th June</td>
</tr>
</tbody>
</table>

The biennial UK Radiation Oncology Congress (UKRO), for which IPEM's events team is the contracted organiser, was held at the James Watt Centre, Heriot-Watt University, Edinburgh from 19th - 21st March 2007. The event has been described by one member of the organising committee as the “best ever”, but the organisation of any event can always be improved, and IPEM’s team is already addressing ways that it can contribute to making UKRO 2009 an even greater success.

UKRO 2007 featured the biennial Douglas Lea Lecture, which was given by Dr J. D. Chapman of CRM Consulting Services, British Columbia, Canada. Dr Chapman’s lecture title was, Target Theory Revisited: why physicists are essential for radiobiology research.

The provisional venue and date for UKRO 2009 is Cardiff City Hall, from 6-8 April 2009.

Both these events are managed by Radiation and Oncology Congresses
(ROC) (a charitable company) and its trading company ROC Meetings and Exhibitions Limited (ROCME). The members of these companies are the Institute of Physics and Engineering in Medicine, the Royal College of Radiologists, the British Institute of Radiology and the College of Radiographers.

■ Peter Jackson and Robert Neilson

Association of Clinical Scientists

In 2006 the Association received 180 applications of which 68 were for Medical Physics and Clinical Engineering. Since it has been set up, ACS has assessed over 700 applications.

The QA visit that HPC originally planned for 2005 has still not taken place. However the Association is very conscious of the need to monitor the working of the assessment scheme. At the annual meeting of its assessor on 23rd November it discussed in detail how the consistency of assessments could be monitored. As a result of that discussion ACS has drawn up a set of standards which it is in the process of piloting. These standards include more formal training of assessors, including a training guide for assessors, and a programme for the moderation of assessments. The meeting also had a presentation from Eileen Thornton who is the Chair of the HPC Education and Training Committee.

ACS officers met with HPC officers in September. Most of the discussion was on the Foster and Donaldson Reviews.

The White Paper on the Foster and Donaldson reports has now been published. The paper stated that the professional members of the regulating bodies will be appointed and not elected as in the past. However there will be no increase in the number of regulators. There would be re-validation and records of higher levels of practice. The Association is concerned about the proposed use of KSF for re-validation.

At the AGM Derek Pearson was elected as Chair of ACS for the coming year.

■ Peter Sharp

Federation for Health Care Science

The Institute has continued to provide the Chairman for the Federation, the umbrella body covering all healthcare science groups. Two major activities are underway: a major survey of all healthcare scientists in the UK, and a review of how the Federation is structured and how it represents and develops policy with its constituent healthcare science professions. The Federation has continued to provide input to the Modernising Healthcare Science Careers project, which has far-reaching consequences for the future training and education of scientific and technical groups. The Federation has also worked on guidance for developing new support roles at career pathway stage four.

There have been discussions with NHS Careers, with contributions to the
design of career information material and to the development of their medium-term campaign to target the 14-19 age group.

A fuller overview of the Federation’s work is available in the 2006/07 Annual Report on the website, www.fedhcs.net. As Government policy on science and the NHS unfolds, it is essential that the Institute works through the Federation to contribute to policy development and push for an effective role for science in healthcare.

— Keith Ison

BSI Standards

The last year has once again seen IPEM members contributing to the development of healthcare standards and reports, as Committee representatives, Chairmen or experts on Joint Working Groups.

There was considerable activity in the field of electro-medical device safety, with the third edition of IEC 60601-1, (the general requirements for basic safety and essential performance of medical electrical equipment), finally being published as a British Standard in 2006. This edition of the standard has built on previous editions, consolidated several collateral standards and now addresses essential performance requirements as well as basic safety. It is envisaged that this will in future improve the design of medical devices leading to enhanced patient safety. Work will now commence on reviewing the numerous “part 2” standards, (which are particular standards for specific equipment types), to bring them into line with the third edition.

The CEN Advisory Board for Healthcare Standards, (ABHS), which has UK representation on, has been re-energised, in part in response to a resurgence of interest in healthcare sector standards within the British Standards Institution over recent years. ABHS has set up a number of task forces on issues including subjects as diverse as World Standards Cooperation, the Environment and Quality Management. This group is a forum that can establish task forces and solve problems encountered as part of standards development and harmonisation, as well as providing a platform to make recommendations to CEN’s technical board and ensuring liaison with European Commission services.

IPEM members continuing involvement in the area of standards developments is contributing to enhanced patient safety and supporting improved public health agendas.

— Dr Richard Scott

International Relationships

The European Alliance for Medical and Biological

EAMBES has had considerable activity in the last year in pursuit of one of its major aims – raising the profile of MBES with the European Commission and its various Directorates. This is particularly important at present as the
Engineering and Science (EAMBES)

Contents of the Seventh Framework are developed and formalised. A white paper on the place and role of MBES in instrumentation and healthcare was prepared, based on input from individuals and Academic Institutions and Society members of EAMBES. This was well received and appears to have influenced the thinking of relevant Directorates.

Further meetings on aspects of FP7 were held in Warsaw in March, producing a useful FP7 Brochure (see eambes.org).

Discussion also continues on Education, Training and Accreditation, with a meeting in London in June.

Joe Barbenel

International Organisation for Medical Physics (IOMP)

The IOMP is a scientific, educational, and professional organization, charitable in nature, of 76 national adhering organisations (IPEM is one of these), more than 16,500 individual members, several Corporate Members and four international Regional Organizations. The headquarters of IOMP is at Fairmount House and IPEM provides administrative support under contract.

Through its membership of IOMP, IPEM is able to advance the charitable aim “the advancement of medical physics in all its aspects”, which is common to both organisations, internationally and to greater effect than acting on its own. Particular emphasis is placed by IOMP to contributing to the advance of medical physics in developing counties. Activities include the provision of travel grants and supporting libraries through provision of books and journals. The IOMP also contributes to the formulation of international guidance on radiation protection and various medical physics standards and topics, which can have impact on the advancement of medical physics in the UK. It sponsors meetings and organizes sessions at relevant international conferences, workshops and courses.

The IOMP has recently reviewed its activities and strategic direction and has prepared a plan for 2006-2012 (Review and Way Forward: 2006-2012). Further information is available on www.iomp.org.

Peter Jackson and Keith Ison

European Federation of Organisations for Medical Physics (EFOMP)

The European Federation of Organisations in Medical Physics (EFOMP) includes 35 national organisations representing more than 6,600 physicists and engineers working in Medical Physics. During the past year EFOMP has been actively involved in education, training, registration and communication issues.

A detailed comparison of education and training programmes across Europe (“The present status of Medical Physics Education and Training in Europe - New Perspectives and EFOMP recommendations”) has been published on the EFOMP website (www.efomp.org). The recommendations of this report will be formed into a policy statement for approval at the EFOMP Council meeting in September 2007.
A further important milestone was the “Malaga Declaration” which was presented to the EFOMP Council at their 2006 meeting. This is a statement of EFOMP’s position on Medical Physics in Europe, with the aim of establishing Medical Physics as a regulated health care profession in all member states in Europe.

EFOMP has relaunched “European Medical Physics News”, an electronic magazine, which will be published two or three times per year. This provides a platform for news from EFOMP and member countries, as well as scientific and technical contributions, and reports in national languages. All IPEM members are invited to subscribe to the magazine, without cost, via the EFOMP website. In addition, the journal “Physica Medica” will be relaunched as an official journal of EFOMP with the title “European Journal of Medical Physics”. The scope of the journal has been redefined to include Radiotherapy Physics, Radiology, Radiation Protection, Measurements, and Education. A new editorial board has been established with 5 associate editors representing these subfields of Medical Physics. IPEM provides administrative support to EFOMP under contract.

■ Chris Gibson and Neil Lewis

The main activity of the Federation in the last year was the successful World Congress, held in Seoul. The World Health organisation has resulted in IFMBE being recognised by UN/WHO as a specialised NGO, which will increase the visibility and influence of both the Federation and MBE. The precipitating factor in the interaction was an initiative related to improved patient health and safety and this led to the then President of IFMBE, Professor Joachim Nagel addressing the WHO Congress in Geneva. The Federation has become a member of The World Alliance on Patient Safety, leading to a greater recognition and acceptance of the importance of Clinical Engineering in patient safety.

IFMBE continues to sponsor or co-sponsor a wide range of conferences, although it appears that UK representation is often rather meagre. IPEM provides administrative support to IFMBE under contract.

■ Joe Barbenel

The Union is the umbrella organisation linking the International Organization of Medical Physics (IOMP) with the International Federation of Medical and Bioengineering (IFMBE). It is a member of the International Council of Scientific Unions (ICSU).

The principal objective of IUPESM is to contribute to the advancement of physical and engineering sciences in medicine for the benefit and well being of humanity. It therefore has similar charitable objectives to IPEM but operates at an international level.

IPEM is now providing financial administrative support, under contract, to
IUPESM.

A major activity is the organisation of the triennial World Congresses on Medical Physics and Biomedical Engineering. The successful 2006 Congress was held in Seoul, Korea and the 2009 Congress will be held in Munich, Germany in 2009. Further details on www.iupesm.org.

The IUPESM is fully participating in a developing an ICSU initiative ‘Science for Health and Well-Being’ and funding from ICSU has been obtained to take this forward.

Peter Smith

The UK has gained further support in its bid to hold IRPA 13 in Glasgow in 2012. At the 3rd Informal Meeting of European IRPA Societies in Brussels in October 2006, unanimous support was given by those present to identify this bid as The European Bid.

Preparation for IRPA 12 (October 2008 in Buenos Aires) is in full swing. Apart from active participation in the programme committee, names of some UK scientists have been put forward for consideration as speakers in the scientific sessions and refresher courses. A list of potential candidates has been drawn up for the UK delegation at IRPA 12.

Work relating to stakeholders’ engagement in radiological protection has continued and a 3rd workshop will be held in the UK in December 2007. This should help to improve the decision-making process by creating a culture of stakeholder engagement among the radiation protection professionals.

Philip Clewer, IPEM representative on the International Committee, is in the working group involved in responding to the consultation on the review of the Euratom Basic Safety Standards Directive.

The Society for Radiological Protection (SRP) is applying for charter which, if successful, will create the new title “Chartered Radiation Protection Professional” (CRadP). There is provision to offer the title CRadP to suitably qualified members of IPEM who are International Members of SRP. This should bring added recognition to many IPEM members who are engaged in radiation protection.

Ruby Fong
Membership of IPEM Committees 2007-2008

COUNCIL

Officers
Dr K T Ison
President
London

Dr C J Gibson
President Elect
Oxford

TBA
Vice Presidents (Council may make up to 3 nominations)

Dr D C Crawford
Honorary Secretary
Cardiff

Ms L Sawyer
Assistant Honorary Secretary
Bath

Mr A Thompson
Honorary Treasurer
Newcastle Upon Tyne

Dr S F Keevil
Chair, Science, Engineering and Technology Committee
London

Dr P A White
Chair, Accreditation and Training Committee
Cambridge

Mr G Cusick
Chair, Publications Committee
London

Eur Ing L A Blache
Chair, Engineering Group Board
London

Elected Members
Professor J W Hand
Fellow
London

Dr D M Simpson
Corporate Member
Southampton

Ms E Parvin
Corporate Member
Milton Keynes

TBA
Fellow or Corporate Member
Rotherham

Mrs B Dawson
Incorporated Member
Cambridge

Mr P Robbins
Incorporated Member
Southampton

Ms A Podvoiskis
Associate Member, Clinical Scientist/Engineer

TBA
Associate Member, Clinical Technologist

SCIENCE, ENGINEERING AND TECHNOLOGY COMMITTEE

Dr S F Keevil, (Chairman)
London

Dr N Stone, (Vice Chairman)
Gloucester

Mr M Dunn, Secretary
Nottingham

All Chairs of Special Interest Groups
President or his nominee

Nominated Council Member
Chairman of Publications Committee or nominee

A representative of EGB
Dr R Scott (BSI Liaison)
Sutton in Ashfield

Mr R Glover (MRHA Representative)

SPECIAL INTEREST GROUPS

CLINICAL ENGINEERING (CE)

Mr D Hyde (Chairman)
Bath

Mr G Aucott (Secretary)
Leicester

Mr T Spicer
Derby

Mr M Durand
Cranfield

Mr B Bartup
London

Mr D Hart
Salisbury

Mr D Clarkson (Mentor)
Coventry

Dr G Dempsey (Co-opted Member)
Belfast

Mr J Mahady (Biomedical/Clinical Engineering Association of Ireland Representative)
Dublin

Mr J Lefever (MDA Representative)
London

Ms T Dunn (NHS Purchasing and Supplies Agency Representative)
London

DIAGNOSTIC RADIOLOGY (DR)

Mr S Mutch (Chairman)
Oxford

Ms A Jeffries (Secretary)
Birmingham

Ms P Clinch
London

Mr B Johnson
London

Mr O Morrish
Cambridge

Dr B McParland
Amersham

Mr D Grainger (MHRA/DoH Representative)
Amersham

Ms H Cole (CEP Representative)

Mr M Kelly (NPL Representative)
<table>
<thead>
<tr>
<th>Committee</th>
<th>Chair</th>
<th>Secretary</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMERGING TECHNOLOGIES (ET)</strong></td>
<td>TBA (Chair) Cambridge</td>
<td>TBA (Secretary)</td>
<td>Dr S Meldrum Norwich Dr E Dymond Bristol Dr B Stansfield Glasgow Dr P Hoskins Edinburgh Dr D J Hutchings (Mentor) Stone Dr J M Thompson (Mentor) Rugeley</td>
</tr>
<tr>
<td><strong>INFORMATICS AND COMPUTING (IC)</strong></td>
<td>Mr E McDonagh (Chair) London</td>
<td>Mr D Carpenter (Secretary) Southampton Mr D Withers London Mr A Reilly Edinburgh Mr P Stevens Bristol Mr S du Plooy London Dr E Claridge (Mentor) Birmingham Dr A Hoole (CFH PACS Radiotherapy Representative) (Co-opted) Mr P Pringle (Industrial Representative) Reigate Ms H Cole (CEP Representative) London</td>
<td></td>
</tr>
<tr>
<td><strong>NUCLEAR MEDICINE (NM)</strong></td>
<td>Miss C Tonge (Chair) Manchester</td>
<td>Mr R Fernandez (Secretary) London Mr R Peace Newcastle Upon Tyne Ms W Waddington London Ms M Dempsey Glasgow Ms P Todd Belfast Ms S Allen (BNMS Representative) Ms S Ebdon-Jackson (DoH Representative) Ms L Rahman (BIR Representative) Mr S Judge (NPL Representative) Mrs M King (MHRA Representative) Mr M Nettleton (HSE Representative) Ms B Ellis (UK Radiopharmacy Group Representative)</td>
<td></td>
</tr>
<tr>
<td><strong>PHYSIOLOGICAL MEASUREMENT (PM)</strong></td>
<td>Dr Glyn Coutts (Chair) Manchester</td>
<td>TBA (Secretary) Bromley Dr E Moore London Dr J Thornton London Mr D Price London</td>
<td></td>
</tr>
<tr>
<td><strong>RADIATION PROTECTION (RP)</strong></td>
<td>Mr S Evans (Chair) London Miss J Smyth (Secretary) Dundee Miss N Dulai London Ms K Fuller Sheffield Mr P Howells Scarborough Ms E Larkin Birmingham Dr P Marsden (Mentor) London Dr P Allisy-Roberts (Mentor) France Mrs J Stewart (NRPB Representative) Mr M Nettleton (HSE Representative) Mr A Bush (Environmental Agency Representative) Mr I Chell (DoH Representative)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RADIOTherapy (RT)</strong></td>
<td>Dr C G Rowbotton (Chair) Manchester</td>
<td>Dr C Edwards (Secretary) Stoke on Trent Mr C Lee Wirral Ms T Perrett Cardiff Mr N Richmond Middlesbrough Dr J Sykes Leeds Mrs C Brown Wirral Mr S Slade-Carter Oxford Dr D E Bonnett (Mentor) Maidstone Dr S Duane or Dr A Du Sautoy (NPL Representative) Mr M Nettleton (HSE Representative) Mrs S King (Medicines and Healthcare Products Regulatory Agency Representative) Ms H Cole (Purchasing and Supply Agency Representative)</td>
<td></td>
</tr>
</tbody>
</table>
INSTITUTE OF PHYSICS AND ENGINEERING IN MEDICINE

IPEM ANNUAL REVIEW 2007

REHABILITATION AND BIO-MECHANICS (REB)

Mr R Caley (Chairman)  Wakefield
Ms Z Robertson (Secretary)  Derby
Professor D Stefanov  Cardiff
Mr P Dryer  London
Mr G Bush  Leicester
Mr J Currell  Stanmore
Dr R Farley (until December 2007)  Edinburgh
Dr A Shortland (until December 2007)  London

ULTRASOUND AND NON IONISING RADIATION (UNIR)

Mr M Mayo (Chairman)  Plymouth
Mr M Brewin (Secretary)  London
Miss B Griffiths  Nottingham
Dr C Moran  Edinburgh
Dr D Allan  Manchester
Dr A Lecomber  Newcastle Upon Tyne
Dr P Wright  Salisbury
Mr M Lynn  Reading
Dr P Verma  Sheffield
Professor J Hand  London

PUBLICATIONS

PUBLICATIONS COMMITTEE

Mr G Cusick (Chairman)  London
Dr M M Arnell (Secretary)  Manchester
Dr M Neuman (Editor of Physiological Measurement)  to 31.12.2007
Dr S Webb (Editor of Physics in Medicine and Biology)  London
Dr S Clift (Editor of Medical Engineering and Physics)  Bath
Dr M McJury (Editor of SCOPE)  Belfast

Professor J Woodcock (Editor of Journal of Medical Engineering and Technology)
Chair or Secretary of Scientific Committee
President or his nominee

SCOPE EDITORIAL TEAM

Dr M McJury (Editor)  Belfast
Ms A Cotton (Meeting Reports Editor)  Southampton
Dr D Cowan (Engineering Editor)  North Chailey
Mr P Harding (Technology Editor)  Leicester
Mr J McLean (News Editor)  Glasgow
Miss S Misson (Book Review Editor)  Southampton
Miss G Whitelaw (Book Review Editor)  London

ACCREDITATION AND TRAINING

ACCREDITATION AND TRAINING COMMITTEE

Dr P A White (Chair)  Cambridge
TBA  (Secretary)
Dr C Callicott (Chair of CSETP)  Bradford
Mr P Robbins (Chair of CTETP)  Cambridge
Professor M Sperrin (Chair of Membership Panel)
Ms C Hardiman (Chair of Professional Development Panel)  Northwood
Eur Ing L A Blache (Chair of Engineering Group Board)  London
Ms N Kent (Associate Physicists and Engineers Network)  Newcastle
Ms S Maddison (Associate Technologists Network)  Portsmouth
Mr J Y Methven (Registrar VRCT)  Carlisle
Professor P F Sharp (FHCS/RPA 2000/Scottish Federation of HCS)  Aberdeen
Dr S F Keevil (Chair of SET Committee)  London
Nominated Council Member
Miss T Maddison (IPEM Membership and Training Manager)  York

IPEM Annual Review 2007
## CLINICAL SCIENTISTS EDUCATION AND TRAINING PANEL (CSETP)

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Dr C Callicott</td>
<td>Bradford</td>
</tr>
<tr>
<td>Secretary</td>
<td>Dr H Stockdale</td>
<td>Liverpool</td>
</tr>
<tr>
<td>Part I Registrar</td>
<td>Dr A Bolster</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Part II Registrar</td>
<td>Dr G Lawrence</td>
<td>Wirral</td>
</tr>
<tr>
<td>Chief Examiner</td>
<td>Dr S Pye</td>
<td>Edinburgh</td>
</tr>
<tr>
<td>APEN Representative</td>
<td>Ms J Dennis</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Representative from EGB</td>
<td>Mr R Heggie</td>
<td>Cardiff</td>
</tr>
<tr>
<td>Part I Training Centre Accreditation</td>
<td>Mr A Rogers</td>
<td>Nottingham</td>
</tr>
<tr>
<td>Course Accreditation</td>
<td>Dr D Parker</td>
<td>Birmingham</td>
</tr>
<tr>
<td>Membership and Training Manager</td>
<td>Miss T Maddison</td>
<td>York</td>
</tr>
</tbody>
</table>

## CLINICAL TECHNOLOGISTS EDUCATION AND TRAINING PANEL (CTETP)

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Mr P Robbins</td>
<td>Cambridge</td>
</tr>
<tr>
<td>Secretary</td>
<td>Mr A Thompson</td>
<td>Newcastle Upon Tyne</td>
</tr>
<tr>
<td>Registrar</td>
<td>Ms D Allen</td>
<td>Leicester</td>
</tr>
<tr>
<td></td>
<td>Mr S Atherton</td>
<td>Manchester</td>
</tr>
<tr>
<td></td>
<td>Ms S Maddison</td>
<td>Portsmouth</td>
</tr>
<tr>
<td></td>
<td>Ms A Butcher</td>
<td>Guildford</td>
</tr>
<tr>
<td></td>
<td>Mrs B Dawson</td>
<td>Rotherham</td>
</tr>
<tr>
<td></td>
<td>Mr D Harrison</td>
<td>Birmingham</td>
</tr>
<tr>
<td></td>
<td>Ms T Jones</td>
<td>Birmingham</td>
</tr>
<tr>
<td></td>
<td>Ms A McIntosh</td>
<td>Edinburgh</td>
</tr>
<tr>
<td>Course Accreditation</td>
<td>Ms C Segasby</td>
<td>Sheffield</td>
</tr>
<tr>
<td>Registrar</td>
<td>Ms L Yuile</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Membership and Training Manager</td>
<td>Miss T Maddison</td>
<td>York</td>
</tr>
<tr>
<td>ART Representative</td>
<td>Mr D Gandy</td>
<td>London</td>
</tr>
<tr>
<td>IET Representative</td>
<td>Mr A Fielder</td>
<td>Exeter</td>
</tr>
</tbody>
</table>

## MEMBERSHIP PANEL

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Professor M Sperrin</td>
<td>Reading</td>
</tr>
<tr>
<td>Fellowship Registrar</td>
<td>Professor P C Williams</td>
<td>Manchester</td>
</tr>
<tr>
<td>Membership, Registrar/CSci Registrar</td>
<td>Dr G Lawrence</td>
<td>Wirral</td>
</tr>
<tr>
<td>ARCP Panel</td>
<td>Ms C Segasby</td>
<td>Sheffield</td>
</tr>
<tr>
<td>(C Eng Registrar)</td>
<td>Mr J McCarthy</td>
<td>Cardiff</td>
</tr>
<tr>
<td>London Registrar</td>
<td>Mr N Abraham</td>
<td>London</td>
</tr>
<tr>
<td>(Eng Tech Registrars)</td>
<td>Mr A Illes/Atherton</td>
<td>Bristol/Manchester</td>
</tr>
<tr>
<td>Membership Manager</td>
<td>Miss T Maddison</td>
<td>York</td>
</tr>
</tbody>
</table>

## PROFESSIONAL DEVELOPMENT PANEL

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Ms C Hardiman</td>
<td>Northwood</td>
</tr>
<tr>
<td>Secretary</td>
<td>Ms S Buckley</td>
<td>Swansea</td>
</tr>
<tr>
<td>Representative</td>
<td>Mr A Rogers</td>
<td>Nottingham</td>
</tr>
<tr>
<td>(CSETP Rep)</td>
<td>Mr P Robbins</td>
<td>Cambridge</td>
</tr>
<tr>
<td>Accreditation and RPA</td>
<td>Mrs K Goldstone</td>
<td>Cambridge</td>
</tr>
<tr>
<td>(IRMER Representative)</td>
<td>Ms C Paterson</td>
<td>Glasgow</td>
</tr>
<tr>
<td>(ATeN Representative)</td>
<td>TBA</td>
<td>Hull</td>
</tr>
<tr>
<td>Higher Training Needs</td>
<td>Dr C Langton</td>
<td>Devon</td>
</tr>
<tr>
<td>(Clinical Scientist)</td>
<td>Mr A Mitchell</td>
<td></td>
</tr>
<tr>
<td>(Clinical Technologists)</td>
<td>Commissioner for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commissioner for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher Training Needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Engineer</td>
<td></td>
</tr>
</tbody>
</table>
## ASSOCIATE PHYSICISTS AND ENGINEERS NETWORK (APeN)

<table>
<thead>
<tr>
<th>Position</th>
<th>City/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss N Kent (Chair)</td>
<td>Newcastle Upon Tyne</td>
</tr>
<tr>
<td>TBA (Secretary)</td>
<td></td>
</tr>
<tr>
<td>Ms J Hutchings (Events)</td>
<td>Gloucester</td>
</tr>
<tr>
<td>Ms A Podvoiskis (Events)</td>
<td>Southampton</td>
</tr>
<tr>
<td>Ms C Findlay (Newsletter)</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Ms C Paterson (Website)</td>
<td>Glasgow</td>
</tr>
<tr>
<td>2 vacancies</td>
<td></td>
</tr>
</tbody>
</table>

## ASSOCIATE TECHNOLOGISTS NETWORK (ATeN)

<table>
<thead>
<tr>
<th>Position</th>
<th>City/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss S Maddison (Chair)</td>
<td>Portsmouth</td>
</tr>
<tr>
<td>Mr A Stanton (Vice Chair)</td>
<td>Manchester</td>
</tr>
<tr>
<td>Mrs Z Iyoob (Secretary)</td>
<td>Oxford</td>
</tr>
<tr>
<td>Mrs J Palmer (Newsletter)</td>
<td>Southampton</td>
</tr>
<tr>
<td>Mr F Pillai (Website)</td>
<td>Cambridge</td>
</tr>
<tr>
<td>1 Vacancy</td>
<td></td>
</tr>
</tbody>
</table>

## PART I EXAMINERS

<table>
<thead>
<tr>
<th>Role</th>
<th>City/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr I Badr (DR/RP)</td>
<td>London</td>
</tr>
<tr>
<td>Professor A W Beavis (R/T)</td>
<td>Hull</td>
</tr>
<tr>
<td>Dr A Bolster (NM)</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Dr J N H Brunt (MRI)</td>
<td>Wirral</td>
</tr>
<tr>
<td>Dr C Callicott (MEM/DMEI)</td>
<td>Bradford</td>
</tr>
<tr>
<td>Mr P Childs (Radiotherapy)</td>
<td>Surrey</td>
</tr>
<tr>
<td>Mr J Colin (BEF/AT/MED)</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Dr D M Cowan (AT/BEF/NM/MMI)</td>
<td>Lewes</td>
</tr>
<tr>
<td>Dr N J Dudley (Ultrason)</td>
<td>Nottingham</td>
</tr>
<tr>
<td>Mr M J Dunn (DR/RP)</td>
<td>Leicester</td>
</tr>
<tr>
<td>Dr W D Evans (Nuclear Medicine)</td>
<td>Cardiff</td>
</tr>
<tr>
<td>Mrs K Farrant (DR)</td>
<td>Gloucester</td>
</tr>
<tr>
<td>Mr R Gadd (Nuclear Medicine)</td>
<td>Stoke on Trent</td>
</tr>
<tr>
<td>Mr P S Ganney (ICT)</td>
<td>Hull</td>
</tr>
<tr>
<td>Mr M Graves (MRI)</td>
<td>Cambridge</td>
</tr>
<tr>
<td>Mr c Griffiths (DMEI/PM)</td>
<td>Newcastle Upon Tyne</td>
</tr>
<tr>
<td>Dr N D Harris (PM)</td>
<td>Bath</td>
</tr>
<tr>
<td>Dr M Hillman (AT/MED)</td>
<td>Bath</td>
</tr>
<tr>
<td>Dr A Hughes (Nuclear Medicine)</td>
<td>Preston</td>
</tr>
<tr>
<td>Ms D Ingham (R/T)</td>
<td>Exeter</td>
</tr>
<tr>
<td>Miss H James (Radiotherapy)</td>
<td>Ipswich</td>
</tr>
<tr>
<td>Dr M Keir (NM)</td>
<td>Newcastle Upon Tyne</td>
</tr>
<tr>
<td>Mr S P Lake (ICT)</td>
<td>Liverpool</td>
</tr>
<tr>
<td>Mr C Lawinski (DR)</td>
<td>London</td>
</tr>
</tbody>
</table>

## CORPORATE MEMBERSHIP/PART II EXTERNAL ADVISORS *FELLOWSHIP PANEL*

<table>
<thead>
<tr>
<th>Name</th>
<th>City/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms K Adamson (Nuclear Medicine)</td>
<td>London</td>
</tr>
<tr>
<td>Dr J Agnew (Nuclear Medicine)</td>
<td>London</td>
</tr>
<tr>
<td>Dr E Aird (Radiotherapy/Diagnostic Radiology)</td>
<td>Middlesex</td>
</tr>
<tr>
<td>Mrs G Baker (Radiotherapy)</td>
<td>Kent</td>
</tr>
<tr>
<td>Professor A T Barker (Physiological Measurement)</td>
<td>Sheffield</td>
</tr>
<tr>
<td>Professor A Beddoe (Radiotherapy)</td>
<td>Birmingham</td>
</tr>
<tr>
<td>Miss M Bidmead (Radiotherapy)</td>
<td>London</td>
</tr>
<tr>
<td>Dr K Boardman (Computer Science)</td>
<td>Coventry</td>
</tr>
<tr>
<td>Dr D E Bonnett (Radiotherapy)</td>
<td>Kent</td>
</tr>
<tr>
<td>Professor B H Brown (Physiological Measurement)</td>
<td>Sheffield</td>
</tr>
<tr>
<td>Mr F Brunton (Radiotherapy)</td>
<td>Inverness</td>
</tr>
<tr>
<td>Mr G Budgell (Radiotherapy)</td>
<td>Manchester</td>
</tr>
<tr>
<td>Dr M Cawley (Radiotherapy)</td>
<td>Lincoln</td>
</tr>
<tr>
<td>Dr I R Chambers (PM/C Eng)</td>
<td>Middlesbrough</td>
</tr>
</tbody>
</table>

IPEM Annual Review 2007
Mr S Chandler (Nuclear Medicine)  Darlington
Dr E Claridge (Computer Science)  Birmingham
Dr I Coles (Radiotherapy)  London
Dr G Coutts (MRI/Spectroscopy)  Manchester
Professor R Dale (Radiotherapy)  London
Dr C Daniel (Clinical Engineering)  Surrey
Dr C Deehan (Radiotherapy)  London
Mr S Duck (Radiotherapy)  London
Dr N J Dudley (Ultrasound/Medical Imaging)  Nottingham
Dr C Edwards (Radiotherapy)  Stoke on Trent
Mr S Fielden (Biomedical Engineering)  Birmingham
Professor J Fleming (Nuclear Medicine)  Southampton
Dr G Galloway (Radiotherapy)  Derby
Mrs K Goldstone (Radiation Protection)  Cambridge
Dr N Gravill (Physiological Measurement)  Lincoln
Dr M Halliwell (Ultrasound)  Bristol
Dr J Handley (Radiotherapy)  Stoke on Trent
Dr A Hufton (Diagnostic Radiology)  Manchester
Professor P Jarrett (Nuclear Medicine)  Cambridge
Mr A P Jones MRI (Non Ionising Radiation Techniques)  Manchester
Mr T J Jordan (Radiotherapy)  Clwyd
Dr S Keevil (MRI)  London
Dr M J Keir (Nuclear Medicine)  Newcastle
Mr N Kenyon (Computer Science-Informatics)  Rotherham
Dr J Kotre (Diagnostic Radiology)  Newcastle
Dr K Langmack (Radiotherapy)  Nottingham
Dr G Lawrence (Nuclear Medicine)  Wirral
Professor M Leach (MRI)  Surrey
Dr J J Lloyd (Nuclear Medicine)  Newcastle
Dr C Marshall (Nuclear Medicine)  Belfast
Dr S Mason (Physiological Measurement)  Nottingham
Mr P Mayles (Radiotherapy)  Wirral
Dr J McCarthy (Biomedical Engineering)  Cardiff
Dr D Nicholas (Radiotherapy)  London
Professor A Nisbet (Radiotherapy)  Oxford
Dr W G Pitchford (Radiotherapy)  Lincoln
Mr J Plane (Radiotherapy)  Middlesbrough
Mr A Poynter (Radiotherapy)  Ipswich
Mr M A Richardson (Nuclear Medicine)  Middlesbrough
Dr J Ridgway (MRI)  Leeds
Mrs M Rose (Nuclear Medicine)  Manchester
Dr I Rosenberg (Radiotherapy)  London
Dr C Rowbottom (Radiotherapy)  Manchester
Mr J Saunders (DR/RP)  Hull
Dr R Shields (Nuclear Medicine)  Manchester
Dr A Simmons (MRI)  Manchester
Dr A Taktak (CE, PM/Computing)  Liverpool
Mr D H Temperton (Diagnostic Radiology/Radiation Protection)  Edgbaston
Mr S J Thomas (Radiotherapy)  Cambridge
Professor D Thwaites (Radiotherapy)  Leeds
Dr W Tindale (Nuclear Medicine)  Sheffield
Dr J F Townley (Radiotherapy)  Birmingham
Mr C Walker (Radiotherapy)  Middlesbrough
Dr A Whittingham (Ultrasound)  Newcastle
Professor P Williams (Radiotherapy)  Manchester
Dr D Wood (Clinical Engineering)  Salisbury
Dr P Wright NIR/Clinical Engineering/Rehabilitation  Salisbury

ENGINEERING GROUP BOARD

Eur Ing L A Blache (Chair)  London
Mr J P McCarthy (Vice Chairman and C Eng Registrar)  Cardiff
Mr T Adlam (Secretary)  Bath
Dr A Taktak (C Eng Asst Registrar)  Liverpool
Mr N Abraham (I Eng Registrar)  London
Mr C Glaister (Assistant I Eng Registrar)  Hemel Hempstead
Mr A Iles (Eng Tech Registrar)  Bristol
Mr S Atherton (Assistant Eng Tech Registrar)  Manchester

CLINICAL TECHNOLOGISTS’ COMMITTEE

Mr P Robbins (Chairman)  Cambridge
Mr A Thompson (Secretary)  Newcastle Upon Tyne
Ms D Allen (Registrar)  Leicester
Mr S Atherton  Manchester
Ms S Maddison  Portsmouth
Ms A Butcher  Guildford
Mrs B Dawson  Rotherham
Mr D Harrison  Birmingham
Ms T Jones (Chief Moderator)  Birmingham
Ms A McIntosh  Edinburgh
Ms C Segasby (Course Accreditation)  Sheffield
Ms L Yule (Registrar)  Glasgow
Miss T Maddison (Membership and Training Manager)  York
Mr D Gandy (ART Representative) London
Mr A Fielder (IET Representative) Exeter

PROFESSIONAL ADVISORY GROUP

Vacant Chair (Vice President Professional Issues)
Ms L Sawyer (Secretary)
Dr K Ison (IPEM President) London
Dr C Gibson (President-elect, IPEM) Oxford
Mr R W Neilson (IPEM, General Secretary)
Dr S F Keevil (Chairman, SET Committee) London
Professor P F Sharp (FHCS and Scottish Forum for Healthcare Science)
Eur Ing L A Blache (Chairman, EGB) London
Dr D Pearson Nottingham
Dr P White (Chairman, ATC) Cambridge
Mr P Robbins (Chairman, Clinical Technologists Committee) Cambridge
Vacant (Clinical Technologists Committee)
Ms D Allen Leicester
Miss C Findlay (Associate Physicists and Engineers Network (APEN))
Vacant (Associate Technologists Network)

ACADEMIC DEVELOPMENT GROUP

Professor A Perkins (Chairman) Nottingham
Dr K Ison (President) Southampton
Professor D Bader London
Dr A El-Haj Stoke on Trent
Professor J Barbenel Glasgow
Dr I Chambers Newcastle Upon Tyne
Dr S F Keevil London
Professor P F Sharp Aberdeen
Professor R H Smallwood Sheffield
Professor M A Smith Middlesbrough
Dr N Stone Gloucester
Mr R W Neilson York
Ms E-M McClean York

IPEM Annual Review 2007