

The Birth of the International Organizations For Medical Physics
With Memories by Prof. John Mallard
September 8th, 1994

This article is a modified version of the plenary lecture first given by John Mallard at the Golden Jubilee congress of the HPA/IPSM in Bristol on 8th September 1994. Reprinted in entirety (Scope, Vol. 3 No.2, 25-31, June 1994) with the permission of the author and publisher.

About halfway through preparing this paper, it struck me that the HPA began to get itchy feet in the 1950's. I suppose it was the effect of all those war years, and the austerity that dragged on into the 50's. We began to want to see what was going on elsewhere.

Although many medical physicists from abroad were members of the HPA- from Australia, Canada, Sweden, USA for example, - and we must never forget that the HPA was the first national body of medical physicists in the world- our only other international links and outlets, apart from personal friendships and acquaintances, were through the International Congress of Radiology. These always had hospital physics topics in their programs- radiotherapy physics and radiation protection sessions, and radioisotope ones were just coming in at the time.

A party of 16 members went to the 7th International Congress of Radiology in Copenhagen in 1953. Then a special visit was arranged to Holland in April 1954. 68 members took part, visiting Utrecht and Amsterdam hospitals, with Phillips laying on a visit to Eindhoven: there was also a visit to the bulb fields. The setting-up of the Journal 'Physics in Medicine and Biology' was begun on this trip, and its first issue was in May 1956, two years later. It was just after this trip in 1954 that Norman Veali asked the HPA to look at the possibility of setting up some form of international association, but nothing was done. It was suggested again by Dr. Moos of Chicago, and this time, the President, Ray Wood, wrote round to Sven Benner in Sweden, Edith Quimby, in New York, and Hal Johns in Toronto, beginning a correspondence continued by the next President, Harold Miller.

In April 1958 came another special trip, this time to Germany, visiting radiotherapy in Heidelberg, physics in Wurzburg, and Siemens at Erlangen where preliminary discussions were held about a possible international body, and momentum gathered that a meeting be called for the following year. It was generally agreed that the HPA should be the organizing body towards an international federation. Although there was a further trip made to Karlsruhe and CERN in Geneva, and other trips took place later to Paris in 1963 and to the Nordic countries in 1965, the first two visits were the psychological stimulus to the international activity.

Invitations were issued by the HPA to a special one-day meeting at the end of the 9th International Congress of Radiology in Munich in July 1959. It was at this meeting that the first real steps were taken to form our own international organization. An account was published in Physics in Medicine and Biology 1960 [(Jan), Vol. 4 (3), pp 223-237, Report of a Discussion on International Organization in Medical Physics.] Over 80 people attended from 20 countries, the Chairman being Jack Boag, President of the HPA, and the Secretary was Roy Ellis, the Secretary of the HPA. Programmed speakers were: the President of the Congress, Boris Rajewsky; Jack Boag, who mentioned the first international meeting of the biophysics at Cambridge a few weeks before, and the move to begin an international society for Biophysics, and that cooperation with any organization of medical physics would be welcomed; Bill Spiers, who mentioned 200 hospital physicists in 80 centres and hospitals in the UK; John Laughlin, who spoke about the USA with 60 certificated (recognized by the American Board of Radiology) hospital physicists; Kurt Liden of Sweden;

and Professor Wachsmann of Erlangen, who spoke about 11 hospital physics appointments in Germany as private consultants.

26 speakers contributed to the discussion from 12 different countries; several said that the international organization should be wide enough to cover both fundamental biophysics and the applied branch - medical physics; stressed that there were already too many international organizations! Jack Boag put forward a motion to form an International Liaison Committee on Medical Physics to correspond with the national societies participating in this meeting, and with the representatives present if no society existed. The initiative in implementing the motion was left to the HPA.

This is where I personally became involved, taking over for Roy Ellis, as Honorary Secretary of the HPA from 1960-1962. I tried hard to correspond with all those 20 countries, encouraging them to form their own societies where they did not have one. It was a very slow business, and it became clear that in some countries there were rival personalities or rival groupings. Invitations were given to as many as we knew, to attend a meeting of the International Liaison Committee in Stockholm during the Second International Biophysics Congress in 1961.

It was during this Biophysics Congress that the International Organization for Pure and Applied Biophysics (IOPAB) was set up, and they wanted our collaboration. There was a big head of steam that whatever body we set up should become affiliated to IOPAB. Our meeting was held on the 4th August 1961 and there were over 50 medical physicists present from 12 different countries- I now find it significant that this was much smaller than the 80 people from 20 countries at the Munich Radiology Congress meeting - and 15 were from the UK and 10 from USA; thus less Medical Physicists were able to come to a Biophysics Congress than a Radiology one!

An account of this meeting was published in *Physics in Medicine and Biology* 1962 [(Jan), Vol. 6(3), pp 472-478 - Report on a Meeting of the International Liaison Committee of Medical Physics, Stockholm August 4 1961.] The Chairman was Len Lamerton, the President of the HPA, and the discussion quickly made it clear that the setting up of an International Organization for Medical Physics was very desirable, independently of whether it became affiliated with IOPAB, and that it should be done as soon as possible. There was some difficulty in defining medical physics, as distinct from medical electronics that had already set up IFME; and health physics that had set up its own international Health Physics Society- what would the relationship between them be? An International Steering Committee was set up to draft a Constitution; consider affiliating to IOPAB; to hold a scientific meeting in a reasonable time; and to report within a year: a very ambitious program! Dr. Sven Benner of Sweden became Chairman of this Steering Committee, Len Lamerton, Vice-Chairman and myself, Secretary together with 10 representatives of 10 different countries. These were UK, Sweden, USA, Czechoslovakia, Canada, Germany, Holland, Hungary, Japan and the IAEA, Vienna. The HPA was to provide the facilities for the Committee. Jo Rotblat, the new editor of *PMB*, pressed for the Journal to become the Journal of the new organization. This did, in fact, happen in 1969 and Rune Walstam of Sweden became the first IOMP Editor of *PMB*.

The next year was a very busy one. Draft Statutes were drawn up, based upon those of IOPAB, but with interminable modifications and alterations. They had to go out to all the representatives for comments, and often it was impossible to get answers- how useful a FAX would have been then!

This International Steering Committee met in Montreal at the 10th Congress of Radiology on 26th August 1962- just over the year! Sven Benner was Chairman, but I was unable to be there at the last moment, because my mother-in-law was critically ill in our home with breast cancer and did, in fact die on the day before the Congress began. John Greening very kindly stepped in and acted as Secretary of the meeting. A

short account of this meeting was published in PMB [Phys. Med. Biol. 1962 (Dec) Vol. 7 (3) pp 377-380, Meeting of International Steering Committee, Montreal, 26th August 1962.] It was agreed unanimously to form The International Organization for Medical Physics (IOMP), which was to be inaugurated on January 1st, 1963. The Steering Committee was to act as Provisional Council until the first General Meeting of the IOMP members could be held- this would be during the first Congress- and at this meeting the first election of officers would be held. Until then, the Officers of the Steering Committee were to act as IOMP Officers. Thus Sven Benner became Acting President; Len Lamerton, Acting Vice-President, and myself Acting Secretary-General. The Draft Statutes were approved with only tiny modifications that made all the hard work of the last year worthwhile! But there was a Proviso that IOMP applies for affiliation to IOPAB - which meant ultimately being associated with ICSU, the International Council of Scientific Unions. This news, and the Statutes, was to be sent to all the representatives known to us in as many countries as possible, and asking them to join.

The International Organization for Medical Physics (IOMP)

The Statutes gave the Objects of the Organization (**Table I**) and gave it Powers (**Table II**). Each country was to join the Organization through a National Committee for Medical Physics, which would co-ordinate within its own country, the interests of the various branches of Medical Physics, and select delegates to represent it at the General Meeting of IOMP.

In the UK, the National Committee was begun and was operated by the HPA, but included also a representative of the British Institute of Radiology, and of the Biological Engineering Society - Jack Perkins served as the latter. This Committee began to bring together the clinical physicists and the engineers - at least it was a discussion forum. However, the BES resigned when IFMBE was set-up two years later in 1965 - much to my disappointment.

Although a National Committee made good sense for the more advanced countries, it was difficult to implement in those less developed nations where there was only a handful of medical physicists. In many cases, the National Committee was set-up by the only Society in a country, but there is no doubt that having to form a National Committee spurred on many countries to organize themselves and band together, set-up their own societies and help one another.

Table I

International Organization for Medical Physics (IOMP)

Objects (from the Statutes)

a) to organize international co-operation in medical physics and to promote communication between the various branches of medical physics and allied subjects.
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b) to contribute to the advancement of medical physics in all its aspects.
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c) to advise on the formation of National Committees for Medical Physics in those countries which lack such organization.

Table II

International Organization for Medical Physics (IOMP)

Powers (from the Statutes)

a) to set up bodies for special purposes.
b) to organize international meetings and conferences
c) to collaborate or affiliate with other scientific organizations.
d) to develop any activity deemed helpful to the forwarding of its declared objects.

This was undoubtedly one of the unwritten successes of IOMP - it led to countries organizing themselves so that they could join. There is no doubt, also, that in one or two countries there were rival personalities, so that the need to ensure that there was a truly representative National Committee for a country which applied for membership of IOMP, made it possible to say to them -sort it out- give us more information- and so on. Cumbersome and difficult to explain as it was, the National Committee concept played an important role. However, it did lead to one or two countries delaying their applications, or having sent them back for further information and thereby being delayed.

IOMP began in January 1963 with its four stalwart supporters being its members i.e. UK, USA, Sweden and Canada. In 1964 it was agreed that the first Congress should be in the UK. At the first Congress in 1965, five more members were elected, and I can remember vividly the boxes of correspondence with them that led to that. At one stage I was writing to about 19 different countries, each one at different stages of development. I still find it surprising that the countries behind the Iron Curtain were so keen - as can be seen in **Table III**, East Germany was in before West; and Hungary and Poland, in spite of all their difficulties, were in the first batch of new elections. I can remember some of the letters, from which it was clear that *any* international contact at all was treasured and valued highly. By 1992, the Membership had reached 51 affiliated countries, 2 Regional Organizations and 17 Corporate Members.

At each Congress a new set of Officers are elected (**Table IV**). The Vice-President is the new boy, learning the ropes, who becomes the President at the next Congress. The Secretary-General usually serves for two Congresses to give continuity as much as possible.

Table III

IOMP Membership (early)

Total No.

1963: Canada, Sweden, UK, USA 4

1965: East Germany, Hungary, Israel, Poland, South Africa 9

1972: West Germany 10

1973: Brazil, Finland, France, Greece, Mexico 15

1976: Netherlands, New Zealand 17

1977: Ireland 18

1978: Norway 19

1979: Italy, Japan, Spain 22

1982: Austria, Belgium, Denmark, India, Switzerland, Thailand,

EFOMP 29

By 1992 the Membership had reached
51 Affiliated Countries
2 Regional Organisations
17 Corporate Members

Table IV

Officers of the IOMP

1962-1965

Acting President S. Benner, Sweden
Acting Vice-President L F Lamerton, United Kingdom
Acting Secretary-General J R Mallard, United Kingdom

1965-1969

President W V Mayneord, United Kingdom
Vice-President J S Laughlin, United States
Secretary-General B Waldeskog, Sweden

1969-1972

President J S Laughlin, United States
Vice-President R I Magnusson, Sweden
Secretary-General J R Cameron, United States

1972-1976

President R I Magnusson, Sweden
Vice-President R Mathieu, Canada
Secretary-General J R Cameron, United States

1976-1979

President R Mathieu, Canada
Vice-President J R Mallard, United Kingdom
Secretary-General R Walstam, Sweden

1979-1982

President J R Mallard, United Kingdom
Vice-President A Kaul, Federal Republic of Germany
Secretary-General R Walstam, Sweden

1982-1985

President A Kaul, Federal Republic of Germany
Vice-President L H Lanzl, United States
Secretary-General B Stedeford, United Kingdom

1985-1988

President L H Lanzl, United States
Vice-President J R Cunningham, Canada

Secretary-General B Stedeford, United Kingdom

1988-1991

President J R Cunningham, Canada

Vice-President U Madhvanath, India

Secretary-General C G Orton, United States

1991-1994

President U Madhvanath, India

Vice-President K Boddy, United Kingdom

Secretary-General C G Orton, United States

The four stalwart member states- UK, USA, Sweden and Canada, have supplied all the IOMP Officers until 1979, when Alexander Kaul of West Germany became Vice-President. There has always been someone from Europe as an Officer, so no one can accuse IOMP of being North American dominated. If anything, the Americas could say that it is more European dominated! Dr. Madhvanath is the first officer from the Asian continent - now President. Undoubtedly this will happen more and more.

The First IOMP Congress, Harrogate, 1965

The first Congress of IOMP was held on 8th, 9th, 10th September 1965, in Harrogate, England. Val Mayneord was its President, and at the General Meeting he became the first elected President of IOMP. John Laughlin of the USA was elected the Vice-President. The Secretary of the Congress was George Innes, who was that year President of the HPA. It really ought to be called the George Innes Congress, because he did all the organization virtually single-handed on behalf of the UK National Committee, which he chaired. The BES also gave much valued help to this Congress. There were 117 proffered papers in three parallel sessions, covering all aspects of our work at that time, and over 500 people from 24 countries came. There were eight Review Papers, which PMB published as a Supplement, together with Mayneord's Presidential Address. It is a pity that all the papers were not published together as a Proceeding.

The social Program was terrific, and during the following weeks, overseas delegates were able to visit 26 centers around the country, including 12 in London - this was a very successful feature that helped a lot to show how medical physics was really done. At Harrogate it was decided that the next meeting would be at Boston, USA and thus began the series of International Conferences of Medical Physics listed in **Table V**. The next one - 1995 - is in Rio de Janeiro. Dare I hint that it is time that we had another one in UK!

There are two more short publications about IOMP [Brief History of IOMP, PMB 1974 Vol. 19 (1) 109-114 by John R. Cameron: and IOMP: A Brief History. Medical Physics World 1982, Vol. 1 No. 1 4-8 by Rune Walstam]. Both are very brief indeed, and each gives a complete version of the Statutes as they stood at that time.

Early Co-operation with the Biophysicists

Going back now to the early days of IOMP in 1963. Our Montreal Steering Committee had said quite clearly that IOMP should affiliate to IOPAB, the Biophysics International Organization, which was already set-up and thriving. This was a continuation of the feelings expressed at the Munich '59, and the Stockholm '61 meetings where many (particularly the Senior members and more academically minded) were in favor of us linking to the Biophysicists. By affiliating to IOPAB we could join the international scientific community immediately as a recognized specialty. IOPAB was already preparing to apply to become an

International Union and member of ICSU, and the scientific subject matter was in directions towards which many thought that the Medical Physics should go. Overtures had been made to IOPAB that had been welcomed.

The next IOPAB Congress was to be in Vienna in 1966, and a special Session on Medical Physics that was organized, to be chaired by Professor Mayneord as President of IOMP. There were four papers including one by myself on the normal brain pattern in scintiscans, and one by Bob Beck of Chicago on modulation transfer functions in radio-isotope imaging systems. The congress was for a week and I remember what seemed to be a long tedious week, with sessions at which I was somewhat out of my depth on molecular biophysics, energy transfer and so on. The Medical Physics Symposium was at the end of this long week, and out of a conference of 1200 or so, we had only three or four people in the audience other than the speakers. Professor Mayneord did not even bother to deliver his opening address - he said that it was going to be an harangue on the importance of physicists on medicine, and the virtually important work they do! We all gave our papers but it was a disaster. It was a very miserable and wasted week for me.

Of course, all this was reported back, and most of the steam went out of the recommendation that we should pursue affiliation with the IOPAB. Nevertheless, IOPAB organized a Medical Physics Session, without reference to IOMP, at their next Congress in Boston in 1969, and I was asked to give a paper and chair the Session. None of the Organizers or the speakers were known to me as hospital physicists. The Congress was held at the famous Massachusetts Institute of Technology, just two weeks after our own Second IOMP Conference, also in Boston, organized by Ted Webster and John Laughlin, with Lauriston S. Taylor as the President. The IOMP congress was a great success - I remember an outing on a glorious summer day at a lovely mansion house with avenues of trees in the grounds, sweeping down to the sea and having clam chowder and a barbecue until sunset. There was a week between the IOMP congress and the IOPAB one and I used that week to visit five centres all over the States going to Dave Kuhl, who was pioneering SPECT in Philadelphia; Hal Anger, improving his gamma cameras at Berkeley; one of the first image processing computers at Denver; Michael TerPogossian at St. Louis with his PET; Jim MacIntyre at Cleveland with whom I was working on an ICRU Report; and back to Boston to see Gordon Brownwell, also with a PET, and for the Biophysics Congress. Once again, a packed Congress of 2000 or so, but the Medical Physics session was attended by only a handful. It was a flop. None of the speakers were known to me and the Session was organized by the biophysicists without reference to IOMP or to me as Chairman of the Session. This third week in the States dragged on for me and I was glad to say goodbye to IOPAB and USA to get home.

I seem to have been at all of the IOMP Council meetings until about 1990, either as an Officer or as one of the UK Delegates and whenever, IOPAB has cropped up as a possible vehicle for our own aspirations, I was able to recount these experiences and caution against it. It seemed wiser to go our own way and stand on our own feet!

The Medical Engineering Organization

Of course, whilst all this was ongoing, the Medical Engineers were getting organized internationally, too. A First International Conference on Medical Electronics was held in Paris in 1958; and at a second one, also in Paris in 1959 in the UNESCO building, the International Federation of Medical Electronics (IFME) was set-up. There were 120 papers from 16 countries at that one. The third one was held in London in 1960 at Earl's Court - I exhibited the first brain color scanner. IFME continued to meet annually and widened itself to become IFMBE - a Federation of Medical and Biological Engineering, taking in biomechanics, in 1965.

The Evolution of International Union of Physical and Engineering Sciences in Medicine

IFMBE continued to meet annually until the 11th meeting in Ottawa in 1976. Now, the President of the Conference was Jack Hopps - an electrophysiological signals man - of the National Research Council in Ottawa, where the secretarial work of IFMBE was based. Now, at our third IOMP Conference in Gothenburg in 1972 - our meetings were every four years, when the IOMP President was Bob Magnusson, a clear mandate was given for a closer collaboration between IOMP and IFMBE. As a result, IOMP's Fourth meeting was fixed to be held in Ottawa, planned to be the week before the IFMBE Congress, held in the same Halls, with Sessions of mutual interest in the middle, so that we could fraternize a bit. It was the first step towards getting together.

In Ottawa it was agreed by each body separately that the next meeting would be in Jerusalem three years later, and that, if possible, it was to be a joint event. There was some argument afterwards by the reactionaries, but the physicists did NOT dominate the engineers, nor *vice-versa* - both decided separately! It was in Ottawa that I was elected Vice-President of IOMP: also a Joint Committee of the Officers of both Organizations was set-up to look at the possible advantages of closer co-operation. This committee held its first meeting in Ottawa during the winter after the Congress and I can remember flying to Montreal and being met by Roger Mathieu, the IOMP President, in a freezing wind and driving snow. He very kindly put me up at his home, and we drove from Montreal to Ottawa - some 130 miles or so - with snow piled up on both sides of the beautifully cleared motorway - it was very impressive!

Now, my association with IOPAB had made it clear to me that one their main goals had been to become a Scientific Union and member of ICSU - the International Council of Scientific Unions - in other words, to become one of the big boys. So what is ICSU and what does it do? It is the focus of all Scientific Unions, encouraging international scientific activity to help peace and security; it carries out international interdisciplinary research and education by helping and coordinating the International Scientific Unions, and the National Academies, who affiliate a country to it. Its Membership consists of 76 National Scientific Academies, which are multi-disciplinary e.g. the Biophysicists; together with 26 Scientific Associate organizations. All three provide a wide spectrum of scientific expertise that enables members to address major international interdisciplinary issues that they could not handle alone. Over 600 Congresses a year are held within its orbit, and it has contacts with hundreds of thousands of scientists worldwide. It has major Interdisciplinary Research Projects such as the International Geophysical Year 1957-1958; the International Biological Program 1964-1974; and the International Geosphere-Biosphere Programme, which is on going. Finally, it relates with Governments through the National Academies and works with the UN, WMO and other major international Agencies; addressing problems common to all scientists e.g. teaching; ethics; the developing countries; the free movement of scientists. In other words, ICSU acts as a world focus for science, and as a spokesman and advisor for world science. It is clear, then, that membership of ICSU is full recognition of one's field at the world level and that this recognition passes back to each individual national Academy and Government. In order to apply to join, we had to have a scientific Union. It was clear to me that if we could set-up a body which could bring together IOMP and IFMBE, we had a Union which could speak for the whole of our field and which could apply for membership of ICSU.

I was delighted at this Joint Committee meeting in Ottawa in 1977 to find that the Secretary of IFMBE, Jack Hopps and their President, wanted a Union and wanted ICSU as an objective as well. Jack Hopps worked for the National Research Council of Canada, which is Canada's National Academy, and the adhering body to ICSU, so he had a good idea of its workings. However, both sides did not want to lose their independence! Neither side wanted to be swallowed up! Hence the idea of an umbrella body evolved, on top of IOMP and IFMBE, with the President alternating between physicist and engineer, and the Vice-

President, the opposite so that a physicist President will have an Engineer Vice-President and *vice-versa*. All of the IUPESM Officers are the Immediate Past Officers of IOMP or IFMBE. Thus IOMP remained unchanged; and IFMBE remained unchanged; but the umbrella body co-ordinates the two and relates to ICSU. There was much argument about the name, but my proposal was accepted - the International Union of Physical and Engineering Sciences in Medicine - all embracing but clear.

All this took several meetings, reams of correspondence, and innumerable phone calls to give a clear proposal on the tables for both organizations to consider at the Jerusalem Congress in 1979. In spite of a rearguard action from the old guard of the BES and the US engineers - and indeed, some of the physicists as well- the Proposed Statutes of IUPESM were approved at the Jerusalem Congress, and the new Union came into being in January 1980, representing 54 countries and 20, 000 individuals. I was very privileged and proud to be elected as its Founding President, and to serve our whole profession worldwide. We hoped then, and I am sure that the present Officers still do, that other closely related organizations will join it, such as radiation protection and others.

The European Federation of Medical Physics

Whilst all that was taking place, the European Federation of Medical Physics (EFOMP) was formed. This body arose out of the need to have an organization, which could be the voice of Medical Physics in the European Community. The practice of Medical Physics varies from country to country, with differing education requirements and legal status. In order to make it possible to have freedom of movement and employment between member states, some harmonization is needed.

Once again, the HPA was the catalyst for the emergence of the new international body. John Clifton had initiated correspondence during his years as President of the HPA, 1976-1978, and during Roy Ellis's years as President, 1978-1980, this culminated in him chairing an exploratory meeting, hosted by the HPA in London in May 1979.

Table V

International Conference on Medical Physics

- I. Harrogate, England September 1965
- II. Boston, USA August 1969
- III. Goteborg, Sweden July 1972
- IV. Ottawa, Canada July 1976 (before IFMBE)
- V. Jerusalem, Israel August 1979 (joint with IFMBE)
- VI. Hamburg, Germany September 1982 (World Congress)
- VII. Helsinki, Finland August 1985
- VIII. San Antonio, USA August 1988 (World Congress)
- IX. Kyoto, Japan July 1991 (World Congress)

A Working Party was set-up under Stewart Orr to draw up a Draft Constitution, and this was achieved in Paris in the Autumn of 1979. At a further meeting in London in May 1980, EFOMP was inaugurated.

This Organization is a Federation of national organizations, and is European wide, not just limited to the EEC. It now has 25 member States, ranging from small bodies with 10 members, to the 1200 or so of the UK. EFOMP has played a major role in establishing the profession widely in all corners of Europe, and has published Policy Statements on Best Practice in Medical Physics and on Education and Training for

example. Very important and valuable Symposia have been organized at the various World Congresses, such as Hamburg and Helsinki. IOMP supported the formation of EFOMP and EFOMP joined the IOMP as a Regional Grouping in 1982. This, in turn, has helped IOMP.

Our Membership of the International Council of Scientific Unions (ICSU)

Finally, now for our membership of the ICSU. I had corresponded with them, and visited them early in 1980, at their Headquarters in Paris, in a lovely Empire mansion near the edge of the Bois de Boulogne. To my horror, it was explained that if we did not apply by the summer, we would have to wait for two more years! It was suggested to us that we should apply for Associate Membership instead, but we were all anxious to strike whilst there was the momentum and the will for it.

We needed support from several National Academies and Scientific Unions, more for Full Membership than for Associate. The National Academies of the four stalwart Members States said that they would support it; Canada being the strongest, and USA the next. Rune Walstam worked hard on Sweden, and they said that they would. The Royal Society for UK were more equivocal, and I was not convinced that they would fully back our application: it would have helped if we could have had half-a-dozen medical physicists as FRSs to plug for us!! Hungary and Israel were very helpful too. The Scientific Unions which supported us were the Pure and Applied Physics; the Chemists; the Biochemists were very strong, but I was not so sure of the Biophysicists.

The vast stack of papers- all over my Office! - was submitted just in time, but, unfortunately, our application was turned down. This was a blow, and there was some negative reaction from some of the die-hards on both sides. I went to see ICSU again. I was told that the application had been supported but, nevertheless, it was felt that we should apply for Associate Membership first. So, we had to apply all over again in 1982. This time, of course, we could give more details of the projected program of IUPESM, which had now begun its own life and was establishing itself. The new massive application was submitted just before the Hamburg Meeting in September 1982.

The Hamburg meeting was not easy for IUPESM. The diehards - particularly on the Engineering side- took the ICSU application failure as being the death of IUPESM. However, the second application was actually in, so in the end, a spirit of 'Let's wait and see' prevailed. Happily, our application for Associate Membership was accepted by ICSU, the formal letter coming in early 1983.

Ever since then, IUPESM has been becoming more and more active building up its strength, and promoting programmes, so that, in due course, application for Full Membership can be made. All the joint Congresses have been held under auspices; three of them being called World Congress. Everything is now in place for the full acceptance of our specialty, which I feel sure will come before the end of the Century.

I do hope that this story has not been too boring but after it was presented to the 50th Anniversary Congress in Bristol, the hope was expressed that it would be published so that it was not lost to posterity.

I wish to give my very grateful and sincere thanks to Keith Boddy, John Clifton, and John Haggith, each of whom has given me considerable help with parts of this story.

John Mallard