

# Medical Physics World

Bulletin of the International Organization for Medical Physics

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## President's Message

Dear Colleagues and Friends,

The year 1988 is an important one for IOMP. The highlight of the year will be the World Congress on Medical Physics and Biomedical Engineering in the beautiful city of San Antonio, Texas. Concurrent with the World Congress, there will be the Thirtieth Annual Meeting of the American Association of Physicists in Medicine (AAPM) and other closely allied meetings.

Many activities are being planned, including special symposia, refresher courses, proffered papers, poster sessions, commercial and scientific exhibits, as well as social events.

It is customary that the AAPM holds a summer school in conjunction with its annual meeting. The topic this year will be "Computers in Medical Physics." The summer school will be held during the period from July 31 to August 5, 1988 at St.

Edward's University in Austin, Texas. The number of places is limited. Enrollments are accepted on a first-come, first-served basis; IOMP members are welcome to apply. Information is listed in the Calendar of Events.

An innovation for IOMP at this meeting will be a special course in radiotherapy dosimetry, specially designed for Latin American medical physicists and held in the Spanish language. The sponsors include IOMP, the Spanish Medical Physics Society, AAPM, PAHO, and the International Atomic Energy Agency. Information on this course, also, is listed in the Calendar of Events. A great deal of planning has gone into the organization of the course, and many people are involved. The individual who has contributed most to this effort is Dr. Cari Borrás of the West Coast Cancer Foundation in San Francisco.

In recent years, it has become a function of the officers of IOMP to engage in solicitation of funds. The funds thus raised have been used to help a

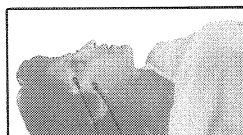
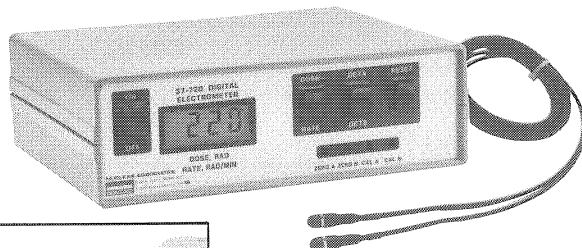
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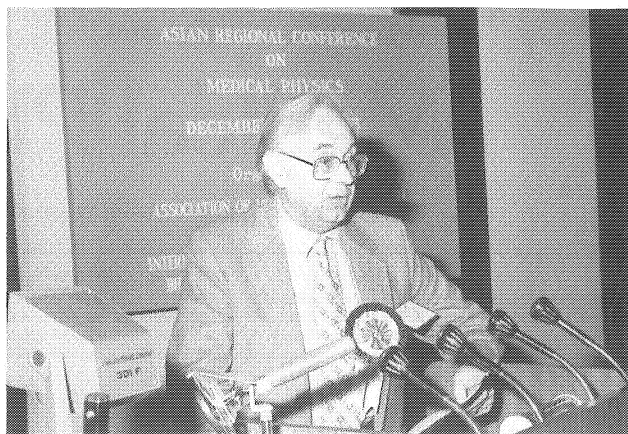
## President's Message

limited number of medical physicists to attend regional and international meetings of IOMP. This fund-raising effort is continuing for the special course.

During the week of the World Congress, there will be business meetings of the International Union of Physical and Engineering Sciences in Medicine, the International Federation of Medical and Biological Engineering, as well as the IOMP. As is the custom of IOMP, there will be two meetings of the delegates, and a very important agenda item will be the election of officers for the offices of Vice-President and Secretary-General. Both of these meetings are, of course, open to IOMP members; however, the official delegates are the ones who will cast the votes.

It is my personal hope that as many of you as possible from many different countries will attend the Congress. As usual, the Congress will enable us to greet old friends and meet new friends from around the world. We especially welcome members from the adhering national organizations which have joined IOMP since our last World Congress in Finland in 1985.

Lawrence H. Lanzl, Ph.D.



*President Lawrence H. Lanzl (addressing the attendees at the Asian Regional Conference on Medical Physics, Bombay, December 1986).*

## Announcement

### Newly Elected IOMP Member

Congratulations are extended to the newly elected member of IOMP the **Sri Lanka Medical Physics Association**. Sri Lanka becomes the smallest member association of the IOMP, with seven members under the Chairmanship of E.H. Dharmasena.

---

## Officers of the Council/IOMP

### President

**Lawrence H. Lanzl, Ph.D., Prof.**  
Medical Physics, Rush-Presbyterian-St. Luke's  
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4200 East Ninth Avenue (A-031)  
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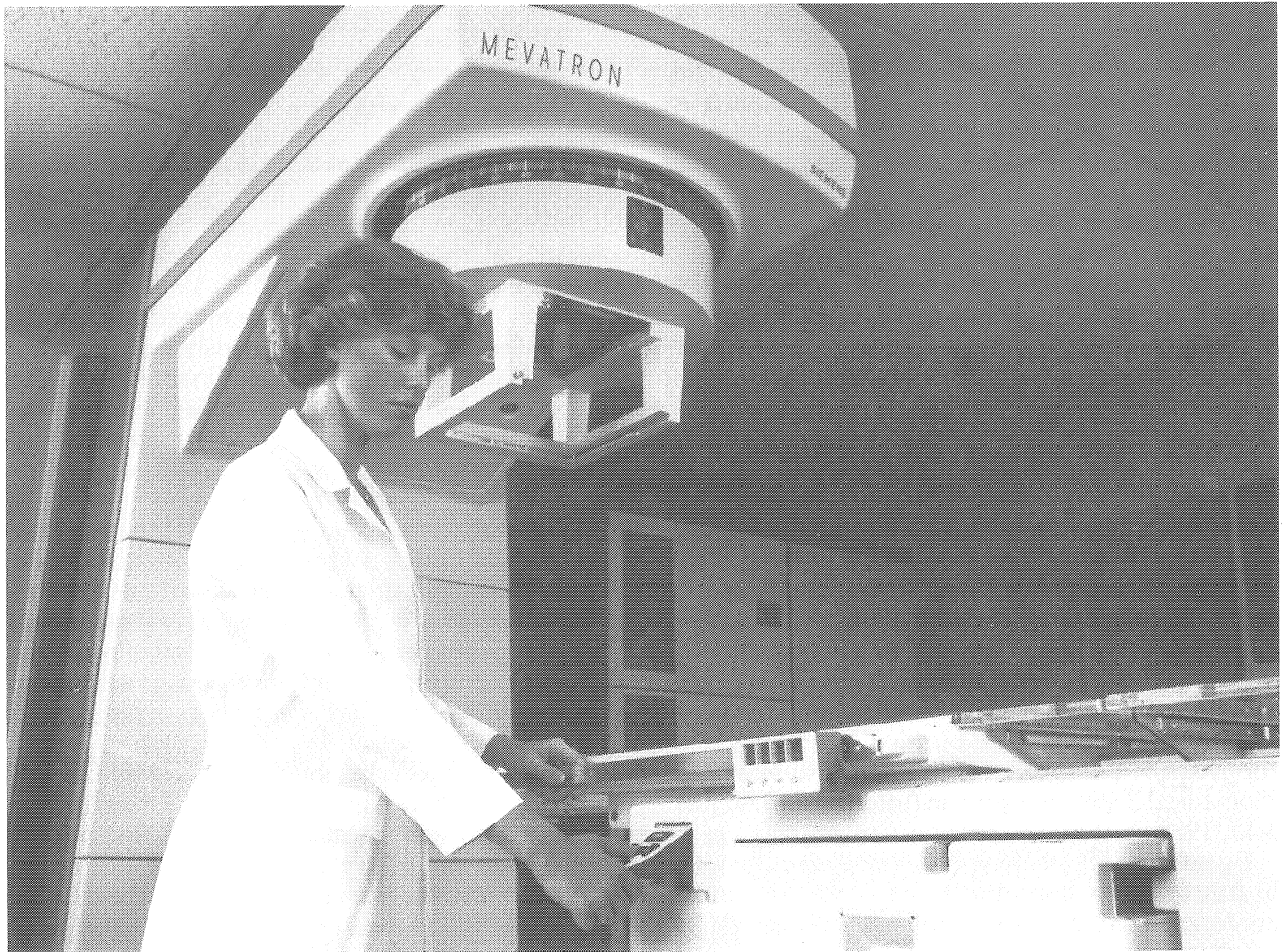
**Alexander Kaul, Prof. Dr., (ex officio)**

**Lawrence H. Lanzl, Ph. D., (ex officio)**

**Brian Stedeford, Ph.D., (ex officio)**

Editorial and Business correspondence should be addressed to Dr. Colin Orton. Events information should be addressed to Mr. Geoffrey Ibbott. IOMP correspondence should be addressed to Dr. L.H. Lanzl and Dr. B. Stedeford.

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or	
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# Secretary-General's Report

Brian Stedeford

I write this as I enter the sixth and final year of my term of office. Considering that an average of eight letters a week go out from the Secretary-General's office, I wonder what I should report. One thing worthy of consideration as a change of officer approaches is whether the time has not come to consider a permanent office for IOMP. This would have the advantage of continuity, although it is clearly not appropriate for the Secretary-General to come always from the same country and this would involve some adaptation. But all societies need such an office, an international one perhaps even more so. Clearly it would need to be shared, perhaps with a national society. Perhaps an inducement to accept one society as "host" would be a possible three-fold increase in subscription rates necessary to establish a truly independent office.

Electronic mail should soon ease the problems of communicating between a central office, officers and national secretaries. At present there are apparently several systems which do not talk to each other, but this is likely to be resolved soon. This would provide a relatively inexpensive substitute for slow and uncertain mail, and expensive and awkward telephone calls with time and language differences. We should be able to use some of our physics to help us communicate!

Preparations are now well advanced for our 8th International Conference on Medical Physics and the World Congress on Medical Physics and Biomedical Engineering in San Antonio from August 6-13, 1988.

By now you should have received the author kits. In July I had the opportunity to visit the site of the conference and it promises to be a very successful meeting. I am saddened that the cost of international air travel will mean that many who could benefit most from such a meeting will be unable to come. I hope that our commercial sponsors will be able to help some to attend who would not otherwise be able to do so. Accommodation at the "headquarters" hotels will be expensive for many participants from outside the USA, but fortunately there are less expensive hotels in downtown San Antonio. Do come if you can.

Prior to that meeting there will be a Special Practical Course on Physical Dosimetry in Radiotherapy conducted in Spanish in San Antonio from August 3-6. This is a joint venture between the American Association of Physicists in Medicine, the Latin-American Association of Medical Physics, the Spanish Society of Medical Physics and the IOMP with sponsorship from the IAEA and other organizations, and also manufacturers. Information will be

circulated through the Spanish-speaking societies, but do write to me if you are interested.

Finally at San Antonio new officers of the IOMP will be elected, and the venue of the 1994 international conference decided. If you have any suggestions to make for either of these, please contact your society's officers and ask them to take the appropriate action now.

## IUPESM News

The International Union of Physical and Engineering Sciences in Medicine (IUPESM), of which the IOMP is a member, organized Student Paper Awards at the last international conference, and they will be featured again at the 1988 meeting. In addition, the IUPESM has organized an Awards Committee under the chairmanship of Professor Dr. A. Kaul to administer a new Union Award. This award will be presented at future international conferences to recognize significant contributions to our discipline and it is hoped that the first presentation can be made in 1988.

When the Union was established, the co-ordination of international meetings of its constituent organizations was seen as an important function. We request that you inform your IOMP secretariat of plans for regional or international meetings. With the increasing number of such meetings it is to your advantage to seek alignment or to avoid conflict with other conferences.

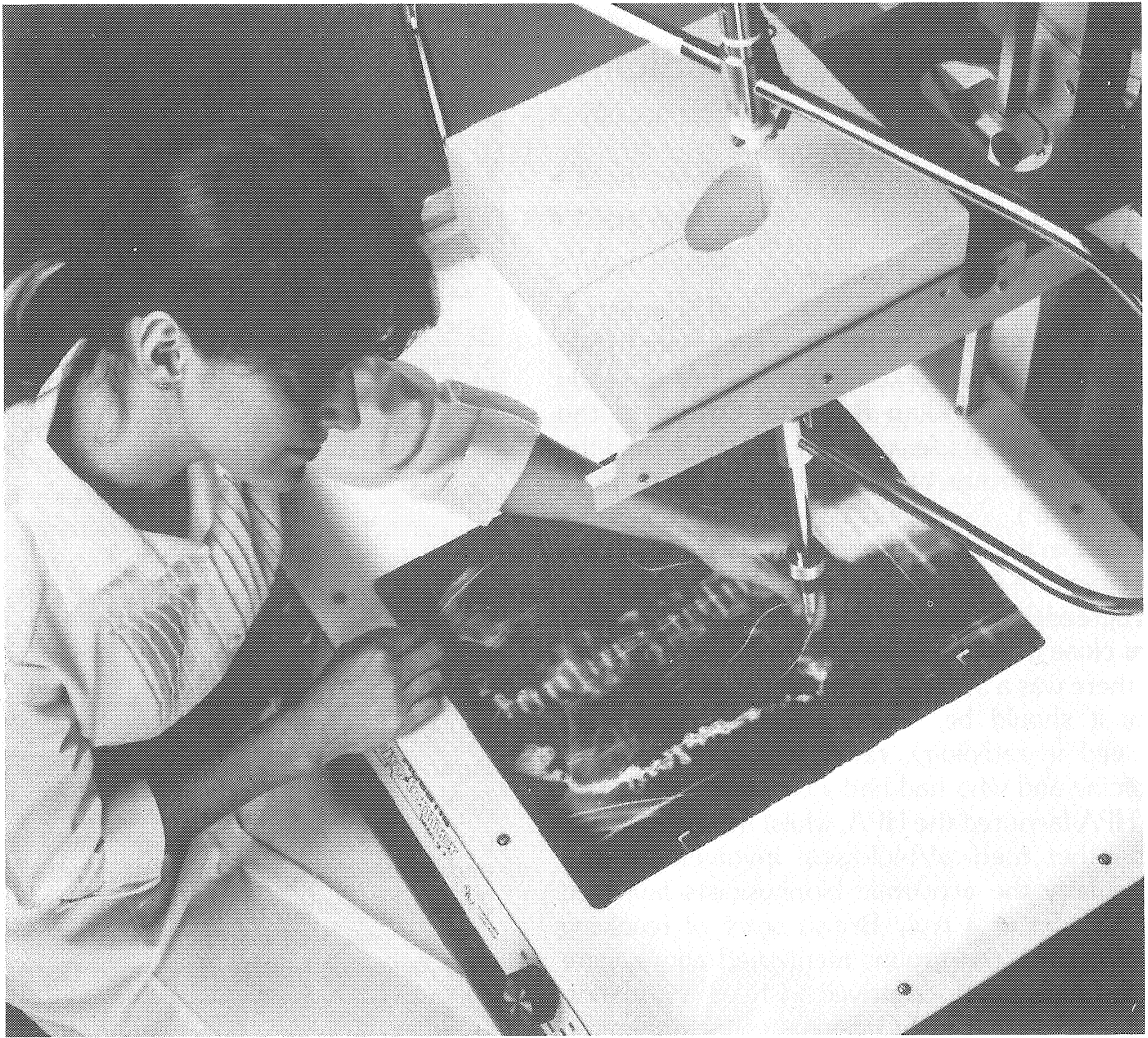
Professor R. Clarke, the Vice-Secretary-General has been named Chairman of the Union's Conference Co-ordinating Committee. A first priority for this new committee is to ensure that all arrangements concerning our organizations will be effected for the 1988 Congress and to establish agreements for future international meetings.

Last year we reported that the IFMBE, the IOMP and the IUPESM have produced information posters which can be used to promote our organizations at professional meetings. Copies can be obtained from our Secretariat.

We reminded you also in 1986 of the importance of making our Union known to your National Academies of Science. Recognition of our status within the International Council of Scientific Unions is essential to the effective operations of **your** Union as your representative. To provide you with more data on the Union we have published an information brochure, copies of which are obtainable by writing to:

IUPESM Secretariat:  
c/o National Research Council of Canada,  
Room 302 Building M-60,  
Ottawa, Ontario, Canada K1A 0R8.





# CUTTING WITH CONFIDENCE

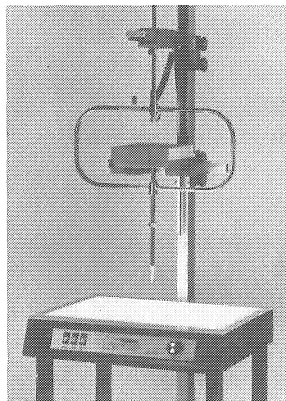
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# Australasian College of Physical Scientists in Medicine

Kenneth Clarke,  
Honorary Secretary, ACPSM  
(excerpted from a letter to the  
Secretary-General)

## Brief History of the College

The Australasian College of Physical Scientists in Medicine was formed in 1977 as a successor to two societies that had worked together since the early 1960s, the Australian Regional Group of the Hospital Physicists Association, UK (HPA) and the Biophysics Group of the Australian Institute of Physics (AIP).

When, in the early 60s the physicists in medicine and biology in Australia decided to form a society it was agreed that there would be considerable benefit from close association with a strong parent body, but there was a 50/50 split opinion on which parent body it should be. Those physicists who were involved in radiology, radiotherapy and nuclear medicine and who had had long associations with the HPA favoured the HPA, whilst those physicists with other medical/biological involvement and particularly the academic biophysicists favoured the AIP. So in a truly British spirit of resolving problems the two groups mentioned above were formed and it was contrived to have a common secretariat so that both Groups effectively operated as one.

In spite of the cumbersome structure it worked. Annual conferences were established from 1961 and also a scientific bulletin which grew in stature over the years.

By the mid-70s a number of things had changed. A number of bioengineers and mathematicians had joined the Groups and the academic biophysicists, feeling there was too little common ground with medical physicists had split off. It was felt that the two Groups had become outmoded; they had served their purpose and the support that the two parent bodies had provided over the years was greatly appreciated. In 1977 it was decided to dissolve the two Groups and form the College with the objects of (1) promoting more actively the development of the sciences of physics, engineering, mathematics and computing as applied to medicine; and, (2) uplifting professional standards and training.

At this time the New Zealand medical physicists and bioengineers hearing of this proposed big leap

forward asked to be involved and so the College became Australasian.

The College's scientific Bulletin was upgraded and is now the *Journal Australasian Physical & Engineering Sciences in Medicine (APESM)*, which has been accepted by the major international abstracting and indexing services.

The College has strict membership requirements based on a bachelor's degree in one of the relevant sciences or engineering plus five years relevant experience. It is recognised that the College represents a number of disciplines and specialities within the disciplines, and that being a Member of the College does not mean that one is an expert in all areas. The College is therefore moving to establish Certificates of Competence by examination in various areas requiring specific expertise (eg: Radiotherapy Physics, Electrical Safety, Radiation Safety etc.) in anticipation of the requirements for greater accountability and a higher degree of professionalism. It is considered more professionally desirable for the College to set the standards of competency rather than have some other body impose them.

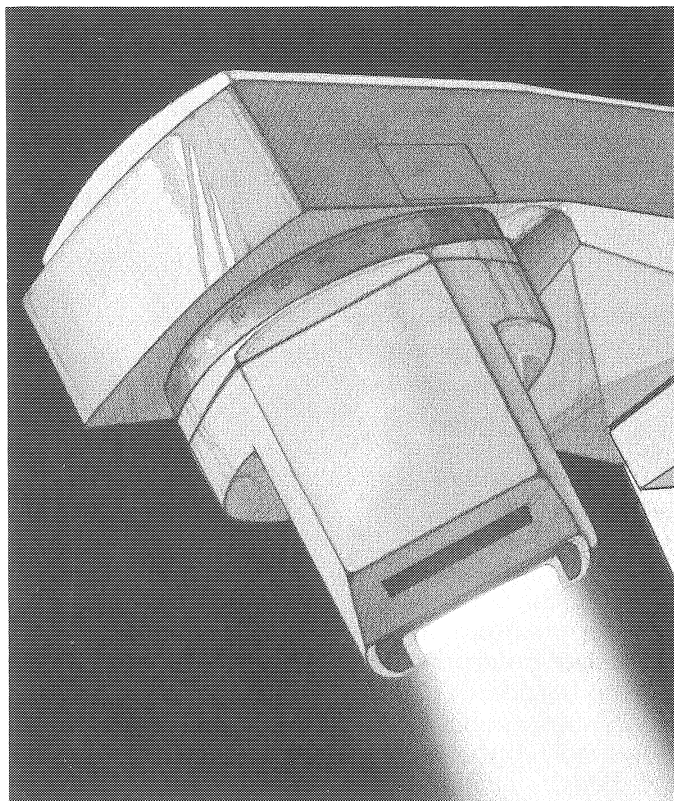
Thus the College aims to take a more responsible and influential position in our Australian and New Zealand societies.

As a result of contacts opened up by visiting scientists and by the Australian Centre for Publications Acquired for Development (ACPAD) the College sends copies of its quarterly Journal (APESM) to many Individuals and Libraries in the South East Asian Region, Fiji, Hong Kong, India, Indonesia, Malaysia, Papua, New Guinea, Philippines, Sri Lanka, Thailand.

## Membership

Corporate Members	Honorary Fellows	6
	Fellows	10
	Members	112
		<hr/>
		128
Non Corporate members	Associates	118

The category Associate includes those Physical and Engineering Scientists in Medicine who do not yet fulfil all the requirements for Full (Corporate) Membership (eg. less than 5 years experience), others involved professionally in the Physical Sciences in Medicine (eg. physiologists) and others interested in the field but not involved (eg. Professors of Physics) who for one reason or another do not meet the requirements for Full Membership.



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## **A Rural Oncology Centre in India - Padhar Hospital**

*Anand Vijay Kumar,  
Medical Physicist, Cancer Unit,  
Padhar Hospital,  
P.O. Padhar,  
Dist. Betul,  
M.P. 460 005, India*

Padhar Hospital is situated in a lush green satpura valley of district Betul of Madhya Pradesh in India on the main highway between Bhopal the capital city of Madhya Pradesh and Nagpur in Maharashtra. Almost half the population in this region comprises an ancient tribe called the Gonds. The development of Padhar Hospital has been unique because while keeping pace with the scientific advancements in the developing country, it has also kept in mind the practical needs of the under-privileged masses of the surrounding villages. It is not just a leading hospital offering specialised treatment with sophisticated equipment to a select few, but it is also an institution that reaches out to the needy taking simple health care to their doorstep in over 100 tribal villages.

The pioneering programmes in Community Health and related development programmes have benefitted thousands of tribal people. They have achieved the objectives to develop a health care delivery system within the means of the rural community and train health personnel to meet the local needs as well as the needs of other institutions in Madhya Pradesh. Besides the Primary Health Care thousands of people get help to improve the social, cultural, economic and educational aspects of their lives which in turn result in better health conditions. With the help of the Nationalised Bank, loans have been channelised to people who are below the poverty line. The low cost effective care programme is trying not only to provide good health care at minimum cost but simplify the health care delivery system in general. The Cancer Therapy and Research Centre at Padhar was initiated in 1982 with the installation of a Theratron 780 Teletherapy Cobalt unit imported from Canada with the financial support and assistance of a number of international agencies, and with the full approval and assistance of the Government of India's Department of Atomic Energy. Since then the unit is working well and providing a very greatly needed service to a part of India not otherwise supplied with this facility. For a number of years prior to this the Hospital had been treating a wide variety of neoplastic diseases by means of chemotherapy and surgery, and the addition of the cobalt unit to the Hospital's resources has resulted in a very great expansion of the scope of service it is now able to give. Every year about 600 patients receive radiotherapy treatment, the majority of the cases suffer from cancer of the

oral cavity and esophagus because of prevalent practice of chewing tobacco and smoking bidi/cigarettes from adolescent age. Among rural women there is a considerable incidence of uterine/cervical cancer and many would come with late diagnosis. Treatment facilities existed only in big cities which were not accessible to them. This was a disease which remains localised and could easily be treated by intracavitary and surgery.

Through generous donations of the Nargis Dutt Foundation based at New York, Padhar Hospital acquired a low cost gynaecological brachytherapy treatment Cs-137 Amersham's Manual afterloading system to meet the challenge of this type of neoplasm. The radiotherapy centre has an excellent physics backing and this was strengthened by frequent visits of Medical Physics experts, radiotherapists and technologists from Ireland, England, and Hong Kong.

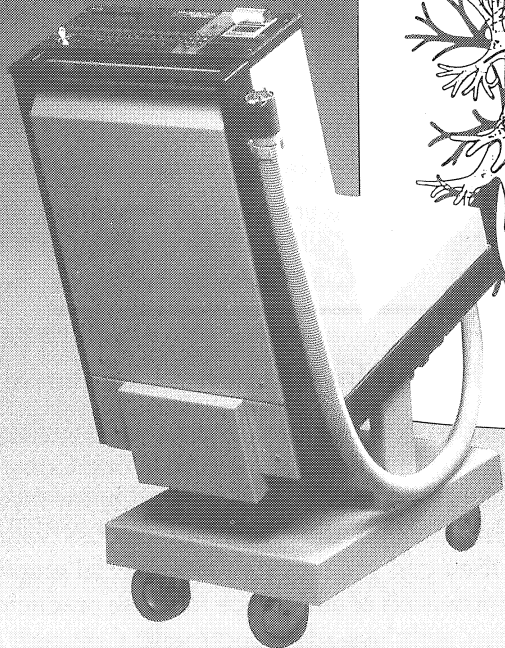
Monitoring equipment includes a Farmer dosimeter with 0.6 and 0.2 cc chambers, survey meters, water phantom, and Sr-90 check source, all from Nuclear Enterprises, U.K. In brachytherapy, apart from standard Cs-137 source trains of various activities, monitoring equipment includes a rectal monitor, contamination monitor, pocket dosimeter, L-Bench, bedside shield and transport trolley from England. Further plans are to equip the department with a computerized treatment planning system which forms an essential part for exact dose delivery calculations and complex treatment plans. Personnel dose monitoring is done by film badge and a Radiation Protection Officer advises on taking adequate measures in radiation protection.

Besides providing excellent facilities in surgical and Radiation Oncology, the department has its outreach programme. A number of cancer detection camps are organised in many parts of M.P. and Maharashtra, and large masses are screened. For cervical cancer, pap smears are taken and results sent to individuals. Awareness is created in the people by training health workers and volunteers from villages in early detection and referrals. This forms an important part of the integrated health care system. The 200 bedded hospital founded by Dr. Clement F. Moss, a British Missionary who served for four decades in this tribal area of Madhya Pradesh stands today in its pristine glory. It provides facilities in general medicine, paediatrics, physiotherapy and artificial limb centre, ophthalmic and optical workshop, pathology and laboratory, dental, surgical, diagnostic x-ray and ultrasound, and cancer therapy and research. The quality of health care provided at the Hospital stands out because of the spiritual flavour to it in its wholistic approach to every individual. Unless every person learning and serving here is endowed with the same spirit of selfless service that inspired Dr. C.F. Moss, Padhar Hospital would be no better than a commercial centre.



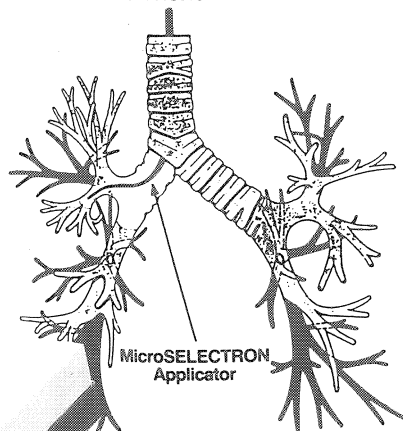
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- Esophagus
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- Endometrium
- Intraoperative

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# Announcements

## World Congress Update

The 1988 World Congress on Medical Physics and Biomedical Engineering to be held in San Antonio, Texas, USA, has as its theme, "Looking Ahead: Challenges for the Year 2000". This Congress is made possible by the combined efforts of several international and national organizations;

International Union of Physical and  
Engineering Sciences in Medicine

International Organization for Medical Physics

International Federation for Medical and  
Biological Engineering

American Association of Physicists in Medicine

Alliance for Engineering in Medicine and Biology

Canadian Association of Physicists

Canadian College of Physicists in Medicine

Society for Biomaterials

The scientific program is planned to satisfy many diverse interests.

**Plenary Symposia:** Space Medicine and Biology, Medical Physics and Bioengineering in Latin America, Medical Imaging, Artificial Organs, and Computers in Medicine.

**Biomedical Engineering Symposia:** Electrophysiology, Clinical Engineering, Biological Systems Modeling, Biomechanics, Atherosclerosis, Ultrasound, Biosensors, Rehabilitation Engineering, Bioprocessing, Drug Infusion, Cardiovascular Dynamics, Technology Assessment, Artificial Heart, Cellular Biomechanics, Medical Devices, Respiratory Dynamics, and Biofluid Mechanics.

**Medical Physics Sessions:** Radiotherapy Treatment Planning, Quantitative Imaging, Medical Lasers, Hyperthermia, Digital Imaging, Labeled Antibodies, Brachytherapy, Biomagnetism, Magnetic Resonance Imaging, SPECT & PET, PAC, CT, and Nuclear Magnetic Spectroscopy.

The World Congress will open on Sunday, August 7 and end at noon on Friday, August 12, 1988. The social program includes a Reception on Sunday night, a Cocktail Party on Monday, and a gala Fiesta/Western Style Party on Wednesday night. Cost of these social events is included in the Registration Fee: \$180 US before June 15, 1988, \$235 US after June 15, and \$290 US On-Site.

A large block of convenient hotel rooms has been reserved and will cost approximately \$77 US for single occupancy and \$87 US for double occupancy (plus 13% tax). Arrangements have also been made for a limited number of more modest hotel rooms at a lower rate and for dormitory rooms for students. San Antonio International Airport is serviced by

most of the national and international airlines. The official airline for the World Congress is American Airlines and the official travel agency is Rennert World Travel of San Antonio. The meeting saver fare for attendees is 40% discount off full coach fare. In the U.S. reservations can be made by dialing 1-800-433-1790 and asking for STAR file #S-54404. For international information call your local American Airlines reservation office and ask for the International Congress desk. Rennert World Travel, Inc. can be reached at 8000 Broadway, San Antonio, TX 78209. Their telephone number is (512) 829-7206. Use of our Official Airline not only benefits each attendee, but the World Congress will benefit by obtaining travel assistance for our invited speakers. Help yourself and help the World Congress, call American Airlines.

More details on travel, hotels, the scientific program, etc. will be published in a preliminary program to be mailed after the 1st of the year. Those not having previously mailed a request for information should address their request to:

David T. Kopp, Ph.D.  
Secretary General  
Dept. of Radiology  
UTHSC at San Antonio  
7703 Floyd Curl Dr.  
San Antonio, TX 78240

Be sure to include your name, institution, street address, city, state, ZIP code, and country.

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## Workshop on International Collaboration

A special "Workshop on International Collaboration" is being organized at the 1988 World Congress. This will provide a unique opportunity for medical physicists around the World to discuss ways in which they can collaborate, with special emphasis on the provision of assistance to those practicing in countries with less-advanced medical physics programs.

Officers from national medical physics societies and other appropriate organizations will be invited to participate in the discussions. Any official representative of a national organization or group of medical physicists, IOMP member or non-member, should contact IOMP Secretary-General Brian Stedeford (address on p.2) if they wish to participate in this Workshop. We are especially interested in having representation from countries with less-developed medical physics programs.

The Editor

## Announcements

### Foreign Visitors Program

The International Affairs Committee of the AAPM has organized a plan to assist foreign visitors attending the International Congress in San Antonio. Committee members have been assigned to assist visitors from specific countries, especially those who may experience language difficulties. Congress attendees who wish to avail themselves of this service will be able to request such assistance at the on-site registration area.

In addition, the Committee will help attendees to arrange visits to a variety of laboratories in the United States. Preferably, this should be organized well before arrival in San Antonio in order to make the appropriate travel arrangements. Anyone interested in visiting such laboratories should contact the Committee Chairman:

Colin G. Orton, Ph.D.  
Chairman, AAPM Int. Affairs Comm.  
Gershenson Radiation Oncology Center  
Harper-Grace Hospitals  
3990 John R. St.  
Detroit, MI 48201  
Tel: (313) 745-2486

### IOMP Corporate Members

We welcome the following corporations who have recently become Corporate Members of the IOMP or have renewed their membership:

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**PTW-Freiburg**  
Freiburg, FRG.

This new form of membership was approved at the recent Asian Regional Conference in Bombay, December, 1986. Funds derived from these memberships are allocated to the support of hospital physicists in developing countries. Benefits of Corporate Memberships include provision of a regularly updated list of officers in national membership organizations and a discounted rate for advertising in "Medical Physics World."

Corporations wishing to receive more information about Corporate Membership should contact: Brian Stedford, Ph.D., Secretary-General, address on page 2.

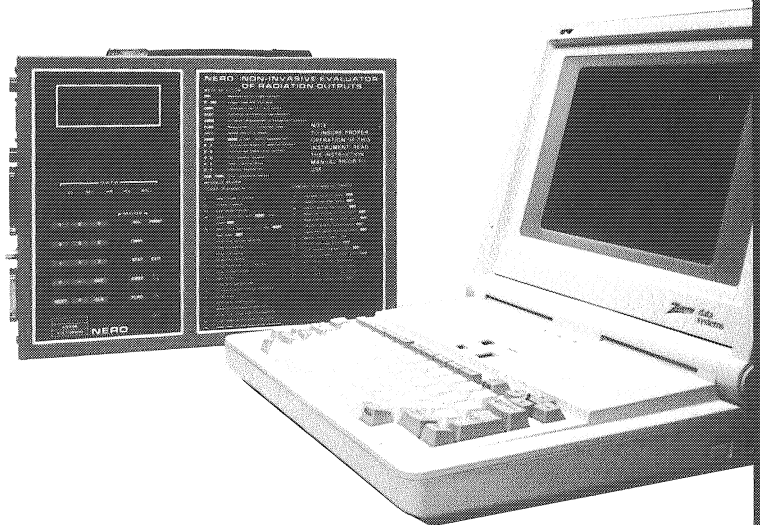
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# CALENDAR OF EVENTS

Geoffrey S. Ibbott, Editor

1988

**February 8 - 12**

**Indian Society of Oncology: 3rd Biennial Conference and Indo-USSR International Workshop on Oesophageal Cancer**, Bangalore, India (Conference Secretariat, Kidwai Memorial Institute of Oncology, Hosur Road, Bangalore 560 029 India [91 (812) 640245]).

**February 28 - March 3**

**Symposium on Radioactive Waste Management (WM 88)**, Tucson, AZ (Technical Program Chairman, WM 88, Department of Nuclear and Energy Engineering, College of Engineering and Mines, University of Arizona, Tucson, AZ 85721 [602-621-2475]).

**March**

**The Finnish Society for Medical Physics and Medical Engineering 6th National Meeting on Biophysics and Medical Engineering** (Prof. Jaakko Malmivuo, Tampere University of Technology, P.O. Box 527, SF-33101 Tampere, Finland).

**March 17 - 19**

**International Meeting on Artificial Intelligence and Medical Imaging (Radiology)**, Strasbourg, France (R.M. Kipper, Service de Radiologie I, CHR de Strasbourg, 1 place de l'Hopital, BP 426, F-67091 Strasbourg Cedex, France).

**April 5-8**

**International Non-Ionizing Radiation Workshop**, Melbourne, Australia (Dr. M. Repacholi, Chief Scientist, Royal Adelaide Hospital, North Terrace, Adelaide, South Australia, 5000 [08-223 0230 Ext 5562]).

**April 6 - 8**

**Modelling and Control in Biomedical Systems, Sponsored by: International Federation of Automatic Control**, Venice, Italy (Secretariat IFAC-BME-88 Symposium, Department of Electrical Engineering, University of Padova, Via Gradenigo, 6/A, I-35131 Padova, Italy).

**April 10 - 17**

**7th International Congress: International Radiation Protection Association**, Centerpoint Convention Centre, Sydney, Australia (Mr. R.J. Burk, Health Physics Society, 1340 Old Chain Bridge Road, Suite 300, McLean, Virginia, U.S.A. 22101 [703-790-1745]).

**April 12 - 15**

**Advances in Rehabilitation Technology, Sponsored by the North Sea Conference on Biomedical Engineering, International Federation of Medical and Biological Engineering**, Maastricht, The Netherlands (Dr. Th. Gerritsen, Institute for Rehabilitation Research, Zandbergsweg 111, 6432 CC Hoensbroek, The Netherlands).

**April 16 - 20**

**17th Annual Meeting, American Radium Society**, The Four Seasons Hotel, Seattle, Washington, U.S.A. (Office of the Secretariat, 1101 Market Street, 14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107 [215-574-3179]).

**April 17 - 22**

**Radiation Research Society Annual Meeting**, Franklin Plaza Hotel, Philadelphia, Pennsylvania, U.S.A. (Meg Keiser, Radiation Research Society, 1101 Market Street - 14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107 [215-574-3153]).

**April 20 - 23**

**5th International Symposium on the Planning of Radiological Departments**, Palazzo Dei Congressi, Florence, Italy (CLAS Editoriale S.r.l., Via Pace, 8, 25122 Brescia, Italy).

**April 22 - 23**

**Digital Radiography and PACS: Recent Developments and Future Directions Sponsored by American Association of Physicists in Medicine in cooperation with Association of University Radiologists**, New Orleans, Louisiana, U.S.A. (AAPM, Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

**May 8 - 13**

**American Roentgen Ray Society 88th Annual Meeting**, San Francisco, California, U.S.A. (American Roentgen Ray Society, 1891 Preston White Drive, Reston, Virginia, U.S.A. 22091).

**May 11 - 13**

**Canadian Radiation Protection Association Annual Meeting**, Montebello, Quebec, Canada (Dr. A.M. Marko, Atomic Energy of Canada Ltd., Chalk River Nuclear Laboratories, Chalk River, Ontario, Canada K0J 1J0 [613-584-3311, Local 4728]).

**May 16 - 20**

**International Symposium on the Management of Low and Intermediate Level Radioactive Wastes**, Stockholm, Sweden (Conference Services Section, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria).

**May 23 - 25**

**International Conference on Transportation for the Nuclear Industry**, Stratford-upon-Avon, England (The Conference Secretary, The Institution of Nuclear Engineers, Allan House, 1 Penerley Road, London SE6 2LQ, England).

**May 23 - 28**

**Radiology 88, 46th Annual Congress of the British Institute of Radiology and 42nd Annual Conference of the College of Radiographers**, Glasgow, Scotland (Programme Office, The British Institute of Radiology, 36 Portland Place, London W1N 4AT, United Kingdom [01-580 4085]).

**May 24 - 27**

**International Clinical Hyperthermia Symposium '88, Sponsored by International Clinical Hyperthermia Society**, Indianapolis, Indiana, U.S.A. (Homayoon Shidnia, M.D., Program Chairman, Department of Radiation Oncology, Indiana University School of Medicine, 535 Barnhill Drive, Indianapolis, Indiana, U.S.A. 46223 [317-274-2524]).

**May 25 - 27**

**International Microwave Symposium and Exhibit** New York, New York, U.S.A. (Mr. Charles Buntschuh, Narda Microwave Corporation, 435 Moreland Road, Hauppauge, New York, New York, U.S.A. 11788 [516 231 1700]).

**June 6 - 10**

**1st European Accelerator Conference**, Rome, Italy (Mr. S. Tazzari, Lab. Naz. dell'INFN, Via E. Fermi 40, 13, I-00044 Frascati, Italy).



**June 9 - 11**

**French Society of Hospital Physicists 27th Annual Meeting**, Clermont Ferrand (Donnarieix Denise, Centre J. Perrin BP392, 63011 Clermont Ferrand CEDEX [73-27-8153]).

**June 12 - 16**

**American Nuclear Society Annual Meeting**, Town & Country Hotel, San Diego, California, U.S.A. (Thomas Page, San Diego Gas & Electric, 101 Ash Street, San Diego, California, U.S.A. 92112).

**June 12 - 16**

**American Society of Radiologic Technologists, 1988 Annual Conference**, Albuquerque, New Mexico, U.S.A. (The American Society of Radiologic Technologists, 15000 Central Avenue S.E., Albuquerque, New Mexico, U.S.A. 87123 [505-298-4500]).

**June 20 - 22**

**Annual Congress of the Canadian Association of Physicists, Joint Meeting with the American Physical Society**, Montreal, Quebec, Canada (Ms. M. Jento, Executive Secretary, Canadian Association of Physicists, 151 Slater Street, Suite 903, Ottawa, Ontario, Canada K1P 5H3 [613-237-3392]).

**June 23 - 25**

**2nd European Congress of NMR in Medicine and Biology**, International Congress Center, Berlin (Conference Secretariat, c/o Prof. Dr. R. Felix, Department of Radiology, Charlottenburg University Hospital, Spandauer Damm 130, D 1000 Berlin 19, Federal Republic of Germany).

**June 26 - July 1**

**13th Annual Meeting of the American Association of Medical Dosimetrists**, Pallister Hotel, Calgary, Alberta, Canada (Dennis M.B. Watkins, Medical Physics Department, Tom Baker Cancer Centre, 1331 - 29th Street N.W., Calgary, Alberta, Canada T2N 4N2 [403-270-1797]).

**July**

**Annual Meeting, Philippine Organization of Medical Physicists**, The Philippines (Agnette P. Peralta, POMP President, C/O Radiation Health Service, Department of Health, Rizal Avenue, Manila, Philippines).

**July 4 - 8**

**Health Physics Society, 33rd Annual Meeting**, Boston, Massachusetts, U.S.A. (Mr. R.J. Burk, Health Physics Society, 1340 Old Chain Bridge Road, Suite 300, McLean, Virginia, U.S.A. 22101 [703-790-1745]).

**July 17 - 22**

**10th World Congress of the International Federation of Hospital Engineering (FHE) Congress '88**, Edmonton, Alberta, (Laurie A. Alcorn, Convention Program Consultant, Alberta Hospital Association, 10025-108 Street, Edmonton, Alberta T5J 1K9, Canada).

**July 18 - 22**

**8th Regional Conference of Europe and Africa of the International Society of Radiographers and Radiological Technicians**, Finland (Ms. V. Crown, 38 High Ashton, Kingston Hill, Kingston, Surrey KT2 7QL, United Kingdom).

**July 31 - August 5**

**AAPM Summer School: "Computers in Medical Physics"**, St. Edward's University, Austin, Texas, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

**August 3 - 6**

**Practical Course of Physical Dosimetry in Radiotherapy (in Spanish)**, organized by the American Association of Physicists in Medicine (AAPM), Asociacion Latinoamericana de Fisica Medica, the International Organization for Medical Physics (IOMP), Sociedad Espanola de Fisica Medica. University of Texas Health Science Center and the Cancer Therapy and Research Center, San Antonio, Texas, U.S.A. (Dr. Brian Stedeford, Secretary General, IOMP, Department of Radiation Physics, Churchill Hospital, Oxford OX3 7LJ).

**August 6 - 13**

**World Congress on Medical Physics and Biomedical Engineering, 15th International Conference on Medical and Biological Engineering, 8th International Conference on Medical Physics, 6th International Conference on Mechanics in Medicine and Biology, 30th Annual Meeting of the American Association of Physicists in Medicine, and 41st Annual Conference on Engineering in Medicine and Biology**, San Antonio, Texas, U.S.A. (Gary D. Fullerton, Ph. D., Department of Radiology, The University of Texas Health Sciences Center, 7703 Floyd Curl Drive, San Antonio, Texas, U.S.A. 78284).

**August 15 - 19**

**International Symposium on Applications of Dynamic Functional Studies in Nuclear Medicine in Developing Countries**, Vienna, Austria (Conference Service Section, IAEA, P.O. Box 100, A-1400 Vienna, Austria).

**August 29 - September 3**

**5th International Symposium on Hyperthermic Oncology, Sponsored by the Japanese Society of Hyperthermic Oncology**, Kyoto International Congress Hall, Kyoto, Japan (Secretariat 5th I.S.H.O., Health Research Foundation, Matsuo Building 4F, Kawaramachi Marutamachi Sagaru, Kamigyo-ku, Kyoto 602, Japan).

**September 1 - 3**

**Australian Society for Ultrasound in Medicine 18th Annual Scientific Meeting**, Gold Coast, Queensland (Dr. G. O'Brien, 225 Wickham Terrace, Brisbane, Queensland, 4000 Australia).

**September 1 - 3**

**5th International Selectron Users' Meeting**, Scheveningen, Holland (Nucletron Trading LTD, Linehall House, 88-90 Watergate Street, Chester CH1 2LF, England [0244 319977]).

**September 4 - 8**

**7th Annual Meeting of the European Society for Therapeutic Radiology and Oncology**, Den Haag, Nederland (ESTRO Secretariat, Department de Radiotherapie, Clinique Saint-Raphael, 35 Chemin des Capucines, B-3000 Louvain, Belgium [016-21 22 31]).

**September 6 - 8**

**Industrial Radiation and Radioisotope Measurement Applications, Sponsor: American Nuclear Society**, Pinehurst, North Carolina, U.S.A. (Mr. Robin P. Gardner, Department of Nuclear Engineering, North Carolina State University, Box 7909, Raleigh, North Carolina, U.S.A. [919-737-3378]).

**September 7 - 9**

**Biological Engineering Society 28th Annual General Meeting: Clinical Application of Biomechanics**, University of Salford, United Kingdom (The Secretary, Biological Engineering Society, Royal College of Surgeons, 35 Lincolns Inn Fields, London WC2A 3 PN, United Kingdom [01-242 7750]).

**September 11 - 14**

**L.H. Gray Trust Meeting on the Biological Effects of Low Doses of Radiation**, Oxford, United Kingdom (Mr. K.F. Baverstock, MRC Radiobiology Unit, Chilton, Didcot, Oxon. OX11 ORD, United Kingdom [0235 834393]).

**September 12 - 16**

**7th International Conference on Radiation Shielding**, Bournemouth, Hampshire UK (Mr. A.K. McCracken, Winfrith Atomic Energy Establishment, UKAEA, Dorchester, Dorset DT2 8DH, UK [Dorchester (0305) 63111 ext 2672]).

**September 14 - 17**

**Medical Physics 88, Annual Scientific Meeting of DGMP and OGMP**, Tübingen, Federal Republic of Germany (Prof. Dr. F. Nusslin, Radiologische Klinik, Lehrstuhl and Abteilung Medizinische Physik, D-7400 Tübingen [07071/292172]).

**September 14 - 17**

**3rd International Conference on Dose, Time, and Fractionation in Radiation Oncology, "Prediction of Response in Radiation Therapy: The Physical, Biological, and Analytical Basis", (co-sponsored by the AAPM)**, University of Wisconsin, Madison, Wisconsin, U.S.A. (Bhudatt Paliwal, Ph.D., University of Wisconsin, Radiation Oncology and Medical Physics, 600 Highland Avenue K4/B100, Madison, Wisconsin, U.S.A. 53792 [608-263-8500]).

**September 22 - 24**

**Training and Education of and by Medical Physicists**, Poland (O.A. Chomiccki, Klinika, Endokrynologii, Szpital Beilanski ul. Cegtowska 80, 01-809, Warszawa, Poland).

**October 3 - 7**

**4th International Symposium on Radiation Physics, International Radiation Physics Society**, Sao Paulo, Brazil (Prof. Dr. Ivan Nascimento, Directo, Instituto de Fisica, Universidade de Sao Paulo, Cidade Universitaria, C.P. 20516, Sao Paulo, Brazil).

**October 9 - 14**

**American Society for Therapeutic Radiology and Oncology**, New Orleans Hilton, New Orleans, Louisiana, U.S.A. (American Society for Therapeutic Radiology and Oncology, 1101 Market Street, 14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107-2990 [215-574-3180]).

**October 10 - 14**

**International Symposium on Nuclear Medicine (ISNM'88)**, Beijing, China (Secretariat of International Symposium on Nuclear Medicine, The Capital Nuclear Medicine Center, PUMC Hospital, CAMS, Beijing, China).

**October 15 - 17**

**5th National Conference on Biomedical Physics and Engineering with International Participation**, Sofia, Bulgaria (Assoc. Prof. M. Markov, Department of Biophysics, Biological Faculty, Sofia University, 8, Dragan Tzankov Blvd, Sofia 1000, Bulgaria).

**October 17 - 21**

**5th Meeting of the World Federation for Ultrasound in Medicine and Biology**, Convention Center, Washington, DC., U.S.A. (AIUM Convention Department, 4405 East-West Highway, Suite 504, Bethesda, Maryland, U.S.A. 20814).

**October 18 - 21**

**25th Congress of the Association for Medical Radiology in the DDR** (MR Prof. Dr. sc.med. M. Luning, Institut für Röntgendiagnostik, Schumanstr. 20/21 DDR, 1040 Berlin, [Tel: 2 86 20 78]).

**November 6 - 9**

**12th Symposium on Computer Applications in Medical Care**, Sheraton Washington Hotel, Washington, DC., U.S.A. (The George Washington University Medical Center, Office of Continuing Education, 2300 K. Street, N.W., Washington, DC, U.S.A. 20037).

**November 27 - December 2**

**Joint Meeting of the AAPM with the Radiological Society of North America**, Chicago, Illinois, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017 [212-661-9404]).

**December 4 - 8**

**Health Physics Society 22nd Midyear Topical Meeting on Radiation Instrumentation**, San Antonio, Texas, U.S.A. (Mr. John Hageman, Southwest Research Institute, 6220 Culebra Road, San Antonio, Texas, U.S.A. 78284 [512-522-2027]).

**December 6 - 8**

**The British Medical Ultrasound Society 20th Annual Scientific Meeting**, Glasgow Conference Centre, Scotland (Mrs. L. Blench, General Secretary, BMUS, 36 Portland Place, London WIN 3DG, England).

**December 14 - 16**

**International Symposium on Magnetic Resonance Imaging**, New Delhi, India (Dr. N. Prasad, Department of Radiology, Baylor College of Medicine, Houston, Texas 77030, U.S.A. [Tel: 713-799-4415]).

**1989**

**March 19 - 23**

**Radiation Research Society Annual Meeting**, Westin Hotel, Seattle, Washington, U.S.A. (Meg Keiser, Radiation Research Society, 1101 Market Street, 14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107 [215-574-3153]).

**April**

**International Conference of Radioactive Waste Management**, United Kingdom (The Secretariat, British Nuclear Energy Society, at the Institution of Civil Engineers, 1-7 Great George Street, Westminster, London SW1P 3AA United Kingdom [01-222 77 22]).

**April 4 - 7**

**INTERMAG: International Magnetics Conference Sponsored by Magnetics Society, Institute of Electrical and Electronics Engineers**, Washington, DC., U.S.A. (Technical Activities Department, The Institute of Electrical and Electronics Engineers, Inc., 345 East 47th Street, New York, New York, U.S.A. 10017).

**April 15 - 19**

**18th Annual Meeting, American Radium Society**, St. Thomas, US Virgin Islands (Office of the Secretariat, 1101 Market Street, 14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107 [215-574-3179]).

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**May 4 - 6**

**Radiology 89, 47th Annual Congress of the British Institute of Radiology and Annual Conference of the College of Radiographers**, Eastbourne, Sussex, United Kingdom (Programme Office, The British Institute of Radiology, 36 Portland Place, London W1N 4AT, United Kingdom [01-580-4085]).

**June 4 - 8**

**American Nuclear Society Annual Meeting**, Atlanta Hilton, Atlanta, Georgia, U.S.A. (Barbara Morris, American Nuclear Society, 555 North Kensington Avenue, LaGrange Park, Illinois, U.S.A. 60525 [312-352-6611]).

**June 4 - 9**

**4th International Symposium, Society for Radiation Protection**, Malvern, England, (Dr. P. Schwemlein, SRP Symposium, c/o CEGB, Courtenay House, 18 Warwick Lane, London, EC4P 4EB, England).

**June 11 - 16**

**9th International Symposium on the Packaging and Transportation of Radioactive Materials (PATRAM 89)**, Washington, DC, U.S.A. (Mr. Lawrence H. Harmon, Director, Transportation Management Division, Office of Defense Waste and Transportation Management, Department of Energy, Washington, DC, U.S.A. 20545).

**June 14 - 16**

**International Microwave Symposium and Workshops Sponsored by Microwave Theory and Techniques Society, Institute of Electrical and Electronics Engineers**, Long Beach, California, U.S.A. (Mr. C.W. Swift, C.W. Swift and Associates, 15216 Burbank Boulevard, Van Nuys, California, U.S.A. 91411).

**June 18 - 22**

**Health Physics Society, 34th Annual Meeting**, Albuquerque, New Mexico, U.S.A. (Mr. R.J. Burk, Health Physics Society, 1340 Old Chain Bridge Road, Suite 300, McLean, Virginia, U.S.A. 22101 [703-790-1745]).

**June 18 - 22**

**Joint Meeting of the Canadian Association of Physicists with the Canadian Association of Radiologists and Radiation Oncologists**, Montreal, Quebec, Canada (Sherry Connors, Department of Medical Physics, Cross Cancer Institute, 11560 University Avenue, Edmonton, AB T6G 1Z2 Canada).

**July 1 - 4**

**International Congress of Radiation Oncology**, Paris, France (American Society for Therapeutic Radiology and Oncology, 1101 Market Street - 14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107-2990 [215-574-3180]).

**July 3 - 7**

**9th World Congress of the International Society of Radiographers and Radiological Technicians**, Paris, France (Ms. V. Crown, 38 High Ashton, Kingston Hill, Kingston, Surrey KT2 7QL, United Kingdom).

**July 5 - 6**

**Joint Meeting of the French Society of Hospital Physicists with ICR 89**, Lyon, France (Irene Sentenac, CH Lyon Sud. J. Courmont, 69130 Pierre Benite, France [7850 75 15]).

**July 16 - 21**

**AAPM Summer School: "Physics of Nuclear Medicine"**, Birmingham, Alabama, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

**July 23 - 27**

**American Association of Physicists in Medicine, 31st Annual Meeting**, Radisson Hotel, Memphis, Tennessee, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

**September 3 - 7**

**8th Annual Meeting, European Society for Therapeutic Radiology and Oncology**, London, England (ESTRO Secretariat, University Hospital St. Rafael, Department of Radiotherapy, Capucijnenvoer 35, B-3000 Leuven, Belgium).

**October 1 - 6**

**American Society for Therapeutic Radiology and Oncology**, San Francisco, California, U.S.A. (American Society for Therapeutic Radiology and Oncology, 1101 Market Street-14th Floor, Philadelphia, Pennsylvania, U.S.A. 19107-2990 [215-574-3180]).

**October 3 - 6**

**Annual Meeting, American Institute of Ultrasound in Medicine**, San Francisco, California, U.S.A. (AIUM Convention Department, 4405 East-West Highway, Suite 504, Bethesda, Maryland, U.S.A. 20814).

**November 5 - 8**

**13th Symposium on Computer Applications in Medical Care**, Sheraton Washington Hotel, Washington, DC, U.S.A. (The George Washington University Medical Center, Office of Continuing Education, 2300 K Street, N.W., Washington, DC, U.S.A. 20037).

**November 12 - 17**

**Joint Meeting of AAPM with the Radiological Society of North America**, Chicago, Illinois, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017 [212-661-9404]).

**November 26 - December 1**

**American Nuclear Society Winter Meeting**, San Francisco Hilton, San Francisco, California, U.S.A. (Barbara Morris, American Nuclear Society, 555 North Kensington Avenue, LaGrange Park, Illinois, U.S.A. 60525 [312-352-6611]).

**1990**

**June 7 - 9**

**French Society of Hospital Physicists**, Lille, France (tentative).

**June 11 - 16**

**Radiology 90, 48th Annual Congress of the British Institute of Radiology and Annual Conference of the College of Radiographers**, Harrogate, Yorkshire, United Kingdom (Programme Office, The British Institute of Radiology, 36 Portland Place, London W1N 4AT, United Kingdom [01-580-4085]).

**August 5 - 9**

**American Association of Physicists in Medicine, 32nd Annual Meeting**, St. Louis, Missouri, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

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November 4 - 7

**14th Symposium on Computer Applications in Medical Care**, Sheraton Washington Hotel, Washington, DC., U.S.A. (The George Washington University Medical Center, Office of Continuing Education, 2300 K. Street, N.W., Washington, DC., U.S.A. 20037).

November 25 - 30

**Joint Meeting of AAPM with the Radiological Society of North America**, Chicago, Illinois, U.S.A. (AAPM Executive Director, 335 East 45th Street, New York, New York, U.S.A. 10017 [212-661-9404]).

1991

July 28 - August 1

**American Association of Physicists in Medicine, 33rd Annual Meeting**, San Francisco, California, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

August

**19th Meeting of the International Organization for Medical Physics**, Kyoto, Japan (Dr. L.H. Lanzl, President, IOMP, Department of Medical Physics, Rush-Presbyterian St. Luke's Medical Center, 1753 West Congress Parkway, Chicago, Illinois, U.S.A. 60612).

November 17 - 22

**Joint Meeting of AAPM with the Radiological Society of North America**, Chicago, Illinois, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017 [212-661-9404]).

1992

August 23 - 27

**Joint Meeting of American Association of Physicists in Medicine, 34th Annual Meeting with the Division of Medical and Biological Physics of the Canadian Association of Physicists**, Calgary, Alberta, Canada (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017).

November 29 - December 4

**Joint Meeting of AAPM with the Radiological Society of North America**, Chicago, Illinois, U.S.A. (AAPM Executive Officer, 335 East 45th Street, New York, New York, U.S.A. 10017 [212-661-9404]).

*Readers are invited to send to the **Calendar of Events** Editor, Geoffrey Ibbott (address on p. 2), information on any events not listed in this issue of MPW and also additions or corrections to the items that are listed. Officers of national societies are especially encouraged to submit information on their future national meetings.*

New From the AAPM

# Radiation Oncology Physics—1986

Edited by **James G. Kereiakes, Howard R. Elson, and Clifford G. Born**

*Proceedings of the AAPM 1986 Summer School held at Miami University, Oxford, Ohio, July 27–August 1, 1986.*

An inclusive storehouse of state-of-the-art information, **Radiation Oncology Physics—1986** offers an update of topics and techniques by practicing experts in the field. This book covers a wide range of subjects, reflecting the growing complexity in radiation oncology physics. Featured are reviews of nonstandard modes of therapy—particle, neutron, intraoperative, and hyperthermia; quality assurance; dosimetry instrumentation; electron beam calibration and dose; comparison of the AAPM Task Group 21 protocol with SCRAD and ICRU #21; total skin/electron irradiation technique and dosimetry; treatment planning computers (past and future); 3-D treatment planning algorithms; and special brachytherapy procedures.

Clinical radiation oncology physicists will find **Radiation Oncology Physics—1986** to be an indispensable source of current information.

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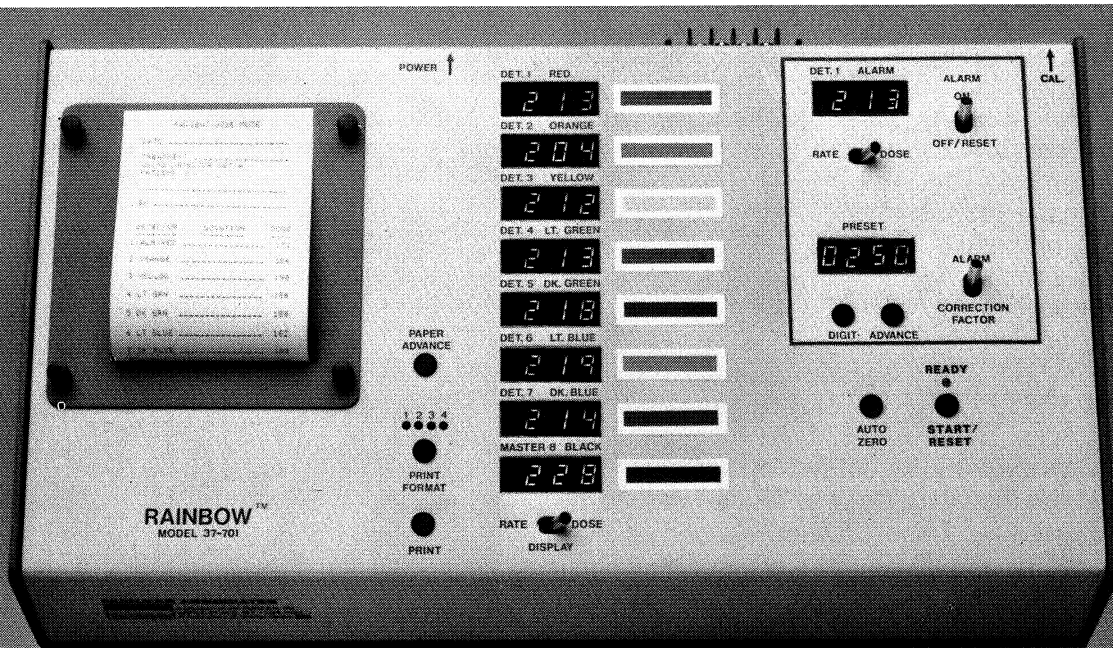
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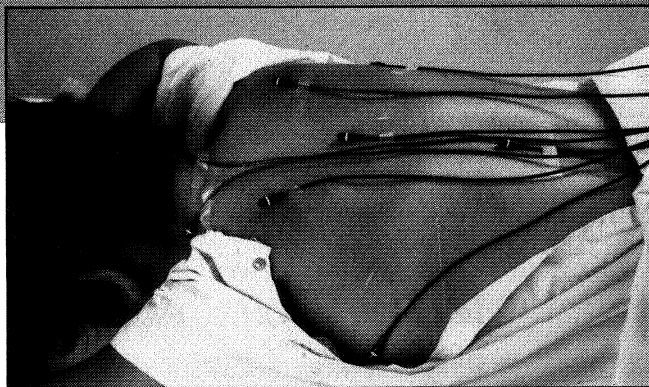
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3 YELLOW	<u>RT CERVICAL</u>	212
4 LT GRN	<u>LT CERVICAL</u>	213
5 DK GRN	<u>RT SUPRACLAV</u>	218
6 LT BLUE	<u>LT SUPRACLAV</u>	219
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# News from the Philippine Organization of Medical Physicists

Agnette Peralta  
October 23, 1987  
Manila

On March 10, 1987, the POMP held its first awarding ceremony at the Radiation Health Service, Department of Health. The awardees were Dr. Celia Anatalio, Radiation Health Service Chief, Dr. Lars-Eric Larsson, IAEA consultant assigned to the M.Sc. Applied Physics (Medical Physics) program at the University of Santo Tomas Graduate School for two years and retired Chief Physicist of the Karolinska Hospital, and Mr. Luciano Niguidula, retiring physicist (at the age of 80) of three Metro-Manila hospitals. The guest speaker during the ceremony was the Chief of Staff, Undersecretary of Health Mr. Mario Taguiwalo.

On August 1, 1987, the POMP held its first annual conference at the Radiation Health Service, Department of Health. Dr. Antonio Periquet, Undersecretary of Health for Hospital and Facility Services, was the opening ceremony guest speaker. He was introduced by Dr. Celia Anatalio, Radiation Health Service chief and POMP honorary member.

During the convention, the following papers were presented: "Radioactivity in Porcelain for Artificial Teeth and the Resulting Dose in Tissue" authored by Ms. Proserfina Tortal, "Determination of the Collective Radiation Doses to Certain Organs in Patients Undergoing X-ray Examinations" by Mr. Marlon Raul Tecson, "A Study on the Usefulness of 125 kVp for Chest Radiography" by Mr. Reynaldo Collado, "Calculation of Radiation Doses to the Thyroid Following Administration of I-131 for Therapeutic Purposes" by Ms. Aida Lobrigitto, "Optimization of the Physical Parameters in the Radiation Treatment of Malignant Lymphoma (Hodgkin's Disease) using Mantle Technique" by Ms. Monica Bacaling, and "Comparison of Dose Distribution in Patients Undergoing Radiation Treatment with Photons from Cobalt-60 Unit, 4 MV or 10 MV Linear Accelerator" by Ms. Rosita Uy.

The following POMP members also presented their reports on overseas meetings they had attended: Agnette Peralta - Asian Regional Conference on Medical Physics (Bombay, India; Dec. 8-12, 1986); Lilian Rodriguez - 9th International Conference on the Use of Computers in Radiation Therapy (June 22-25, 1987, Scheveningen, the Netherlands); Eulinia Valdezco - Workshop on Photon, Electron and Neutron Dosimetry in Radiotherapy (June 8-19, 1987, Seoul, South Korea); and Rogelio Gagarin - IAEA Seminar for Asia and the

Pacific on Calibration Procedures in Secondary Standard Dosimetry Laboratories (July 13-17, 1987, Kuala Lumpur, Malaysia).

A business meeting followed the scientific sessions.



Shown above during the opening ceremony of the First Annual Convention of the Philippine Organization of Medical Physicists on August 1, 1987 from the left are: Ms. Lilian Vidal-Rodriguez, emcee and POMP member; Dr. Celia Anatalio, Radiation Health Service Chief and POMP member; Undersecretary of Health for Hospital and Facility Services, Dr. Antonio Periquet, guest speaker; and Ms. Agnette Peralta, POMP President.



Shown above are POMP officers and members during the March 10, 1987 Awarding Ceremony with the 3 awardees: Mr. Luciano Niguidula (front row, 4th from left), Dr. Lars-Eric Larsson (front row, 5th from left), Dr. Celia Anatalio (front row, 7th from left) and with the guest speaker Chief of Staff and Undersecretary of Health Mario Taguiwalo (front row, 6th from left).

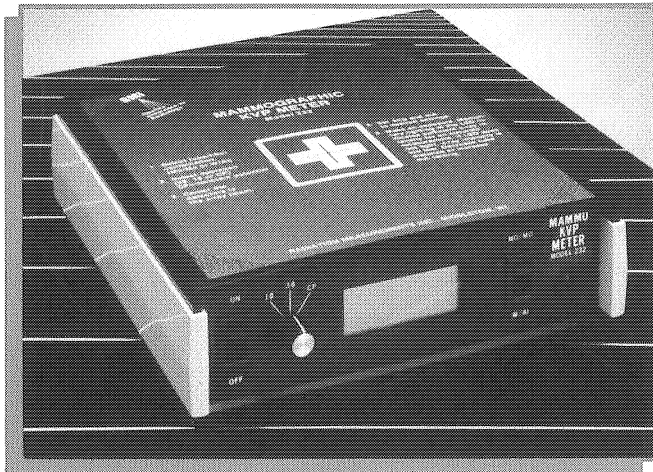
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IOMP Member Societies wishing to advertise in *Medical Physics World* (see AAPM book ad on page 16) should contact the *Editor*. There is no charge for this service but it does depend upon the availability of space.

The Editor

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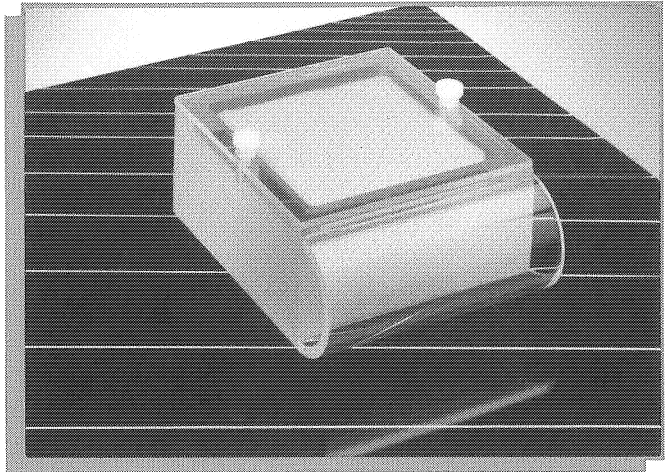
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## Developing Countries Committee

Rune Walstam, Chairman  
Department of Radiation Physics  
Box 60204  
S-104 01 Stockholm  
Sweden

Members of the Developing Countries Committee (DCC) and officers of the IOMP have had the opportunity of meeting twice during the recent years. One such occasion was the "Second Symposium of Radiological Physicists with international participation" in Smolenice, Czechoslovakia, September 22-25, 1986. The second meeting with more members of DCC and officers of IOMP was held in Bombay on December 8 and 11 in connection with the "Asian Regional Conference on Medical Physics". Minutes from the last meeting have been prepared by the secretary of the committee, Prof. Cafiero Franconi and are presently circulated for comments. In summary, the committee discussed its constitution, its tasks, working procedures and relations to a number of development agencies. Many decisions were made in order to strengthen the relations between IOMP and several international bodies. A detailed summary of the minutes will be published in a coming issue of MPW.

The committee has started, on a voluntary basis to collect equipment, journals, books, etc. which are being made available for developing countries. Further information about such material for donations can be forwarded to any of the members of the committee. Hopefully the committee will be able to make a selection on suitable departments for such donations in the developing world during the meeting in San Antonio in 1988. It is therefore important that departments in the developing world interested in particular equipment and instruments, common journals, such as Physics in Medicine and Biology, Medical Physics, Health Physics, etc. express their needs to the committee. For the selection of candidates for such donations it is of importance that the committee is informed about the technical and personnel facilities at such departments as well as the type and amount of work carried out. The committee will select those departments which are supposed to make the best use of the donations.

Applications for such donations and the requested information can be sent to the undersigned or to the secretary of the committee: Professor Cafiero Franconi, Department of Internal Medicine, 2nd University of Rome, Via O. Raimondo, I-00173 Rome, Italy.

A very special offer has been handed over to DCC: "Are there any developing countries who could

employ a Medical Physicist for two years of more from summer 1988? She has an MSc in Medical Physics and by next summer will have three years experience in a British Medical Physics Department and hopes to have completed the HPA training scheme. Her work has been in diagnostic imaging, particularly X-ray equipment testing, radiation protection and ultrasound imaging. Please contact Brian Stedeford, IOMP Secretary-General, for further information."

Through IUPESM, the ICSU-affiliated umbrella organization for IOMP and IFMBE, the committee has also been approached by the Third World Academy of Sciences (TWAS) in Trieste, Italy. This organization is trying to assist developing countries in many respects and our committee has been asked to give its view on possible co-operative programs with TWAS. Such programs may cover education and training schemes, consultants and cost for supply and transportation of material of the kinds mentioned above.

Through the exchange of observers with EFOMP (European Federation of Organizations for Medical Physics) the committee is following the attempts on the European scene to evaluate facilities for training and education of medical physicists from the developing world. Here IOMP and EFOMP are both trying to assist WHO and IAEA in the best possible way. Further reports on EFOMP Council Meetings in Smolenice, Czechoslovakia, September 1986 and Innsbruck, Austria, September 1987 and on collaborative efforts will hopefully be ready to present at the meeting in San Antonio.

**In conclusion:** For the committee it is now important to get information about **available** equipment, instruments, books and journals which can be donated from departments in industrialized countries and **requests** and **informations** as indicated above from departments in developing countries which are interested to apply for assistance through DCC. Please let us know your possibilities in industrialized countries and your demands in developing countries!

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## Editorial Policy

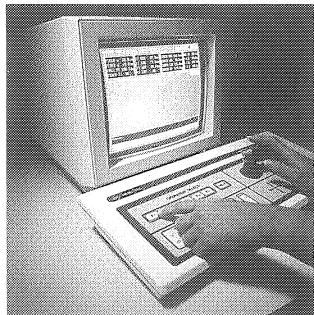
Medical Physics World welcomes correspondence from medical physicists around the world. We are especially interested in receiving articles which review the status of medical physics in IOMP member countries, such as the articles on pages 6, 8, 18 and 26. Please send all correspondence intended for publication **double spaced** to the Editor. Deadline for the next issue is April 1, 1988.





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## Correspondence

### V1 Congreso Nacional De Fisica Medica, Badajoz, Spain 23-25 September 1987

The Secretary-General was invited to attend this meeting by the President of the SEFM, Mari-Cruz Lizuain, and also the President of the Congress, Dr. Pena Bernal, in order to facilitate arrangements for the Practical Course in Physical Dosimetry in Radiotherapy for Spanish-speaking physicists (see Secretary-General's report). This was a most successful meeting attended by 120 Spanish medical physicists - a very high proportion indeed of the 150 members of the SEFM. Guest speakers were Dr. Cari Borrás from San Francisco, and Dr. A.A. Lammertsma from Hammersmith Hospital, London. News of the meeting and issues relating to Medical Physics in general were well covered by the local press, radio and television, which should help to promote Medical Physics in Spain. The meeting was opened by D. Jose Enrique Campillo Alvarez, Dean of the Faculty of Medicine of Badajoz and by D. Antonio Sanchez Misiego, Rector of the University of Extremadura. Then Dr. Borrás gave her first seminar on Quality Control in Radiotherapy. Following this there were a number of proffered papers on physics in radiotherapy, with topics in brachytherapy, total body irradiation, linear-quadratic models, high energy dosimetry and a report of a dosimetry workshop.

The following session was on instrumentation with papers on automated recognition of persons by their voice patterns, ion chamber and thermoluminescent dosimetry and Monte Carlo calculations.

In the afternoon there were sessions on teaching in medical physics and medical optics and a general session including some biomechanical topics such as the pressure on knee caps and the attenuation of lasers in biological tissues.

On Thursday Dr. Borrás gave a further seminar, on quality control in diagnostic radiology. She commented on the range of doses extending over a factor of 100 for the same examination. This was followed by some proffered papers in diagnostic radiology with sessions on radiological dosimetry using a phantom and also for various types of radiological examinations.

Then followed a specially invited lecture by Dr. Lammertsma, a Dutch medical physicist who has been working at the Hammersmith Hospital for some years, on positron emission tomography. Dr. Lammertsma gave a masterly exposition of PET and also described the latest developments at the Hammersmith including a system with 4096 detectors on two separate rings capable of resolving 15 planes in a single scan.

In the afternoon there was a conference outing to Merida, site of a prominent Roman city where we visited the New National Museum of Roman Art. This museum is actually built over some of the Roman remains and also houses some splendid mosaics and statues. This was followed by the Annual Meeting of the SEFM and the conference dinner.

On Friday Dr. Borrás gave two more seminars, on quality control in nuclear medicine and in C.T. scanning which was followed by some proffered papers on radiological protection, including papers on the cost-benefit ratio of dose reduction in diagnostic radiology, the new ICRP limits for radiological protection and an analysis of doses received by workers in nuclear medicine.

Following this there was a visit to Cáceres with a reception in the Town Hall followed by a tour of the floodlit walled city of old Cáceres. The city received a charter in the thirteenth century, with many buildings dating from the fifteenth, and some Roman remains. The organizers are to be congratulated on this meeting which the Secretary-General was privileged to attend.

Sincerely,

Brian Stedeford  
November, 1987

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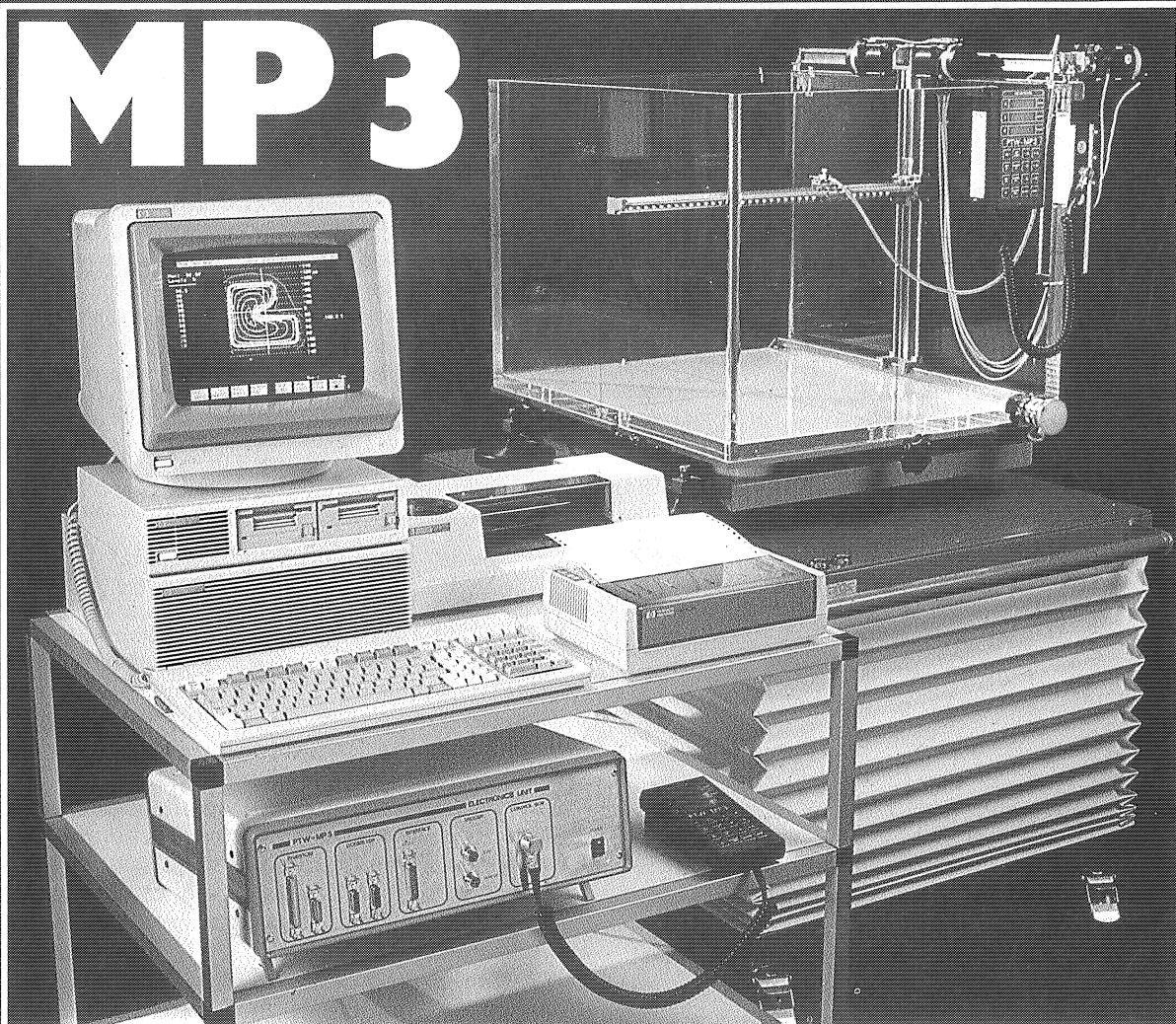
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## Announcements

### Practical Course of Physical Dosimetry in Radiotherapy

The American Association of Physicists in Medicine, the Latin American Association of Medical Physics, the International Organization for Medical Physics and the Spanish Society of Medical Physics are organizing a radiotherapy dosimetry course **in Spanish** to be held in San Antonio, Texas, August 3-6, 1988, just prior to the World Congress on Medical Physics and Biomedical Engineering, August 6-12, 1988. The Course is co-sponsored by the International Atomic Energy Agency, the Radiological Physics Center, Houston and other national and international organizations including the IAEA and PAHO. The objective of the course is to familiarize the Spanish speaking medical physicist with the most recent dosimetry protocols for external beam radiotherapy with Cobalt-60, low, medium and high energy x-rays and electrons and for brachytherapy. Lectures will be held at the University of Texas Health Science Center. Measurements will take place at the Cancer Therapy and Research Center using a variety of linear accelerators, teletherapy and x-ray units. For further information, contact Dr. Brian Stedeford, IOMP Secretary-General, Department of Radiation Physics, Churchill Hospital, Oxford, OX3 7LJ, United Kingdom.

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### Recent IEC Publications

The following three safety related publications are now available from the IEC:

**601-2-7 (1987) Part 2: Particular requirements for the safety of high voltage diagnostic X-ray generators.**

121 pp. Fr.s. 139. — (First Edition) SC 62B  
(Based on Documents 62B (Central Office) 50, 58, 59.)

**601-2-8 (1987) Part 2: Particular requirements for the safety of therapeutic X-ray generators.**

72 pp. Fr.s. 100. — (First edition) SC 62B  
(Based on Document 62B (Central Office) 49.)

**601-2-11 (1987) Part 2: Particular requirements for safety of gamma beam therapy equipment.**

59 pp. Fr.s. 84. — (First edition) SC 62C  
(Based on Documents 62C (Central Office) 26, 33.)

Information regarding the contents as well as the price of these publications may be obtained from: The International Electrotechnical Commission (IEC) 3, rue de Varembe, P.O. Box 131, 1211 Geneva 20, Switzerland, Telephone: 022/34 01 50 Telegrams: INELISSION Geneva Telex: 28872 CEIEC CH.

## Correspondence

### Annual Congress in Brazil

The Brazilian Medical Physics Association (ABFM) held a congress together with the Brazilian Radiology Society, October 10-15, 1987, in Sao Paulo, Brazil. The ABFM component of the congress was organized by Professor Marilia Texeira da Cruz, secretary of the regional section of ABFM for the state of Sao Paulo. Approximately 150 medical physicists participated in the well organized program consisting of invited papers, contributed papers and scientific posters. ABFM has about 350 members.

A \$500 (U.S.) prize was given for both the best contributed paper and the best poster of the ABFM meeting. A group led by H.J. Khoury of the Federal University of Pernambuco won the prize for the best contributed paper. This prize was named for Professor Shiguo Watanabe of the University of Sao Paulo, the second president of the ABFM and now an honorary member of AAPM. A group led by Professor Thomaz Ghilardi of the University of Sao Paulo in Riberao Preto won the prize for the best poster.

The "hot topic" at the congress was the recent radiation accident at the end of September in the city of Goiania, about 1,000 km northwest of Sao Paulo. Details of the accident were given to the congress by Homero Calvacanti, incoming president of the ABFM, who had spent two days in Goiania just before the congress. The unfortunate accident involved the rupture of a therapy source of about 1000 Ci of cesium-137 which was inadvertently left in an old building abandoned by the hospital. A junk dealer sold the lead shielding from the source. In removing the lead the source housing ruptured and spilled radioactive cesium, which glowed in the dark attracting adults and children. The six year old daughter of the junk dealer swallowed some of the source and died October 23, about four weeks after the accident. About twenty adults had severe skin contamination. Three of these also died in late October. A total of about 240 people suffered some degree of contamination. Minor amounts of the radioactivity were spread to other cities. Like many accidents, the blame must be shared by several individuals and organizations.

At the annual business meeting on October 14 the new ABFM president Homero Calvacanti of Recife was installed to replace Jose de Julio Rozental of Rio de Janeiro. Other officers elected for the current two year term are: president-elect Thomaz Ghilardi, secretary Helen Khoury and treasurer Lea Conthier de Freitas. New members elected to the council are Cecil Chow Robilotta and Marcia Maria Santos Lopes.

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John R., Cameron  
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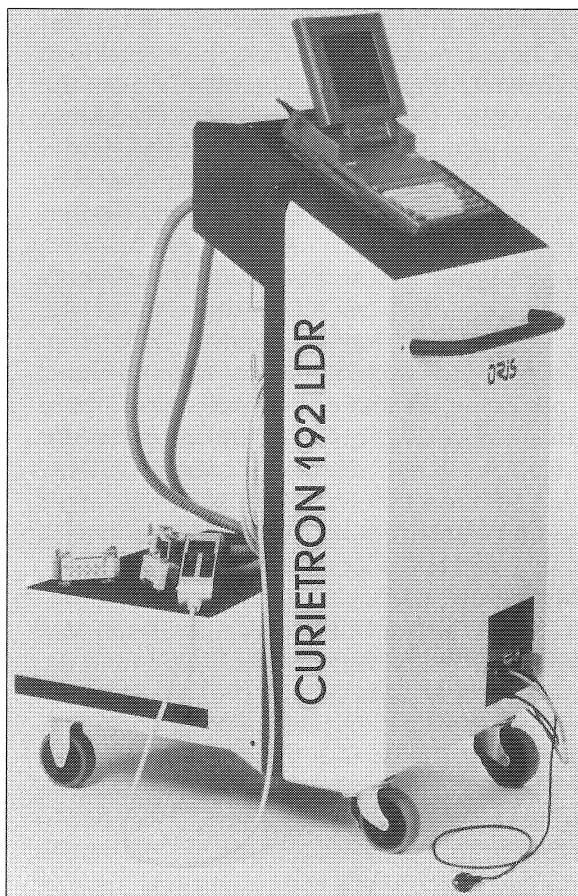
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## Radiation Therapy in China\*

Dr. Liu Tai Fu and Dr. Zhang Zhi Yi  
Shanghai Cancer Hospital/Cancer Institute  
270 Dong An Road, Shanghai 200032  
People's Republic of China

The treatment of cancer by radiotherapy in China began in the early 30's, but was almost limited to the PUMC Hospital in Beijing and the Sino-Belgian Radium Institute in Shanghai. However, in the last 30 years Chinese radiation oncology has developed at an extremely rapid pace, culminating in the founding of the Chinese Society of Radiation Oncology last year as a separate organization under the Chinese Medical Association with the *First Chinese International Radiation Oncology Conference* held at Shanghai April 1987.

There are now more than 200 departments engaged in radiation oncology throughout the country, with a total of approximately 1500 radiation therapists. However, in view of the *enormous actual population*, almost one billion people, there is an acute need for even quicker expansion in order to cope with the great number of cancer patients who need radiation treatment. Most of the larger cancer centers are treating 300 to 400 patients a day, but they all have a long waiting list.

Another aspect, particular to radiation oncology in China, is that the priorities in radiation treatment are somewhat different from the Western countries. For instance, *nasopharyngeal* and *esophageal* carcinoma are the most frequent cancers for males, while *uterine cancer* is still the main problem in females. The high incidence of *liver cancer* is also a challenge to radiotherapists since surgery is usually not possible in most of the cases seen. The results in *gastric cancer* which is still the commonest cancer in both males and females could perhaps be improved by *intra-operative* radiotherapy, a method of treatment that is undergoing *preliminary trials* in some centers in China. Lung cancer has become the No. 1 problem in Shanghai as regards to frequency and adequate treatment.

It is thus evident that on the one hand, great efforts are needed to fulfill the demand in equipment and personnel in order to treat more cancer patients but on the other hand, there is now such an *abundance of clinical material* that considerable work in *clinical research* could be done in a much *shorter period of time than anywhere else*. What would be needed is good organization and *cooperation* on a national as well as *international scale* and frequent *exchange* of data and experience with other countries.

\*Reprinted with permission from the American Society of Therapeutic Radiation and Oncology (ASTRO) Newsletter, Vol. V, No. 3.

## Correspondence

### Meetings in China

The Annual Meeting of the Chinese Society of Medical Physics, CSMP was held in Lo Yang City, China on June 10-14, 1987. In the Board Meeting of CSMP, Professor Lawrence H. Lanzl, Ph.D., the President of IOMP and Dr. Brian Stedeford, Ph.D., the Secretary-General of IOMP were elected the first two Honorary Members of CSMP for their excellent work of helping Developing Countries.

After the Asian Regional Conference of Medical Physics held in Bombay, India last December, Dr. R.P. Rao member of the Association of Medical Physicists in India (AMPI) was invited to present a paper in An International Conference in Beijing and then visited Guangzhou Medical College on August 1987. Another Indian Medical Physicist, new President of AMPI, Dr. A. Bose was invited to visit China on October 1987 meeting the Chinese Colleagues in Beijing and Guangzhou.

Prof. S. Mascarenhas, the President of Third World Association of Medical Physics, TWAMP was invited to participate the Second Conference of the Third World Academy of Sciences, TWAS in Beijing presenting a paper and then visit Guangzhou Medical College to talk with me, the first member of TWAMP from China, about the exchanges of Science and Technology in the Third World.

The above facts show us the Country Members of IOMP are much close together exchanging Science and Technology.

Best wishes.

Sincerely yours,

Nan-Zhu Xie, Professor  
Member of AAPM  
Member of New York Academy of Sciences  
Member of TWAMP

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## Advertising Rates

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# Announcements

## AAPM Establishes Corresponding Memberships

The American Association of Physicists in Medicine (AAPM) has recently established a new category of membership available to medical physicists residing outside of the United States, who now have the option of Full Membership or Corresponding Membership. A Corresponding Member must not be a permanent resident of the United States or a temporary resident for more than six months. Eligibility and acceptance for Corresponding Membership shall be the same as for full membership. The Corresponding Member shall not have the right to vote or hold office in the Association.

The advantage of such membership is that there are several alternative dues structures for Corresponding Members, all less expensive than the cost of a Full Membership. At present rates, Corresponding Membership annual dues are either \$35 U.S. for mailings only, or \$60 for mailings plus *Medical Physics*. There is a third possibility. Medical Physicists from developing countries, or countries with significant foreign exchange problems, may apply for a **free** Corresponding Membership with mailings only. The number of these **free** memberships is limited and will be allocated according to financial need and on a first-come first-served basis.

Regardless of which type of Corresponding Membership is desired, applicants must meet the following eligibility criteria:

Corresponding Membership is open to individuals who are primarily and professionally engaged in the application of physics to medicine and biology in medical, research or educational institutions who meet one of the following academic requirements:

Degree in Physical Science	Minimum Years Experience in Medical Physics
Ph.D. or D.Sc.	1
M.A. or M.S.	2
B.A. or B.S.	3

In special cases, individuals who fail to meet these academic requirements, who can demonstrate adequate experience, and who have contributed significantly to the field of medical physics, may be considered eligible for Corresponding Membership.

Anyone interested in applying for any of the above forms of Corresponding Membership should send for details and an application form to:

Executive Officer  
 American Association of Physicists in Medicine  
 335 East 45th Street  
 New York, New York U.S.A. 10017

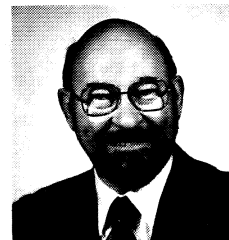
Colin G. Orton, *Chairman*  
 AAPM International Affairs Committee

## WHO Correspondent

We are pleased to announce that Dr. Gerald P. Hanson has graciously agreed to act as World Health Organization correspondent to *Medical Physics World*. Dr. Hanson was recently appointed senior scientist and chief of the radiation medicine unit of the WHO in Geneva, Switzerland. Prior to this, he has been with the Pan American Health Organization in Washington, D.C. for the past 23 years. He has served as regional adviser in radiological health since 1979 and as regional adviser in radiological medical physics from 1971 until 1978. No replacement for him has been named yet.

After joining PAHO in 1964, Dr. Hanson was sent to Lima, Peru and Santiago, Chile, where as the regional adviser in radiological protection he assisted various governments in the Americas in organizing and developing radiation protection services throughout Latin America and the Caribbean. PAHO is also the WHO regional office for the Americas being one of six regional WHO offices.

At WHO headquarters, Dr. Hanson will work with member governments in establishing national policies and programs based on primary health care and in improving their country's health care services in radiation medicine, including diagnostic imaging technologies, therapeutic use of ionizing radiation, and radiation protection.



Dr. Gerald P. Hanson

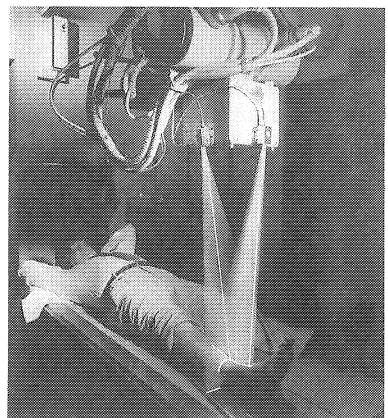
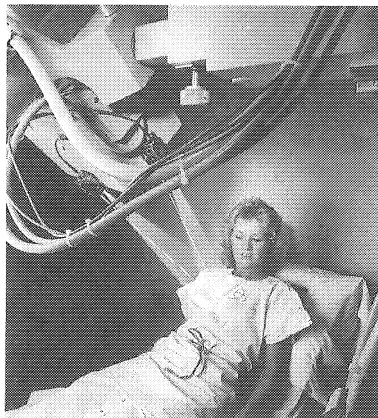
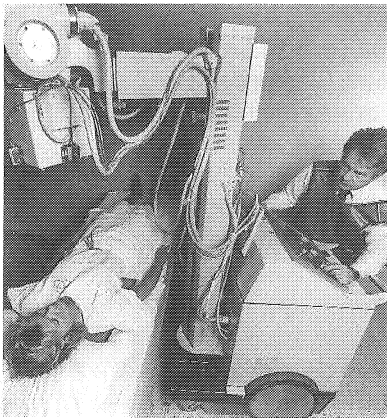
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