

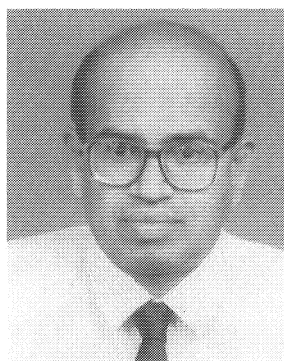
Medical Physics World

Bulletin of the International Organization for Medical Physics

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President's Message



Dear Friends and Colleagues

I would like to express our collective thanks to Prof. Hiroshi Abe, President, to Dr. F. Kajiya, Secretary-General, of the 1991 IOMP Conference, and to our Japanese Colleagues, for their excellent work in organizing and hosting the Conference in Kyoto, Japan. The beautiful setting and pleasant weather

contributed to the stimulating Scientific and Social programmes.

The time of the conference also was the time for changing IOMP officers. Our President for the past three years, Dr. John R. Cunningham, now holds the office of Past President. While I have succeeded Dr. Cunningham to the presidency and Prof. K. Boddy of the U.K. has been elected to the position of Vice-President.

We are indeed very fortunate that Prof. Colin Orton has been re-elected to the office of Secretary-General. Both Prof. Orton and Dr. Cunningham have worked hard for the benefit of IOMP and its members. If we are financially in a much better position and cover 45 national adhering Societies, it is solely because of Prof. Orton's untiring efforts during the past three years.

My thoughts for the immediate future pertain to the appalling situation that prevail in some of the developing countries in regards to radiation oncology facilities and in what way developed countries can help improve the situation. I reproduce below my very brief Banquet Speech rendered at the Kyoto World Congress. I sincerely hope IOMP and individual countries will come up soon with some solutions to this problem and I invite suggestions from member nations.

Sincerely,
Udipi Madhvanath, Ph.D.

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Letter From Dr. Keith Boddy, Vice President

I am greatly honoured to have been elected as Vice-President of the International Organization for Medical Physics, particularly when circumstances beyond my control prevented me from being at the World Congress in person. My absence in no way distracts from my whole-hearted commitment and support to the advancement of Medical Physics professionally and scientifically world-wide.

In conferring this honour, which I gratefully accept, IOMP and our membership can be assured that I will dedicate myself, with all my customary energy and enthusiasm, to the responsibilities of the Vice-Presidency, to emulate the excellent standards of my predecessors.

I look forward to contributing new ideas and suggestions for promoting Medical Physics and its professional recognition internationally; particularly international cooperation in training, the setting of Quality Standards, collaborative research and development and seeking mechanisms for international funding, as well as contributing fully to work already in progress.

I am genuinely grateful for this honour and, in all humility, promise my dedicated service to IOMP and the membership.

Please accept my best wishes and kindest regards.

Keith Boddy, Ph.D.
Head of Department
Regional Medical Physics Department
Newcastle General Hospital
Newcastle-Upon-Tyne, NE4 6BE
United Kingdom

Announcement

The Proceedings of the Tenth International Conference on the Use of Computers in Radiation Therapy (418 pages), held in Lucknow, India and edited by S. Hukku, M.D. and P. S. Iyer, Ph.D. is available from:

Dr. S. Hukku
Associate Professor
Department of Radiotherapy
Sanjay Gandhi PGI
P.O. Box 375
Lucknow 226001
India

The price of the Proceedings is \$55 U.S. per copy for individuals and \$90 U.S. per copy for institutions.

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Udipi Madhvanath, Ph.D., Prof., (ex officio)

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Events information should be addressed to Mr. Geoffrey Ibbott. IOMP correspondence should be addressed to Dr. Udipi Madhvanath and Dr. Colin Orton.

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Secretary-General's Report

Kyoto World Congress

The World Congress on Medical Physics and Biomedical Engineering held in Kyoto, Japan, July 7-12 was, in all respects, a resounding success thanks to the untiring efforts of Congress President Prof. Hiroshi Abe, Secretary-General Prof. Fumihiko Kajiya, and all the outstanding members of their Organizing Committee. Several other reports in this issue of *Medical Physics World* relate to activities at the World Congress, so here I will mention just a few of the highlights.

Attendance:

There were over 3,000 total attendees, with just over one-third from abroad, with a total of 2,580 papers accepted for presentation, nearly 1,500 of those from abroad. The breakdown of participants and papers is shown in Table 1.

Table 1: Participants and Papers Accepted		
COUNTRY	PARTICIPANTS	ABSTRACTS
Japan	65%	42.4%
USA	8.9%	12.9%
UK	2.4%	3.9%
Italy	2.2%	3.3%
Germany	1.6%	2.5%
Canada	1.4%	2.2%
Korea	1.3%	1.4%
France	1.2%	1.4%
USSR	1.2%	2.2%
Brazil	1.2%	2.4%
Sweden	1.1%	1.4%
China	1.1%	8.8%
India	1.1%	3.1%
Others	10.3%	12.1%

A breakdown of the proportion of the total of 2,850 papers which related to medical physics is shown in Table 2.

Table 2. Medical Physics Papers (as a % of total)	
TOPIC	% OF TOTAL
Radiation Therapy	9.1
Medical Imaging	9.1
Ultrasound	5.3
Medical Information	4.8
Nuclear Medicine	3.0
Modeling and Simulation	2.9
Hyperthermia	2.8
Medical Optics	2.8
Medical Physics Education	2.4
MRI and MRS	2.2
Quality Assurance	0.9
Radiation Protection	0.7
Artificial Intelligence	0.5
Others	5.0
TOTAL	51.5

Note that just about half of the papers presented were on medical physics topics.

Travel Grants:

In 1991 the IOMP provided, or secured from Corporate Members, a total of over \$42,000 US in travel grants for the Kyoto World Congress. We are especially indebted to the following corporations for their generous contributions to this program:

C.D. High Tech. Pvt. Ltd. (Mr. E. E. Prasad)
 Gammex Lasers Corporation (Mr. Charles Lescrenier)
 Nuclear Associates/Victoreen (Mr. Hy Glasser)
 Nucletron Corporation (Mr. Eric van't Hooft)
 Siemens S.A. (Mr. Klaus Brieke)
 TSG Integrations (Mr. S. L. Kapoor)

Elections:

At the Kyoto Congress the following IOMP Officers were elected (or re-elected):

President Dr. Udipi Madhvanath, India
 Vice President Prof. Keith Boddy, U.K.
 Secretary-General . . Prof. Colin G. Orton, U.S.A.

Site of 1997 World Congress:

The site for the XI ICMP was selected as Nice, France, at the Acropolis Centre.

New Members Elected:

Council ratified the election of ten new national member societies: Argentina, Bulgaria, Cyprus, Ghana, Korea, Malaysia, Romania, Tanzania, Turkey, and Yugoslavia.

Sincerely,
 Colin G. Orton, Ph.D.

COUNCIL MEETING, KYOTO, JULY, 1991

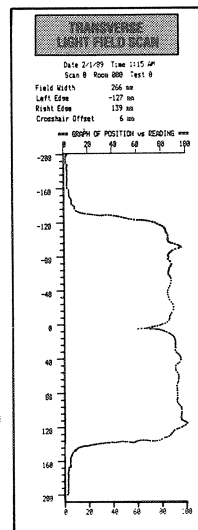
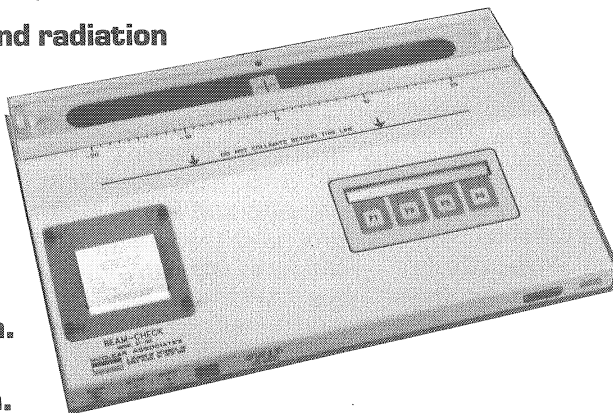


*Dr. Udipi Madhvanath, President and
 Dr. Jack Cunningham, Immediate Past President*

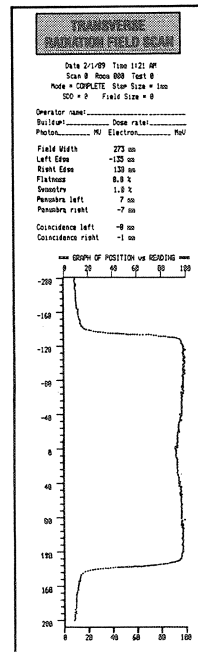
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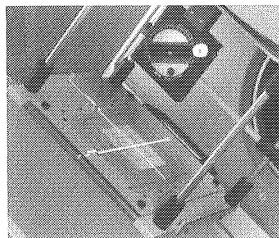
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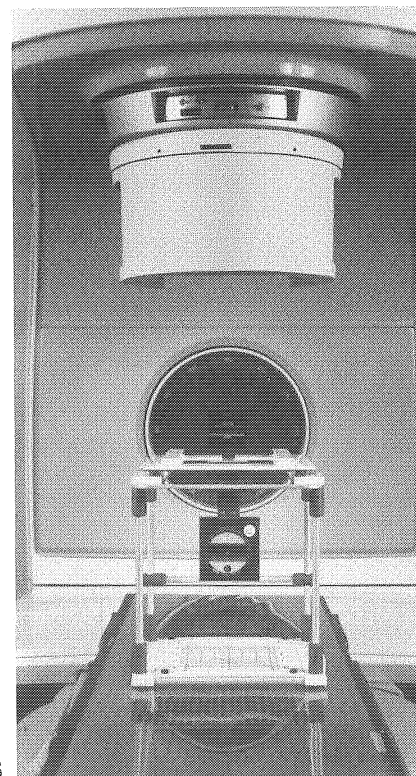
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Report on the International Workshop on Radiotherapy Treatment Planning and Remote Afterloading Brachytherapy, Seoul, Korea

P. S. Iyer

Division of Radiological Protection
Bhabha Atomic Research Centre
Trombay, Bombay 400085, India

The International Workshop on Radiotherapy Treatment Planning and Remote Afterloading Brachytherapy which was one of the satellite meetings of the World Congress on Medical Physics and Biomedical Engineering was held on July 4, 1991 at the Allen Hall, Yonesi University, Seoul, Korea. The workshop was organized by the Korean Association of Physicists in Medicine (KAPM) and was jointly organized by the

International Organization for Medical Physics and Nucletron International B.V.

Fifty-five participants, mostly medical physicists from different parts of Korea, attended the workshop. The international guest faculty included Prof. C. G. Orton, Wayne State University and Harper Hospital, Detroit, Michigan, U.S.A., Mr. Miles Mount, President, Nucletron Corporation, Maryland, U.S.A. and Dr. P. S. Iyer, Bhabha Atomic Research Centre, Bombay, India. The topics of presentation were: (1) photon and electron beam dosimetry, (2) basic principles of brachytherapy, (3) remote afterloading techniques, facilities planning, treatment planning, quality assurance tests of equipment and calibration of sources, and (4) biological aspects of treatment planning.

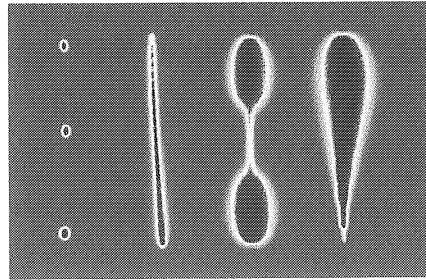
The proceedings of the workshop were handed over to the participants on the morning of the workshop. Dr. S. S. Chu (President, KAPM), welcomed the participants and Dr. W. S. Kany (Secretary-General, KAPM), proposed the vote of thanks. It may be mentioned that this was the first international meeting organized by the KAPM.



Participants in the Seoul International Workshop on Radiotherapy Treatment Planning and Remote Afterloading Brachytherapy.

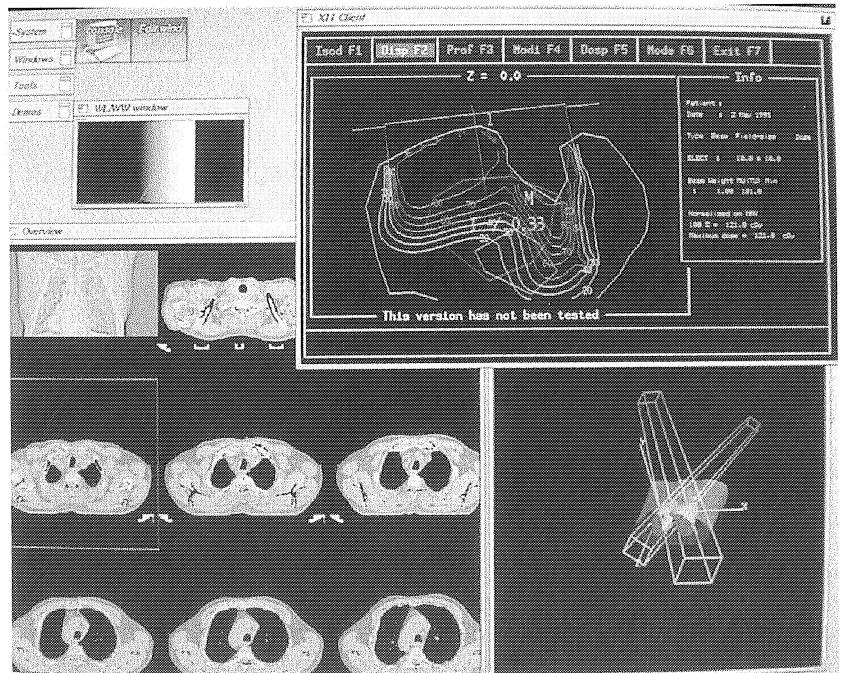


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Report on the Asian and Pacific International Conference on Medical Physics, 1991

Oskar A. Chomicki

**Secretary-General
Polish Society of Medical Physics
Klinika Endokrynologii
Szpital Bielski
Ceglowska 80
01-809 Warszawa**

The Conference was held on July 15-17, 1991 in Guangzhou, People's Republic of China, in the wake of the World Congress on Medical Physics and Biomedical Engineering, July 7-12, 1991, Kyoto, Japan, on the initiative of Prof. Nan-Zhu Xie, Professor of the Guangzhou Medical College and Chairman of the IOMP Developing Countries Committee and Prof. K. Wu of the Eastern Virginia Medical School (U.S.A.). The Organizing and Scientific Committees also included well-known medical physicists from China, U.S.A., Germany and Canada. Several institutions, such as Gammex/RMI, Nuclear Associates/Victoreen, Varian, Analogic Scientific and others provided financial support for the Conference.

Over 150 participants, mostly from China, but also those from other countries in Asia, America, Australia and Europe presented papers on medical imaging (26 papers), radiation therapy (52 papers), medical physics (40 papers), computers in medicine (11 papers), health physics (6 papers) and biological engineering (7 papers). Professors J. Cunningham (Canada), U. Madhvanath (India), J. S. Laughlin (U.S.A.) and U. F. Rosenow (Germany) delivered invited talks in plenary sessions. Some participants, unfortunately, were prevented from coming by the disastrous flood that had struck Central China.

The Congress was very well organized and provided good opportunity for medical physicists from the developed countries to share experience and discuss the latest scientific and technological advances in medical physics. Apart from the scientific program some participants were able to visit the Guangzhou Cancer Hospital where they became acquainted with cancer therapy carried out by Chinese physicians and physicists using linear accelerators and a Cobalt-60 unit manufactured in China.

The organizers also arranged for two sight-seeing tours and enabled the participants to enjoy the famous Cantonese food at several receptions.

Report on the Training Course on Medical Radiation Physics, Beijing, June 17 to July 3, 1991

P. S. Iyer

**Division of Radiological Protection
Bhabha Atomic Research Centre
Trombay, Bombay 400085, India**

The Chinese Association of Radiation Physics and Chinese Society of Medical Physics organized the training course on Medical Radiation Physics at the Cancer Institute (Hospital) in Beijing during June 17-July 3, 1991.

Professor Yimin Hu, Chief Physicist, Cancer Institute (Hospital) was the organizer of the course. The course was attended by 61 participants, mostly medical physicists from all over China. In addition, some post-graduate radiation oncology students from Chinese hospitals attended the course.

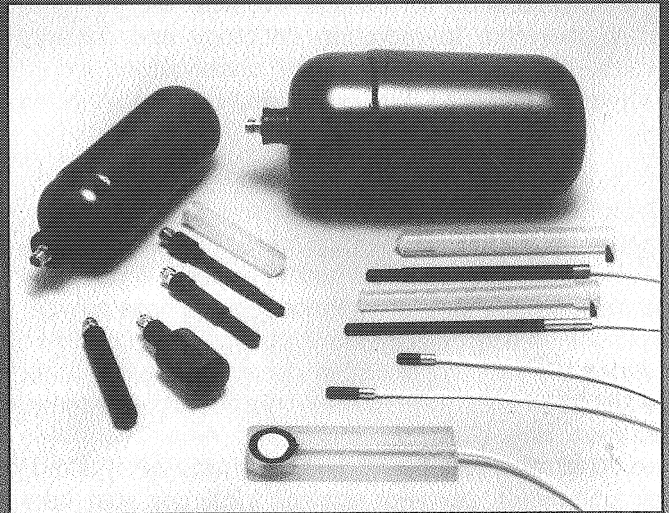
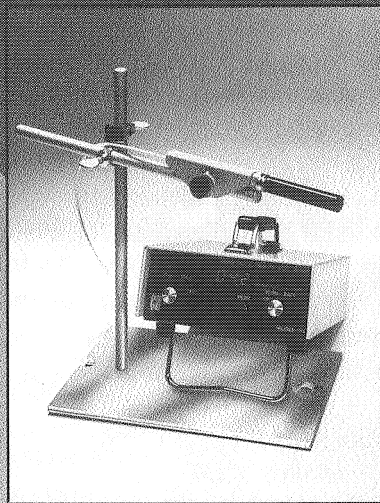
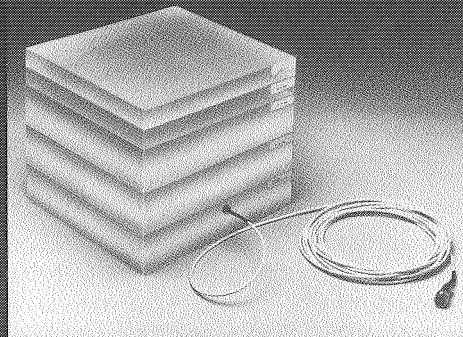
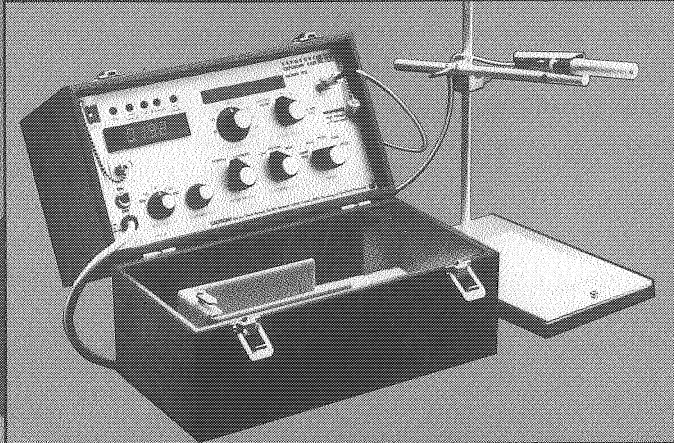
A number of lectures and practical sessions were conducted by Prof. Yimin Hu, Mr. Zhang Hongshi, Senior Physicist, Cancer Institute (Hospital) and their colleagues. The international guest faculty included Dr. A. Brahme (Stockholm, Sweden), Dr. G. Rickner (Uppsala, Sweden), Dr. J. V. Dam (Brussels, Belgium) and Dr. P. S. Iyer (Bombay, India).

The topics on which I gave lectures were: (1) Quality assurance in radiation therapy, (2) Brachytherapy dosimetry and acceptance tests for equipment and sources and (3) Medical physics and radiation protection infrastructure in India. Prof. Hu's almost simultaneous translation of the English presentations by the foreign faculty members proved very helpful to the participants.

The training course was run on self-reliance and self-support and there was no financial support from the outside. Most out-station participants had been provided accommodations near the venue of the course.

My participation in the training course was facilitated by a very generous grant of the IOMP's Nucletron Travel Scholarship Award, which covered part of my travel expenses. I sincerely thank the International Organization for Medical Physics, Dr. C. G. Orton, Secretary-General, IOMP, Nucletron International Netherlands, B.V. and Mr. Eric Van't Hooft of Nucletron International. Local hospitality was provided by the organizers and I thank the organizers and Prof. Yimin Hu for the same.

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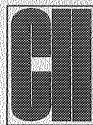


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International Cooperation in Medical Physics

The text of Dr. Udipi Madhvanath's Banquet Speech given at the 1991 IOMP Meeting in Kyoto, Japan on July 11, 1991

Delegates to this wonderful World Congress on Medical Physics and Biomedical Engineering, invitees, ladies and gentlemen. It is a great honour for me to address this August gathering as the President of the International Organization for Medical Physics. As you know, the two organizations, IFMBE and IOMP have joined together to form IUPESM, the International Union for Physical and Engineering Sciences in Medicine whose member countries cover 70% of the world population. When Prof. Abe wrote asking me to speak to you on this occasion, I chose this topic of International Cooperation in Medical Physics. My thoughts pertain therefore to radiation oncology and medical physics and I presume that my observations would pretty much apply to biomedical engineering areas as well.

It is most unfortunate that when we are about to celebrate the centenary of the discovery of x-rays, benefits from x-ray diagnostics have not reached most of the countries in the third world, especially in Africa and Asia. Most countries in these regions have meager resources by way of x-ray facilities and most countries in Africa do not have a single cobalt teletherapy unit. The UN Scientific Committee on the Effects of Atomic Radiation has observed that most Asian countries have 30-80 diagnostic x-ray examinations per 1,000 of their population per year against 1,200 per year here in Japan or 800 in the U.S.A. or Western Europe. For the treatment of cancer with radiation, as a rule of thumb, one needs at least one cobalt unit per million of population in the Asian region where the average life expectancy is about 55 years. Against this requirement, Myanmar has 6 units for its population of 38 million, Nepal 1 for 20 million, Bangladesh 1 unit for 111 million, Tanzania 1 for 25 million, Kenya 2 for 25 million. While South Africa has 36 machines for its 32 million population, the remaining 53 African countries put together have 28 units for their 615 million. The two most populous countries, Peoples Republic of China (with a population of 1,050 million) and India (845 million) have 343 and 172 teletherapy units respectively, i.e. 30% and 20% of the required number of units. Further, these facilities are not evenly distributed within the country. For example, one of the States in India (U.P.) with a population of 136 million has only 12 cobalt units. Practically all medical physicists in these countries cater to cancer treatment services and medical physics research is non-existent. Obviously, lack of resources for health care programmes is at the root of this disparity.

In what way can international efforts be mobilized to improve the situation? I can think of a few means worth considering. First, I appeal to all the institutions which have advanced modern facilities to donate their earlier models of equipment — still working of course, and dosimetric, QA instruments to the developing countries. In fact, I know of a few cobalt machines from the U.S.A. which have been gifted to needy countries. Second, WHO and IAEA, Vienna have programmes to assist developing countries in many ways. Many countries are either not aware of or are not availing themselves of such assistance. Many do not know that travel fellowships for educational programmes are available from these International Organizations. Further, if countries can purchase a good quality refurbished cobalt unit, IAEA can help transport the unit, install and also bear the expenses for a new cobalt source. The IOMP has a prepared memorandum of understanding with the IAEA, Director, Division of Technical Assistance and Cooperation and we hope to reap the benefits of this cooperation very soon. The International Centre for Theoretical Physics (ICTP) at Trieste, Italy has also its own programme to help developing countries in the area of radiological sciences. Last, efforts should be made for dissemination and transfer of knowledge on medical physics to developing countries by way of exchange of visits, conducting workshops, through publications, etc.

I conclude by expressing my sincere thanks to Prof. Abe and his colleagues for enabling me to talk to you this evening. I would also like to take this opportunity to thank the organizers for their excellent arrangements for this conference and making our stay a memorable one.

Udipi Madhvanath
President, IOMP
Head, DRP, BARC

Announcement

New Members

We wish to congratulate the Jordanian Association of Medical Physics and The Pakistan Radiological Society on being elected to IOMP Adhering National Organization Membership, subject to ratification by Council at their next meeting.



TWO PROFESSIONALS

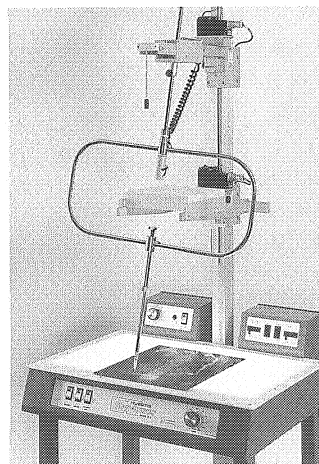
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Medical Physics in the Philippines

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Radiation Health Service, Department of Health,
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Brief History:

The practice of medical physics in the Philippines can be considered to have started in 1940 when the position of a hospital physicist was first created in the Philippine General Hospital. Engineer Luciano Niguidula became the first practicing hospital physicist, and today, at the age of 84, he still acts as a consultant at the Philippine General Hospital and the Lung Center of the Philippines. He is now regarded as the "father" of medical physics in the Philippines.

For so many years there was no other major breakthrough, until in 1974, the Radiation Health Office, now the Radiation Health Service (RHS) was created in the Department of Health. Its first Director, Dr. Celia T. Anatalio, a radiation oncologist, spearheaded the establishment of a graduate program in medical physics which will supply the much needed physicists in hospitals.

The Medical Physics Program:

In November 1981, the Medical Physics Program at the University of Santo Tomas (UST) Graduate School started with an initial enrollment of 4 students. The program is a joint project of the Department of Health through the RHS, the Department of Science and Technology through the Philippine Nuclear Research Institute (PNRI) and the UST, with the technical support of the International Atomic Energy Agency (IAEA). Filipino physicists who were earlier sent abroad for graduate studies in medical physics became its first professors.

The medical physics program is a two year course leading to a degree in Master of Science in Applied Physics with a major in Medical Physics. Subjects covered are listed in Table 1. The students are required to undergo a 3 month hospital attachment in radiotherapy, nuclear medicine and diagnostic radiology, including ultrasound; to pass the written comprehensive examination covering the major subjects and to successfully defend a research thesis.

Now in its tenth year, the program has produced 14 graduates and 22 students of various academic levels are currently enrolled in the program.

The Practice of Medical Physics:

At present, there are 13 radiotherapy, 46 nuclear medicine, 12 CT, 5 MRI, about 1,000 ultrasound and more than 2,000 medical x-ray facilities in the Philippines, serving its more than 60 million people. Most of these facilities are located in the urban areas.

At present only 9 medical physicists are hospital based, including two who were recently hired by the Makati Medical Center and St. Luke's Medical Center, considered two of the best private medical centers in the country. With this, it is expected that other private hospitals would soon follow. What can be considered as another milestone was the appointment in February 1991 of Ms. Agnette P. Peralta, a medical physicist, to the position of the Director of RHS.

Medical physics work in radiotherapy mostly involves treatment planning and dosimetry, acceptance testing, quality control and training of doctors and technicians in radiotherapy physics and radiation protection. Only three hospitals at present have computer-based treatment planning systems.

Aside from its radiation protection work, the RHS (where most of the medical physicists are employed) also provides medical physics services to all hospitals under the DOH. This partially solves the difficulty of creating new positions in government hospitals.

Medical physics services offered by the RHS include performance and acceptance testing of radiological equipment, teletherapy machine calibration, calibration of dose meters, design of radiation facilities, establishment of quality assurance programs in radiology and provision of consultancy services.

The medical physicists at the PNRI on the other hand, provide services in nuclear medicine facilities throughout the country. These services include quality assurance/quality control of gamma cameras and other nuclear medicine equipment, training of doctors and operators and radioactive waste management.

The POMP:

The Philippine Organization of Medical Physics (POMP) was founded in June 1986 with 12 regular members and 12 associate members. Ms. A. P. Peralta became its first president. Membership has doubled since then.

The POMP was admitted as a member of the International Organization for Medical Physics (IOMP) in December 1986 during the Regional Conference on Medical Physics held in India.

(Continued on page 14)

NOMEX

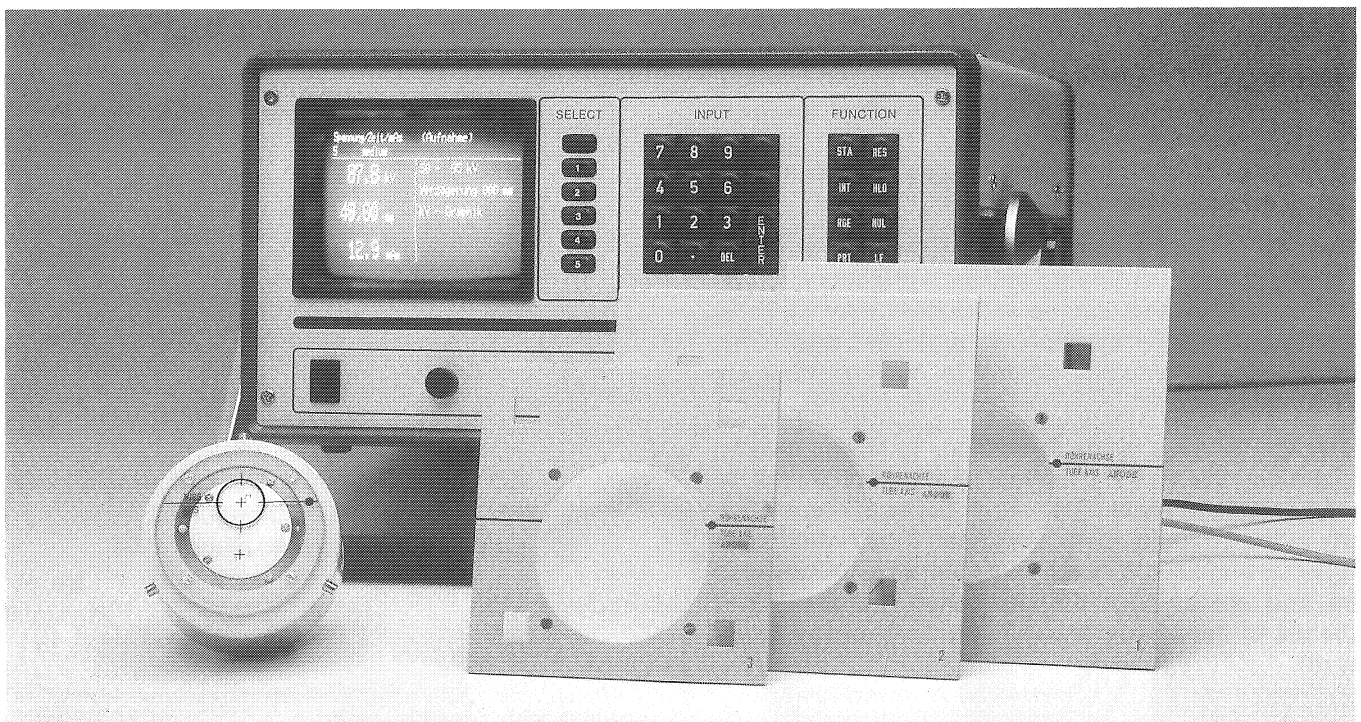
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(Continued from page 12)

To date, the POMP has sponsored 3 national conferences in medical physics. The POMP also conducts monthly scientific lectures which also serve as a forum where members can discuss their problems. The POMP was also chosen as a recipient of the IOMP Medical Physics Libraries Program. The library is currently being maintained at the RHS.

Despite its limited financial resources, the POMP plans in the future to publish its own bulletin.

Future Directions:

Three major problems have been identified, namely: low salaries, lack of position in hospitals and lack of acceptance by the medical practitioner¹. Much work is being done to address these problems.

Cordial relations exist between the POMP and the Philippine College of Radiology (PCR). In July 1991, the PCR amended its constitution to allow non-radiologists such as medical physicists to become regular members of the college. Radiologists play an important role in convincing hospital management to create physicist positions. Younger radiologists are also initiated into the importance of medical physicists through lectures during their residency training. The problem of low salaries is much more difficult to solve since it is tied up with the economic situation of the country.

The demand for medical physicists is expected to increase if the Department of Health pushes through its plan of establishing radiotherapy and nuclear medicine facilities for each of the 13 regions of the country.

Medical physics research is another problem that needs to be addressed. Most of the research studies are done as an academic requirement in the medical physics degree. These are mostly low-budget research studies. Support, including funding, by both government and private institutions is needed to strengthen medical physics research.

Medical physicists are, however, actively participating in several IAEA coordinated research projects such as methods of dose reduction in radiological examinations, absorbed dose determination, computerized dosimetry, quality assurance/quality control in nuclear medicine and brachytherapy.

Medical physics in the Philippines is slowly moving on, amidst the more pressing national problems of poverty, natural calamities and political instability. Early in the struggle, there have been those who chose to give up and sought other, more lucrative professions here and abroad. But the dedication, hardwork and patience of those who chose to stay will in the future pay off.

1. "Problems of Medical Physicists in the Philippines," A. P. Peralta, L. V. Rodriguez; paper presented during the Regional Conference on Radiation Physics and Medical Physics, Kuala Lumpur, August 14-16, 1989.

Table 1
M.Sc. in Applied Physics
(Major in Medical Physics)
Curriculum

	Units
Core Subjects: (9 units)	
Introduction to Life Sciences	3
Research Techniques with Instrumentation	3
Statistics	3
Major Subjects: (20 units)	
Radiation Physics	3
Radiation Dosimetry	3
Radiation Biology	2
Physics of Diagnostic Radiology	3
Physics of Radiotherapy	3
Physics of Radionuclides & Nuclear Medicine	3
Radiation Protection	3
Cognate Subjects: (6 units)	
Ultrasound	2
Non-Ionizing Radiation	2
Special Topics	3
Computer Applications in the Sciences	3
Graduate Seminar	1
Solid State Physics	3
Digital Electronics	3
Nuclear Electronics	3
Thesis I (Practicum)	3
Thesis II	3

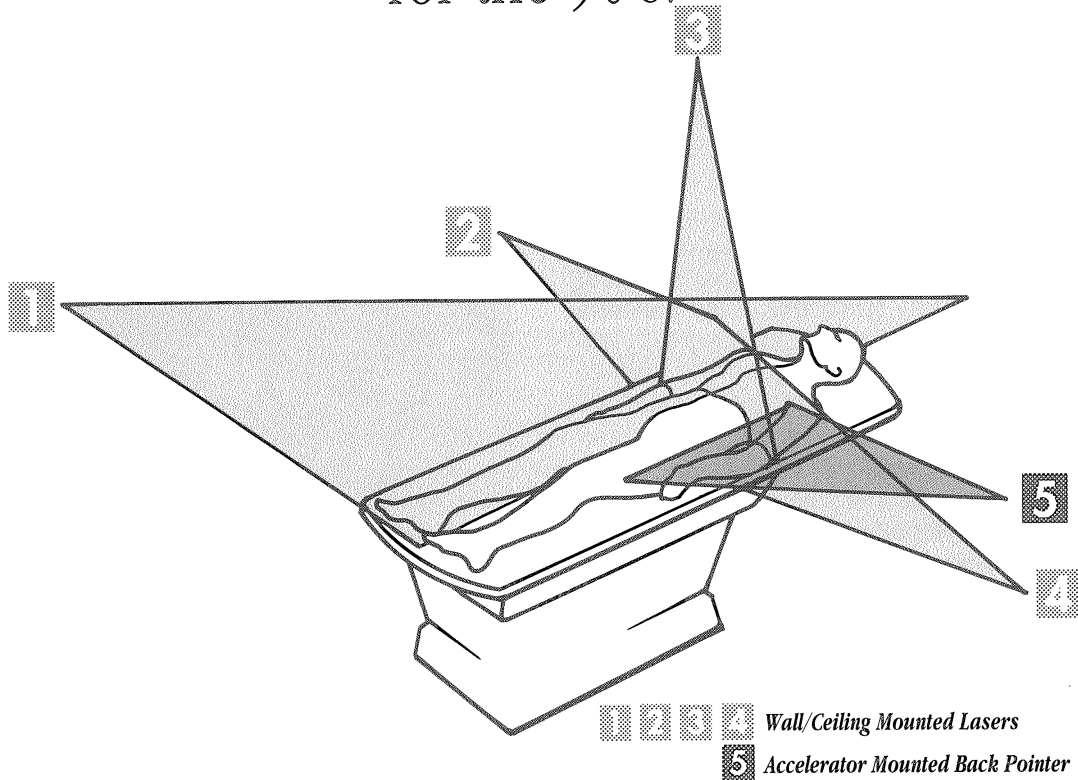
Table 2
Profile of Students As of January 1991

	No. of Students
1st Year Level	7
2nd Year Level	8
Thesis Level	8

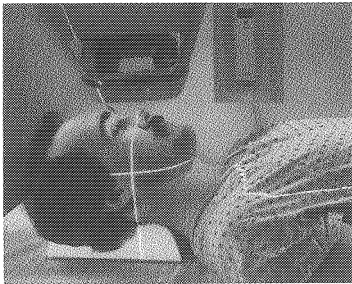
Table 3
Employment Distribution of Medical Physicists, As of July 1991

	No. of Physicists
Government Hospital	7
Private Hospital	2
Regulatory/Research Institute	25
Academic Institution	3
Abroad	6
Others	2

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IOMP Libraries Program: Status Report

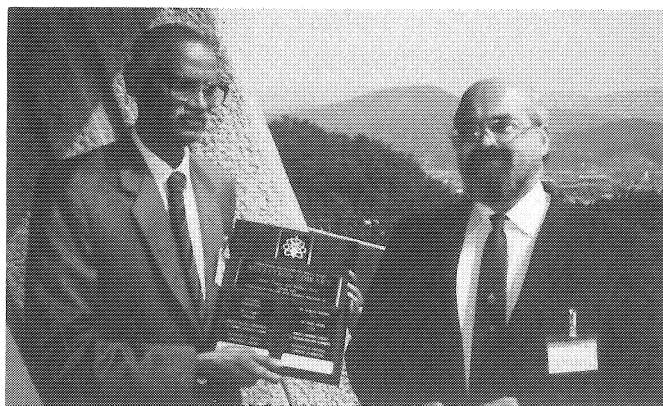
The number of IOMP libraries now totals 36. Through the assistance of the AAPM International Affairs Committee, the IOMP has expanded its libraries into 23 countries. The generosity of many donors has greatly assisted these libraries in building their resource inventory. I want to mention, however, that the program is expanding so rapidly that we are unable to meet the demand for resources. Any donations of medical or health physics publications would be greatly appreciated, particularly journals such as *Physics in Medicine and Biology*, *Medical Physics*, *Health Physics*, *British Journal of Radiology*, *International Journal of Radiation Oncology, Biology, Physics*, *Journal of Nuclear Medicine*, *Clinical Physics and Physiological Measurements*, and others. Most of the libraries have also requested copies of NCRP, ICRP, and ICRU publications, and basic medical physics and radiation safety textbooks. Even **previous editions** of any of these books would be greatly received by the libraries, since they generally cannot afford to purchase the most basic references. An appropriate recipient is assigned to a donation based on requests of specific materials by each library established. Donors may specify the destination library if preferred. The IOMP will reimburse shipping costs upon request. For more information, please contact me at: Gershenson ROC, Harper Hospital, 3990 John R, Detroit, Michigan 48201, USA. I can be reached by FAX at: 1-313-745-2314, or through e-mail at: cathyw@rocdec.roc.wayne.edu.

Also, it would be useful to place the names of our libraries on mailing lists of organizations which periodically send out updates on medical and health physics issues. If anyone knows of such organizations, please contact me.

The IOMP is recognized as a 501(c)(3) tax-exempt organization by the U.S. Internal Revenue Service. Depending upon the tax laws in your country, donations may be considered "charitable contributions."

A special thanks to the Institute of Physics Publishing Ltd. for supplementing their already generous donations to IOMP libraries with copies of all *IOPP Reports*.

At the Kyoto World Congress, IOMP Library Plaques were officially presented to two of our corporately sponsored libraries. Shown in the photographs are Miles Mount presenting the Nucletron Library plaque to Dr. Arabinda Bose of Calcutta, India, and of Dr. Colin Orton presenting the Siemens Library plaque to Dr. Marko Markov of Sofia, Bulgaria. (The last issue of *Medical Physics World* incorrectly stated that the Siemens Library was in Ezeiza, Argentina.)



Miles Mount presenting the Nucletron Library Plaque to Dr. Arabinda Bose of Calcutta, India.



Dr. Colin Orton presenting the Siemens Library Plaque to Dr. Marko Markov of Sofia, Bulgaria.

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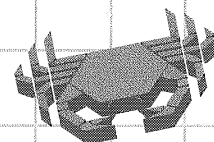
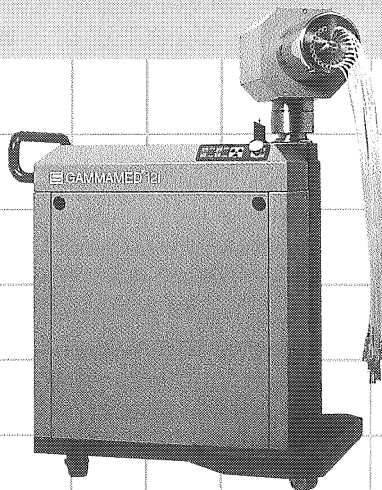
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Cathy Warmelink, MS
Curator, IOMP Libraries Program

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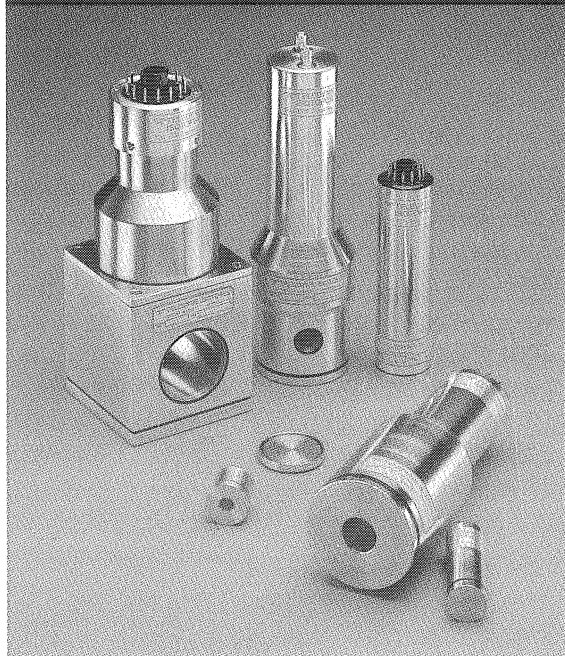
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Announcement

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For more information contact:

Ann Goldman
Project Manager
Pan American Development Foundation
1889 F Street, N.W.
Washington, D.C. 20006
Telephone: (202) 458-6344

Announcement

The Committee on Education and Training has approved IOMP sponsorship and supplied partial funding for a series of meetings and workshops to be held in 1992. The Committee also has under discussion the establishment of two regional centers designed to aid Medical Physics in underdeveloped countries.

To facilitate the Committee's function, and to clarify the procedures for obtaining IOMP sponsorship and/or IOMP funds allocated to the Committee's budget, the Committee will require future applicants to complete certain forms which are designed to facilitate the consideration and processing of such requests.

These forms will be available from the chairman of this committee or from the office of the Secretary-General.

Norman A. Baily, Chairman
Committee on Education and Training
International Organization for Medical Physics
Department of Radiology, 0632
University of California, San Diego
9500 Gilman Drive
La Jolla, California 92093-0632

Announcement

IOMP Regional Conference

The Association of Medical Physicists of India is organizing an International Conference on Medical Physics and Radiation Safety in collaboration with the International Organization for Medical Physics. The conference will take place at the Bhabha Atomic Research Centre (BARC), Bombay on September 8-11, 1992. The conference will be of interest to medical physicists, radiation oncologists, diagnostic imaging specialists, health physicists, biomedical engineers and others in related health care programs.

A series of plenary and topical sessions will review the status and current practices in the main field of medical physics. Oral and poster sessions, as well as technical exhibits will be scheduled. A trade exhibition is also being planned.

All communications regarding the conference should be addressed to:

Dr. P. S. Iyer
Secretary, Organizing Committee, ICMP-92
Division of Radiological Protection
Bhabha Atomic Research Centre
Bombay 400 085
India
Telephone: (022) 551 6670; (022) 556 3060
Extensions: 2201 or 2202
Telex: 011-71017 BARC IN
Fax: 91-22-556 0750

Two satellite meetings are being held; one on Quality Assurance in Radiation Therapy on September 4-5, 1992 at the Cancer Institute, Adyar, Madras and the second on Quality Assurance in Diagnostic Radiology during September 14- 18, 1992 a Kidwai Memorial Institute of Oncology, Bangalore.

Further details of these satellite workshops may be obtained by writing to the local organizers whose addresses are given below:

Dr. A. V. Lakshmanan
Associate Director
Cancer Institute
Adyar, Madras 600 020
Tamil Nadu, India
Telephone: (044) 412714
Fax: 91-44-412185

Or:

Prof. R. Ravichandran
Head, Department of Radiation Physics
Kidwai Memorial Institute of Oncology
Hosur Road
Bangalore 560 029
Karnataka, India
Telephone: (0812) 642061



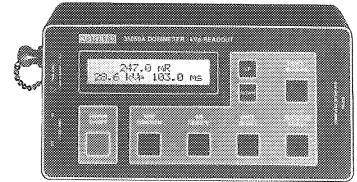
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CALENDAR OF EVENTS

Geoffrey S. Ibbott, Editor

1992

July 3 - 6

Congress of the International Society Radiographers and Radiological Technicians, Vienna, Austria. (Mr. Anton Helleparth, Simmeringer Hptstr. 34-40, A-1110 Vienna, Austria, [Tel. 0222-74-83-67]).

July 12 - 16

International Conference on Low Dose Irradiation and Biological Defense Mechanisms, Kyoto, Japan. (Prof. Takashi Aoyama, Secretary General of the Conference, Dept. of Exptl. Radiology, Shiga University of Medical Science, Seta Tsukinowa-cho, Otsu, Shiga 520-21, Japan [Tel: 81-775-48-2205; Fax: 81-775-43-5709]).

July 13 - 17

10th International Conference on Solid State Dosimetry, Georgetown University Conference Center, Washington, D.C. USA. (Dr. S. W. S. McKeever, Department of Physics, Oklahoma State University, Stillwater, OK 74075, USA [Fax: 405-744-7673]).

July 28 - 31

8th International Conference on Electrical Bioimpedence, Kuopio, Finland. (Mrs. Karin Koivisto, University of Kuopio, Center for Training and Development, P.O. Box 1627, SF-70210 Kuopio, Finland [Tel: + 358 71 163 917; Fax: + 358 71 163 903]).

August 8 - 14

Society of Magnetic Resonance in Medicine, 11th Annual Scientific Meeting and Exhibition, Berlin, Germany. (SMRM, 1918 University Avenue, Suite 3C, Berkeley, CA 94704, USA [Tel: 510-841-1899; Fax: 510-841-2340]).

August 23 - 27

34th Annual Meeting of American Association of Physicists in Medicine, Joint Meeting with the Canadian Organization of Medical Physicists, Calgary, Alberta, Canada. (AAPM, 335 East 45th Street, New York, NY 10007, USA [Tel: 212-661-9404]).

August 30 - September 4

A.A.P.M. Summer School: "The Physics of Magnetic Resonance Imaging," Banff Centre, Alberta, Canada. (AAPM, 335 East 45th Street, New York, NY 10017, USA [Tel: 212-661-9404]).

August 31 - September 18

College of Medical Physics: "Imaging and Radiation Protection," Trieste, Italy. (Prof. Edoardo Castelli, Università and INFN, Via A. Valerio 2, 134127 Trieste, Italy. [Fax: .39.40.5603350; BITNET CASTELLI@TRIESTE,INFN.IT]).

September 1 - 4

11th Annual ESTRO Meeting, Malmö, Sweden (ESTRO Secretariat, U.Z. St. Rafael, Department of Radiotherapy, Capucijnenvoer 35, 3000 Leuven, Belgium).

September 6 - 8

7th International Brachytherapy Working Conference, Baltimore, Washington, Hosted by the University of Maryland Medical System (Nucletron Corporation, 9160 Red Branch Road, Columbia, MD 21045, USA. [Tel: 301-964-2249, Fax: 301-964-0912]).

September 8 - 11

International Conference on Medical Physics and Radiation Safety, Bhabha Atomic Research Centre, Bombay, India. (Dr. P. S. Iyer, Secretary, Organizing Committee, ICMP-92, Head, Medical Advisory and Control Section, Division of Radiological Protection, Bhabha Atomic Research Centre, Bombay, 400 085, India. [Tel: 022-5514910, Ext. 2202; Fax: 91-22-5560750]).

September 13 - 16

4th International Symposium on IORT, Munich, Germany. (IORT '92 Congress Secretary, H. J. Kraemling, M.D., Department of Surgery, Ludwig-Maximilians University, Klinikum Grosshadern, Marchioninistrasse 15, D-8000 Munich 70, Germany. [Tel: 49-89-7095-2780; Fax: 49-89-7095-8893]).

September 16 - 19

4th International Conference on Dose, Time, and Fractionation in Radiation Oncology, (A joint presentation of the AAPM and the University of Wisconsin, Department of Human Oncology), Edge-water Hotel, Madison, WI, USA. (Bhudatt Paliwal, Ph.D., Conference Chairman, Department of Human Oncology and Medical Physics, University of Wisconsin, 600 Highland Ave., K4/B100, Madison, WI 53792, USA. [Tel: 608-263-8506]).

September 14 - 18

ESTRO Teaching Course on Radiation Physics for Clinical Radiotherapy, Leuven, Belgium. (ESTRO Secretariat, U.Z. St. Rafael, Department of Radiotherapy, Capucijnenvoer, 35, 3000 Leuven, Belgium).

September 21 - 25

4th Trieste International Conference on Applications of Physics in Medicine and Biology: "Advanced Detectors for Medical Imaging," Trieste, Italy. (Prof. Edoardo Castelli, Università and INFN, Via A. Valerio 2, 134127 Trieste, Italy. [Fax: .39.40.5603350; BITNETCASTELLI@TRIESTE,INFN.IT]).

October 8 - 10

Annual Meeting on "Medical Physics" of the Deutsche Gesellschaft für Medizinische Physik (DGMP), the Österreichische Gesellschaft für Medizinische Physik (OGMP) and the Schweizerische Gesellschaft für Strahlenbiologie and Medizinische Physik (SGSMP), Basel, Switzerland. (Frau I. Fankhouser, Abteilung für Radiologische Physik, Kantonsspital, CH-4031, Basel, Switzerland. [Tel: 061 265 31 40]).

October 12 - 16

11th International Working Party Meeting and Conference on the Treatment of Carcinoma Cervix in Developing Countries and Workshop on Brachytherapy in Carcinoma Cervix, Trivandium, India. (Organizing Secretary, 11th Working Party Meeting on Carcinoma Cervix, Regional Cancer Centre, Trivandium, Pin-695 011, India).

October 24 - 26

Hyperthermia in Clinical Oncology, Trento, Italy. (ESTRO Secretariat, U.Z. St. Rafael, Department of Radiotherapy, Capucijnenvoer 35, 3000 Leuven, Belgium).

November 15 - 20

International Meeting of the American Nuclear Society, Washington, D.C., USA. (Meetings Department, American Nuclear Society, 555 North Kensington Avenue, La Grange Park, Illinois 60525, USA).

November 29 - November 4

Joint Meeting of AAPM with the Radiological Society of North America, Chicago, Illinois, USA. (AAPM, 335 East 45th Street, New York, NY 10017, USA. [Tel: 212-661-9404]).

December 2 - 4

7th International Conference on Biomedical Engineering, Singapore. (The Secretary, 7th ICBME, 1992, Department of Orthopaedic Surgery, National University Hospital, 5 Lower Kent Ridge Road, Singapore 0511, Republic of Singapore. [Tel: 7724424; Fax: 7780720]).

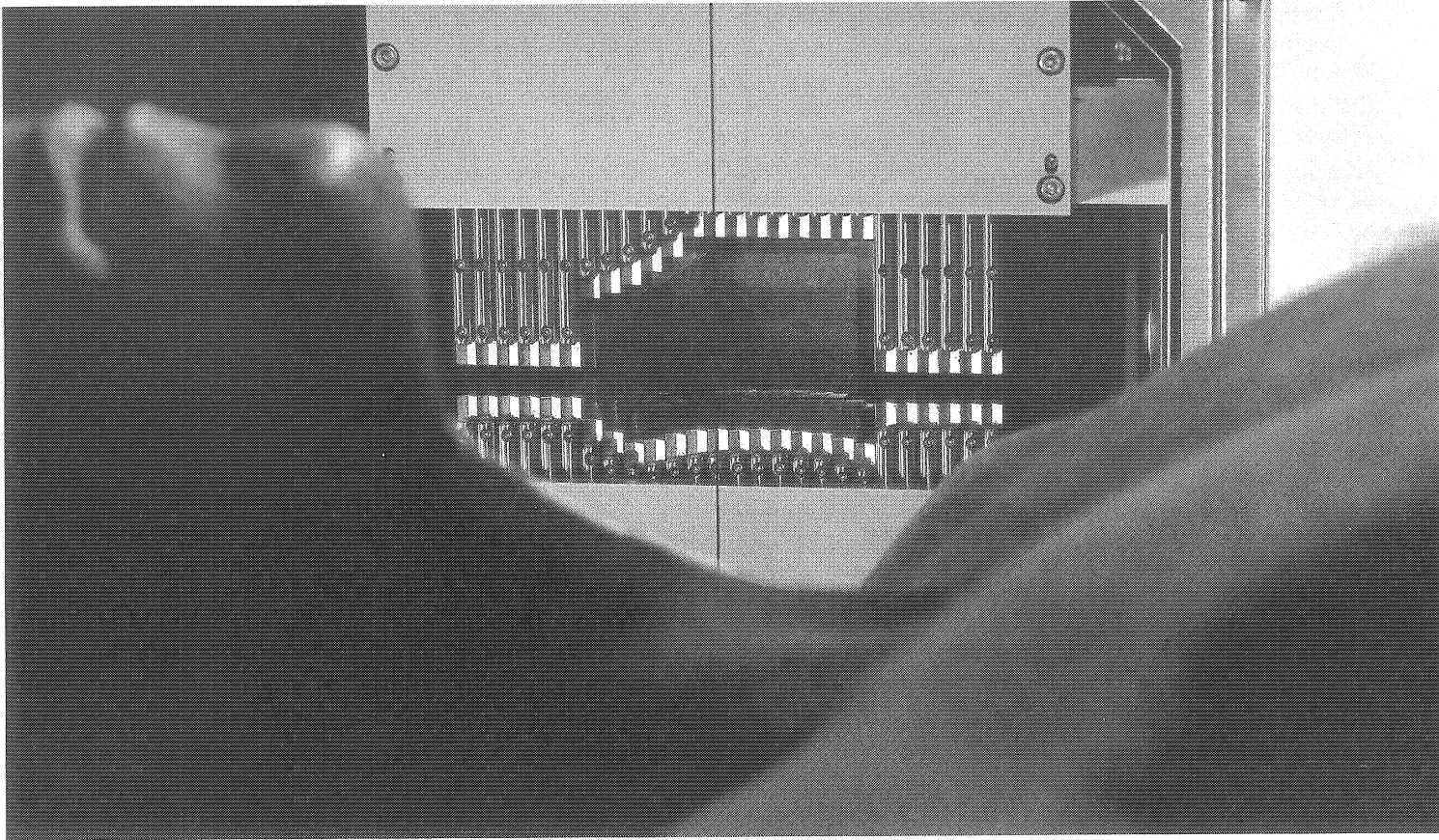
1994

August 20 - 26

World Congress on Medical Physics and Biomedical Engineering: 10th International Congress of Medical Physics and 17th International Conference on Medical and Biomedical Engineering, Rio de Janeiro, Brazil.

Readers are invited to send to the Calendar of Events Editor, Geoffrey S. Ibbott, M.S. (address on page 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.

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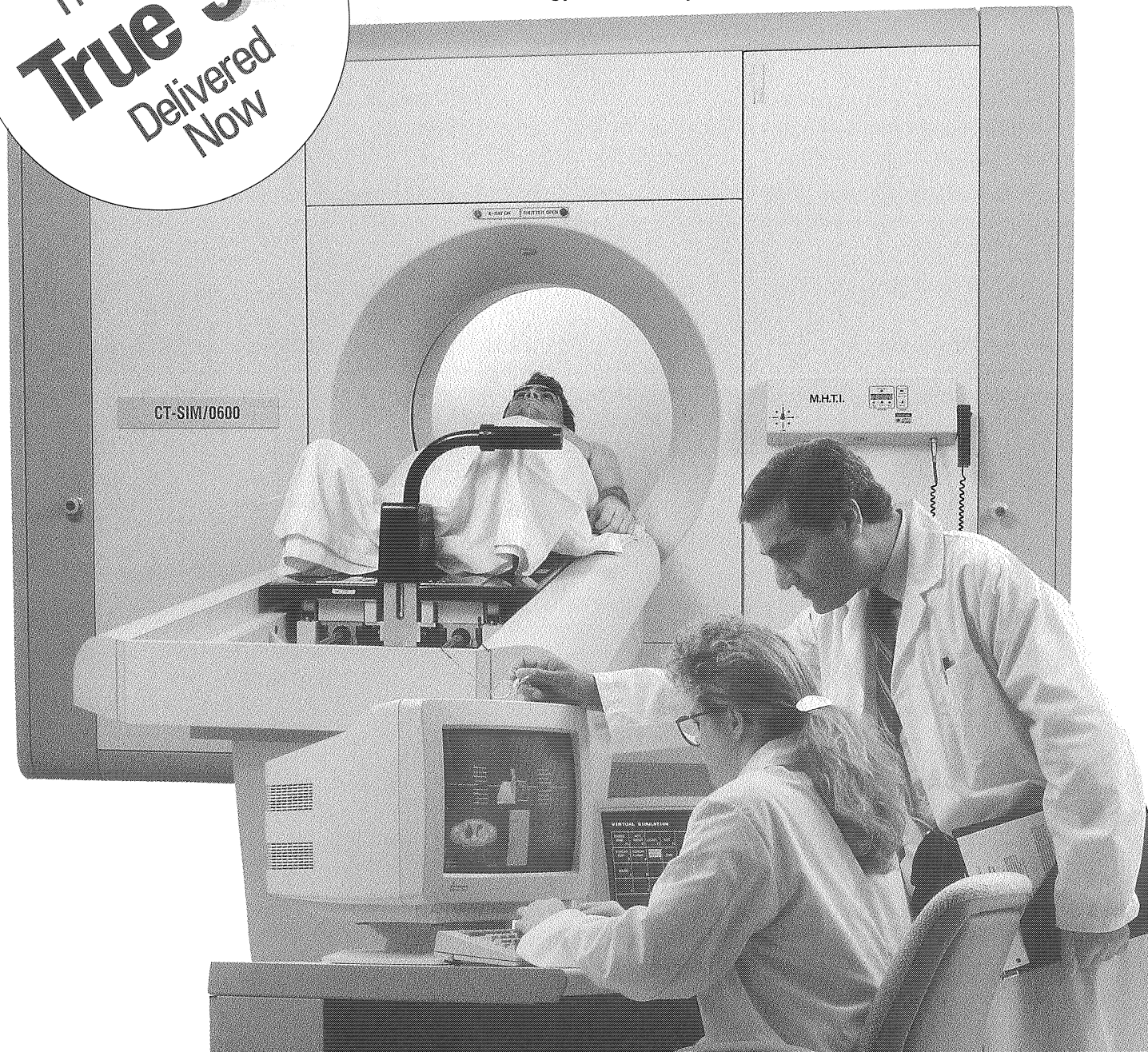


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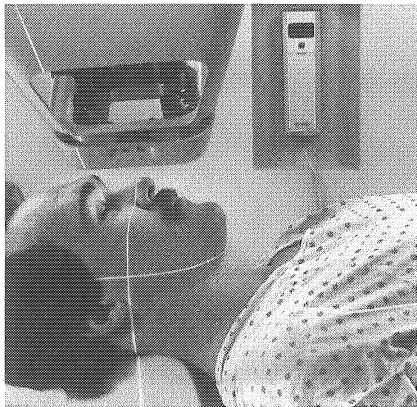


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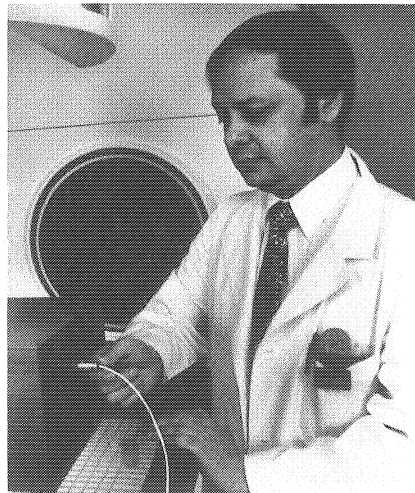
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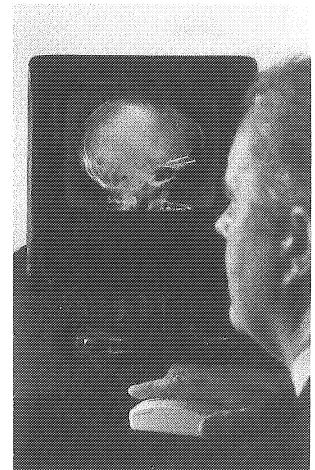


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