

NOVEMBER 1995

CHRISTMAS DINNER TUESDAY 12 DECEMBER 1995 5.30 p.m

.GOVERNOR HINDMARSH HOTEL
59 PORT ROAD
HINDMARSH

\$7.50 per head

The festive season is upon us again so why not join your fellow members for a night of frivolity and merriment in this the Society's 30th year. Several committee members have worked very hard in sampling the offerings of many establishments before choosing the Governor Hindmarsh Hotel.

For your \$7.50 you will get a sumptuous meal and drinks ,including Seaview champagne,Cockatoo Ridge Red ,house wines ,beer (light and normal strength) and soft drinks for a limited time.

This will be the highlight of our social calendar so get into your festive spirit and **BE THERE. Please complete the tearoff slip at the end of the newsletter and return with your money to John Kirby,Biomedical Engineering Services,The Queen Elizabeth Hospital by COB, 8th December 1995.**

THIS ISSUE

[Certification of Biomedical engineering technicians](#)

[EPSMH'96 Engineering and Physical Sciences in Sciences in Medicine and Health](#)

president	Adrian Richards	The Queen Elizabeth Hospital	222 6533
Immediate past President	Robin Woolford	Repatriation General Hospital	275 1619
Vice President	Greg Smith	Helicon Technology	223 2000
Secretary	Tim Staker	The Queen Elizabeth Hospital	222 6259
Treasurer	John Kirby	The Queen Elizabeth Hospital	222 6218
Councillors	Roger Pirola	Accuson	018 806 295

Maureen Merrick	Wakefield Memorial Hospital	223 3555
Jo Harris	Acute Care Systems	018 800821
Kurt Anderson	Anaequip Pty Ltd	293 7700
Kevin O'Brien	Valleylab	377 0833

Editor Robin Woolford

**THE AUSTRALASIAN COLLEGE OF PHYSICAL SCIENTISTS AND
ENGINEERS IN
MEDICINE SOUTH AUSTRALIAN BRANCH PRESENT**

INVITED LECTURE

**Toxigenic *E. coli* and Haemolytic Uraemic Syndrome (HUS):
lessons from the Garibaldi outbreak.**

SPEAKER : Dr James Paton
Head, Molecular Microbiology Unit
Women's and Children's Hospital

VENUE: Verco Theatre, IMVS
Frome Road.

DATE: Wednesday 6th December 1995

TIME: 5.30 pm drinks and nibbles
6 pm start.

1997 ANNUAL CONFERENCE

It's official. The 1997 annual conference will be here in Adelaide in 1997 at a date yet to be decided. This will be a joint conference with I.E.Aust, ACPSEM and ARPS. With potentially only 20 months to the conference there is some urgency in starting the long and complex but rewarding task of organising the many aspects of the conference.

If you are interested in being part of this significant event please contact Adrian Richards ASAP as the inaugural meeting will be held before Christmas.

Speaking from experience you will find it a very rewarding experience and seeing a successful conference that you have been intimately involved with is worth the effort.

The success of a conference depends on the enthusiasm and dedication of the committee.

CERTIFICATION OF BIOMEDICAL ENGINEERING TECHNICIANS

Summary of presentation by Adrian Richards at EPSM'95 in New Zealand.

Many members may recall the Society actively investigating this topic back in 1989, at which time we convened a dedicated subcommittee chaired by Rob Wiseman of the RAH. We were prompted at that stage by a number of requests that we had received, typically from allied health consumers of Biomedical services, as to the appropriateness of service providers who claimed expertise in the field. Questions such as this were in fact difficult to answer without some impartial scheme in place to identify competent practitioners. Another factor that consolidated our conviction to assess the matter was the fact that here in SA more than 95% of individuals working within Biomedical engineering, this includes both public and private, are at the technician level. Australia wide the figure is at least 80%. The lack of any suitable scheme to facilitate self regulation of the industry did not seem like a wise stance to consciously adopt. This subcommittee tabled its report in April of 1990 with a number of well considered conclusions. These included:

- That a certification scheme was indeed considered to be desirable to enhance the standing of and identify competent practitioners.
- Any such scheme must be national and administered by a recognized peer group
- That there may be some merit in having specialist as well as generalist categories of certification
- Academic programs would be required to provide a means of acquiring appropriate knowledge.

The main reasons we did not see any program spring to life immediately were two fold. Firstly it was felt at the time that no national body with a BME focus existed that was appropriate to administer a scheme, and there was a total absence of suitable academic support programs. The whole exercise was therefore put on the backburner for a couple of years.

During that time however investigations did continue particularly to gain an international perspective on similar schemes in other developed nations. Programs were investigated in Japan, United Kingdom, USA and Canada. The detail of these varied considerably, from

a compulsory scheme in Japan to a minimalist version in the UK..Probably the main message to come out of this was however, that these countries did indeed have a mechanism of some sort in place and again Australia could be seen to be lacking.

At this point we could take stock of the situation and consolidate what was seen to be the merits of any program which may evolve. These merits included:

- Add status to the discipline
- Recognize and identify competent practitioners
- Provide a competitive edge to both technicians seeking employment and organisations employing certified staff and marketing their services.
- Assist employers in selection of personnel.
- "Self regulation" of the industry.
- May prove in some states to be industrially useful.

A couple of things then started to occur which rekindled enthusiasm in the concept and provided some hope that a scheme may come to fruition. Firstly the Biomedical college within the Institution of engineers was formed, a national peer group which had the resources to potentially administer a scheme. Secondly academic programs began to emerge including the tailor made Diploma at Flinders University and in the not to distant future a potential program within the TAFE system coming out of Victoria. This addressed the two major shortcomings which we had originally identified.

Also occurring at about this time was the development of a "register" scheme by the Society of Engineering Associates, a group coming under the umbrella of IE Aust.. Closer investigation of this scheme revealed that it may well serve our purposes quite ideally. It was driven by the overall IE Aust philosophy of providing a mechanism to identify competent practicing individuals with an equivalent scheme having been successfully in place for professional engineers for some time now.

The "National Engineering Associates Register" (**NEAR**) as it is termed comprises three components. The first of these is the requirement of an academic qualification (normally at the Associate Diploma level) or equivalent, with this aspect of it still being under consideration.. The applicant then needs to demonstrate competencies in a number of areas of activity by the submission of a comprehensive engineering practice report which ties ones experience into a particular industry sector ,in our case Biomedical Engineering. Finally a record is required to be kept of ongoing professional development which includes courses, presentations, readings, conferences etc.. All in all this scheme has the potential to provide the industry ,both public and private sectors, with all of the merits that we would seek. The one critical factor in the whole exercise however, is for the scheme to be voluntarily and vigorously adopted by all parties ,namely the technicians themselves ,their employers or potential employers and consumers of Biomedical Engineering services. An extensive education program is intended to help spread the word so that all of these groups are aware of the scheme's existence and that consumers and employers in particular will keenly seek registered individuals.

The development of this scheme is advancing at a steady pace with myself having the opportunity to have substantial amounts of input to it. It is envisaged that it should become available within the first couple of months next year. Handbooks will be available at that time giving full details. Anyone who would like further information at this stage please feel free to call me at any time.

Adrian Richards.

EPSMH'96 ENGINEERING AND PHYSICAL SCIENCES IN MEDICINE AND HEALTH

The annual conference will next year be held in Canberra in October. This conference is jointly organised by the Australasian College of Physical Scientists and Engineers in Medicine, the Biomedical College of the IE Aust, SMBE NSW and the Australian Radiation Protection Society. The conference venue is Rydges Canberra overlooking the shores of Lake Burley Griffin. Several invited speakers are confirmed and include **Dr Joel Nobel**, founder and president of ECRI
Dr Schlomo Shalev, of the Manitoba Cancer Treatment and Research Foundation, has a special interest in electronic portal imaging and its application to routine clinical work and conformal therapy.
Dr George Segouris, of the Memorial Sloan-Kettering Cancer Centre has worked extensively in areas of patient specific 3-D dosimetry and image registration of SPECT and CT.

The first three days will be dedicated to presentation of papers with the fourth day for workshop sessions.

Topics to be covered include **risk management analysis, radiation dosimetry, medical imaging, contracting out, non-ionising radiation, technology management, medical informatics, environmental radiation protection, radiation biology, biomaterials and biophysics.**

For those wishing to present a paper the deadline for abstracts is **10th June 1996.**

Further information can be obtained from

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CONFERENCE CALENDAR

June 9-13 1996 [10th Nordic-Baltic Conference](#) .on Biomedical Engineering, Tampere, Finland

October 21-24 1996 [EPSMH'96](#) Engineering and Physical Science in Medicine and Health, Canberra

Sept 14-19 1997 World Congress on Medical Physics and Biomedical Engineering, Nice, France

Information on the above are available from the editor or president

S.M.B.E. (SA) Inc. Newsletter Vol.VI No. 3