

March 1999 Newsletter

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SMBE (NSW) Country Technicians Seminar

This very popular seminar is on again from Monday 29 March to Wednesday 31 March 1999. Although it is not far away some of you may be inclined to go if you have not already booked in. We recently received a program and it is printed below for your information. More information at <http://www.billythebot.com/smbe99.htm>

	Topic	Presenter	Institution
Monday 29 March 1999			
Session 1- A Vision for BME	Setting the scene	Bruce Morrison	Hunter Health
	Maintenance-new directions	Bill Stubbs	Chemtronics
	Management of service contracts	Eddy Joyce	Westmead Hospital
	Setting performance indicators for the evaluation of BME services, in-house and external.	Peter Wright	Datex-Ohmeda
	Product evaluation	Lyn Shepherd	Hunter Health
	Clinical Support	Rob Bampton	Macquarie Area Health Service
	In-service education	Steven Threlfo	Hunter Health
Session 2-Professional Development	The Austin BMET Course	David Lierkamp	Austin Hospital
	The NSW TAFE BMET modules	Nick Wesley/Alex Watson	NSW TAFE/Prince of Wales Hospital
	NEAR/NETR/CengO	Adrian Richards	The Queen Elizabeth Hospital
	Workplace assessments, skills assessments	Ian Lovell	Hunter Health
Session 3-Clinical topics 1	Electro-physical treatment modalities-rationale and effects	Peter Osmotherly	Hunter Health

	Physiotherapy treatment regimes-therapeutically beneficial or placebo.	Mark Brown	Australian Physiotherapy Association
	Therapeutic Lasers	Manfred Andrei	Medilase
	Surgical Lasers-theory and safety aspects	Steven Threlfo	Hunter Health
Session 4-Clinical topics 2	Temperature measurements-the unfashionable physiological measurement	Rob Wilkins	Gradipore
	Pacemakers-current practices	John Shonk	Central Coast Area Health
	Advances in electrosurgery and related equipment and procedures	Grant Nettheim	Valleylab Australia
	Developments in ESU return electrode plates	Michael Moore	3M Australia
	NIBP monitoring-Proper methods for evaluation.	Geoff Turner	Welch Allyn
Tuesday 30 March			
Session 5-Service and Support	Standards update	Rob Wilkins	Gradipore
	AS3200.1.1-The systems standard	Peter Selvey	Testing and Certification Australia
	Public and private-is that the question?	Maurice Ward	Spacelabs Medical
	Competing with the ISOs-cross-border servicing, private hospital experiences	Eddy Joyce	Westmead Hospital
	A view from on the fence-Building Services and Biomedical Engineering	Rob Bampton	Macquarie Area Health
Session 6-Accreditation & Certification	EQUIP	Marjorie Pawsey	ACHS
	Experiences in EQUIP	Pat Edwards	Hunter Health
	Accreditation through the AQC	Jenny Jennings/Mary Scott	Hunter Health
	ISO9000 from the in-house perspective	Adrian Richards	The Queen Elizabeth Hospital
	ISO9000 from the OEM perspective		Datex-Ohmeda
	ISO9000 from the ISO perspective	Bill Stubbs	Chemtronics
Session 7-Technical papers and the quiz.	BIO Quiz		
	EEG acquisition and analysis using a microprocessor controlled system	Peter DeLore	Hunter Health
	Battery Management	Michael Hellyer	RF Industries

	Calibration of low signal levels	Mark Littlejohn	Electrolab
Session 8-Departmental Management	Measuring our services-what do the numbers mean? Why gather them?	Rob Wilkins	Gradipore
	Equipment Management Systems-what do we want from them? Do they provide it?	Eddy Joyce	Westmead Hospital
	Quality as a management tool	Lyn Sheperd	Hunter Health
	Benchmarking our services as a way of gaining significant improvements	Bruce Morrison	Hunter Health
	Generating some numbers to help clear the mists	Pat Weir	Hunter Health
Wednesday 31 March			
Session 9-The Way Ahead for Monitoring	Elements of clinical information systems	Rae Fernandez	New Children's Hospital
	Marquette's Vision	TBA	GE-Marquette
	Hewlett Packard's Vision	Dr Vargotski	Hewlett Packard
	Spacelab's Vision	Morrie Ward	Spacelabs Medical
Session 10-More of the future	Telehealth-Opening links to the outback	Paul Cardew	Hunter Health
	Linking the Hunter	Tony Green	Hunter Health
	Data Management	Steven Cox	Acute Care Systems
	Y2K Update	Peter De Lore	Hunter Health
	Rebuilding the Australian medical manufacturing industry	Karel Grezl	

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Award for newsletter article

The newsletter is all about keeping you informed as to what is happening in the SMBE world. Part of this is publishing articles of original work by our members. This work may be on research and development, new technologies or procedures or a discussion about some aspect of our field that will promote further discussion and/or articles.

By now you will have seen the program for the SMBE (NSW) Country Technician's Seminar (see above). This is a program jammed full of topical issues that we face everyday in our work. Previous attendees at this seminar have found it to be extremely valuable. The SMBE is now giving you the chance to attend this seminar next year. An award to enable a person to attend this seminar will be made for the best article to be submitted for publication in our newsletter. The award will be an annual one and will cover registration, travel and accommodation.

The entries will be judged by the Council, the Council decision will be final and the Council reserves the right not to make the award. All articles submitted will be published.

Next years seminar is over 12 months away so you have plenty of time to put pen to paper. More details on the deadlines will be provided in future newsletters but it is expected that the award may be given at the end of each year.

REPORT ON MEETING MANUFACTURING INTELLIGENCE

DAVID POWERS, SCHOOL OF INFORMATICS, FLINDERS UNIVERSITY OF SOUTH AUSTRALIA

I am sure that, like myself, many members were not quite sure what to expect of a meeting with the above title. David Powers turned out to be an enthralling speaker who presented an interesting and broad based talk on a topic in which he is clearly a leader. He has what I suspect are some ground breaking and innovative ideas on the matter of just what defines intelligence and the means by which it can be created artificially.

The challenge that David has taken on is to produce a computer based system that can learn a language. Above and beyond his peers perception of this however is his belief that invention is the key to intelligence and that learning must go beyond rote learning to creative problem solving and that language is effectively invented by children to suit

their environment.

One of the tests of artificial intelligence systems outlined during the evening was the Turing Test, one that has been around since the 1950s and which is currently the basis of a significant international competition with prizes up to \$100,000 for a system that can successfully complete it. The basis of the test is the "Imitation Game"

in which, via a teletype(it was the 50s!!) the system must convince a human judge that it is a woman.

The strategy adopted by many Artificial Intelligence system developers is to equip the system with huge databases that tries to prepare it for any question that may be asked. This is where David's approach varies somewhat in that he believes that a system must actually gain experience during the learning process to avoid tripping up during this game. He drew an interesting analogy with playing a football match. He suggested that if someone wanted to convince a judge that they played football they could watch it, read about it, learn about it and believe that they

knew the game intimately but unless they had actually played a game a persons knowledge of it was incomplete.

To that end David's research is heading down the path of developing a robot doll that is equipped with a broad range of sensors for gathering and processing information. This is to be introduced into a learning environment to provide it with a near human learning experience. Accompanying a 3-5 year old is the means by which this will be done with

it gradually developing the ability to meet a series of goals such as learning to recognise the owners name and face, command commands, toys and the like.

Overall a fascinating insight into Artificial Intelligence and the approach taken by an expert whose name I suspect we may be hearing more of in the future as his research leads him towards his ultimate goal.

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Digital Television Transmissions Start

The Australian Broadcast Authority (ABA) is the broadcasting regulator for Australian radio and television and is responsible for the introduction of digital television in Australia. Television broadcasters will be undertaking test transmissions in digital mode leading up to the implementation of full time digital broadcasting in metropolitan areas on 1 January 2001. Regional areas will commence full time digital broadcasting between 2001 and 2004.

The potential exists for digital transmissions to interfere with medical telemetry equipment, as has happened in the eastern states.

The ABA has asked that all hospitals in the metropolitan area conduct an audit of their telemetry equipment and provide relevant information to the ABA. The relevant information includes, Type of equipment, Hospital, Manufacturer and model, Number of units and Operating frequencies. This information will be forwarded to the Australian Communications Authority (ACA) to assist them in their review of spectrum management as it applies to our medical telemetry equipment.

Channel Nine has started (or is about to start) test transmissions here in Adelaide. Anyone with equipment operating in the 188 - 195 MHz band is encouraged to contact Mr John Harris of Channel Nine on 08 8339 1072.

Finally, any one with further enquiries should contact either Alastair Gellatly, Assistant Director of Engineering (ABA) on 02 6256 2800 or Daniel Fletcher, SMBE Councilor on 08 8222 7330.

SMBE Merchandise

The SMBE is currently investigating the possibility of getting some apparel produced with the SMBE and possible sponsor logos, so we are looking for expressions of interest from members and companies interested in sponsorship.

The choices may be 1. Polo shirt 2. Work shirt 3. Cap

All will be quality items, and cost will be determined by sponsorship, SMBE subsidy and demand.

If interested, please reply to Darren Kohlhagen on Mobile 0412 111 829 or Email : kohlhagen@picknowl.com.au

Newsletter advertising

The issue of advertising in the newsletter has been discussed several times over the last few years. Council has now decided to allow advertising in the newsletter. Those wishing to advertise should send details of the advertisement to the editor, preferably in word 97 format. Alternatively the advertisement could be provided in a format that can easily be scanned, but only in black and white. Pricing for the advertisements is provided below.

CONFERENCE CALENDAR

March 29 - 31 1999 SMBE (NSW) Country Technicians Seminar , Newcastle

May 30-June 2 1999 Fifth Conference of the European Society for Engineering and Medicine, Barcelona

June 30 □ July 6 1999 XVII International Symposium of Biomechanics in Sports Perth WA

October 24-28 EPSM "The Next Generation" Gold Coast QLD

Information on the above is available from the editor or president.

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