

**2ND INTERNATIONAL CONFERENCE
ON BIOELECTROMAGNETISM
Melbourne - AUSTRALIA
15 - 19 February 1998**



February 1998
Melbourne Australia



YOUR SEAT HAS BEEN RESERVED

PRESENTED BY
MONASH UNIVERSITY
Bioelectronics Group
Department of Electrical & Computer
Systems Engineering

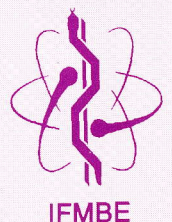
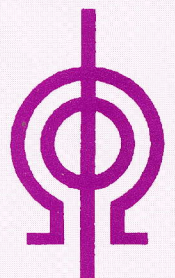
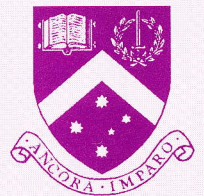
ORGANISED BY
MONASH UNIVERSITY
Office of Continuing Education



UNDER THE AUSPICES OF
INTERNATIONAL SOCIETY FOR
BIOELECTROMAGNETISM (ISBEM)

IN COOPERATION WITH
IEEE/EMBS IFMBE ACPSEM

**ADVANCE PROGRAM
CALL FOR PAPERS**



CONFERENCE PROGRAM

SUNDAY 15 FEBRUARY 1998

1.00 pm	Registration
5.00 pm	Opening Ceremony Get-together Cocktail Party

MONDAY 16 FEBRUARY 1998

8.00-8.30 am	Registration
8.30 am	Invited Lecturers/Sessions
10.15 am	Coffee/Posters
10.45 am	Sessions
11.45 am	Lunch
1.00 pm	State-of-the-Art Lectures
2.15 pm	Coffee/Posters
2.45 pm	Sessions
5.00 pm	BBQ in Melbourne

TUESDAY 17 FEBRUARY 1998

8.00-8.30 am	Registration
8.30 am	Invited Lecturers/Sessions
10.15 am	Coffee/Posters
10.45 am	Sessions
11.45 am	Lunch
1.00 pm	Meeting of Societies
7.00 pm	Pre-Dinner Drinks
7.30 pm	Dinner

WEDNESDAY 18 FEBRUARY 1998

8.00-8.30 am	Registration
8.30 am	Invited Lecturers/Sessions
10.15 am	Coffee/Posters
10.45 am	Sessions
11.45 am	Lunch
1.00 pm	State-of-the-Art Lectures
2.15 pm	Coffee/Posters
2.45 pm	Sessions
Evening	Concert in the Park

THURSDAY 19 FEBRUARY 1998

8.30 am	Invited Lecturers/Sessions
10.15 am	Coffee/Posters
10.45 am	Sessions
11.45 am	Lunch

PRIZE

The Ragnar Granit Prize will be awarded for the best young scientist contribution. The prize is funded by the Ragnar Granit Foundation, Tampere, Finland.

SOCIAL PROGRAM

An extensive social program is being planned including a barbecue on the beach, concerts in the park, and a special conference banquet. Refer to the ICBEM home page and check out the link to '**What's on in Melbourne**' that will give complete details of the many events scheduled.

FEES

The registration fee includes attendance, admission to the opening and closing ceremonies, a copy of the proceedings, morning and afternoon teas and an evening barbecue on the beach. The conference banquet will include a 3 course meal, refreshments, entertainment and music at a cost of AU\$80 per person. (Tuesday 17 February 1998)

REFUND POLICY

For non presenters a full refund of registration fee is available if a written request is received before 12 January 1998. After that date, no refunds are available.

VENUE

Sheraton Towers is part of the Southgate Arts and Leisure Precinct, the Yarra River, the Arts Centre and the city's parks and gardens. The city's central business and retail district is a five minute walk away across a specially constructed footbridge, which brings visitors to the corner of Flinders and Elizabeth Streets.

EXHIBITS

The Commercial Exhibition will be organised in the Central Foyer of the Sheraton Towers from Sunday 15 February to Thursday 19 February 1998. This display area will also be used during morning and afternoon teas and the cocktail party. Companies, research organisations and others who wish to demonstrate new products of biomedical engineering and medical physics should contact the Conference Managers.

TRAVEL INFORMATION

Qantas Airways Ltd has been appointed as the Official Airline for 2nd ICBEM. Under this arrangement domestic air travel can be made via our official booking agency, JTC Conference Travel, who will endeavour to provide the best fare of the day from your departure point to Melbourne. Special non conditional discount airfares up to 45% off the normal full economy class airfares have been negotiated for 2nd ICBEM delegates (subject to availability at the time of booking). For those delegates travelling from international destinations, we recommend that you contact your local Qantas travel agent to achieve best fare of the day. Please quote the following reference code **AUQLD1031**

Please contact: JTC Conference Travel

Toll Free: 1800 813 699 or +61 7 3870 1088
(Australia only)

ACCOMMODATION

Delegates need to make their own accommodation booking. We suggest that all accommodation bookings be made through the official conference accommodation bureau,

OZACCOM

The Conference & Event Bureau of Australia
PO Box 164 Fortitude Valley
QUEENSLAND 4006 Australia

Toll free 1800 814 611 or Tel +61 7 3854 1611
Fax +61 7 3854 1507

SCOPE

Many biological processes within living organisms, from cellular up to organism level, are based on bioelectric and biomagnetic phenomena. These phenomena are still not completely understood and are the subject of much scientific research. We hope that this conference will reflect the present state of this research.

INTERNATIONAL ADVISORY COMMITTEE

Jaakko Malmivuo (Finland)	Fumihio Kajiya (Japan)
Metin Akay (USA)	Susan Blanchard (USA)
Tatsuo Togawa (Japan)	Julia J. Tsuei (Taiwan)
Robert Plonsey (USA)	Shoogo Ueno (Japan)
Rajko Tomovic (Yugoslavia)	Hiie Hinrikus (Estonia)
Tina Karu (Russia)	Wilson Gretbatch (USA)
Yuan Ting Zang (Hong Kong)	Pak Chung Ching (Hong Kong)

SCIENTIFIC COMMITTEE

Irena Cosic (Australia) Chairman	
Brian Lithgow (Australia) Co-chairman	
Jaakko Malmivuo (Finland) Co-chairman	
Metin Akay (USA) Co-chairman	
Andy Daubenspeck (USA)	Hidetoshi Matsuki (Japan)
Bhavin Mehta (USA)	Malvin Teich (USA)
Jacques Duchene (France)	Makoto Yoshizawa (Japan)
Hartmut Dickhaus (Germany)	Daming Wei (Japan)
Yuan Ting Zang (Hong Kong)	Richard Jones (NZ)
Anthony Rees (UK)	Robert Barnett (Australia)
Ken Joyner (Australia)	Stig Ollmar (Sweden)
Dale Murphy (Australia)	Lars Korsnes (Norway)
David Kilpatrick (Australia)	Leonid Titomir (Russia)
Robert Shepherd (Australia)	Tina Karu (Russia)
Janie Fouke (USA)	Richard Potember (USA)
Keith Paulsen (USA)	Shunsuke Sato (Japan)
Patrick Celka (Switzerland)	Kazuo Yana (Japan)
Janet Rutledge (USA)	

KEYNOTE SPEAKER

Wilson Greatbatch inventor of the pacemaker.

STATE-OF-THE ART SPEAKERS

Professor Julia J. Tsuei, Taiwan

Electromagnetism in Alternative Medicine

Dr Tina Karu - Russia

Laser Affects on Cell Culture

Professor Paul Nunez - USA

Electromagnetism of the Brain

CONFERENCE MANAGERS

Irene Thavarajah / Maureen Kemp
Office of Continuing Education
Monash University

Wellington Road, Clayton 3168 AUSTRALIA

Tel: +61 3 9905 1344 / Tel : +61 3 9905 1340

Email : irene.thavarajah@adm.monash.edu.au

maureen.kemp@adm.monash.edu.au

Fax : +61 3 9905 1343

TECHNICAL ENQUIRIES

Assoc Prof Irena Cosic
Monash University

Dept Electrical & Computer Systems Engineering

Tel : +61 3 9903 2875

Fax : +61 3 9903 2906 OR +61 3 9903 1516

Email : cosic@eng.monash.edu.au

SCIENTIFIC PROGRAM - CHAIRS

Field measurements	Robert Plonsey
electrocardiography	David Kilpatrick
electroencephalography	Andy Daubenspeck
other electric fields	Daming Wei
magnetic field measurement and modelling	Leonid Titomir
signal and image analysis	Metin Akay
magnetocardiography	Jaakko Malmivuo
magnetoencephalography	Jaakko Malmivuo
Electric and magnetic stimulation	Rajko Tomovic
pacemakers	Graeme Rathdowne
muscular stimulation	Robert Barnett
cochlear implants	Brian Lithgow
magnetic stimulation of the brain	Jaakko Malmivuo
Effect of electromagnetic fields	Tina Karu
manmade electromagnetic radiation	Stewart Jenvey
natural radiation	Andrew Wood
effect on the tissue level	Hiie Hinrikus
effect on the cellular level	Tina Karu
Electric and magnetic impedance	Stig Ollmar
plethysmography and Tomography	Dale Murphy
electrodermal characteristics	Stig Ollmar
Electromagnetic properties in	
alternative medicine	Julia Tsuei
impedance of acupuncture points	Marc Cohen
electric & laser stimulation in acupuncture	Julia Tsuei
Biomolecular Electronics	Richard Potember
molecular modelling of proteins	Antony Rees
molecular interactions	Irena Cosic
molecular manipulations	Lars Korsnes

DEADLINES

Paper submissions	25 September 1997
Notification of Acceptance	15 November 1997
Camera Ready Manuscript	1 December 1997
Registration (regular fee)	1 December 1997

PRE - CONFERENCE WORKSHOPS

14 & 15 February 1998

Pre-conference workshops will be arranged in the fields of :

- 1 electromagnetism in alternative medicine,
Julia Tsuei & Mark Cohen
- 2 signal and image processing,
Metin Akay
- 3 electro-muscular stimulation,
Rajko Tomovic & Robert Barnett
- 4 biomolecular electronics and modelling,
Anthony Rees & Irena Cosic

The workshops will be held at Monash University, (Caulfield Campus) only if sufficient enrolments are received.

WORLD WIDE WEB

Look for our page which also has links to airline schedules and information about both Victoria and Australia.

<http://www.monash.edu.au/oce/icbem.htm>

PAPER FORMAT

How to Prepare a Manuscript for the 2nd International Conference on Bioelectromagnetism

Juha Nousiainen, Jari Hyttinen, Hannu Eskola, Jaakko Malmivuo
Ragnar Granit Institute, Tampere University of Technology
P.O. Box 692, FIN-33101 Tampere, Finland

85mm

20mm

Abstract: This document contains instructions for the preparation of manuscripts to be submitted to the 2nd ICBEM. The abstract may not be longer than 15 lines.

INTRODUCTION

Manuscripts must be written according to the layout and instructions given in this document.

METHOD

The maximum length of the paper is two pages. The text of the manuscript must be printed in two-columns (85mm width) with a single line spacing and contained within the dimensions given in this document with blue markings. Please use Times-Roman font. The point sizes to be used in different parts of the manuscript are given in Table 1.

TABLE 1. Font Sizes to be used in manuscript

	font size	font style
title	14	bold
authors and affil.	12	roman
abstract	10	bold
other text	10	roman

FORMAT:

Begin all paragraphs with a 5 mm indentation. Do not add blank lines between paragraphs. Leave one line space above and below all headings. Use only one level of headings.

The title of the manuscript, full names, institutions and addresses of the authors should be centered using the full width of the paper. The title must not exceed two lines.

RESULTS:

Number the figures (Figure 1) and do not indent the figure legend. Figures can fit across both columns if necessary. If possible include figures in the text document, otherwise paste them taking care to keep the page flat. The tables (Table 1) must be inserted in the text. Number any equations consecutively.

References must be numbered in square brackets in the order of their citation in the text [1]. A full list of references should be given at the end of the paper using the IEEE format as shown below. [2,3].

REFERENCES:

- [1] A.B Author, S. Else and S. More, "Title of the paper," *Journal Name*, vol. 13, pp. 111-123, 1993.
- [2] B. Writer, *Book*. New York: Cliffhanger, 1970.
- [3] D. Dummy, "Title of a paper in a book," in *Proceedings of the 2nd ICBEM*. Tampere: Ragnar Granit Foundation, 1996, pp. 77-80.

Papers for the conference should be prepared according to the guidelines explained on this page. Papers should be submitted in paper format and preferably also in electronic form.

PAPER FORMAT:

- A4, max 2 pages
- write according to the instructions

SUBMIT:

- camera ready high quality paper copy
- two additional copies
- only black and white illustrations
- electronic format: ASCII format, WP, MSWord
- on IBM PC disks

ACCEPTANCE:

- The deadline for papers is 25 September 1997. Notification of scientific acceptance will be sent to the authors by 15 November 1997. The deadline for registration is 1 December 1997. Please note that at least one author of the paper must register before the paper can be finally accepted.

PRESENTATIONS

ORAL PRESENTATIONS will be 10 min, with an additional 5 min for discussion. Two slide projectors and an overhead projector will be available in each room. The use of additional equipment may be arranged by contacting the conference managers.

POSTER SESSIONS are scheduled during the coffee breaks (coffee is served in the ballroom foyer area). Posters will be displayed for one full day. Posters should be 95cm (width) x 120cm (height).

Send your Manuscript to:
2nd ICBEM
Office of Continuing Education
Monash University
Wellington Road
CLAYTON
Victoria 3168
AUSTRALIA