

# HOSPITAL ENGINEERING NEWSLETTER

Volume 38 No 1

## The Engineering Council

The Institute of Hospital Engineering is a Nominated Body of the Engineering Council. As such, the Institute may sponsor its members for registration with the Council at the appropriate level.

Registration is seen as enhancing the standing of engineers, and engineering, in the community and, indeed, registration is gaining ever widening recognition. To this end, the Engineering Council and the Institute are committed.

Accordingly, in future all new members elected to the Institute will be registered, automatically with the Engineering Council, at the appropriate level, unless indicating a wish to the contrary.

Existing members of the Institute who did not seek registration with the old Engineers' Registration Board, as T.Eng. or Tech., are urged to seek such registration with the Engineering Council now. As an extra incentive to seek such registration the Engineering Council is waiving entrance fees *for the time being* but quite substantial registration fees of £12 - Chartered Engineer, £8 - Technician Engineer, and £4 Technician will be introduced soon.

The entrance fees are payable by the registrant but the annual registration fee will be borne by the Institute.

So far as this Institute is concerned some three quarters of those eligible for registration have become registered and the remainder of those so eligible are urged to take the step to

register now. As a matter of information the requirements for registration at T Eng and Tech are set out below:

### Technician Engineering Section - T Eng

- minimum age, 23
- academic standard exemplified by HNC or City and Guilds FTC
- five years engineering experience (including three years approved practical training)
- membership of one of the societies in the Technician Engineer Section of the Engineering Council.

### Technician Section - Tech

- minimum age, 21
- academic standard exemplified by ONC or City and Guilds Part II Final Technicians Certificate
- three years engineering experience (including three years approved practical training)
- membership of one of the societies in the Technician Section of the Engineering Council.

## Elections to Council 1984

These will be held in accordance with the relevant Articles of Association. At the Annual General Meeting to be held on 18th May 1984 the following Members of Council will retire by way of normal rotation (in accordance with Articles 81 and 82).

B. A. HERMON	General Member
S. RATCLIFFE	Nominated Member
M. BROOKE	Area Member, East Anglia and East Midlands.

P. JACKSON Area Member, Wales.

A. MILLINGTON Area Member, North West.

Only B. A. HERMON is eligible for re-election in the same category, but in fact, Mr. Hermon will not seek re-election. Candidates for area Members, for the above Areas, and for General Member may be nominated by any Branch or group of five members. Such nominations duly signed and bearing the written assent, and a brief history, of the nominee, should reach this office by registered post within 14 days of the date of this letter. (Particular attention is drawn to Article 67).

To comply with the relevant Article, actual Ballot Papers will be sent only to paid-up Corporate Members.

## LIST OF COUNCIL NOMINEES

R. M. CUTCLIFFE CEng, FIMechE, FCIBS, FIHospE

Nominated Member  
Regional Engineer  
West Midlands Regional Health Authority

S. RATCLIFFE CEng, MICE, MIMechE, FIHospE

General Member  
Assistant Chief Engineer, DHSS  
Member of Council 1978-1984  
Member of Education Committee 1978-84  
Member of Finance and General Purposes Committee 1978-84  
Member of International Affairs Committee 1978-84  
Chairman, Membership Committee 1979-84

## Annual Conference 1985

The Annual Conference for next year will be held in the Hotel Majestic, Harrogate from 22nd-24th May. Please make an early note in your diaries.

## The membership structure of The Institute

It will be known that this subject is, again, receiving the consideration of Council. An Article by Mr. S. Ratcliffe, Chairman of Council's Membership Committee appeared in the October Issue of the Journal and others are planned to follow.

Council is most anxious to learn the views of Branches or individual members and hope that correspondence may be stimulated in the Journal and would welcome contributions from Branches/members to appear in these columns or for future discussion at meetings of Council.

## Obituary

It is with regret that we record the death of Alex Ross on 12th November, 1983 at the age of 66.

Alex retired because of ill health some 9 months prior to his 65th birthday and although he had not enjoyed very good health for some time, his spirit was good until the end.

After a sea-going career Alex joined the Health Service in 1958 as Superintendent Engineer for the old Board of Management for Coatbridge, Airdrie and District Hospitals. After the reorganisation of 1974 Alex became District Engineer for the Hamilton/East Kilbride District of Lanarkshire Health Board until his retirement in 1982.

Alex was an active member of the West of Scotland branch of the institute which he joined in 1958 and held various offices including Branch Chairman.

Our thoughts are with his wife Marion, daughter Elizabeth and his two grandchildren whom he admired very much.

Alex will be sadly missed by his friends and ex colleagues which was proved by the large turnout at the burial service, and the written notes of sympathy to his family.

## IHEX '84

As has been previously announced, for the first time at the 40th Annual Conference, there will be a related exhibition held at the Dragonara Hotel.

## Annual Conference 1984 Bristol

This year's Annual Conference is to be held at the Dragonara Hotel, Bristol, from the 16th-18th May. Alongside the technical programme a separate Ladies' Programme has been devised. It will include a boat trip and a day spent in the beautiful and historic city of Bath.

For both Delegates and their ladies a visit to the Hospital Estate Management and Engineering Centre at Falfield has been arranged for the evening of Wednesday 16th. After a tour of the Centre there will be a barbecue (food indoors in the event of rain). Coaches will leave the Dragonara at 5.30 and return at 10.30 and 11.30.

A further social occasion takes place on Thursday 17th, when there will be a Civic reception at the Dragonara Hotel, prior to the Conference dinner dance. The reception is given by the Lord Mayor and Lady Mayoress of Bristol, and the principal guests will include Mr. W. V. S. Seccombe, Chairman of the South West Regional Health Authority and Mrs. Seccombe, Mr. J. W. Barnes, Principal of the Centre at Falfield and Mrs. Barnes, together with the Regional Team of Officers and their partners.

### Programme

#### Wednesday 16th May

- 10.30 am OFFICIAL OPENING by  
W. V. S. SECCOMBE ESQ JP  
Chairman, South Western Regional Health Authority  
Introduced by L. G. HADLEY Esq. CEng, FIMechE, FInstE, FCIBS, MConsE, FIHospe.  
President, The Institute of Hospital Engineering
- 10.40 am DEVELOPMENT AND MAINTENANCE OF ELECTRO-MEDICAL EQUIPMENT  
Speaker: Dr. A. C. SELMAN PhD MSc. CEng, MIMechE  
District Works Officer  
Lewisham & North Southwark Health Authority
- 11.45 am EQUIPMENT MANAGEMENT IN PRACTICE  
Speaker: J. A. GARRETT ESQ CEng, FIEE  
Principal Physicist  
Bristol Royal Infirmary  
Chairman: R. TUCKER ESQ BSc, CEng, MIMechE, MCIBS, MIHospE  
District Works Officer  
North Devon Health Authority

12.45 pm Lunch

2.30 pm DEVELOPMENT OF DIAGNOSTIC TECHNIQUES

- Speaker: M. F. WOOD ESQ MA, BSc.  
Deputy Chairman  
The Oxford Instruments Group  
Chairman: M. I. LEES ESQ CEng, FIMarE, MCIBS, FIHospE  
District Works Officer  
Bristol and Weston Health Authority

4.00 pm Tea and Visit Exhibition

5.30 pm Depart for the Hospital Estate Management and Engineering Centre Falfield

7.30 pm Barbecue at Falfield.

#### Thursday 17th May

8.30 pm Exhibition Opens

9.30 am COAL FIRING - THE FUTURE

- Speaker: D. M. WILLIS ESQ BSc, CEng, FInstE  
Chief Industrial Development Technologist  
National Coal Board  
Coal Research Establishment

10.45 am Coffee

11.15 am CHIMNEY DESIGN AND PREVENTION OF FAILURE

- Speaker: A. S. SAFIER ESQ. DIPCE, BSc(Eng), CEng, FICE, FIStructE, FCIARB, MConsE, MSOCIS(France)  
Senior Partner

Armand Safer and Partners  
Consulting Civil and Structural Engineers

Chairman: R. G. KENSETT ESQ. BA, CEng, MIMechE, MInstE,  
MCIBS, MBIM, FIHospE  
Chief Engineer  
Welsh Health Technical Services Organisation

- 12.45 pm Lunch
- 2.00 pm LOW PRESSURE MEMBRANE TREATMENT OF WATER FOR BOILERS  
Speaker: D. McBAIN ESQ Technical Director Elga Ltd
- 3.00 pm SOLAR ENERGY PROJECT AT TORBAY  
Speakers: B. JAMES ESQ CEng, MIMechE, MInstE, FCIBS, MBIM, FIHospE  
Regional Engineer  
Wessex Regional Health Authority  
R. LEWIS ESQ MA(Cantab) MSc, AMICE  
M. J. W. REYNELL ESQ MA(Oxon)  
Research Officers  
School of Architecture and Building Engineering  
Bath University  
S. B. TYRER ESQ MCIBS, MIHospE  
Principal Assistant Engineer  
South Western Regional Health Authority  
Chairman: D. L. LEWIS ESQ CEng, MIMechE, MCIBS, FIHospE  
Regional Engineer  
South Western Regional Health Authority
- 4.30 pm Close
- 7.30 for CIVIC RECEPTION AT THE DRAGONARA HOTEL FOR THOSE
- 8.00 pm ATTENDING THE CONFERENCE DINNER DANCE
- 8.00 pm CONFERENCE DINNER DANCE

#### Friday 18th May

- 10.30 am MIDDLE EAST CONSTRUCTION - THE MANAGEMENT CHALLENGE  
Speaker: F. H. BAILEY ESQ FCIBS, MBIM  
Director Haden International Ltd  
Chairman: D. W. HANSON ESQ BArch, ARIBA, FCIQB, AssocIHospE  
Regional Works Officer  
South Western Regional Health Authority
- 12 noon CONFERENCE CLOSURE  
by THE PRESIDENT  
THE INSTITUTE OF HOSPITAL ENGINEERING

## FORTHCOMING BRANCH MEETINGS

**East Midlands Branch:** Hon Sec E. A. Hall TN Nottingham (0602) 475783

- 25th January Energy Trends in The Wolsey Room  
Hospitals The Post House Hotel  
Leicester

**Southern Branch:** Hon Sec R. P. Boyce TN Chichester (0243) 781411

- 17th January Modern Advances in Southampton General Hospital  
Medical Imaging

**North Western Branch:** Hon Sec E. A. Hateley TN Manchester (061) 236 9456 ext 266

- 25th January Visit West Cheshire Hospital
- 23rd February Design and Maintenance St. Marys Hospital  
of Lifts Manchester

**Midlands Branch:** Hon Sec W. Turnbull TN Birmingham (021) 378 2211 ext 3590

- 18th January Modern Coal and Old Royal Public House  
Ash Handling Corner of Church Street and  
Cornwall Street, Birmingham.
- 22nd February Visit to Central Independent Television Centre  
(Limited numbers)

## New Members

### FELLOWS

CHITTOCK Ronald Ernest, J. E.  
Creatorex and Partners  
CROOME Derek John, Bath University  
DAY Terence Joseph, T. J. Day & Partners  
HOSKIN Leslie, Brandon Medical Equipt Co  
OLIVER Brian Cecil, DHSS  
PHILLIPS Alexander George, Hoare Lea and Partners  
WARE Brian, Northern RHA

### MEMBERS

ARKU-DADSON Antoine Raiy, Haden Young Ltd  
BALL Brian Robert, West Surrey NE Hants HA  
BLACK Jeffrey, Cambridge Health Authority  
BOSLEY Philip Clive, Sir Alexander Gibb and Partners  
BRINCAU Joseph, Panta Lesco International, Malta  
BROWNHILL Colin, North West RHA  
BURKE Malcolm Edmond, Camberwell Health Authority  
BUTHCER Alec George, Upton Associates  
CAWTHRAW Derek, Ewbank Preece Design Partnership  
CHARLES David Gillman, D. C. Engineering Services  
EUNSON Ronald Foubister, Common Services Agency  
FOGG Kenneth Frank, Lamp General Engineering Services  
FOX Geoffrey Robert, Wolverhampton Health Authority  
GREGG Paul Henry, Eastern Health and Social Services Board  
HALL Barry John, Leicestershire Health Authority  
HARRISON Kevan John, West Lambeth Health Authority  
HIGGINS Martin, Leeds Eastern Health Authority  
ISTEED David Antony, Mid Staffordshire Health Authority  
JONES Haydn Lloyd, Ralph T. King and Associates  
JONES Victor Leslie, Wirral Health Authority  
KINGSMORE Paul, Eastern Health and Social Services Board  
LEONARD John Gerard, Honeywell Control Systems Ltd  
LINGHAM Vythialingam Rama, Ministry of National Development, Singapore.  
MALONE George, R. W. Gregory and Partners  
MANN David Arbuthnott, Tayside Health Board  
MASSEY Anthony, Cranage and Perkins  
NEW Michael Raymond, Shanning International Ltd  
PANG Kin on Roger, Ryoden Electric Eng. Co Ltd. Hong Kong  
RATNAYAKE Palitha Bandara, D&C Services Group  
ROLLERSON Gordon Brian, Western Holdings, South Africa  
RONAASEN David Arne, Ove Arup & Partners, South Africa  
RYAN Anthony Joseph, S., Barratt & Co Ltd  
SCOTT Kenneth George, South West Thames RHA  
STODDART Dennis, North West Durham Health Authority  
TATTERSALL Roger Harold, North Bedfordshire Health Authority  
TUMELTY Denis John, Eastern Health

and Social Services Board  
 WALKER Philip James, Hull Health Authority  
 WILLIAMS Alan Gordon, Cornwall & Isle of Scilly HA  
 YASSIN Abd Hamid Hj Mat, RIAS Hospital, Brunei

#### GRADUATES

MASON Richard Mark, West Glamorgan Health Authority  
 SAWKINS David Ian, Holy Cross Hospital, Haslemere.

### Upgradings/ Regradings

#### TO FELLOW

BEBB David John  
 BURROWS John Graham  
 WEBSTER John Thomas George

#### TO MEMBER

FOSTER Martin Andrew

#### ASSOCIATES

ABARIKWU Irozuru Ndubeze Ibeji, Michelin (Nig) Ltd  
 ALI Benson Aure, Health Services and Management Board, Nigeria  
 BROWN Stephen Albert, Southmead Health Authority  
 FRANKLAND Edmund Russell, Frankland International Ltd  
 GABER Ahmad Hassan, Dept of Medical Equipment, Cairo  
 KANGARA Padmasiri Ranjith, General Hospital, Kandy, Sri Lanka  
 KUMAR Vijay, National Heart and Chest Hospital  
 MATHEW George, Emirates Hospital Supplies Ltd, Abu Dhabi  
 ODUGBESI Olatunji Lawrence, Larritunes Chemical & General Eng. Services, Nigeria  
 OMEATA Emmanuel Chukwuma, Imex International (Nig) Ltd.  
 PALMER Colin Ernest, Forth Valley Health Board  
 ROBINSON Raymond John, Robinson Engineering (Services) Luton Ltd  
 SHEHU Emmanuel Ayuba, Health Services Management Board, Nigeria  
 SINGH Joginder, Dept of Health & Medical Services, Abu Dhabi  
 SWAINSTON Neil, Cowie Fire Safety & Security Ltd  
 WJESIRI Kogallana Dorage Santhupala, New Dubai Hospital

## One-day Symposia 1984

Four One Day Symposia are planned for 1984 and the dates and venues are given below:

Wednesday 7th March (see published programme), Kensington Town Hall, London

Thursday 5th July on Telecommunications, Institute of Marine Engineers, London

Wednesday 3rd October, Institute of Marine Engineers, London

Thursday 6th December, Institute of Marine Engineers, London

## ONE-DAY UPDATING SEMINAR

**Wednesday 7th March 1984  
 at Small Hall, Kensington Town Hall,  
 Hornton Street, London W8.**

The Institute has had many requests for a seminar at which delegates can be told of the latest developments and possible future changes in certain key areas of hospital estate technology.

Chairman for the Day –

JOHN CONSTABLE ESQ, CBE, CEng, FICE, FRICS, FIMunE, PPIHospE  
 Immediate Past President, The Institute of Hospital Engineering

### PROGRAMME

10.00 Coffee

10.30 INTRODUCTION L. G. HADLEY ESQ. CEng, FIMechE, FInstE, FCIBS, MConsE, FIHospE  
 President, The Institute of Hospital Engineering

#### OPENING

#### TRAINING IN THE NHS

Speaker: SIR JOHN DONNE

Chairman

National Health Service Training Authority

*The NHS Training Authority came into being on 1 October 1983 – how will it function – what will be its relationship with Ministers and NHS Authorities – how will it affect the work of existing training establishments?*

11.15 DEVELOPMENTS IN THE WATER INDUSTRY

Speaker: S. F. WHITE ESQ. CEng, FICE

Adviser – Water Research Centre

Chairman – DoE Water Advisory Committee

*There have been changes in the structure of the Water Industry and new Model Water Byelaws have been sent out for consultation. These changes will be outlined and their implications for hospital design and maintenance will be discussed.*

12.00 PERFORMANCE INDICATORS

Speaker: M. J. WOOLSCROFT ESQ. MSc, CEng, MIMechE, MCIBS, MInstE.

Principal Professional Technical Officer

Works Group

Department of Health and Social Security

*Estate Performance Indicators are an essential element in strategic planning, their roots are in the Works Information Management System – they are still being developed – how reliable will they be – how will they be applied – will they be an essential part of annual reviews?*

12.45 Lunch

14.15 LOW ENERGY HOSPITAL

Speaker: J. M. SINGH ESQ. CEng, MIMechE

Superintending Engineer

Works Group

Department of Health and Social Security

*To identify usage in a typical hospital and how consumption might be economically reduced. Ways in which Low Energy Hospital studies might be disseminated will be discussed.*

15.00 FIRE PRECAUTIONS

Speaker: M. R. L. LONG ESQ. ARICS

Registered Architect

Principal Assistant Architect

South West Thames Regional Health Authority

Member of DHSS Study Group 14

*The Home Office guidance for existing hospitals has been issued but guidance for new construction is still in draft form whilst new developments are being validated. The Building Legislation Working Group has*

*produced guidance on Part 'E' of the Building Regulations which is about to be issued. What is the present position?*

#### 15.45 ASPECTS OF POST MORTEM ROOM AND OPERATING THEATRE TECHNOLOGY

Speaker: L. W. M. ARROWSMITH ESQ. BSc(Hons), CEng, MIMechE  
Principal Professional Technical Officer  
Works Group  
Department of Health and Social Security

*There have been developments in post mortem room and operating theatre ventilation techniques and in the application of oxygen concentrators for pipeline supply systems. These developments will be described and future guidance will be discussed.*

16.30 Close

### TICKET APPLICATION FOR ONE DAY SEMINAR

To: The Secretary, The Institute of Hospital Engineering, 20 Landport Terrace, Southsea PO1 2RG.

Please send to me \_\_\_\_\_ ticket(s) for the ONE DAY UPDATING SEMINAR to be held on Wednesday 7th March 1984.

Member £40.25 Non Member £46.00

I enclose £\_\_\_\_\_ (ticket to include morning coffee, lunch and VAT). No fees will be returned for cancellations (in writing please) received after midday on Thursday 1st March 1984.

VAT Registration No 339 3963 20

NAME (in capitals please) \_\_\_\_\_

ADDRESS \_\_\_\_\_

Position \_\_\_\_\_ Non Member (please tick) \_\_\_\_\_

### REDUCED RATE RAIL FARES AND HOTEL ACCOMMODATION

Substantial rail fare reductions are available for delegates attending this Symposium. The following are examples of second class fares to London (for first class add 50%) Grampian Region - £49; Glamorgan - £19; Cornwall - £30; Oxfordshire - £7.

Forum Hotels in London are prepared to offer delegates a reduction on their normal rates.

Application forms to obtain these reductions may be obtained only from The Institute of Hospital Engineering.

*NB. Please note that tickets are available ONLY from The Institute of Hospital Engineering (Tel. Portsmouth (0705) 823186)*

## Lucas Scholarship Fund

Awards will be made, again, in 1984, to enable two young members of The Institute of Hospital Engineering to attend the Annual Conference to be held in the Dragonara Hotel, Bristol from 16th to 18th May.

The Awards will cover Conference Registration Fee, Conference Dinner Ticket, cost of hotel accommodation and travelling expenses to and from Bristol.

Accordingly, young members of the Institute (under 28 years old on 28.2.84) resident in the United Kingdom or Eire who would like to attend the Conference under this Award scheme should make application to the Secretary of the Institute at 20 Landport Terrace, Southsea, PO1 2RG.

Applications should reach the Institute by 28th February 1984 and should offer full curriculum vitae giving:

1. Academic achievements
2. Practical training
3. Full career details
4. Date of birth
5. Confirmation that leave of absence to attend the Conference will be granted

Selection of the Award Winners will be made by an Assessment Panel appointed by council.

*NB. Members who have made previous application for an Award under this scheme are not debarred from applying again.*

## Occupational Pensions - Private Sector

The Institute of Mechanical Engineers offer a cordial invitation to members of the IHospE to attend a lecture on the subject of occupational pensions in the private sector.

### SYNOPSIS

#### Part one. The Range of Benefits Provided by a Company Pension Scheme

- (a) Pensions based on final salary.
- (b) But what is final salary?
- (c) Commutation of pension for a lump sum at retirement.
- (d) Increases after retirement.
- (e) Death before retirement.
- (f) Death after retirement.
- (g) Disablement and early retirement.

#### Part two. Changing Jobs

- (a) A refund of contributions - is it available and is it advisable?
- (b) Preserved pensions. The case for and against increases.
- (c) Transfer payments - what they buy and what they don't buy.

### PENSION MEETINGS - SPRING 1984

1. Meeting in Newcastle-upon-Tyne, jointly with North Eastern Branch at County Hotel, Neville Street, Newcastle-upon-Tyne on Monday 13th February 1984 at 6.30 pm (refreshments at 6 pm)

2. Meeting in Manchester, jointly with North Western Branch at UMIST, Room RD7, Reynolds Building, on Thursday 16th February 1984 at 6.45 pm (refreshments at 6.15 pm)

3. Meeting in Glasgow, jointly with Scottish Branch, on Thursday 22nd March 1984, at Strathclyde University, Room M406, James Weir Building, at 6 pm (refreshments at 5.30 pm)

## CHANGE OF PUBLISHER

Please note that as from the October 1983 issue, the new publishers of HOSPITAL ENGINEERING are:

TULLY GOAD VINALL  
St Agnes House  
Cresswell Park Blackheath  
London SE3 9RJ England  
Telephone 01-852 9448

All correspondence or enquiries should **now** be sent to the editor, Jenny Campbell at the above address.

# CLASSIFIED ADVERTISEMENTS

## Appointments & Situations Vacant

To place your classified advertisement, please contact Michael Birch on (0793) 45311 or write to him at HOSPITAL ENGINEERING Tully Goad Vinall St Agnes House Cresswell Park Blackheath SE3 9RJ.

RATES: £11 per single column centimetre (minimum depth 3 cm) 4 columns per page. Lineage £3.25 per line (minimum 8 lines) Box number £5

Applications are invited for the following posts in the Engineers Division of the Regional Works Department in the Oxford Region.

### **Estate Management Engineer Principal Assistant Engineer Grade**

£11,515 to £13,920  
(Ref. No. V122/83)

This post will be responsible for developing advice and guidance on all matters on management of the Estate including providing advice on the effective development and management of the Estate Management Information System, developing techniques and procedures for plant and equipment evaluations, standardisation of design, Health & Safety at Work standards, and Engineering System testing and commissioning.

### **Steriliser Engineer Principal Assistant Engineer Grade**

£11,515 to £13,920  
(Ref. No. V123/83)

The postholder will be the Regional representative on Sterilisers and will liaise with District Officers in Works, CSSD, Pharmacy and other departments to assess and ensure that all sterilisers within the Region are tested and maintained correctly.

Candidates for both these posts must be Chartered Engineers and Corporate Members of one of the Institutions of Civil, Mechanical, Electrical or Electronic and Radio Engineers or the Chartered Institution of Building Services and should be able to demonstrate proven experience in their particular sphere of activity.

Experience in the Health Service is useful but not essential. If you would like to discuss these posts informally please contact: Mr. Makepeace, (Telephone: (0865) 64861 Ext. 427).

Application form and further details available from, (quoting the appropriate reference number):

**The Recruitment Officer,  
Oxford Regional Health Authority,  
Old Road, Headington, Oxford OX3 7LF.  
Telephone: Oxford 64861 Ext. 228/268.  
Closing date: 25 January 1984.**



## **HOSPITAL ENGINEERING**

### **Display or classified advertising**

For further information on advertising in HOSPITAL ENGINEERING or to book a classified or display advertisement, please contact:

Michael Birch  
Advertisement Manager  
Telephone (0793) 45311

*Correspondence, orders or written enquiries  
should be addressed to him at:*

HOSPITAL ENGINEERING  
IMR International  
14 Bath Road  
Swindon, Wilts SN1 4AA

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**Secretary**  
J E Furness MBE VRD\*

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