

Bulletin

A Monthly Newsletter for RAL Staff

July 1994

EPAC 94 LONDON

The fourth European Particle Accelerator Conference took place at the QEII Conference Centre, London from 27 June to 1 July. It follows similar events in Rome in '88, Nice in '90 and Berlin in '92.

Accommodation and registration for the 750 delegates from over 25 countries were two of the 'smaller' requirements for the local organising committee made up of staff at the Daresbury and Rutherford Appleton Laboratories and chaired by Ian Gardner of ISIS. The RAL Conference and Meetings organisation service provided much of the help for the Conference with Andy Kurzfeld acting as the Conference Manager and Susan Humphreys as the leader of the Conference Secretariat, ably supported by Anne-Marie Hamilton and other members of the PPR Section and Admin Department.

The Conference provided a comprehensive overview of research, technology and applications in the field of particle accelerators. These accelerators contribute to many branches of physics including particle and nuclear physics. Recent growth areas are the use of synchrotron light and pulsed neutron sources for the study of materials (topics close to DRAL's heart). The role of these accelerators in medical research was among some of the topics discussed with over 1000 papers accepted for presentation.

A substantial number of young scientists and Eastern Europeans were given support to attend EPAC 94 by various European Laboratories, by the CEC and by the Conference itself. To complement the main event an industrial exhibition of 44 exhibitors, a CERN exhibition of the Large Hadron Collider (LHC), including a virtual reality trip along part of the LHC tunnel, and a display of ISIS and SRS were also on view.

Science Minister David Davis officially opened the Conference on Monday morning, and after a long day at the QEII a welcome drinks reception at the Savoy Hotel was enthusiastically embraced by all the delegates. Further interaction amongst the multi-national EPAC community was encouraged by an invitation to dinner at The Grosvenor House Hotel. Some perplexed looks were apparent when the all-dancing, all-shouting Icknield Way Morris Men of Wantage jingled their way centre stage. But these looks of puzzlement were soon replaced by rapturous applause as the tradition of the Morris and its similarity to Particle Physics (!) were explained, accompanied by dances from the Cotswolds region.

Responsibility for organising the next EPAC passes from Britain to Spain. This will take place in Barcelona in the Summer of '96. ■



Dr R Bennet of RAL's ISIS division describes the proposed DRAL exotic beam test experiment (94RC4058)



Minister of Science David Davis MP opens EPAC 94 at the QEII (94RC4031)

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Question Time

In a recent survey, readers of the Bulletin expressed an interest in finding out more about other staff at RAL. In this month's issue we begin a regular feature aimed at gaining an 'on the spot' insight into the personalities of staff throughout the Laboratory.

In an interview with PPR's Buura Azemoun, Richard Lawrence-Wilson, DRAL's Associate Director and Laboratory Secretary, family man, and accountant, talks to us about his work at RAL and his outlook on life.

Q When and where did you start work at RAL?

I started here as Finance Officer in R20 in 1982. I occupied that post for eight years. When Jim Valentine retired, I competed to become the Lab Secretary of RAL and succeeded.

Q What does your job currently involve?

I tend to be involved in any disaster or triumph that happens at DRAL. My degree

in Politics (political correctness), Philosophy (logic to use good arguments with intelligent people) and Economics (value for money) has come in handy!

Q What are the most difficult aspects of your job?

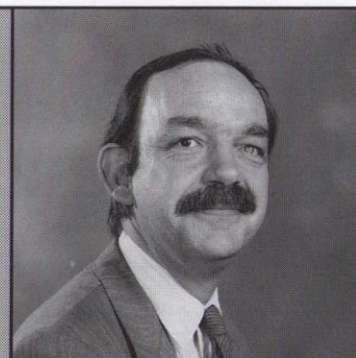
In a community such as ours there are always going to be people with problems and problems to do with or caused by individuals are always difficult to resolve and often the most heart-rending.

Q How would you describe yourself at work?

I try to be professional and try only to fight battles I know I can win. I try not to be intimidating and try to make people feel they can come to see me whenever they like and that goes for everybody. I reckon I work hard - I lose many hours of flexi on the clock every month; that's how I know! I'm very fussy about written English and like to see well-written work. What annoys me most at work is staff putting rules and regulations above the needs of the Lab!

Q How about outside work?

I'm a fairly new and therefore very keen family man. I like eating and drinking. I dislike being unfit but I dislike exercise even more!



(90RC4138)

Q What do you do to relax when things get a little too much?

Eat and drink...oh and do a bit of gardening and drawing - I used to sell drawings and collage on the University Park railings in Oxford.

Q What is the most enjoyable aspect of your life at present?

Watching my 20 month old baby daughter Zoe becoming a person.

Q How would you like to be remembered?

As someone who added to the stock of human happiness.

RAL exhibit at the Didcot Power Station Open Days

RAL'S work was seen by an estimated 50,000 visitors during Didcot Power Station's Open Days on 4 & 5 June. RAL's exhibition, in keeping with the environmental theme of the marquee, focused on the Wind Energy work of the Energy Research Unit.

This drew an extraordinary amount of questions, queries and comments. Wind Energy literature was available in abundance and the opportunity to use it for school projects was not missed by the 6th form students of the surrounding schools.

Wind Energy was not the only aspect of RAL's work to be on view. The ISIS model, normally located in the R1 foyer, proved to be a great success with visitors. The ISIS staff manning the stand

found themselves taking part in ad hoc elementary particle physics debates! Space science was by no means ignored. Nick Moulton hadn't a moment to spare as he answered a torrent of questions provoked by his ATSR demonstration programme. Other Departments at RAL were also represented with overview exhibition boards and leaflets, which again proved to be of great interest.

The general consensus of all the exhibitors was that the weekend went exceptionally well. However, as with anything of this nature, it did have some 'unscheduled activity'. Such as one of the marquees taking to the skies, only coming to rest when it found the largest generator on site. Or the Jazz band battling with the elements as music

sheets were strewn across Didcot. This certainly did not detract from the enjoyment of the day, indeed it proved to add to it as we were rewarded with glorious summer weather the following day, bringing nearly 30,000 people through the gates.

When the next Open Day at the Power Station is likely to take place is difficult to say. Judging by the looks of exhaustion on the faces of the organisers it may not be for some time to come!

On behalf of the Press & Public Relations Section, I would like to thank all those for helping to make the weekend a great success by manning the stands and providing their expert views. ■

Garrett Dearey

Daresbury News

In this month's issue, we begin a regular column featuring technical news and events taking place at Daresbury, our sister Lab 'up North'.

SERC's parting shot was one in the arm for a major new initiative at the Synchrotron Radiation Source (SRS). A new, fast, light-weight, four-circled diffractometer will be installed on a modified station 9.7. The beamline design philosophy is to collect all the available Synchrotron Radiation and use a triangular bent monochromator and plane mirror in order to provide a horizontal and vertical focused beam of very high intensity.

Elsewhere on the SRS, the first scientific results have been obtained from station 16.4. Its white beam and high pressures allow studies of pressure-induced phase changes in materials at high temperatures. This will bring new insights into the behaviour of materials under extreme conditions and into rock forming processes in the Earth's upper mantle.

Still with the SRS, a new detector arm has been commissioned on station 9.4. The solid state X-ray detector can now be positioned at one of two fixed angles in the out of plane direction.

Radioactive Beam Spectroscopy and TESSA

Over the last few years, intense world-wide interest has developed in the production of radioactive nuclear beams and the scientific opportunities they offer. The Daresbury Nuclear Physics Support Group has just performed the first high spin gamma-ray spectroscopy at the Université Catholique in Belgium.

The experiment was a great success. It provided both new nuclear structure information and valuable experience in the use of radioactive beams. It also showed that spectroscopy of this type is still possible despite the hostile environment created by the beam.

Young Woman Engineer of the Year 1994

Applications are invited for the award of *Young Woman Engineer of the Year* from young women who have obtained an engineering qualification, such as an HNC, HND or ordinary degree, have undergone appropriate training and have proved themselves capable of holding a responsible job at Incorporated Engineer level. Women holding academic qualifications at honours degree level and as such suitable for Chartered Engineer registration are not encouraged to apply for the award.

For copies of the award nomination form or further information apply to:

The Secretary, The Institution of Electronics and Electrical Incorporated Engineers,
Savoy Hill House, Savoy Hill, London WC2R OBS.
Telephone: 071 836 3357. ■



Harwell Film Society

Established in 1954, the Harwell Film Society celebrates its fortieth anniversary this year. Ian McCrea and Pete Smith of RAL's Space Science and Admin Departments co-chair what is one of Harwell's oldest societies.

Providing an interesting and entertaining selection of contemporary films, the Society offers a mix of Hollywood, British and European releases. This year's season begins with a celebration party in the Cockcroft Hall on 20 September at 7:30pm, followed by a presentation of the highly acclaimed "Much Ado About Nothing" starring Kenneth Branagh and Emma Thompson.

Other highlights include the chance to see Anthony Hopkins in "Remains of the Day" and "Shadowlands"; Daniel Day Lewis and Michelle Pfeiffer in Francis Ford Coppola's "The Age of Innocence" and the 1993 Oscar winner for best film "The Piano".

Membership is open to all members of the Harwell Rec Soc at a cost of £20 for the season or £2.50 at the door.

The Society's committee urges as many as possible to attend the films to help keep its activities financially viable. If you wish to join or just want more information phone Ian on ext 6513 or Pete on ext 6204. ■

Noticeboard

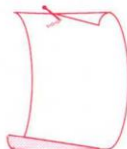
European Election Results: Hampshire North & Oxford

(Aldershot; Basingstoke; Hampshire;
North West; Newbury; Oxford East;
Oxford West; Abingdon; Wantage).

Conservative held 9,194

Turnout 38.31%

Graham Mather (C) 72,209
Ms Jo Hawkins (LD) 63,015
John Tanner (Lab) 48,525
David Wilkinson (UK Ind) 8,377
Dr Mike Woodin (Green) 7,310
Hugh Godfrey (NLP) 1,027
Richard Boston (Boston Tea Party)
1,018



Acknowledgements

Peter Whitehouse retired last month having worked at RAL for 20 years. He started under Ted Crowley in R8 in what was an offshoot of Building Services Electrical Section. Following its merger with the main section under the Technology banner he collected a couple of suggestion awards. In 1983, Peter moved to SNS (now ISIS) under Jack Mills in the Electrical Workshop.

Peter wishes to bid farewell to the colleagues that he missed at his retirement reception.

Aerobics

Re-start Monday 1 August.
Newcomers welcome (Men and Women). All sessions take place at the Rec Soc 12:30 - 1:20pm, every Monday. Legs, tums & bums 12:30- 1:20pm, every Thursday.

For further information tel 75 16 21.

Arts & Crafts

The Arts & Crafts Exhibition '94 collected £37 for The Sue Ryder and Cheshire Homes.

Jenny Coates
Exhibition Organiser

Sports Day

The Research Councils enjoyed a hot but breezy day at the Birmingham Civil Service sports ground at Elmdon, Solihull for the Outdoor Sports Day on Friday 1 July.

Having won five events last year RAL was looking to improve on this occasion. However whether there wasn't a sufficient acclimatisation period for the unforgiving heat of Birmingham (!) or the fact that a number of our top athletes were unable to attend left us wondering what might have been.

The winners of the events are as follows:

100 metres (F)	SO
Tug-of-War	DL
Rounders	RGO
Croquet	RGO
Tennis	RGO
6-a-side Cricket	SO
5-a-side Football (M)	SO
5-a-side Football (F)	SO
100 metres (M)	DL

Andy Napper
Rec Soc Chairman

Library gets

British Standards on CD - ROM

The Library now has the complete set of British standards on CD - ROM. Searches can be made by keywords or standard numbers and full text of standards can be displayed on the screen or printed out in full. An index of world-wide standards is also included. For more information ring ext 5384, OV/VM id LIBRARY.

National Trust tickets

General National Trust tickets are now available to any Rec Soc member. If anyone is interested in taking advantage of this offer over the summer days ahead, please contact Katie Hopgood on ext 5814 or on OV/VM KH.

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