

HARWELL bulletin

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19 September 1980



ELECTRICITY FROM NUCLEAR POWER

The theme of the AEA stand at the 'Home Life Exhibition' was that of 'Electricity from Nuclear Power'. The exhibition was held at Granby Hall, Leicester from 3 to 13 September 1980. Throughout the exhibition there was a continuous showing of a 15-minute audio-visual programme. Staff from HARWELL and other AEA Laboratories were present throughout the exhibition answering technical questions and distributing leaflets as well as a special information newspaper.

In the photograph Les Carver (Research Reactors Division) is demonstrating a radiation counter to Eamonn Smith (left) and Paul Milner of Hazel School, Leicester with David Cope, an Engineer from Radio Leicester (right). In the background is Rosie Winter of Marketing and Sales Department.

UKAEA ANNUAL REPORT FOR 1979/80

The Annual Report was presented at the London International Press Centre on 15 September. In his introductory remarks Sir John Hill said that the Government announcement in December 1979 accepting the nuclear power station ordering programme proposed by the Generating Boards provides the kind of steady ordering which is essential. On its completion, Britain will have about 22 GW of nuclear generating capacity compared with 12 GW under construction and in operation now. The expansion of nuclear power is a sensible conservation policy even in countries with substantial reserves of fossil fuels. Such a policy will allow oil to be used for applications for which it has no substitute and the best use to be made of coal which will increasingly be required as a substitute for oil and gas which are currently being used for many applications for which coal would suffice. It also has economic benefits because, in this country, it is without doubt the cheapest way of generating electricity.

The Government is currently reviewing the situation on fast reactors. The nuclear industry has had discussions with other countries with whom they might collaborate on the development and construction of fast reactors. Sir John then referred to the recent publicity on Dounreay following the Panorama programme on 8 September. The Government would issue its official statement soon. All in all, in spite of Panorama, we are making reasonable progress.

The AEA programme of work on the PWR system has been expanded in anticipation of the public inquiry which is expected to take place in 1982.

The experimental AGR reactor at Windscale, commissioned in 1962, has generated 3.5×10^9 kWh of electricity while carrying out an extensive development programme. The reactor will cease electricity generation in March 1981 and afterwards, a series of important safety experiments is planned.

We have had another busy year in both the nuclear and non-nuclear fields. We have again earned about 40% of our total expenditure through work carried out on a repayment basis for the nuclear industry, Government Departments and industry generally.

We were pleased to be able to show the Prime Minister examples of HARWELL's wide range of research work in the nuclear and non-nuclear fields when Mrs. Thatcher visited the laboratory on 11 September.

Good progress has been made on the fast reactor. The most important development at Dounreay has been the progressive commissioning of the PFR reprocessing plant which was started up by the Prime Minister in September 1979; plutonium fuel is now being reprocessed.

Although by some standards the British nuclear power programme is a modest one, we are making better progress than many Western countries. In terms of economics, safety and impact on the environment, nuclear power will be of immense benefit to the world and it is a great pity that opposition by determined groups of people in many countries exploiting ignorance and fear have slowed down its introduction and development.

Copies of the Annual Report have been circulated to all Divisions.



A selection of photographs taken during the Prime Minister's visit are given on these pages. The names of AEA staff and those accompanying the PM are given below.

Above: Dr. Lewis Roberts (Director), the Prime Minister, Dr. Walter Marshall (Deputy Chairman) and Sir John Hill (Chairman, AEA).

Below: left, Dr. Jack Williams (Assistant Director, Nuclear and Underlying) and Mr. Ian Gow (Parliamentary Private Secretary);

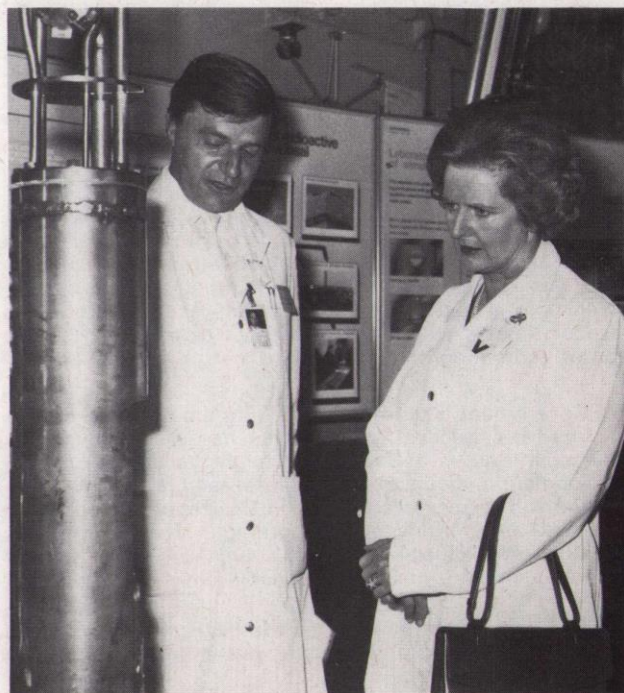
right, Dr. Ron Flowers (Head of Chemical Technology Division) in B.220, discussing radioactive waste management.

Page 3: top left, Mr. Tom Smith (PLUTO Reactor Manager) presenting a memento (a mounted silicon slice); top right, Dr. Vic Crocker (Head of MPD).

centre left, Mr. Geoff Hucklebridge (SCPS), Mr. M.S. Ridout (Chairman, National Staff Side), Dr. Ron Sowden (Commercial Director), Mr. John Terry (IPCS) and Mr. Tom Valentine (Chairman, HARWELL Staff Side).

centre right, Dr. John Stubbs (Head of PR Group), Mr. Laurie Martin (Chief Personnel and Administration Officer), Dr. Lewis Roberts and Sir John Hill (Mrs. Thatcher is signing the Visitors' Book, the first signature in which is that of Sir Winston Churchill, December 1954).

bottom left, Dr. Barry Dale (Head of ICE project); bottom right, Mr. Ian Gow, Dr. Walter Marshall and Dr. Roger Price (Energy Technology Division).



PRIME MINISTER'S VISIT — 11 SEPTEMBER 1980





WIND ENERGY

The Wind Energy Steering Committee, chaired by Dr. Freddie Clarke (Research Director, Energy) met at HARWELL on 8 September.

The Committee (see above photograph) meets regularly to discuss policies and to make recommendations on projects under consideration in the Wind Energy Programme. See HARWELL bulletin No. 80/30. Further details can be obtained from Cliff Maskell, ETSU, B.168.

MAINTENANCE OF MICROCOMPUTERS

The Authority is considering entering into a maintenance contract for the following types of Microcomputer:-

PET, APPLE, HP85A, CAPRICORN, NEW BRAIN

If you have one of the above Microcomputer systems and are interested in a routine or 'on call' maintenance, please contact Mrs. P. Sagar, Contracts Department, Section 1C, Building 438 (extension 4673).

FILM BADGE NOTICE

2 Weekly Films: Period 39F (Colour stripe NO STRIPE)
Commencing Monday 22 September 1980

Please change your film(s) promptly and return old ones for processing.

DIARY OF EVENTS

Metallurgy Division
Seminar

'Metal solidification technology'

1980

Wednesday 1 October
& Thursday 2 October
at 09.30 a.m.
Bldg. 35
(Details from
Dr. E.A. Feast, 12-276 or
Mr. N.H. Hancock, Ext. 2746)

Chemistry Division
Colloquium

Dr. L.B. Asprey
(Los Alamos)

'Advances in the chemistry of
U(III), U(V) and U(VI)'

Tuesday 7 October
at 2.00 p.m.
Large Conf.Room,
Bldg. 220.24

Chemical Technology
Division Colloquium

Mr. F.H. Passant
(CEGB)

'The work of the CEGB on the
immobilisation of medium lead
wastes'

Tuesday 28 October
at 3.20 p.m.
Conf. Room, Bldg. 488.6