

RRS Newsletter

(For the Use of R.R.S. Staff Only)

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COLLABORATION AND CO-ORDINATION IN RESEARCH

DSIR's Contribution to the Organisation of the National Research Effort

This article, largely based on an official statement from Headquarters D.S.I.R. may serve to remind our readers of the very wide field of Departmental activities of which the work of R.R.S. forms part.

The establishment of priorities in research is the most important function of the Council for Scientific and Industrial Research. New ideas for research are always coming forward, competing for limited resources both amongst themselves and with established lines of work. The Council tries to ensure that no important research project or programme is neglected, and also that the research effort on behalf of different industries and in different branches of science is brought into balance.

In its role of co-ordinating and initiating research, the Council serves two main purposes; it ensures that the whole research field is covered without overlap, and gives a coherent scientific picture on which executive decisions can be taken.

Co-operation within Government

Science is more and more influencing operations of government and the Council states that its aim is to take a positive part in the process. The Council endeavours to anticipate matters upon which Government will require practical answers. For example, a Hydrological Research Committee has been set up under DSIR chairmanship to co-ordinate the research activities of all official bodies concerned with the country's water resources. The fact that the Water Resources Bill is now before Parliament emphasises the value and timeliness of this work.

Flexibility in Industrial Co-operation

The need for flexibility in supporting joint research and development projects with industry is recognised, only by matching the complex structure of industry and the variety of its needs with a correspondingly flexible approach by the Department will success be achieved. In this field of activity the Council would like to see more rapid progress and is looking at ways of bringing this about.

In the machine tool industry, for example, formal arrangements have been set up whereby representatives of the makers and users will work together with the Department to identify developments which should be made and which may need Government support. It may prove desirable to make similar arrangements with other industries.

A report is expected during 1964 on the unique industrial experiment which is being carried out at the Parc Mine, Llanrwst, North Wales. Nine mining houses and a firm of chemical engineering contractors are participating with the Department's Warren Spring Laboratory and the National Research Development Corporation in conjunction with Elliott Automation Ltd. and a number of instrument manufacturers, in a project aimed at providing basic data for the application of automatic control to mineral treatment processes. The results should also give an indication of the suitability of existing instruments, control equipment and machinery for use in automatic, continuously operating, plants.

The work, which, it is estimated, will cost about £140,000, is being financed on a co-operative basis by all the participants.

Research Grants to Universities and Colleges

Requests for DSIR research grants continue to increase. In the year 1961-62, the Research Grants Committee made 390 grants with a total value of £2,313,000 compared with 362 grants valued at £1,961,000 in the previous year. In addition, five major grants, valued together at just over £2 million, were announced during the year. They were for work in radio-astronomy at Manchester and Cambridge and for the provision of three nuclear reactors for groups of universities.

The Research Grants Committee is concerned to maintain a balance in the distribution of its funds between the various scientific disciplines and to encourage activity in fields from which technological and economic advantages could come. In the wide field of engineering materials the Committee is actively seeking to encourage new work, both pure and applied. There are many subjects, for example brittle fracture, which offer a challenge to the pure scientist and at the same time hold promise of results of industrial and commercial value.

Post-graduate Training Awards

The number of postgraduate studentships awarded in 1962 was 1,604 (1,474 in 1961) and of research fellowships 92 (54 in 1961). 35 holders of the Diploma of Technology were awarded research studentships in 1962 (11 in the previous year). The Department is willing to consider more applications from candidates at colleges for training for the award of Membership of the College of Technology. Other ways of encouraging more postgraduate training in engineering and technology are being sought.

Research Associations

During the last three years over £270,000 has been provided to Research Associations to aid new efforts to inform industry of the results of their researches. This Special Assistance to Industry has been used to finance such

projects as work simplification studies and the appointment of specialist liaison officers as well as more general activities such as lectures and exhibitions. The Council is satisfied that both the short and long-term benefits of the scheme, which ends in March 1964, are likely to be out of all proportion to the relatively small cost involved.

Special grants, earmarked for specific items of work in Research Associations, have now been authorised and the National Research Development Corporation has agreed to collaborate by sponsoring appropriate projects. The NRDC and DSIR are examining a number of proposals which have already been submitted.

Research Associations are being encouraged to undertake repayment work - research and other investigations for industry - for which a fee is charged. This type of work is an important function of research associations and at present accounts for just under 10% of their total income. An interesting example of repayment work is a contract valued at \$56,000 awarded by NATO to the British Welding Research Association. An investigation into projection welding will be carried out by the Association, which is making arrangements to sub-contract some of the work to universities in Belgium, Germany and the USA.

Information Services

Steps have been taken to improve liaison with Scottish industry. Four leading technical colleges, at Aberdeen, Dundee, Edinburgh and Paisley, have each appointed an industrial liaison officer to their staff. DSIR will help to train these officers and its Branch Office at Edinburgh will co-ordinate their activities. The existing technical liaison service operating from the Royal College of Science and Technology, Glasgow, will continue.

During the year 1962 the official opening of the National Lending Library for Science and Technology took place. A seventh regional centre, the Yorkshire (East and West Ridings) Technical Information Centre, was opened at Leeds under the joint sponsorship of the Leeds Chamber of Commerce and the DSIR.

Mr. Wilkins

The news that Mr. Wilkins will be Deputy Director R.R.S. when Dr. Saxton leaves was briefly mentioned in our last issue. Mr. Wilkins studied at Manchester College of Technology and at St. John's College, Cambridge. After a short period with the Research Department of the Gramophone Company he joined R.R.S. in 1931, and in the next few years became closely associated with the work of R. A. Watson-Watt. During this time he played a major part in the evolution of radar and I.F.F. In 1940 he left to work with the Air Ministry; and from 1942-1946 served first as Head of Operational Research Sections, Fighter Command, and then at Air H.Q. S.E. Asia. He returned to Ditton Park in 1946 and has since been engaged on many problems of radio propagation. This varied experience makes his new appointment a most fitting one. May we once more offer our congratulations.

STAFF NEWS

Welcome to:

New Staff

Miss M. A. Stacey	T/Photoprinter II
Mrs. E. M. Kershaw	Pt/time Cleaner
Miss A. Bailey	T/Clerical Asst.
Miss S. J. Hatch	T/ " "
Mr. D. G. Deeks	T/S.O.

Resignations

Mr. R. E. Taylor	T/E.O.
Mrs. J.A. Murray	T/Clerical Asst.
Mrs. Y. M. H. Wood	T/P/time Typist (I)
Mrs. E. R. Clarke	T/Clerk (Singapore)

Overseas Transfer

Mr. C. M. Comer leaves for Port Stanley F.I. on 15th Sept.
Mr. D. R. Madden " " Singapore on 29th "

LETTER TO THE OUTSTATIONS

Dear Colleagues,

Lack of news, annual leave, duties away from R.R.S. and the usual manifestations of a sort of metaphysical Le Chatelier's Principle (i.e. Cosmic Cussedness) have combined to make this issue more, or should it be less, of a slim volume than usual.

You will no doubt be sorry to see ⁺Roy Taylor's name among the resignations. He joined R.R.S. about nine years ago and has now taken up a post with the B.B.C. Before he left a presentation was made, and the opportunity taken to wish him well on behalf of all of us.

The launching of the ionosphere beacon satellite S66 is now fairly close at hand, and it is planned to attempt tracking at Winkfield using reflected light from a laser source focussed by a searchlight mirror on to a suitable detector. This method, it is hoped, will eventually allow the accuracy of optical tracking to be extended to times well outside the twilight period.

After July, the deluge, Bank holiday weekend was singularly wet, now the remainder of the working week has seen some improvement in the weather. Another example of the well-known law mentioned earlier by

Yours sincerely,

The Editor
