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** The scientific and technological problems raised by the use of the DESALINATION method for water supplies call for a major cooperative effort at European level. A short note summarizing the situation in this sector is given in an ANNEX.

** MR PIETRO CAPRIOGLIO APPOINTED DIRECTOR-GENERAL OF THE
COMMUNITY'S JOINT RESEARCH CENTRE

The Joint Centre is made up of four establishments (at Ispra in Italy, Geel in Belgium, Karlsruhe in Germany and Petten in the Netherlands). Mr Caprioglio, who will enjoy a large degree of autonomy in the exercise of his functions (see "Research and Technology" No. 80), will have his offices in the largest of these establishments - at Ispra.

Mr Caprioglio's first task will be to define the part to be played by the Joint Research Centre in the Community's new multiannual research programme, which will cover both nuclear and non-nuclear activities.

For further information please apply to the

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The information and articles published in this Bulletin concern European scientific cooperation. Hence they are not simply confined to reports on the decisions or views of the Commission of the European Communities, but cover the whole field of questions discussed in circles concerned in European cooperation in science and technology.

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** For its research requirements, the Community has leased ENRICHED URANIUM to a total value of about \$31,100,101 (figure as at 31 December 1970) from the US Atomic Energy Commission; the total value of the PLUTONIUM supplied to the Community by Great Britain and the USAEC is about \$286,042.

As regards power reactors, the value of the enriched uranium imported under the 24 toll enrichment contracts concluded, implementation of which began on 1 January 1969, was \$15,900,000 in 1970 (as against \$19,907,028.51 in 1969).

All these deliveries were, of course, arranged by the Community's Supply Agency.

** A delegation from the BRITISH MINISTRY OF TRADE AND INDUSTRY will visit the Ispra Establishment of the Joint Research Centre during the week beginning 15 February next.

** The Commission of the European Communities is at present organizing a series of round table discussions with representatives of various sectors of the FOOD INDUSTRY in order to clarify the structure of these sectors and list the problems which they encounter, particularly in connection with the Common Agricultural Policy. The first discussion took place on 15 January and covered the fatty foodstuffs industry; the next meeting is planned for the end of February and will deal with milling and glucose production. The conclusions reached during these discussions will be the subject of a Memorandum on the Foodstuffs Industry.

- ** THE SEMI-AUTOMATIC NUCLEAR DOCUMENTATION SYSTEM of the Centre for Information and Documentation (CID) of the Commission of the European Communities (see "Research and Technology" No. 73) has up to now processed 3,400 requests for literature searches and is currently supplying 650 scientists and industrialists with selective information from periodicals. Of the users of the system 21% are German, 18% Belgian, 16% French, 5% Dutch and 3.8% Italian.

- ** An exchange of information on EXPERIENCE GAINED DURING THE ANNUAL INSPECTIONS OF NUCLEAR INSTALLATIONS was organized at Eberbach, near Obrigheim, Germany, in December 1970 on the initiative of the Commission of the European Communities. It was attended by about one hundred experts representing Community electricity producers operating, constructing or planning the construction of nuclear power plants.

- ** The experts from Community countries who are undertaking COMMUNITY-BACKED COAL RESEARCH will meet at the initiative of the Commission of the European Communities at Hearlen, in the Netherlands, on 17-18 February 1971.

- ** The Commission of the European Communities has just approved the conclusion of a TOLL ENRICHMENT CONTRACT between the Supply Agency and the United States Atomic Energy Commission for the Hamburgische Elektrizitätswerke (HEW) for a total net quantity of 8,500 kg of U²³⁵, to be delivered between 1972 and 1990.

- ** An analysis of interindustrial relations in the CONSTRUCTION SECTOR in the Community has been undertaken at the request of the Commission of the European Communities. It seeks to define the economic impact of possible measures which might be taken at Community level to help the construction sector.

**** THE CORROSION OF NUCLEAR GRAPHITE IN A PRESSURIZED CARBON DIOXIDE ATMOSPHERE** was the subject of a working meeting organized in Brussels on 19 January 1971 by the Commission of the European Communities at which a report was given of the results of a major research programme financed by the Community since 1963. The tests made during this programme in a very high-flux loop of the BR-2 reactor at Mol have made it possible for the first time to measure the behaviour of the graphite moderator under irradiation doses equivalent to the total residence time of the graphite in a power reactor.

**** SCIENTIFIC AND TECHNICAL REPORTS** recently published by the Commission of the European Communities include the following:

- Comparison of the Radioactive Contamination of the Total Diet of Adolescents in the Community - Part II: Institutional Diet Programme: Results and Comments (No. EUR 3945 e.II - 70 pages - 100 FB - available in English);
- The Operations Group of the BR-2 Reactor and its Associated Facilities - Annual Progress Report 1968 (No. EUR 4416 e - 34 pages - 50 FB - available in English);
- Dosimetrie in der Mikrobiologie (Abschlussbericht) (Dosimetry in Microbiology - Final Report) (No. EUR 4506 d - 54 pages - 70 FB - available in German);
- Régime de Déclaration et d'Autorisation applicable en vertu des Normes de radioprotection de l'Euratom dans les Etats membres de la Communauté aux activités et opérations concernant les combustibles nucléaires et

- autres substances radioactives (System of Declaration and Authorization to be applied according to the Euratom Basic Standards to the Member States of the Community to activities and operations relating to nuclear materials and other radioactive substances) (No. EUR 4515 d,f,i,n - 86 pages - 125 FB - available in Dutch, French, German and Italian);
- Progress Report of the Euratom Working Group on Reactor Dosimetry (for the period July 1968 - June 1970) (No. EUR 4528 e - 16 pages - 40 FB - available in English);
 - Pathogenese genetischer und somatischer Strahlenschäden - Jahresbericht 1969 (Pathogenesis of Genetic and Somatic Radiation Damage - Annual Report 1969) (No. EUR 4542 d - 28 pages - 50 FB - available in German);
 - Environmental Radioactivity - Ispra 1969 (No. EUR 4563 e - 50 pages - 70 FB - available in English).

These reports can be obtained from the Sales Office for Official Publications of the European Communities, 37 rue Glesener, Luxembourg.

** The Community's contract of participation in the CHOOZ NUCLEAR POWER PLANT, concluded on 23 July 1962 with the Société d'énergie nucléaire franco-belge des Ardennes (SENA) is to be extended up to 31 December 1974.

A Possible New Subject for European Scientific Cooperation -

The Desalination of Water

The scientific and technological problems raised by the use of desalination for the production of water call for a major effort of cooperation at European level. For some years now the majority of industrialized countries have been faced with the necessity of finding new sources of supply, and have initiated large-scale basic and applied research programmes on the desalination of seawater and brackish water.

These have led to considerable technological advances, which have lowered the cost of desalination, particularly for large distillation plants.

In some parts of the Community (owing to a heterogeneous industrial development), as in some non-member countries (arid or semi-arid), the demand for water is large but lower-capacity installations are required. Research must therefore be directed towards techniques permitting the economic production of fresh water in medium-sized plants.

The desalination of seawater and the treatment of brackish waters are the subject of important research and development efforts in Italy, France, Holland and, more recently, Germany, while industry has already carried out considerable technological research on seawater desalination.

However, many problems remain to be resolved before fresh water can be produced at low cost, and the sooner interested circles are informed of the knowledge acquired in the development of basic data and associated researches, the more readily a solution will be found.

The basic research done on aqueous solutions, mass transport, synthetic diaphragms and separation techniques is the best guarantee of success in the development of these processes, which are potentially capable of producing fresh water at low cost.

It is certain that European cooperation in all forms of research which can facilitate better understanding of the behaviour of water will bring long-term benefits and assist the development of all desalination processes.

It therefore appears that the projects for European cooperation which the Community should undertake relate to those basic and applied research aims capable of interesting the maximum number of enterprises or national bodies seeking to solve water-supply problems inside and outside the Community. In an initial stage these might include inverse osmosis and electrodialysis processes, possibly combined and/or associated with flash distillation.