which had intentionally been pierced. S. Ceja, US, spoke of experience in several reactors, and O. Strindehag, Sweden, of calibration of systems for water-cooled reactors. A. Roguin, France, dealt with techniques, tests and experience connected with six reactors. Methods proposed for the Czechoslovakian heavy water reactor were reported by Z. Melichar, and locations of failures in the CANDU pressurized heavy water reactors by J. Lipsett, Canada, who also acted as Chairman of the panel. As an introduction to the discussions D.S. Briggs, IAEA, summarized techniques and literature on the subject.

As a result of their meetings, the panel was able to draw up information papers on the methods used in light water reactors, reactors moderated with heavy water and cooled by heavy water, boiling light water, gas or organic liquid, natural uranium reactors moderated with graphite and cooled by gas, advanced gas-cooled reactors and fast reactors.

The experts taking part came from Canada, Czechoslovakia, France, Federal Republic of Germany, India, Italy, Japan, Sweden, UK and USA, and there were also two representatives from Euratom. The proceedings are to be published by the Agency.

RADIATION INSIDE REACTORS

A "correspondence club" of scientists in many countries is being organized by the Agency to make available information about the measurement of radiations which occur inside reactors. It will be guided by a working group of world experts appointed with the collaboration of Governments.

One of the Agency's continuing interests is to try to ensure that fullest use is made of research reactors, particularly in developing countries. The work carried out with these reactors can aid many branches of science, but for many of the studies it is necessary to know what happens to different materials when exposed to radiation inside the different types of reactor. Varying types of radiation produce differing effects, and it is extremely important to obtain accurate information of the amount of radiation received by a sample. Methods of measurement also vary according to the information required; it is therefore necessary that the methods used should be well understood, so that the experimental results from different laboratories can be properly compared.

The members of the "Working Group on Reactor Radiation Measurements" are; A.W. Boyd (Canada), I. Draganić (Yugoslavia), Y. Droulers (France), S. Hayakawa (Japan), V. Kadlec (Czechoslovakia), J. K. Linacre (UK, Chairman), V.G. Madeev (USSR), J. Moteff (USA), M.P. Navalkar (India), S.B. Wright (UK), F. Szabo (Hungary) and W. Köhler (IAEA), with S. Sanatani of the Agency as Scientific Secretary.

These scientists will define the special topics to be studied and will act as chairmen of sub-groups, in which any specialists having particular interest and applied experience will be eligible to participate. Problems will be discussed mainly by correspondence, and annual reports will be prepared by the Working Group. Any experts in Member States who would like to take part are invited to write to the Scientific Secretary at the IAEA indicating their particular interest and giving a brief account of their past experience in the field as well as their current activity. Those suitable will be accepted without formality as members of sub-groups. The only condition they would be expected to fulfil is that they write at least once a year to their respective sub-group chairmen indicating progress in their own work or work in their laboratories.

In order to promote consistency in measurement of reactor radiation, two practical manuals are being prepared for the Agency's Technical Reports Series. They are "Neutron Fluence Measurements", edited by John Moteff, and "Determination of Absorbed Dose in Reactors", edited by J.K. Linacre.

The first five-groups, with their chairmen, are:

Theoretical aspects of reactor radiation measurement - J. Moteff

Neutron spectra and fluence measurement - Y. Droulers

Determination of gamma spectra - V. Kadlec

Absorbed dose or dose rate determination by physical and chemical methods - I. Draganić

Calorimetric method - A.W. Boyd