isotopes. This means that a sample of the solution can be sent to another laboratory to be used for calibrating instruments and checking results of research work.

Since 1963 nearly 8 000 radioactive solutions to be used as standards have been sent from Seibersdorf to research laboratories and hospitals in 56 countries. The demand continues to grow, and in order to meet it the equipment was developed by the Saclay Research Centre of the Commissariat à l'Energie Atomique in collaboration with Seibersdorf.

From Romania have come six electronic measuring instruments worth $6 000 to assist nuclear research, surveying and prospecting. Three are electronic scalers for experimental work involving the counting of radioactive emissions, and three are survey meters for detecting the presence of radioactivity in geological samples.

WHEN HIGH MEANS LOW

In disposing of radioactive wastes, whether from nuclear power stations. research centres, laboratories, hospitals or other establishments where radioactive materials come into use, safety, efficiency and economy dictate that separate procedures must be employed according to the levels and types of radioactivity. Normal practices at such centres, therefore, include the establishment of categories of wastes which describe activity limits for disposal by the various methods. Separate categories are used for the liquid, solid and gaseous states.

Because of the individual nature of the determination of waste categories, their definition at a particular centre rarely coincides with the usage at any other site. Thus, what is regarded as "high level" waste in one country can be called "low level" or "intermediate level" in another.

This situation often results in poor communication between nuclear workers, and can cause difficulties in the preparation or interpretation of regulations. In developing countries, where planners rely to a considerable extent on published literature for guidance, it can create uncertainty in deciding which methods should be adopted for waste management.

As a step to overcoming these difficulties the Agency brought together a panel of experts to discuss the principles on which national classifications are based and to propose for international use more precise categories. The result of their deliberations will be published by the Agency under the title "The Recommended Standard Waste Categories".

The experts attending were from Belgium, Czechoslovakia, India, Italy, Japan, Sweden, United Arab Republic, United Kingdom and USA, the World Health Organization, European Nuclear Energy Agency and EURATOM.

Astro physics has become a modern science of considerable interest to theoretical and research workers in nuclear energy but has developed through the centuries from early investigations of celestial bodies. This picture was taken at the Delhi observatory built in 1725, where enormous stone instruments were used to observe the sun, moon and stars.

(Photo: UNESCO)