

## FROM THE EDITOR

In this issue, we have a wide selection of papers focusing on everything from methods and archaeology to the developing use of radiocarbon in the biotech field.

First, Sharon et al. continue the discussion about the Iron Age in the Middle East, with a detailed study of many  $^{14}\text{C}$  dates from Israel. This debate is about small differences in age, and we expect further discussion of it in future. Still in archaeology, Lindroos et al. look at the use of AMS  $^{14}\text{C}$  dating for medieval mortars from Scandinavia.

In methodology development, Shah and Pearson review progress at the Woods Hole laboratory in the microscale dating of lipid fractions, and Carmi et al. report on methods for  $^{14}\text{C}$  in groundwater tracing studies. Two papers, by Fontana and by Jones et al., explore some questions about local reservoir corrections in lacustrine and marine environments.

Several papers look at the overlap between past climates, sometimes with an overlap into archaeology. For example, Feranec et al. report on  $^{14}\text{C}$  dates from Pleistocene fossil deposits in a cave from northern California, whereas Kuzmin makes a comment on recent papers in Siberian prehistory. Burley and Connaughton take us to the more recent past and the South Pacific for a look at Tongan archaeology. A complex paper on  $^{10}\text{Be}$  in Chinese loess by Beck et al. looks at the possible use of  $^{10}\text{Be}$  as both a climatic and geomagnetic indicator, and the separation of these 2 signals.

In recent studies, Ueda et al. look at  $^{14}\text{C}$  emitted from nuclear reprocessing plants. Zoppi et al. review the performance of the newly-installed AMS at Accium Biosciences, which is one of several new commercial facilities devoted to biomedical applications of  $^{14}\text{C}$ . We expect to hear much more about these kinds of activities in the future and the changes in direction of some AMS laboratories.

At Arizona, we are also dealing with changes in the ways in which AMS is funded; however, we also have a big celebration. It is some 25 years since we got the first real  $^{14}\text{C}$  dates using our General Ionex machine. This only serves to point out the huge changes in radiocarbon and radionuclide measurements, which have happened since the late 70s. At the 1982 Radiocarbon conference in Seattle, AMS labs were a small minority—now they dominate the field especially in radiocarbon.

*A J Timothy Jull*