REPORT ON A MEETING HELD AT THE IAEA, VIENNA 20-21 FEBRUARY, 1989

Dear Colleague,

During the International Radiocarbon Conference in Dubrovnik in June 1988, several laboratories expressed the need for quality assurance. Furthermore, on several occasions ¹⁴C laboratories have shown an interest in reference materials of known ¹⁴C activity, apart from the recent activity of the NBS oxalic acid.

During a meeting which was attended by Lloyd A Currie, Wim Mook, Bob Otlet, Henry Polach and by R Gonfiantini and coworkers on behalf of the IAEA, the conclusion was reached that both wishes can only partly be combined. In particular, the IAEA declared that it is not equipped to undertake an operation which would involve a frequent distribution of samples of various activities, known to the IAEA, but unknown to the applicant, and to provide Quality Assurance in the legal sense.

The discussion, therefore, concentrated on the matter of reference materials. The IAEA declared itself prepared to act as the international body for storage and distribution of ¹⁴C reference materials on equal basis as for stable isotopes, and as the coordination agency for this calibration program.

In principle, a first choice was made, after ample discussion, of carbonates and organic compounds of recent and (about) zero, and possibly intermediate activity. Provisional checks on the materials will be made shortly.

Determination of the true ¹⁴C activities of the reference materials—with respect to NBS oxalic acid—will be a joint effort of the ¹⁴C community, where especially laboratories with experience in high precision ($\leq 2\%$) and/or in low background are required to collaborate. The distribution of the materials (before 1990) as well as the evaluation by an open meeting of consultants (autumn 1990) will be organized by the IAEA.

By this announcement ¹⁴C laboratories are requested to state their willingness for active cooperation by letter to:

Dr R Gonfiantini Head Section Isotope Hydrology International Atomic Energy Agency P O Box 100 A-1400 VIENNA Austria

Groningen, April 3, 1989

W G Mook